## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Comprehensive Language Arts

## 01001 - English/Language Arts I (9th grade)

English/Language Arts I (9th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.

## 01002 - English/Language Arts II (10th grade)

English/Language Arts II (10th grade) courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

## 01003 - English/Language Arts III (11th grade)

English/Language Arts III (11th grade) courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

## 01004 - English/Language Arts IV (12th grade)

English/Language Arts IV (12th grade) courses blend composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or more major research papers.

## 01005 - AP English Language and Composition

Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Language and Composition courses expose students to prose written in a variety of periods, disciplines, and rhetorical contexts. These courses emphasize the interaction of authorial purpose, intended audience, and the subject at hand, and through them, students learn to develop stylistic flexibility as they write compositions covering a variety of subjects that are intended for various purposes.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Comprehensive Language Arts

## 01006 - AP English Literature and Composition

Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Literature and Composition courses enable students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing).

## 01007 - IB Language A (English)

IB Language A (English) courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors and written analyses of this literature in addition to other oral and written assignments. All course content is designed to improve students' accuracy and fluency in the English language.

## 01008 - English as a Second Language

English as a Second Language (ESL) courses are designed for the acquisition and rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to "regular" English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States.

## 01009 - Language Arts Laboratory

Language Arts Laboratory courses provide instruction in basic language skills, integrating reading, writing, speaking, and listening, while placing great emphasis on the progress of individual students. Course content depends upon students' abilities and may include vocabulary building, improving spelling and grammar, developing writing and composition skills, reading silently or aloud, and improving listening and comprehension abilities.

## Literature/Reading

## 01011 - IB Language A: Language and Literature - English

IB Language A: Language and Literature-English courses prepare students to take the International Baccalaureate Language A: Language and Literature exams at either the standard or higher level. Course content includes in-depth study of composition for purpose and audience, forms of mass communication and the media, and the context and elements of literature. The course includes oral and written assignments and is designed for students highly competent in using English in an academic context.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Literature/Reading

## 01012 - IB Literature and Performance

IB Literature and Performance courses prepare students to take the International Baccalaureate Literature and Performance exam at the standard level. Course content focuses on the relationship between literature and theatre. These courses may cover the critical study of literary texts, the exploration of chosen approaches to a text, and the performance of written texts.

## 01051 - English/Literature (freshmen and sophomores)

English/Literature (freshmen and sophomores) courses are designed for freshmen and/or sophomores and typically introduce them to two or more genres of literature (novel, short story, poetry, and so on). Exploration of each genre's literary elements; determination of theme and intent; and examination of vocabulary and semantics are often included in the course content. Writing assignments are required as an additional method to improve understanding and comprehension.

## 01052 - English/Literature (juniors and seniors)

English/Literature (juniors and seniors) courses are designed for juniors and/or seniors and emphasize comprehension, discernment, and critical-thinking skills in the reading of texts and literature. These courses introduce and explore more advanced literary techniques (irony, satire, humor, connotation, tone, rhythm, symbolism, and so on) through two or more literary genres, with the aim of creating sophisticated readers. Writing assignments are required as an additional method to develop and improve critical-thinking and analytic skills.

## 01053 - Literature

Literature courses offer the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are often required. Literature courses may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people.

## 01054 - American Literature

American Literature courses focus upon commonly known American authors and their work. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of literature courses, and written compositions are often required.

## 01055 - American Literature/History

American Literature/History courses integrate the study of American literature with an overview of U.S. history. These courses may also include other aspects of American culture, such as art or music. A twoyear sequence or two-period per day class may be required to cover the same objectives as would be covered separately in U.S. History Overview and American Literature.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Literature/Reading

## 01056 - British Literature

British Literature courses may provide a survey of British literature or may focus on a selected timeframe of England's history. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of literature courses, and written compositions are often required.

## 01057 - British Literature/History

British Literature/History courses integrate the study of British literature with an overview of the history of England. These courses may also include other aspects of British culture, such as art or music. A twoyear sequence or two-period per day class may be required to cover the same objectives as would be covered separately in English History Overview and British Literature.

## 01058 - World Literature

World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is an integral part of literature courses, and written compositions are often required.

## 01059 - Biblical Literature

Biblical Literature courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on the books of the Bible. Students may compare techniques, styles, and themes of the various books; examine the Bible's influence on secular literature; and may study historical events of Biblical times. Oral discussion is an integral part of these courses, and written compositions are often required.

## 01060 - Literature of an Author

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on a particular author and his or her work. Students determine the underlying assumptions and values within the selected works; compare techniques, styles, and themes of the author; and reflect upon the time period in which the author lived. Oral discussion is an integral part of literature courses, and written compositions are often required.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Literature/Reading

## 01061 - Literature of a Genre

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on one or several genres, such as poetry, essay, biography, short story, drama, film, and so on. Students determine the underlying assumptions and values within the selected works and also examine the structure, techniques, and intentions of the genre being studied. Oral discussion is an integral part of these genre-oriented courses, and written compositions are often required.

## 01062 - Literature of a Period

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on the literature written during or reflecting a particular time period (such as the French Revolution, the 1960s, or the 20th century). Students determine the underlying assumptions and values within the selected works, reflect upon the influence of societal events and social attitudes, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.

## 01063 - Literature of a Place

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on a particular geographic region. Students determine the underlying assumptions and values within the selected works; study how the literature reflects the land, society, and history of the region; and may study the influence of this literature on others. Oral discussion is an integral part of literature courses, and written compositions are often required.

## 01064 - Literature of a People

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), but use literature written by authors who share a particular characteristic such as religion, culture, or gender. Students determine the underlying assumptions and values within the selected works, reflect upon the influence of a common characteristic, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.

## 01065 - Literature of a Theme

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), but use selected literature to explore a particular theme as expressed from several points of view. Such themes might include The American Dream, Society and Self, Exploration, War and Peace, and the like.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Literature/Reading

## 01066 - Strategic Reading

Strategic Reading courses are intended to improve a student's vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note-taking or for understanding and evaluating the important points of a text.

## 01067 - Assisted Reading

Assisted Reading courses offer students the opportunity to focus on their reading skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension up to the desired level or to develop strategies to read more efficiently.

## 01068 - Corrective Reading

Corrective Reading courses offer diagnostic and remedial activities designed to correct reading difficulties and habits that interfere with students' progress in developing reading skills and understandings. Activities are chosen to increase or improve students' reading comprehension, reading technique, and general literacy skills.

## 01069 - Mythology

Mythology courses introduce students to the origins and meaning of myths, including how cultures use myths to explain natural or social phenomenon. Students will explore the major themes, stories, characters, and archetypes present in the mythologies of several different cultures.

## 01097 - Literature-Independent Study

Courses in Literature-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to literature. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 01098 - Literature-Workplace Experience

Literature-Workplace Experience courses provide work experience in a field related to English literature. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 01099 - Literature-Other

Other Literature courses.

High School

## Subject Area 01: English Language and Literature (secondary)

## 01013 - AP Seminar: English

Following the College Board's suggested curriculum designed to parallel college-level English courses, AP Seminar: English courses expose students to a variety of texts covering multiple genres, topics, and rhetorical contexts in a seminar-style setting. These courses foster students' ability to summarize and explain the salient ideas in a text by analyzing an author's perspective, rhetorical choices, and argumentative structure. Students evaluate a variety of literary, informational, and visual texts, and synthesize perspectives to develop evidence-based arguments. Students convey their findings through multiple written formats, multimedia presentations, and oral defenses.

## Composition/Writing

## 01101 - English/Composition (freshmen and sophomores)

English/Composition (freshmen and sophomores) courses are designed for freshmen and/or sophomores and build upon previous writing skills. These courses seek to develop the writing processes and practices necessary for producing successful high school compositions. Students typically learn to write persuasive, critical, and creative multi-paragraph essays and compositions. While emphasizing composition, these courses may also incorporate some literature study to expose students to exemplary illustrations of various forms of writing.

## 01102 - English/Composition (juniors and seniors)

English/Composition (juniors and seniors) courses are designed for juniors and/or seniors and build upon previous writing skills. Reinforcing the logic and critical-thinking skills that accompany good writing, these courses-which emphasize word choice, usage, and writing mechanics-provide continued and advanced instruction in writing for a variety of purposes and audiences. English/Composition (juniors and seniors) courses may emphasize college or business preparation; literature study may be offered as an additional component in which students analyze examples of several genres.

## 01103 - Composition

Composition courses focus on students' writing skills and develop their ability to compose different types of papers for a range of purposes and audiences. These courses enable students to explore and practice descriptive, narrative, persuasive, or expositive styles as they write paragraphs, essays, letters, applications, formal documented papers, or technical reports. Although composition courses may present some opportunities for creative writing, their focus usually remains on nonfiction, scholarly, or formal writing.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Composition/Writing

## 01104 - Creative Writing

Creative Writing courses offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft. Although most creative writing classes cover several expressive forms, others concentrate exclusively on one particular form (such as poetry or playwriting).

## 01105 - Research/Technical Writing

Research/Technical Writing classes prepare students to write research papers and/or technical reports. These classes emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style.

## 01147 - Composition—Independent Study

Composition—Independent study, often conducted with instructors as mentors, allow students to explore particular topics within the field of language arts (emphasizing composition). Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 01148 - Composition-Workplace Experience

Composition-Workplace Experience courses provide work experience in a field related to English composition. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 01149 - Composition-Other

Other Composition courses.

## Speech and Communication

## 01151 - Public Speaking

Public Speaking courses enable students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Speech and Communication

## 01152 - Forensic Speech—Inclusive

Forensic Speech—Inclusive courses offer students the opportunity to learn how to use oral skills effectively in formal and informal situations. Students learn such skills as logic and reasoning, the organization of thought and supporting materials, and effective presentation of one's voice and body. Often linked to an extracurricular program, these courses introduce students to numerous public speaking situations, and they learn the methods, aims, and styles of a variety of events (e.g., formal debate, Lincoln-Douglas debate, expository speaking, radio broadcast, oral interpretation, and dramatic interpretation). Participation in competition is encouraged, but not always required.

## 01153 - Forensic Speech-Debate

Forensic Speech—Debate courses offer students the opportunity to learn how to use oral skills in formal and informal situations. In these courses, students are able to develop such skills as logic and reasoning, research and analysis, organization of thought and supporting materials, argumentative style and skill, and effective presentation of one's voice and body. Often linked to an extracurricular program, these courses introduce students to the methods, aims, and styles used in various kinds of debates (formal debate or Lincoln-Douglas). Participation in competition is encouraged, but not always required.

## 01154 - Forensic Speech—Individual Event

Forensic Speech—Individual Event courses offer students the opportunity to learn how to use oral skills in formal and informal situations. Topics included depend upon the event(s) being taught, but they usually emphasize effective presentation of one's voice and body, thoughtful understanding and interpretation of literature, logic and reasoning, and the organization of thought and supporting materials. Often linked to an extracurricular program, these courses introduce students to one or several individual event categories (e.g., exposition, oral interpretation, dramatic interpretation, and radio broadcast). Participation in competition is encouraged, but not always required.

## 01155 - Communications

Communications courses focus on the application of written and oral communication skills through a variety of formal and informal experiences. The courses are performance-based and emphasize effective interpersonal and team-building skills. Communications courses may also involve the study of how interpersonal communications are affected by stereotypes, nonverbal cues, vocabulary, and stylistic choices.

## 01156 - Applied English and Communications

Applied English and Communications courses teach students communication skills-reading, writing, listening, speaking-concentrating on "real-world" applications. These courses usually emphasize the practical application of communication as a business tool-using technical reports and manuals, business letters, resumes, and applications as examples-rather than emphasize language arts skills as applied to scholarly and literary materials.

## 01197 - Speech—Independent Study

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Speech and Communication

Speech-Independent Study courses, often conducted with instructors as mentors, allow students to explore particular topics within the field of language arts (emphasizing speech). Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 01198 - Speech—Workplace Experience

Speech-Workplace Experience courses provide work experience in a field related to public speaking and speech. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 01199 - Speech—Other

Other Speech courses.

## Linguistics

## 01201 - English Morphology and Grammar

English Morphology and Grammar courses involve the study of the English language-its roots and derivations, structure and sentence patterns, dialects, writing and spelling systems, and uses as a communication tool.

## 01202 - History of the English Language

History of the English Language courses trace the development of English, concentrating on historical and cultural influences and how the language has changed over time. Although language roots, structures, and dialects may be examined, the emphasis remains on the process of language development rather than on morphology.

## 01203 - English-Test Preparation

English—Test Preparation courses provide students with activities in analytical thinking and with the skills and strategies associated with standardized test taking. Topics covered include vocabulary, reading comprehension, and writing strategies, as well as time management, scoring procedures, and dealing with test-related stress. Course materials may include national and state standardized test review materials (such as ACT, SAT, or PSAT test review materials), current assessment software programs, and previous standardized examinations.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## Linguistics

## 01204 - English Grammar

English Grammar courses focus on the structure of the formal standard American English language, involving sentence structure; parts of speech; the function of words, phrases, and clauses; and proper punctuation.

## All Others

## 01992 - English Proficiency Development

English Proficiency Development courses are designed to assist students in acquiring the skills necessary to pass proficiency examinations.

## 01995 - English Language and Literature-Aide

English Language and Literature-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 01996 - English Language and Literature - Supplemental

English Language and Literature-Supplemental courses, designed to be taken in addition to or in coordination with other English language and literature courses, provide instruction to assist students in acquiring English language arts skills so that students attain necessary grade-level skills or reach a desired competency level.

## 01997 - English Language and Literature-Independent Study

English Language and Literature-Independent study courses, often conducted with instructors as mentors, allow students to explore particular topics within the field of language arts. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 01998 - English Language and Literature-Workplace Experience

English Language and Literature-Workplace Experience courses provide students with work experience in a field related to English language or literature. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 01999 - English Language and Literature-Other

Other English Language and Literature courses.

## State Course Codes

High School

## Subject Area 01: English Language and Literature (secondary)

## All Others

## Subject Area 02: Mathematics (secondary)

## Foundation Mathematics

## 02001 - Informal Mathematics

Informal Mathematics courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and highlight the connections among mathematical topics and between mathematics and other disciplines. These courses approach the teaching of general mathematics, prealgebra, and pre-geometry topics by applying numbers, and algebraic and geometric concepts and relationships to real world problems.

## 02002 - General Math

General Mathematics courses reinforce and expand students' foundational mathematic skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.

## 02003 - Particular Topics in Foundation Math

These courses examine particular topics in Foundation Mathematics, such as arithmetic, sequences, or basic conceptual skills, rather than provide a general overview.

## 02047 - Foundation Mathematics-Independent Study

Foundation Mathematics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to foundation mathematics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

02049 - Foundation Mathematics-Other
Other Foundation Mathematics courses.

## Pure Mathematics

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

Pre-Algebra courses increase students' foundational mathematics skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.

## 02052 - Algebra I

Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

## 02053-Algebra I—Part 1

The first part in a multi-part sequence of Algebra I. This course generally covers the same topics as the first semester of Algebra I, including the study of properties of rational numbers (i.e., number theory), ratio, proportion, and estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first degree equations and inequalities.

## 02054 - Algebra I—Part 2

The second part in a multi-part sequence of Algebra I. This course generally covers the same topics as the second semester of Algebra I, including the study of properties of the real number system and operations, evaluating rational algebraic expressions, solving and graphing first degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratics.

## 02055 - Transition Algebra

Transition Algebra courses review and extend algebra and geometry concepts for students who have already taken Algebra I and Geometry. Transition Algebra courses include a review of such topics as properties and operations of real numbers; evaluation of rational algebraic expressions; solutions and graphs of first degree equations and inequalities; translation of word problems into equations; operations with and factoring of polynomials; simple quadratics; properties of plane and solid figures; rules of congruence and similarity; coordinate geometry including lines, segments, and circles in the coordinate plane; and angle measurement in triangles including trigonometric ratios.

## 02056 - Algebra II

Algebra II course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

Algebra III courses review and extend algebraic concepts for students who have already taken Algebra II. Course topics include (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, properties of higher-degree equations, and operations with rational and irrational exponents. The courses may introduce topics in discrete mathematics, elementary probability and statistics; matrices and determinants; and sequences and series.

## 02058 - Particular Topics in Algebra

These courses examine a specific topic in algebra, such as linear equations or rational numbers, rather than provide an overview of algebra concepts.

## 02059 - Transition to College Algebra

This course addresses a variety of mathematical topics needed to prepare students for success in college-level mathematics. Mathematics topics include: numeracy; manipulating and evaluating expressions and formulas; rates, ratios, and proportions; percentages; solving tables; verbal, algebraic, and graphical interpretations of functions; rational expressions; solving systems of linear and quadratic equations; properties of higher degree equations; and operations with rational exponents. The course was developed to align with both the Kansas College and Career Readiness Standards and the developmental math outcomes of the Kansas Board of Regents.

## 02061 - Integrated Math—multi-year equivalent

Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. The multi-period sequence of Integrated Math replaces the traditional Algebra I, Geometry, Algebra II sequence of courses, and usually covers the following topics during a three- or four-year sequence: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

## 02062 - Integrated Mathematics I

Integrated Mathematics I courses emphasize proficiency in skills involving numbers and operations, algebra, geometry, statistics, and probability. These courses are offered as the first course in a 3- or 4year sequence of college-preparatory mathematics courses that replace traditional Algebra 1, Geometry, and Algebra 2 courses.

## 02063 - Integrated Mathematics II

Integrated Mathematics II courses emphasize proficiency in skills involving numbers and operations, algebra, geometry, statistics, and probability. These courses are offered as the second course in a 3- or 4 -year sequence of college-preparatory mathematics courses that replace traditional Algebra 1, Geometry, and Algebra 2 courses.

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

## 02064 - Integrated Mathematics III

Integrated Mathematics III courses emphasize proficiency in skills involving numbers and operations, algebra, geometry, statistics, and probability. These courses are offered as the third course in a 3- or 4year sequence of college-preparatory mathematics courses that replace traditional Algebra 1, Geometry, and Algebra 2 courses.

## 02065 - Integrated Mathematics IV

Integrated Mathematics IV courses emphasize proficiency in skills involving numbers and operations, algebra, geometry, statistics, and probability. These courses are offered as the fourth course in a 4-year sequence of college-preparatory mathematics courses that replace traditional Algebra 1, Geometry, and Algebra 2 courses.

## 02069 - Algebra-Other

Other Algebra courses.

## 02071 - Informal Geometry

Informal Geometry courses emphasize a practical approach to the study of geometry and deemphasize an abstract, formal approach. Topics typically include properties of and work with plane and solid figures; inductive methods of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

## 02072 - Geometry

Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

## 02073 - Analytic Geometry

Analytic Geometry courses include the study of the nature and intersection of lines and planes in space, including vectors, the polar coordinate system, equations and graphs of conic sections, rotations and transformations, and parametric equations.

## 02074 - Principles of Algebra and Geometry

Principles of Algebra and Geometry courses combine the study of some pre-algebra and algebra topics with introductory geometry topics. These courses include the study of formulas, algebraic expressions, first degree equations and inequalities, the rectangular coordinate system, area, perimeter, and volume of geometric figures, and properties of triangles and circles.

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

## 02075 - Particular Topics in Geometry

These courses examine specific topics in geometry, such as solid or technical geometry, rather than provide a general study of the field of geometry.

## 02079 - Geometry-Other

Other Geometry courses.

## 02101 - Number Theory

Number Theory courses review the properties and uses of integers and prime numbers, and extend this information to congruencies and divisibility.

## 02102 - Discrete Mathematics

Discrete Mathematics courses include the study of topics such as number theory, discrete probability, set theory, symbolic logic, Boolean algebra, combinatorics, recursion, basic algebraic structures and graph theory.

## 02103 - Trigonometry

Trigonometry courses prepare students for eventual work in calculus and typically include the following topics: trigonometric and circular functions; their inverses and graphs; relations among the parts of a triangle; trigonometric identities and equations; solutions of right and oblique triangles; and complex numbers.

## 02104 - Math Analysis

Math Analysis courses include the study of polynomial, logarithmic, exponential, and rational functions and their graphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity. They may also include some study of trigonometry and/or pre-calculus topics.

## 02105 - Trigonometry/Math Analysis

Covering topics of both Trigonometry and Math Analysis, these courses prepare students for eventual work in calculus. Topics typically include the study of right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; complex numbers; numerical tables; polynomial, logarithmic, exponential, and rational functions and their graphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

## 02106 - Trigonometry/Algebra

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

Trigonometry/Algebra courses combine trigonometry and advanced algebra topics, and are usually intended for students who have attained Algebra I and Geometry objectives. Topics typically include right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; complex numbers; numerical tables; field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; and properties of higher degree equations.

## 02107 - Trigonometry/Analytic Geometry

Covering topics of both Trigonometry and Analytic Geometry, these courses prepare students for eventual work in calculus. Topics typically include the study of right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; complex numbers; numerical tables; vectors; the polar coordinate system; equations and graphs of conic sections; rotations and transformations; and parametric equations.

## 02108 - Math Analysis/Analytic Geometry

Covering topics from both Mathematic Analysis and Analytic Geometry, these courses prepare students for eventual work in calculus. Topics include the study of polynomial, logarithmic, exponential, and rational functions and their graphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity; the polar coordinate system; equations and graphs of conic sections; rotations and transformations; and parametric equations.

## 02109 - Elementary Functions

Elementary Functions courses, while preparing students for eventual work in calculus, include the study of relations and functions, including polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their inverses, graphs, and applications.

## 02110 - Pre-Calculus

Pre-Calculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Mathematic Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

## 02111 - Linear Algebra

Linear Algebra courses include a study of matrices, vectors, tensors, and linear transformations and are typically intended for students who have attained pre-calculus objectives.

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

## 02112 - Linear Programming

Linear Programming courses include a study of mathematical modeling and the simplex method to solve linear inequalities and are typically intended for students who have attained pre-calculus objectives.

## 02113 - Abstract Algebra

Abstract Algebra courses include a study of the properties of the number system from an abstract perspective, including such topics as number fields (i.e., rational, real, and complex numbers), integral domains, rings, groups, polynomials, and the fundamental theorem of algebra. Abstract Algebra is typically geared towards students who have attained pre-calculus objectives.

## 02121 - Calculus

Calculus courses include the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus. Typically, students have previously attained knowledge of precalculus topics (some combination of trigonometry, elementary functions, analytic geometry, and mathematic analysis).

## 02122 - Multivariate Calculus

Multivariate Calculus courses include the study of hyperbolic functions, improper integrals, directional directives, and multiple integration and its applications.

## 02123 - Differential Calculus

Differential Calculus courses include the study of elementary differential equations including first- and higher-order differential equations, partial differential equations, linear equations, systems of linear equations, transformations, series solutions, numerical methods, boundary value problems, and existence theorems.

## 02124 - AP Calculus AB

Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an understanding of the concepts of calculus and experience with its methods and applications. These courses introduce calculus and include the following topics: functions, graphs, limits, and continuity; differential calculus (including definition, application, and computation of the derivative; derivative at a point; derivative as a function; and second derivatives); and integral calculus (including definite integrals and anti-differentiation).

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

## 02125 - AP Calculus BC

Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus BC courses provide students with an understanding of the concepts of calculus and experience with its methods and applications. These courses cover all of the calculus topics in AP Calculus AB as well as the following topics: parametric, polar, and vector functions; applications of integrals; and polynomial approximations and series, including series of constants and Taylor series. See SCED Code 02124 for more details.

## 02126 - Particular Topics in Calculus

These courses examine specific topics in calculus (such as integral calculus, special functions or series, or the applications of calculus to mathematical modeling), rather than provide a general overview of calculus.

## 02131 - IB Mathematical Studies

IB Mathematical Studies courses prepare students to take the International Baccalaureate Mathematical Studies exam at the Subsidiary or Higher level. Intended to provide students with the skills to cope with the mathematical demands of a technological society, course topics include linear, quadratic, and exponential functions, solutions, and graphs; skills in computation, estimation, and development of algorithms; data analysis, including collection, calculation, and presentation of statistics; set operations and logic; business techniques, including progressions and linear programming; and geometry and trigonometry.

## 02132 - IB Mathematics

IB Mathematics courses prepare students to take the International Baccalaureate Mathematics exams at the Subsidiary or Higher level. Topics include operations and properties of number sets; trigonometric functions, equations, and graphs; algebra and coordinate geometry; simultaneous linear equations; polynomial and quadratic functions and equations; calculus, including bilinear, exponential and logarithmic functions; two dimensional vectors and matrices; and probability.

## 02133 - IB Mathematics and Computing-SL

IB Mathematics and Computing-SL courses prepare students to take the International Baccalaureate Mathematics and Computing exam at the Subsidiary level. Designed to give students a working knowledge of a high level programming language and sound mathematical training, course topics include operations and properties of number sets; trigonometric functions, equations, and graphs; algebra and coordinate geometry, including simultaneous linear equations, binomial theorem, and polynomial and quadratic functions and equations; calculus; vectors and matrices; and numerical analysis. The courses also contain components on computer problem solving and programming; topics regarding computer hardware, software, modes of operation, and data types and structures.

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Pure Mathematics

## 02134 - IB Further Mathematics-SL

IB Further Mathematics-SL courses prepare students to take the International Baccalaureate Further Mathematics at the Subsidiary level. Designed to advance students knowledge of IB mathematics-HL, course topics include geometry; statistics and probability; sets, relations and groups; series and differential equations; and discrete mathematics.

## 02136 - Finite Mathematics

Finite Mathematics acquaints students with a variety of non-calculus mathematical topics including linear functions and programming, methods to solve linear and quadratic equations and inequalities, matrices, set theory, counting techniques, and basic concepts of probability and statistics (including measures of central tendency and variation).

## 02137 - Mathematical Modeling

Mathematical Modeling courses build upon students' knowledge of algebra and geometry to analyze information using statistical methods and probability, simulate change using mathematical relationships and spatial and geometric modeling, and critically assess and make decisions or solve problems based on quantitative data and logical reasoning.

## 02141 - Particular Topics in Analytic Mathematics

These courses examine particular topics in analytic mathematics (such as mathematical proofs and structures or numerical analysis), not otherwise described above.

## 02149 - Analytic Mathematics-Other

Other Analytic Mathematics courses.

## 02114 - AP Precalculus

Following the College Board's suggested curriculum designed to parallel college-level precalculus courses, AP Precalculus courses introduce students to mathematical modeling and functions that serve as a foundation for calculus and other college-level mathematics needed for a variety of STEM majors and careers. Topics typically include polynomial \& rational functions, exponential and logarithmic functions, trigonometric \& polar functions, and functions involving parameters, vectors, and matrices.

High School

## Subject Area 02: Mathematics (secondary)

## 02139 - IB Mathematics: Applications and Interpretation

IB Mathematics: Applications and Interpretation courses prepare students to take the International Baccalaureate Mathematics: Applications and Interpretation exams. Intended to provide students with an understanding of the role of mathematics in an increasing technological world, these courses focus on mathematical concepts used as applications and in mathematical modeling. Course topics include numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus.

## Other Mathematics

## 02138 - College Mathematics Preparations

College Mathematics Preparations courses solidify quantitative literacy through the use and extension of algebraic, geometric, and statistical concepts. These courses prepare students for postsecondary liberal studies mathematics coursework; they are not intended to serve as remedial mathematics courses. Course content typically includes algebraic operations, solutions of equations and inequalities, number sets, coordinate geometry, functions and graphs, probability and statistics, and data representation.

## 02140 - IB Mathematics, Analysis, and Approaches

IB Mathematics: Analysis and Approaches courses prepare students to take the International Baccalaureate Mathematics: Analysis and Approaches exams. These courses prepare students to use analytical concepts within mathematics to solve abstract problems in a variety of contexts. These concepts are applied to course topics such as numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus.

## 02991 - History of Mathematics

History of Mathematics courses include a study of the historical development of numbers, computation, algebra, and geometry. Figures critical to the development of mathematics (e.g., Pythagoras, Pascal, Descartes) or important developments (e.g., pi, decimal fractions, probability theory, calculus) often form the backbone of these classes.

## 02993 - Mathematics-Test Preparation

Mathematics-Test Preparation courses provide students with activities in analytical thinking and with the skills and strategies associated with standardized test taking (such as the PSAT, SAT, and ACT). Topics covered include strategies for arithmetic, algebra, geometry, and quantitative comparison problems as well as time management, scoring procedures, calculator usage, and management of testrelated stress.

## 02994 - Mathematics Proficiency Development

Mathematics Proficiency Development courses are designed to assist students in acquiring the skills necessary to pass proficiency examinations.

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Other Mathematics

## 02995 - Mathematics—Aide

Mathematics-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course materials. Students may provide tutorial or instructional assistance to other students.

## 02996 - Mathematics-Supplemental

Mathematics-Supplemental courses, designed to be taken in addition to or in coordination with other mathematics courses, provide instruction to assist students in acquiring mathematic skills so that students attain necessary grade-level skills or reach a desired competency level.

## 02997 - Mathematics-Independent Study

Mathematics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to mathematics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 02998 - Mathematics-Workplace Experience

Mathematics-Workplace Experience courses provide students with work experience in a field related to mathematics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 02999 - Mathematics-Other

Other Mathematics courses.

## Applied Mathematics

## 02151 - General Applied Mathematics

General Applied Mathematics courses reinforce general mathematics skills; extend these skills to include some pre-algebra and algebra topics; and use these skills in a variety of practical, consumer, business, and occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations.

## 02152 - Occupationally Applied Mathematics

Occupationally Applied Mathematics courses reinforce general mathematics skills, extend these skills to include some pre-algebra and algebra topics, and use these skills primarily in occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations.

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Applied Mathematics

## 02153 - Technical Mathematics

Technical Mathematics courses extend students' proficiency in mathematics, and often apply these skills to technical and/or industrial situations and problems. Technical Mathematics topics may include but are not limited to rational numbers; systems of measurements; tolerances; numerical languages; geometry; algebra; statistics; and using tables, graphs, charts, and other data displays. Technology is integrated as appropriate.

## 02154 - Business Mathematics

Business Mathematics courses reinforce general mathematics skills, emphasize speed and accuracy in computations, and use these skills in a variety of business applications. Business Mathematics courses reinforce general mathematics topics (e.g., arithmetic, measurement, statistics, ratio and proportion, exponents, formulas, and simple equations) by applying these skills to business problems and situations. Applications might include wages, hourly rates, payroll deductions, sales, receipts, accounts payable and receivable, financial reports, discounts, and interest.

## 02155 - Business Mathematiacs with Algebra

Business Mathematics with Algebra courses teach and have students apply algebra concepts to a variety of business and financial situations. Applications usually include income, insurance, credit, banking, taxation, stocks and bonds, and finance.

## 02156 - Computer Mathematics with Algebra

Intended for students who have attained the objectives of Algebra I, Computer Mathematics with Algebra courses include a study of computer systems and programming, and use the computer to solve mathematics problems.

## 02157 - Consumer Mathematics

Consumer Mathematics courses reinforce general mathematics topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

## State Course Codes

High School

## Subject Area 02: Mathematics (secondary)

## Probability and Statistics

## 02201 - Probability and Statistics

Probability and Statistics courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

## 02202 - Inferential Probability and Statistics

Probability and Statistics courses focus on descriptive statistics, with an introduction to inferential statistics. Topics typically include event probability, normal probability distribution, collection and description of data, frequency tables and graphs, measures of central tendency and variability, random variables, and random sampling. Course topics may also include covariance and correlation, central limit theorem, confidence intervals, and hypothesis testing.

## 02203 - AP Statistics

Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.

## 02204 - Particular Topics in Probability and Statistics

These courses examine particular topics in Probability and Statistics, such as regression or hierarchical linear modeling, rather than provide a general overview.

## 02205 - Statistics

Statistics courses involve the major concepts and methods used to collect, analyze, and draw conclusions from data. Topics typically include populations and samples, measures of central tendency and variability, hypothesis testing, presentation, and making statistical inferences.

## 02207 - Probability and Statistics-Independent Study

Probability and Statistics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to probability and statistics. These courses may be offered in conjunction with other rigorous math courses, or may serve as an opportunity to explore a topic of special interest. They may also serve as an opportunity to prepare for AP exams if the school does not offer specific courses for that endeavor.

## 02209 - Probability and Statistics-Other

Other Probability and Statistics courses.

## State Course Codes

High School
Subject Area 02: Mathematics (secondary)
Probability and Statistics

## Subject Area 03: Life and Physical Sciences (secondary)

## Earth Science

## 03001 - Earth Science

Earth Science courses offer insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography.

## 03002 - Geology

Geology courses provide an in-depth study of the forces that formed and continue to affect the earth's surface. Earthquakes, volcanoes, and erosion are examples of topics that are presented.

## 03003 - Environmental Science

Environmental Science courses examine the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources.

## 03004 - Astronomy

Astronomy courses offer students the opportunity to study the solar system, stars, galaxies, and interstellar bodies. These courses usually introduce and use astronomic instruments and typically explore theories regarding the origin and evolution of the universe, space, and time.

## 03005 - Marine Science

Courses in Marine Science focus on the content, features, and possibilities of the earth's oceans. They explore marine organisms, conditions, and ecology and sometimes cover marine mining, farming, and exploration.

## 03006 - Meteorology

Meteorology courses examine the properties of the earth's atmosphere. Topics usually include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes and weather forecasting.

## State Course Codes

High School
Subject Area 03: Life and Physical Sciences (secondary)

## Earth Science

## 03007 - Physical Geography

Physical Geography courses equip students with an understanding of the constraints and possibilities that the physical environment places on human development. These courses include discussion of the physical landscape through geomorphology and topography, the patterns and processes of climate and weather, and natural resources.

## 03008 - Earth and Space Science

Earth and Space Science courses introduce students to the study of the earth from a local and global perspective. In these courses, students typically learn about time zones, latitude and longitude, atmosphere, weather, climate, matter, and energy transfer. Advanced topics often include the study of the use of remote sensing, computer visualization, and computer modeling to enable earth scientists to understand earth as a complex and changing planet.

## 03009 - Particular Topics in Earth Science

Particular Topics in Earth Science courses concentrate on a particular subtopic within the field of earth science (such as mineralogy) that is not otherwise described within this classification system.

## 03012 - Energy and the Environment

Energy and the Environment courses expose students to the scientific principles associated with energy transformation, collection, extraction, transmission and storage. Course content may emphasize energy's significance in society and the effects of its use on the environment. Topics may include the distribution, availability, patterns of use, and environmental impacts of energy resources.

## 03047 - Earth Science-Independent Study

Earth Science-Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other science courses or may serve as an opportunity to explore a topic of special interest.

## 03048 - Earth Science-Workplace Experience

Earth Science-Workplace Experience courses provide work experience in a field related to earth science. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 03049 - Earth Science—Other

Other Earth Science courses.

High School

## Subject Area 03: Life and Physical Sciences (secondary)

## Biology

## 03051 - Biology

Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

## 03052 - Biology—Advanced Studies

Usually taken after a comprehensive initial study of biology, Biology-Advanced Studies courses cover biological systems in more detail. Topics that may be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms.

## 03053 - Anatomy and Physiology

Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.

## 03054 - Anatomy

Anatomy courses present an in-depth study of the human body and biological system. Students study such topics as anatomical terminology, cells, and tissues and typically explore functional systems such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.

## 03055 - Physiology

Physiology courses examine all major systems, tissues, and muscle groups in the human body to help students understand how these systems interact and their role in maintaining homeostasis. These courses may also cover such topics as cell structure and function, metabolism, and the human life cycle.

## 03056-AP Biology

Adhering to the curricula recommended by the College Board and designed to parallel college-level introductory biology courses, AP Biology courses emphasize four general concepts: evolution; cellular processes (energy and communication); genetics and information transfer; and interactions of biological systems. For each concept, these courses emphasize the development of scientific inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. AP Biology courses include college-level laboratory investigations.

03057 - IB Biology

## State Course Codes

High School

## Subject Area 03: Life and Physical Sciences (secondary)

## Biology

IB Biology courses prepare students to take the International Baccalaureate Biology exams. In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of statistical analysis, cells, the chemistry of life, genetics, ecology and evolution, and human health and physiology, nucleic acids, metabolism, plant biology, genetics, and animal physiology. Laboratory experimentation is an essential component of these courses.

## 03058 - Botany

Botany courses provide students with an understanding of plants, their life cycles, and their evolutionary relationships.

## 03059 - Genetics

Genetics courses provide students with an understanding of general concepts concerning genes, heredity, and variation of organisms. Course topics typically include chromosomes, the structure of DNA and RNA molecules, and dominant and recessive inheritance and may also include lethal alleles, epistasis and hypostasis, and polygenic inheritance.

## 03060 - Microbiology

Microbiology courses provide students with a general understanding of microbes, prokaryotic and eukaryotic cells, and the three domain systems. Additional topics covered may include bacterial control, cell structure, fungi, protozoa, viruses and immunity, microbial genetics, and metabolism.

## 03061-Zoology

Zoology courses provide students with an understanding of animals, the niche they occupy in their environment or habitat, their life cycles, and their evolutionary relationships to other organisms. These courses should also help students develop an awareness and understanding of biotic communities.

## 03062 - Conceptual Biology

These courses provide students with a basic understanding of living things. Topics covered may include ecology and environmental problems such as overpopulation and pollution as well as cells, types of organisms, evolutionary behavior, and inheritance.

## 03063 - Particular Topics in Biology

Particular Topics in Biology courses concentrate on a particular subtopic within the field of biology (such as botany, zoology, genetics, and so on) that is not otherwise described within this classification system.

## State Course Codes

High School
Subject Area 03: Life and Physical Sciences (secondary)

## Biology

## 03064 - Regional Biology

Regional Biology courses are designed to provide information regarding the fundamental concepts of life and life processes as related to the local environment. Course topics may include nature appreciation, local flora and fauna, biology, and zoology.

## 03066 - PLTW Principles of Biomedical Science

Following Project Lead the Way's suggested curriculum, PLTW Principles of Biomedical Science courses focus on a case study in which students investigate the cause of death of a fictional person. Students conduct research, in which they examine autopsy reports, review medical history, and study human physiology, biology, and medicine to diagnose and recommend treatments that could have been applied.

## 03067 - PLTW Human body Systems

Following Project Lead the Way's suggested curriculum, PLTW Human Body Systems courses are designed for students to assume the role of biomedical professionals to solve real-world medical cases and experience science in action. In these courses, students study the interactions of systems within the human body by building organs and tissues on a skeletal manikin and use data acquisition software to monitor bodily functions. Course content also includes the exploration of identity, power, movement, protection, and homeostasis.

## 03068 - PLTW Medical Interventions

Following Project Lead the Way's suggested curriculum, PLTW Medical Interventions courses focus on the health of a fictitious family that students must support by providing disease prevention, diagnosis, and treatments. In these courses, students study infections, human DNA code, cancer treatment, and organ failure. Course topics may also include immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

## 03069 - Nutrition Science

Nutrition Science courses focus on the examination of individual nutrients; their structure and function in the human body; nutrient composition of food; and selection of food to meet nutrient needs, maintain health and provide satisfaction. Topics covered include digestion, absorption, and metabolism of carbohydrates, lipids, and proteins; vitamins and minerals; physical activity; nutritional needs throughout the life cycle; and evaluation of nutritional claims.

## 03097 - Biology-Independent Study

Biology-Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other science courses or may serve as an opportunity for students to explore a topic of special interest.

## State Course Codes

High School
Subject Area 03: Life and Physical Sciences (secondary)

## Biology

## 03098 - Biology—Workplace Experience

Biology-Workplace Experience courses provide work experience in a field related to biology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

03099 - Biology-Other
Other Biology courses.

## Integrated/Other

## 03065 - IB Sports, Exercise, and Health Science

IB Sports, Exercise, and Health Science courses prepare students to take the International Baccalaureate Sports, Exercise, and Health Science exam at the standard level. These courses are designed to provide students with an understanding of the science of physical performance. Course topics may include anatomy and physiology, biomechanics, psychology and nutrition, and the measurement and evaluation of human performance.

## 03201 - Integrated Science

The specific content of Integrated Science courses varies, but they draw upon the principles of several scientific specialties-earth science, physical science, biology, chemistry, and physics-and organize the material around thematic units. Common themes covered include systems, models, energy, patterns, change, and constancy. These courses use appropriate aspects from each specialty to investigate applications of the theme.

## 03202 - Unified Science

Unified Science courses combine more than one branch of science into a cohesive study or may integrate science with another discipline. General scientific concepts are explored, including the principles underlying the scientific method and experimentation techniques.

## 03203 - Applied Biology/Chemistry

Applied Biology/Chemistry courses integrate biology and chemistry into a unified domain of study and present the resulting body of knowledge in the context of work, home, society, and the environment, emphasizing field and laboratory activities. Topics include natural resources, water, air and other gases, nutrition, disease and wellness, plant growth and reproduction, life processes, microorganisms, synthetic materials, waste and waste management, and the community of life.

## State Course Codes

High School

## Subject Area 03: Life and Physical Sciences (secondary)

## Integrated/Other

## 03204 - Technological Inquiry

Technological Inquiry courses provide students with an understanding of the use of process skills as an integral part of scientific activity and technological development. Students learn how scientific phenomena are explained, measured, predicted, organized, and communicated.

## 03205 - Origins of Science

Origins of Science courses explore the body of scientific knowledge and discoveries from an historical perspective, wherein students gain an understanding of how one discovery led to others or to entire revolutions of thought. In these courses, original experiments may be replicated, and students may study primary materials.

## 03206 - IB Design Technology

IB Design Technology courses prepare students to take the International Baccalaureate Design Technology exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Design Technology courses promote understanding and use of the scientific method to solve problems using scientific information and production techniques. Practical/investigative work centers on the properties of materials, mechanisms, control circuits, and production techniques as they apply to constructing an artifact or developing skills and ideas useful in carrying out such a project.

## 03207 - AP Environmental Science

AP Environmental Science courses are designed by the College Board to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems (both natural and human made), evaluate the relative risks associated with the problems, and examine alternative solutions for resolving and/or preventing them. Topics covered include science as a process, ecological processes and energy conversions, earth as an interconnected system, the impact of humans on natural systems, cultural and societal contexts of environmental problems, and the development of practices that will ensure sustainable systems.

## 03208 - IB Environmental Science

IB Environmental Systems courses prepare students to take the International Baccalaureate Environmental Systems exam at the Standard level by providing them with the knowledge, methods, and techniques to understand the nature and functioning of natural systems, the relationships that affect environmental equilibrium, and human impact on the biosphere. Topics also include ecosystem integrity and sustainability, students' own relationships to the environment, and the nature of internationalism in resolving major environmental issues.

## State Course Codes

High School

## Subject Area 03: Life and Physical Sciences (secondary)

## Integrated/Other

## 03209 - Aerospace

Aerospace courses explore the connection between meteorology, astronomy, and flight across and around the earth as well as into outer space. In addition to principles of meteorology (e.g., atmosphere, pressures, winds and jet streams) and astronomical concepts (e.g., solar system, stars, and interplanetary bodies), course topics typically include the history of aviation, principles of aeronautical decision-making, airplane systems, aerodynamics, and flight theory.

## 03210 - Science, Technology and Society

Science, Technology, and Society courses encourage students to explore and understand the ways in which science and technology shape culture, values, and institutions and how such factors, in turn, shape science and technology. Topics covered may include how science and technology enter society and how they change as a result of social processes.

## 03211 - Technical Science

Technical Science courses introduce students to scientific tools and methods and provide an introduction to chemistry and physics. Topics covered typically include measurement conversion, model creation, use of scientific methods, interpretation of atoms, identification of the properties of common compounds, analysis of chemical equations, the impact of force on linear motion, and the study of various physical phenomena and forms of energy.

## 03212 - Scientific Research and Design

In Scientific Research and Design courses, students conceive of, design, and complete a project using scientific inquiry and experimentation methodologies. Emphasis is typically placed on safety issues, research protocols, controlling or manipulating variables, data analysis, and a coherent display of the project and its outcome(s).

## 03214 - Forensic Laboratory Science

Forensic Laboratory Science courses involve the application of biological, chemical, and physical science principles to data and physical evidence related to evidence collection and analysis. The courses focus on the application of scientific knowledge and scientific principles to collect, preserve, and analyze evidence in a laboratory setting. Topics may include but are not limited to entomology, forensic anthropology, serology, and fingerprinting.

## 03994 - Life and Physical Sciences-Proficiency Development

Life and Physical Sciences-Proficiency Development courses are designed to assist students in acquiring the skills necessary to pass proficiency examinations related to the life sciences and physical sciences.

## State Course Codes

High School
Subject Area 03: Life and Physical Sciences (secondary)

## Integrated/Other

## 03995 - Life and Physical Sciences-Aide

Life and Physical Sciences-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students and may serve as laboratory assistants.

## 03996 - Life and Physical Sciences-Supplemental

Life and Physical Sciences-Supplemental courses, designed to be taken in addition or in coordination with other life and physical science courses, provide instruction to assist students in acquiring science skills so that students attain necessary grade-level skills or reach a desired competency level.

## 03997 - Life and Physical Sciences-Independent Study

Life and Physical Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other rigorous science courses or may serve as an opportunity to explore a topic of special interest.

## 03998 - Life and Physical Sciences-Workplace Experience

Life and Physical Sciences-Workplace Experience courses provide work experience in a field related to life and/or physical science. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 03999 - Life and Physical Sciences-Other

Other Life and Physical Sciences courses.

## Chemistry

## 03101 - Chemistry

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

## State Course Codes

High School
Subject Area 03: Life and Physical Sciences (secondary)

## Chemistry

## 03102 - Chemistry—Advanced Studies

Usually taken after a comprehensive initial study of chemistry, Chemistry-Advanced Studies courses cover chemical properties and interactions in more detail. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry.

## 03103 - Organic Chemistry

Organic Chemistry courses involve the study of organic molecules and functional groups. Topics covered may include nomenclature, bonding molecular structure and reactivity, reaction mechanisms, and current spectroscopic techniques.

## 03104 - Physical Chemistry

Usually taken after completing a calculus course, Physical Chemistry courses cover chemical kinetics, quantum mechanics, molecular structure, molecular spectroscopy, and statistical mechanics.

## 03105 - Conceptual Chemistry

Conceptual Chemistry courses are practical, nonquantitative chemistry courses designed for students who desire an understanding of chemical concepts and applications.

## 03106 - AP Chemistry

Following the curricula recommended by the College Board, AP Chemistry courses usually follow high school chemistry and second-year algebra. Concepts covered may include the structure of matter; bonding of intermolecular forces; chemical reactions; kinetics; thermodynamics; and chemical equilibrium. For each concept, these courses emphasize the development of scientific inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. AP Chemistry courses include college-level laboratory investigations.

## 03107 - IB Chemistry

IB Chemistry courses prepare students to take the International Baccalaureate Chemistry exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Chemistry promotes understanding of the facts, patterns, and principles underlying the field of chemistry; critical analysis, evaluation, prediction, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of chemistry and scientific advances in chemistry upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the materials of the environment, their properties, and their interaction. Laboratory experimentation is an essential part of these courses.

## 03108 - Particular Topics in Chemistry

## State Course Codes

High School
Subject Area 03: Life and Physical Sciences (secondary)

## Chemistry

Particular Topics in Chemistry courses concentrate on a particular subtopic within the field of chemistry (such as chromatography and spectrometry) that is not otherwise described in this classification system.

## 03147 - Chemistry-Independent Study

Chemistry—Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other rigorous science courses or may serve as an opportunity to explore a topic of special interest.

## 03148 - Chemistry-Workplace Experience

Chemistry-Workplace Experience courses provide work experience in a field related to chemistry. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 03149 - Chemistry-Other

Other Chemistry courses.

## Physics

## 03151 - Physics

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

## 03152 - Physics—Advanced Studies

Usually taken after a comprehensive initial study of physics, Physics-Advanced Studies courses provide instruction in laws of conservation, thermodynamics, and kinetics; wave and particle phenomena; electromagnetic fields; and fluid dynamics.

## 03153 - Principles of Technology

Principles of Technology courses focus on the study of the forces and laws of nature and their application to modern technology. Equilibrium, motion, momentum, energy conversion, electromagnetism, and optical phenomena are presented in the context of current, real-world applications. Demonstrations, mathematics labs, and applied laboratory experiments are an integral part of the Principles of Technology curriculum. These courses may enable students to gain a solid foundation for careers in electronics, robotics, telecommunications, and other technological fields.

## State Course Codes

High School

## Subject Area 03: Life and Physical Sciences (secondary)

## Physics

## 03155 - AP Physics B

AP Physics B courses are designed by the College Board to parallel college-level physics courses that provide a systematic introduction to the main principles of physics and emphasize problem solving without calculus. Course content includes Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics.

## 03156 - AP Physics C

AP Physics C courses prepare students for the College Board's examinations in Physics C: Electricity and Magnetism and Physics C: Mechanics. These courses parallel college-level physics courses that serve as a partial foundation for science or engineering majors and primarily focus on mechanics and electricity and magnetism, with approximately equal emphasis placed on these two areas. See SCED Codes 03163 and 03164 for detailed content descriptions.

## 03157 - IB Physics

IB Physics courses prepare students to take the International Baccalaureate Physics exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Physics promotes understanding of the facts, patterns, and principles underlying the field of physics; critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of scientific advances in physics upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the fundamental laws of nature and the interaction between concepts of matter, fields, waves, and energy. Laboratory experimentation is essential; calculus may be used in some courses.

## 03159 - Physical Science

Physical Science courses involve study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.

## 03160 - IB Physical Science

IB Physical Science courses prepare students to take the International Baccalaureate Physical Science exams at either the Subsidiary or Higher level. These courses integrate the study of physics and chemistry, showing how the physical and chemical properties of materials can be explained and predicted in terms of atomic, molecular, and crystal structures and forces. In keeping with the general aim of IB Experimental Sciences courses, IB Physical Science courses promote critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of science and scientific advances upon both society and issues of ethical, philosophical, and political importance. Students are required to develop and pursue an individual, experimental project, which is evaluated as part of the IB exam.

## State Course Codes

High School

## Subject Area 03: Life and Physical Sciences (secondary)

## Physics

## 03161 - Conceptual Physics

Conceptual Physics courses introduce students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

## 03162 - Particular Topics in Physics

Particular Topics in Physics courses concentrate on a particular subtopic within the field of physics (such as optics, thermodynamics, quantum physics, and so on) that is not otherwise described in this classification system.

## 03163 - AP Physics C: Electricity and Magnetism

Designed by the College Board to parallel college-level physics courses that serve as a partial foundation for science or engineering majors, AP Physics C: Electricity and Magnetism courses focus on electricity and magnetism, including topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. AP Physics C courses require the use of calculus to solve the problems posed.

## 03164 - AP Physics C: Mechanics

Designed by the College Board to parallel college-level physics courses that serve as a partial foundation for science or engineering majors, AP Physics C: Mechanics courses focus on classical mechanics, including topics in kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; oscillations; and gravitation. AP Physics C courses require the use of calculus to solve the problems posed.

## 03165 - AP Physics 1

Designed by the College Board to parallel first-semester college-level courses in algebra-based physics, AP Physics 1 courses focus on Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory circuits. These courses may also include collegelevel laboratory investigations.

## 03166 - AP Physics 2

Designed by the College Board to parallel second-semester college-level courses in algebra-based physics, AP Physics 2 courses cover fluid statics and dynamics; thermodynamics with kinetic theory, PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. These courses may also include college-level laboratory investigations.

## State Course Codes

## High School

## Subject Area 03: Life and Physical Sciences (secondary)

## Physics

## 03197 - Physics—Independent Study

Physics-Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other rigorous science courses or may provide students with an opportunity to explore a topic of special interest.

## 03198 - Physics-Workplace Experience

Physics-Workplace Experience courses provide work experience in a field related to physics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 03199 - Physics—Other

Other Physics courses.

## Subject Area 04: Social Sciences and History (secondary)

## Geography

## 04001 - World Geography

World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

## 04002 - Particular Topics in Geography

Particular Topics in Geography courses examine a particular topic in geography, such as physical or cultural geography, or the geography of a particular area or region, rather than provide an overview of the field

## 04003 - IB Geography

IB Geography courses prepare students to take the International Baccalaureate Geography exams at either the Subsidiary or Higher level, and individual courses vary to reflect the different emphases of the exams (either human or physical geology and case study or fieldwork instruction). In general, however, IB Geography courses aim to help students understand the relationships within society, the relationships between society and the natural environment, and how those relationships change over time.

## State Course Codes

## High School

## Subject Area 04: Social Sciences and History (secondary)

## Geography

## 04004 - AP Human Geography

Following the College Board's suggested curriculum designed to parallel college-level Human Geography courses, AP Human Geography introduces students to the systematic study of patterns and processes that have shaped the ways in which humans understand, use, and alter the earth's surface. Students use spatial concepts and landscape analysis to examine human social organization and its environmental consequences and also learn about the methods and tools geographers use in their science and practice.

## 04005 - U.S. Geography

U.S. Geography courses provide an overview of the geography of the United States. Topics typically include the physical environment, the political landscape, the relationship between people and the land, and economic production and development.

## 04047 - Geography—Independent Study

Geography-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within geography. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## 04048 - Geography—Workplace Experience

Geography-Workplace Experience courses provide work experience in a field related to geography. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

04049 - Geography—Other
Other Geography courses.

## World History

## 04051 - World History—Overview

World History-Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History-Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.

## State Course Codes

## High School

## Subject Area 04: Social Sciences and History (secondary)

## World History

## 04052 - World History and Geography

In addition to covering the objectives of World History-Overview courses, World History and Geography courses provide an overview of world geography. These courses are often developed in response to increased national concern regarding the importance of geography, and they explore geographical concepts.

## 04053 - Modern World History

Modern World History courses provide an overview of the history of human society in the past few centuries-from the Renaissance period, or later, to the contemporary period-exploring political, economic, social, religious, military, scientific, and cultural developments.

## 04054 - IB History

IB History courses prepare students to take the International Baccalaureate History exams at either the standard or higher level. In these courses, students study historical developments at national, regional, and international levels; critically reflect on their relationship to the present; and explore the nature of historical documentation and the methods used by historians. IB History courses may survey the history of Europe and the Islamic world or focus on 20th-century topics in an international context and may enable students to undertake individual study on a subject of interest in greater detail and depth.

## 04055 - Modern European History

Modern European History courses examine the development of political, social, and economic movements in Europe over the past few centuries (from the Renaissance period, or later, to the contemporary period) and usually include such topics as the rise of the modern nation state, scientific and industrial revolutions, the age of exploration and nationalism, imperialism, and world war.

## 04056 - AP European History

Following the College Board's suggested curriculum designed to parallel college-level European History courses, AP European History courses examine European civilization from the High Renaissance period to the recent past and also expose students to the factual narrative. In addition, these courses help students develop an understanding of some of the principal themes in modern European history and the abilities to analyze historical evidence and to express that understanding and analysis in writing.

## 04057 - AP World History

Following the College Board's suggested curriculum designed to parallel college-level World History courses, AP World History courses examine world history from 8000 BCE to the present with the aim of helping students make connections of historical evolution across times and places. These courses highlight the interaction between humans and the environment; development and interaction of cultures; state-building, expansion and conflict; creation, expansion and interaction of economic systems; and development and transformation of social structures. (Archived SCED)

## Subject Area 04: Social Sciences and History (secondary)

## World History

## 04058 - Ancient Civilizations

Ancient Civilizations courses provide a survey of the evolution of society from the ancient Middle East through Greek and Roman civilizations. Typically, in these courses, students study the rise and fall of civilizations and empires, with an emphasis on the legacies they provide to successive societies.

## 04059 - Medieval European History

Medieval European History courses provide a survey of European civilization from the fall of Rome through the late Middle Ages.

## 04060 - Ancient and Medieval History

Ancient and Medieval History courses combine a study of ancient civilizations and Medieval Europe, beginning with the civilizations of the ancient Middle East and continuing through the late Middle Ages in Europe.

## 04061 - World Area Studies

World Area Studies courses examine the history, politics, economics, society, and/or culture of one or more regions of the world, such as Africa, Latin America, the former Soviet Union, Far East Asia, and the Middle East. These courses may focus primarily on the history of a particular region or may take an interdisciplinary approach to the contemporary issues affecting the region. Furthermore, these courses may emphasize one particular country (other than the United States), rather than emphasizing a region or continent.

## 04062 - World People Studies

World People Studies courses allow students to study various types of subgroups that have something in common such as religion, gender, or culture. Similar in style to World Area Studies, but focusing on a group of people rather than on a specific region, these courses examine a subgroup's history, politics, economics, and/or culture.

## 04063 - Western Civilization

Western Civilization courses apply an interdisciplinary approach to the study of western cultural traditions, frequently using a chronological framework. Course content typically includes a survey of the major developments in and contributors to art and architecture, literature, religion and philosophy, and culture. These courses may also cover intellectual and political movements.

## 04064 - Contemporary World Issues

Contemporary World Issues courses enable students to study political, economic, and social issues facing the world. These courses may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## World History

## 04065 - Particular Topics in World History

These courses examine particular topics in world history other than those already described elsewhere in this classification system.

## 04066 - IB Islamic History

IB Islamic History courses prepare students to take the International Baccalaureate History exams at either the Subsidiary or Higher level. These courses are designed to provide students with the means to acquire a deep and open understanding of Islamic history and to grasp its contribution to the history of the world. Possible topics covered include political, social, economic, and intellectual aspects of Islamic history.

## 04067 - AP World History: Modern

Following the College Board's suggested curriculum designed to parallel college-level World History courses, AP World History: Modern courses examine world history from 1200 CE to the present with the aim of helping students make connections of historical evolution across times and places. These courses highlight the interaction between humans and the environment; development and interaction of cultures; state-building, expansion and conflict; creation, expansion and interaction of economic systems; development and transformation of social structures; and technology and innovation.

## 04097 - World History—Independent Study

World History-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within world history. Independent Study courses may provide students with an opportunity to expand their expertise in a particular period or area, to explore a topic of special interest, or to develop more advanced skills.

## 04098 - World History—Workplace Experience

World History-Workplace Experience courses provide work experience in a field related to world history. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 04099 - World History—Other

Other World History courses.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## World History

## 04168 - IB Twentieth Century World History

IB Twentieth Century World History courses prepare students to take the International Baccalaureate History exams at the standard or higher level. In these courses, students study political, military, economic, social, and cultural trends and explore the nature of historical documentation in an international context. Topics may include, but are not limited to, the Arab-Israeli conflict, communism, the challenges and responses of democratic states, and the Cold War.

## U.S. History

## 04101 - U.S. History-Comprehensive

U.S. History-Comprehensive courses provide students with an overview of the history of the United States, examining time periods from International Expansion to the 2020 or after. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.

## 04102 - Early U.S. History

Early U.S. History courses examine the history of the United States from the colonial period to the Civil War or Reconstruction era (some courses end after this period). Some courses include North American history before European settlement, while others may begin at the formation of the new nation. These courses typically include a historical overview of political, military, scientific, and social developments.

## 04103 - Modern U.S. History

Modern U.S. History courses examine the history of the United States from the Civil War or Reconstruction era (some courses begin at a later period) through the present time. These courses typically include a historical review of political, military, scientific, and social developments.

## 04104 - AP U.S. History

Following the College Board's suggested curriculum designed to parallel college-level U.S. History courses, AP U.S. History courses provide students with the analytical skills and factual knowledge necessary to address critically problems and materials in U.S. history. Students learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The course examines the discovery and settlement of the New World through the recent past.

## 04105 - State-Specific Studies

State-Specific Studies courses examine the history, politics, economics, society, and/or cultures of one state in the United States. This course may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.

## State Course Codes

## High School

## Subject Area 04: Social Sciences and History (secondary)

## U.S. History

## 04106 - Contemporary U.S. Issues

Contemporary U.S. Issues courses study the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

## 04107 - U.S. Ethnic Studies

U.S. Ethnic courses examine the history, politics, economics, society, and/or culture of one or more of the racial/ethnic groups in the United States. These courses may focus primarily on the history of an individual racial/ethnic group or may take a more comprehensive approach to studying the contemporary issues affecting racial/ethnic groups overall.

## 04108 - U.S. Gender Studies

U.S. Gender Studies courses examine the history, politics, economics, and/or culture of gender in U.S. society. These courses may focus primarily on gender relations or may take a more comprehensive approach to studying the contemporary issues related to gender.

## 04109 - Particular Topics in U.S. History

These courses examine a particular topic in U.S. History, such as particular time periods in the history of the United States, or they may focus on the history of particular U.S. regions rather than provide an overview of the subject.

## 04110 - U.S. Wars and Military Conflicts

U.S. Wars and Military Conflicts courses focus on the study of one or more wars and major military conflicts in which the United States had a significant role. These courses concentrate on one of many topics related to war, including the causes; U.S. involvement; and social, political, and economic effects. Specific wars may include the Revolutionary War, American Civil War, World War I, World War II, Korean War, Vietnam War, Gulf War, or other contemporary military conflicts.

## 04147 - U.S. History-Independent Study

U.S. History-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within U.S. History. Independent Study courses may provide students with an opportunity to expand their expertise in a particular period or area, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## U.S. History

## 04148 - U.S. History—Workplace Experience

U.S. History-Workplace Experience courses provide work experience in a field related to U.S. history. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 04149 - U.S. History-Other

Other U.S. History courses.

## 04112 - AP African American Studies

AP African American Studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. This course foregrounds a study of the diversity of Black communities in the United States within the broader context of Africa and the African diaspora.

## 04990 - Government and Public Media Relations

This course will build skills needed to communicate messages to the public as it relates to topics of concern. Topics will include conflict awareness, reliability of sources, creating publicity materials, public relations campaigns and working with media.

## Government, Politics, and Law

## 04151 - U.S. Government-Comprehensive

U.S. Government-Comprehensive courses provide an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. These courses may examine the structure and function of state and local governments and may cover certain economic and legal topics.

## 04152 - Particular Topics in U.S. Government

These courses examine a particular topic pertaining to U.S. government and political institutions rather than provide a general overview of the subject. They may concentrate on one of many topics related to governmental structure, function, and purposes, such as the Constitution, the Supreme Court, Congress, or the Office of the President.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## Government, Politics, and Law

## 04153 - Political Science

Political Science courses approach the study of politics from a theoretical perspective, including an examination of the role of government and the nature of political behavior, political power, and political action.

## 04154 - Comparative Government

Comparative Government courses study the basic tenets of government, searching for the differences and similarities among several forms of government. These courses take a comparative approach to the study of government and politics, focusing on how the United States compares with other nations.

## 04155 - International Relations

International Relations courses provide students with an introduction to the relationships that exist among nations, including an examination of the modern state; the foreign policies of nations; the dynamics of nationalism, ideology, and culture; and the role of international organizations. The courses may also emphasize contemporary events.

## 04156 - United States and World Affairs

United States and World Affairs courses provide a study of global interrelationships. Topics covered may include geographic, political, economic, and social issues of a particular country or region, with an emphasis on how these issues influence (or are influenced by) the way in which the United States relates to other countries in an interdependent world context.

## 04157 - AP U.S. Government and Politics

Following the College Board's suggested curriculum designed to parallel college-level U.S. Government and Politics courses, these courses provide students with an analytical perspective on government and politics in the United States, involving both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. The courses generally cover the constitutional underpinnings of the U.S. government, political beliefs and behaviors, political parties and interest groups, the institutions and policy process of national government, and civil rights and liberties.

## 04158 - AP Comparative Government and Politics

Following the College Board's suggested curriculum designed to parallel college-level Comparative Government and Politics courses, these courses offer students an understanding of the world's diverse political structures and practices. The courses encompass the study of both specific countries and general concepts used to interpret the key political relationships found in virtually all national policies. Course content generally includes sources of public authority and political power, the relationship between states and society, the relationships between the political and institutional frameworks of citizens and states, political change, and comparative methods.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## Government, Politics, and Law

## 04159 - AP Government

AP Government courses prepare students for the AP exams in both U.S. Government and Politics and Comparative Government and Politics. Course content includes the topics covered in those two separate courses as described above.

## 04160 - U.S. Government, Civics, and Economics (Previously known as Principles of Democracy)

U.S. Government, Civics, and Economics courses combine a study of the structure of national, state, and local U.S. government with an overview of the principles of market economics. Course content may include contemporary U.S. issues. These courses prepare students to perform effectively as informed citizens.

## 04161 - Civics

Civics courses examine the general structure and functions of U.S. systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve to the same degree of detail into constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.

## 04162 - Law Studies

Law Studies courses examine the history and philosophy of law as part of U.S. society and include the study of the major substantive areas of both criminal and civil law, such as constitutional rights, torts, contracts, property, criminal law, family law, and equity. Although these courses emphasize the study of law, they may also cover the workings of the legal system.

## 04163 - Consumer Law

Consumer Law courses present a history and philosophy of law and the legal system in the United States, with a particular emphasis on those topics affecting students as consumers and young adults (such as contractual laws, laws pertaining to housing and marriage, and constitutional rights).

## 04164 - Business Law

Business Law courses present a history and philosophy of law and the legal system in the United States, with a particular emphasis on those topics affecting students as future business leaders and employees. Such topics may include contracts, commercial paper and debt instruments, property rights, employer/employee relationships, and constitutional rights and responsibilities.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## Government, Politics, and Law

## 04165 - Legal System

Legal System courses examine the workings of the U.S. criminal and civil justice systems, including providing an understanding of civil and criminal law and the legal process, the structure and procedures of courts, and the role of various legal or judicial agencies. Although these courses emphasize the legal process, they may also cover the history and foundation of U.S. law (the Constitution, statutes, and precedents). Course content may also include contemporary problems in the criminal justice system.

## 04166 - Particular Topics in Law

These courses examine a particular topic in law such as the Constitution, specific statutes, or the legal process rather than provide an overview.

## 04167 - Simulated Political Process

Simulated Political Process courses provide students with the opportunity to confront and resolve national and international issues by mirroring local, national, or international governmental bodies. These courses focus on government and international relations, conflict resolution, and policies and procedures of government. Course topics may include simulations of jury trials and national or international governmental organizations.

## 04169 - IB Global Politics

IB Global Politics prepare students to take the International Baccalaureate Global Politics exams at the standard or higher level through the exploration of political concepts and development of an understanding of local, national, international, and global dimensions of political activity. Topics may include contemporary global political challenges.

## 04170 - Environmental Law

Environmental Law courses present a history and philosophy of law and the legal system in the United States, with a particular emphasis on those topics affecting environmental issues, chemical usage, management, cleanup, disposal, and the exposure and legal responsibilities of those workers engaged in associated occupations. Such topics may include contracts, property rights, employer/employee relationships, liability, and constitutional rights and responsibilities with particular attention paid to conservation and environmental issues.

## 04197 - Government, Politics and Law—Independent Study

Government, Politics, and Law-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within one of the fields of Government, Politics, and Law. These courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## State Course Codes

## High School

## Subject Area 04: Social Sciences and History (secondary)

## Government, Politics, and Law

## 04198 - Government, Politics and Law—Workplace Experience

Government, Politics, and Law-Workplace Experience courses provide students with work experience in a field related government, politics, and/or law. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

04199 - Government, Politics and Law-Other
Other Government, Politics and Law courses.

## Economics

## 04201 - Economics

Economics courses provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

## 04202 - Comparative Economics

Comparative Economics courses offer students an opportunity to study different economies and economic systems, including an examination of various approaches to problems in micro- and macroeconomics.

## 04203 - AP Microeconomics

Following the College Board's suggested curriculum designed to parallel college-level microeconomics, AP Microeconomics courses provide students with a thorough understanding of the principles of economics that apply to the functions of individual decisionmakers (both consumers and producers). They place primary emphasis on the nature and functions of product markets, while also including a study of factor markets and the role of government in the economy.

## 04204 - AP Macroeconomics

Following the College Board's suggested curriculum designed to parallel college-level macroeconomics, AP Macroeconomics courses provide students with a thorough understanding of the principles of economics that apply to an economic system as a whole. They place particular emphasis on the study of national income and price determination and developing students' familiarity with economic performance measures, economic growth, and international economics.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## Economics

## 04205 - AP Economics

AP Economics courses prepare students for the College Board's examinations in both Microeconomics and Macroeconomics; these courses include the content of the two separate courses as described above.

## 04206 - IB Economics

IB Economics courses prepare students to take the International Baccalaureate Economics exams at either the Subsidiary or Higher level. The courses provide students with the basic tools of economic reasoning and teach them to use those tools to explain or interpret economic problems. Course content includes resource allocation under various systems, national income analysis, international economics, and economic development and growth and may also cover income distribution.

## 04207 - Particular Topics in Economics

These courses examine a particular topic in Economics rather than provide a general overview of the field. Course topics may include international economics, economic development and growth of a particular country or region, or resource allocation.

## 04247 - Economics-Independent Study

Economics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the field of economics. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## 04248 - Economics—Workplace Experience

Economics-Workplace Experience courses provide work experience in a field related to economics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 04249 - Economics-Other

Other Economics courses.

## Social Sciences

Anthropology courses introduce students to the study of human evolution with regard to the origin, distribution, physical attributes, environment, and culture of human beings. These courses provide an overview of anthropology, including but not limited to both physical and cultural anthropology.

## Subject Area 04: Social Sciences and History (secondary)

## Social Sciences

## 04252 - Particular Topics in Anthropology

These courses examine a particular topic in anthropology, such as physical anthropology, cultural anthropology, or archeology, rather than provide a more comprehensive overview of the field.

## 04253 - IB Social Anthropology

IB Social Anthropology courses prepare students to take the International Baccalaureate Social Anthropology exams at either the Subsidiary or Higher level. The courses aim to promote students' awareness of underlying patterns and causes of social relationships and systems, preconceptions and assumptions within the social environment, and the use of ethnographic data in creating models, drawing inferences, and making comparisons.

## 04254 - Psychology

Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

## 04255 - Particular Topics in Psychology

These courses examine a particular topic in psychology, such as human growth and development or personality, rather than provide a more comprehensive overview of the field.

## 04256 - AP Psychology

Following the College Board's suggested curriculum designed to parallel a college-level psychology course, AP Psychology courses introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals, expose students to each major subfield within psychology, and enable students to examine the methods that psychologists use in their science and practice.

## 04257 - IB Psychology

IB Psychology courses prepare students to take the International Baccalaureate Psychology exams at either the Subsidiary or Higher level. Course content includes developmental and social psychology, cognition and learning, and personality subject areas, which are approached from biological/physiological, behavioral, and humanistic points of view. These courses may include a study of research design and statistics and involve practical work in psychological research.

## State Course Codes

## High School

## Subject Area 04: Social Sciences and History (secondary)

## Social Sciences

## 04258 - Sociology

Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

## 04259 - Particular Topics in Sociology

These courses examine a particular topic in sociology, such as culture and society or the individual in society, rather than provide an overview of the field of sociology.

## 04260 - Social Science

Social Science courses provide students with an introduction to the various disciplines in the social sciences, including anthropology, economics, geography, history, political science, psychology, and sociology. Typically, these courses emphasize the methodologies of the social sciences and the differences among the various disciplines.

## 04261 - Social Science Research

Social Science Research courses emphasize the methods of social science research, including statistics and experimental design.

## 04262 - IB Organization Studies

IB Organization Studies courses prepare students to take the International Baccalaureate Organization Studies exams at either the Subsidiary or Higher levels. These IB courses provide a broad introduction to the principles and practices of enterprises engaged in producing, distributing, and exchanging goods and services in a variety of economic frameworks. A sample of topics explored within these courses include management styles and structures; decision-making methods; and methods for accounting, planning, and communication.

## 04297 - Social Sciences-Independent Study

Social Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within one of the social science fields. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## 04298 - Social Sciences-Workplace Experience

Social Sciences-Workplace Experience courses provide work experience in a field related to the social sciences. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## Social Sciences

04299 - Social Sciences-Other
Other Social Studies courses.

## Humanities

## 04301 - Humanities Survey

Humanities Survey courses provide an overview of major expressions of the cultural heritage of selected western and eastern civilizations. Content typically includes (but is not limited to) the examination of selected examples of art, music, literature, architecture, technology, philosophy, and religion of the cultures studied. These courses may also cover the languages and political institutions of these cultures.

## 04302 - Humanities

Humanities courses examine and evoke student responses to human creative efforts and the world in particular historical periods and in particular cultures. Course content includes exploration, analysis, synthesis, and various responses to cultural traditions, including viewing, listening, speaking, reading, writing, performing, and creating. The courses may also examine relationships among painting, sculpture, architecture, and music.

## 04303 - Issues of Western Humanities

Issues of Western Humanities courses introduce students to the study of the cultural heritage of human beings and provide an opportunity to explore our fundamental humanity. The content typically includes definitions of the humanities in relation to history, literature, religion, philosophy, art, music, and architecture and study of the cultures of Greece, Rome, and one or more settings in contemporary periods. Students are asked to analyze and clarify their sense of themselves; examine and clarify their responsibilities in relation to those of others; examine philosophies concerning moral responsibility for the future; and examine philosophies about human mortality.

## 04304 - IB Theory of Knowledge

Obligatory for every International Baccalaureate degree candidate, IB Theory of Knowledge courses aim to stimulate critical self-reflection of students' knowledge and experiences. Course content generates questions regarding the bases of knowledge and their verification in the disciplines of mathematics, natural sciences, human sciences, and history, with an awareness of moral, political, and aesthetic judgments and biases. Students learn to appreciate the strengths and limitations of various kinds of knowledge; to relate studied subjects to one another, general knowledge, and living experiences; to formulate rational arguments; and to evaluate the role of language in knowledge and as a way to convey knowledge.

## State Course Codes

## High School

## Subject Area 04: Social Sciences and History (secondary)

## Humanities

## 04305 - Social Studies

Social Studies courses enable students to study a group of related subjects addressing the elements and structures of human society that may include economics, geography, history, citizenship, and other social studies-related disciplines.

## 04306 - Philosophy

Philosophy courses introduce students to the discipline of philosophy as a way to analyze the principles underlying conduct, thought, knowledge, and the nature of the universe. Course content typically includes examination of the major philosophers and their writings.

## 04307 - Particular Topics in Philosophy

These courses examine a particular topic in philosophy, such as aesthetic judgment, ethics, cosmology, or the philosophy of knowledge, rather than providing a more general overview of the subject.

## 04308 - Modern Intellectual History

Modern Intellectual History courses provide a historical overview of modern intellectual movements, generally drawing from different disciplines such as political science, economics, and philosophy.

## 04309 - IB Philosophy

B Philosophy courses prepare students to take the International Baccalaureate Philosophy exams at either the Subsidiary or Higher levels. These courses challenge students to reflect upon and question the bases of knowledge and experience, to develop a personal mode of thought, to formulate rational arguments, and to use language to examine several conceptual themes in a thoughtful, philosophical manner.

## 04310 - Particular Topics in Humanities

These courses cover particular topics in humanities such as the interrelationships among painting, sculpture, architecture, and music or the exploration of a particular time period rather than provide a general overview of the subject.

## 04347 - Humanities-Independent Study

Humanities-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the field of humanities. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

## Humanities

## 04348 - Humanities-Workplace Experience

Humanities-Workplace Experience courses provide work experience in a field related to humanities. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

04349 - Humanities-Other
Other Humanities courses.

## All Others

## 04994 - Social Sciences and History-Proficiency Development

Social Sciences and History-Proficiency Development courses are designed to assist students in acquiring the skills necessary to pass proficiency examinations related to history and/or other social sciences.

## 04995 - Social Sciences and History—Aide

Social Sciences and History-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 04997 - Social Sciences and History-Independent Study

Social Sciences and History-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within one of the fields of social studies. These courses provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## 04998 - Social Sciences and History-Workplace Experience

Social Sciences and History-Workplace Experience courses provide work experience in a field related to social sciences and/or history. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 04999 - Social Sciences and History-Other

Other Social Sciences and History courses.

## State Course Codes

High School

## Subject Area 04: Social Sciences and History (secondary)

All Others

## Subject Area 05: Fine and Performing Arts (secondary)

## Dance

## 05001 - Dance Technique

Dance Technique courses provide students with experience in one or several dance forms (i.e., modern, jazz, ballet, and tap). Initial classes are usually introductory in nature, while the more advanced classes concentrate on improving students' technique and may offer or require experience in choreography and dance evaluation.

## 05002 - Dance Repertory

Dance Repertory courses provide the opportunity for students with prior dance experience to develop dance techniques in small groups; these classes require auditions and emphasize performance.

## 05003 - Expressive Movement

Expressive Movement courses help develop students' ability to move expressively, without an emphasis on particular dance forms or on developing specific dance techniques.

## 05004 - Dance Appreciation

Dance Appreciation courses expand students' knowledge of dance as an art form and help develop students' ability to evaluate dance performances. Learning the history of one or several dance forms may also be included as a course objective.

## 05005 - Choreography

Choreography courses teach students how to arrange and direct dancers' movements. Course content includes application of the elements and principles of dance, study of historical and contemporary dance from a worldwide perspective, and instruction in critique. Course objectives include developing an appreciation of dance as a communicative art form and self-expression. Students sometimes gain performance experience.

## State Course Codes

## High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Dance

## 05047 - Dance-Independent Study

Dance-Independent Study courses, often conducted with instructors or professional dancers/choreographers as mentors, enable students to explore a particular dance form. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## 05048 - Dance-Workplace Experience

Dance-Workplace Experience courses provide students with work experience in a field related to dance. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

05049 - Dance-Other
Other Dance courses.

## Drama

## 05051 - Introduction to the Theater

Introduction to the Theater courses provide an overview of the art, conventions, and history of the theater. Although the courses sometimes include experiential exercises, they emphasize learning about the theater rather than performance. Students learn about one or more of the following topics: basic techniques in acting, major developments in dramatic literature, major playwrights, the formation of theater as a cultural tradition, and critical appreciation of the art.

## 05052 - Theatre Arts

Theatre arts courses focus on the study and performance of drama including musical theatre. These courses review a wide range of scripted materials, such as plays, screen plays, teleplays, readers' theatre scripts, dramatic criticism, creation of original dramatic works, and the role of dramatic arts in society. In addition, students will work collaboratively on performances.

## 05053 - Drama-Comprehensive

Drama-Comprehensive courses are intended to help develop students' experience and skill in one or more aspects of theatrical production. Initial courses are usually introductory in nature, providing an overview of the features of drama such as acting, set design, stage management, and so on. The more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.

## State Course Codes

High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Drama

## 05054 - Exploration in Drama

Exploration in Drama courses are designed to enhance students' understanding of life through the study and performance of dramatic works. They emphasize developing students' ability to express themselves and establish personal criteria for the critical evaluation of drama activities.

## 05055 - Drama-Acting/Performance

Drama-Acting/Performance courses are intended to promote students' experience and skill development in one or more aspects of theatrical production, but they concentrate on acting and performance skills. Initial courses are usually introductory in nature, while the more advanced courses focus on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions.

## 05056 - Drama-Stagecraft

Drama-Stagecraft courses are intended to help students develop experience and skill in one or more aspects of theatrical production, but concentrate on stagecraft (such as lighting, costuming, set construction, makeup, stage management, and so on). Initial courses are usually introductory in nature, while more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.

## 05057 - Directing

Directing courses are intended to improve students' skills in translating a script into a final production and are usually taken after other drama courses. Directing courses enable each student to create an artistic vision and develop a personal aesthetic, by expanding the student's exposure to different types of theatrical techniques and traditions and providing opportunities to direct the performances of others (either in scenes or in a full production).

## 05058 - Playwriting

Playwriting courses are intended to improve students' skills in creating a script suitable for live production and are usually taken after other drama courses. Playwriting courses enable students to develop a personal voice, style, and aesthetic by expanding their exposure to various playwrights and different types of theatrical techniques and traditions. Students are expected to write original scenes, one-act plays, or full productions.

## State Course Codes

## High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Drama

## 05059 - History and Literature of the Theater

History and Literature of the Theater courses explore in depth the structure, elements, and style of dramatic compositions, and, as an extension, how the dramatic literature influenced theatrical production and acting styles throughout history. Some courses may focus more on the literature component than on the theater (with increased emphasis on critique and analysis), but most courses connect these subjects, exploring their interrelationships. Major contributors (playwrights, directors, and so on) and the architecture of the theater may also be included as topics of study.

## 05097 - Drama-Independent Study

Drama-Independent Study courses, often conducted with instructors or artists as mentors, enable students to explore a particular theatrical form. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## 05098 - Drama-Workplace Experience

Drama-Workplace Experience courses provide work experience in a field related to drama and the theater. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

05099 - Drama-Other
Other Drama courses.

## Music

## 05101 - General Band

General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of nonspecified band literature styles (concert, marching, orchestral, and modern styles).

## 05102 - Concert Band

Courses in Concert Band are designed to promote students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances.

## State Course Codes

## High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Music

## 05103 - Marching Band

Courses in Marching Band are intended to develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances.

## 05104 - Orchestra

Orchestra courses are designed to develop students' abilities to play brass, woodwind, percussion, and string instruments, covering a variety of string and orchestral literature styles.

## 05105 - Contemporary Band

Contemporary Band courses help students develop their techniques for playing brass, woodwind, percussion, and string instruments, as well as guitars and keyboards, focusing primarily on contemporary stage band literature styles, such as traditional jazz, jazz improvisation, and rock.

## 05106 - Instrumental Ensembles

Instrumental Ensemble courses are intended to develop students' technique for playing brass, woodwind, percussion, and/or string instruments in small ensemble groups. Instrumental Ensemble courses cover one or more instrumental ensemble or band literature styles.

## 05107 - Piano

Piano courses introduce students to the fundamentals of music and basic keyboard techniques such as scales, chords, and melodic lines. These courses may also include more advanced keyboard techniques.

## 05108 - Guitar

Guitar courses introduce students to the fundamentals of music and guitar-playing techniques, such as strumming and chords. These courses may also include more advanced guitar-playing techniques.

## 05109 - Individual Technique-Instrumental Music

Individual Technique-Instrumental Music courses provide individuals with instruction in instrumental techniques. These courses may be conducted on either an individual or small group basis.

## 05110 - Chorus

Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts.

## State Course Codes

High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Music

## 05111 - Vocal Ensembles

Vocal Ensemble courses are intended to develop vocal techniques and the ability to sing parts in small ensemble or madrigal groups. Course goals may include the development of solo singing ability and may emphasize one or several ensemble literature styles.

## 05112 - Individual Technique-Vocal Music

Individual Technique-Vocal Music courses provide instruction in and encourage the development of vocal techniques (including aural development) other than the ability to sing in groups. These courses may be conducted on either an individual or small group basis.

## 05113 - Music Theory

Music Theory courses provide students with an understanding of the fundamentals of music and include one or more of the following topics: composition, arrangement, analysis, aural development, and sight reading.

## 05114 - AP Music Theory

AP Music Theory courses are designed to be the equivalent of a first-year music theory college course as specified by the College Board. AP Music Theory develops students' understanding of musical structure and compositional procedures. Usually intended for students who already possess performance-level skills, AP Music Theory courses extend and build upon students' knowledge of intervals, scales, chords, metric/rhythmic patterns, and the ways they interact in a composition. Musical notation, analysis, composition, and aural skills are important components of the course.

## 05115 - IB Music

IB Music courses prepare students to take the International Baccalaureate Music exam at either the Subsidiary or Higher level. IB Music courses develop students' knowledge and understanding of music through training in musical skills (listening, performing, and composing); exposure to music theory; and formulation of an historic and global awareness of musical forms and styles. Historical, theoretical, and practical studies are suggested by the IB Curriculum Board.

## 05116 - Music History/Appreciation

Music History/Appreciation courses survey different musical styles and periods with the intent of increasing students' enjoyment of musical styles and/or developing their artistic or technical judgment. Music History/Appreciation courses may also focus on developing an understanding of a particular style or period.

## State Course Codes

## High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Music

## 05117 - Music History

Similar in nature to Music History/Appreciation courses, Music History courses focus specifically on the history of music.

## 05118 - Music Appreciation

Similar in nature to Music History/Appreciation courses, Music Appreciation courses focus specifically on students' appreciation of music. They are designed to help students explore the world of music and to develop an understanding of the importance of music in their lives.

## 05119 - Composition/Songwriting

Composition/Songwriting courses prepare students to express themselves thorough creating music. These courses may use conventional or nonconventional notation and may include harmonization in addition to melody writing. Along with musical instruments, students may also use computers for creating music.

## 05147 - Music—Independent Study

Music-Independent Study courses, often conducted with instructors, professional musicians, or voice coaches as mentors, enable students to explore music-related topics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## 05148 - Music—Workplace Experience

Music-Workplace Experience courses provide students with work experience in a field related to music. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 05149 - Music-Other

Other Music courses.

## Visual Arts

## 05151 - Art Appreciation

Art Appreciation courses introduce students to the many forms of art and help them form an aesthetic framework through which they can judge and critique art of various ages and cultures. These courses also explore the place and significance of art in our society.

## State Course Codes

High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Visual Arts

## 05152 - Art History

Art History courses introduce students to significant works of art, artists, and artistic movements that have shaped the art world and have influenced or reflected periods of history. These courses often emphasize the evolution of art forms, techniques, symbols, and themes.

## 05153 - AP Art—History of Art

Designed to parallel college-level Art History courses, AP Art-History of Art courses provide the opportunity for students to critically examine architecture, sculpture, painting, and other art forms within their historical and cultural contexts. In covering the art of several centuries (not necessarily in chronological order), students learn to identify different styles, techniques, and influences and to formulate and articulate their reactions to various kinds of artwork.

## 05154 - Creative Art-Comprehensive

Creative Art-Comprehensive courses provide students with the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.

## 05155 - Creative Art—Drawing/Painting

Creative Art—Drawing/Painting courses cover the same topics as Creative Art-Comprehensive courses, but focus on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

## 05156 - Creative Art-Drawing

Creative Art—Drawing courses cover the same topics as Creative Art—Drawing/Painting, but focus on drawing. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, and so on), but some courses may focus on only one medium.

## 05157 - Creative Art—Painting

Creative Art—Painting courses cover the same topics as Creative Art—Drawing/Painting, but focus on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

## 05158 - Creative Art-Sculpture

## State Course Codes

## High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Visual Arts

Creative Art—Sculpture courses cover the same topics as Creative Art—Comprehensive courses, but focus on creating three-dimensional works. Students typically work with several media (such as clay, ceramics, wood, metals, textiles, and so on), but some courses may focus on only one medium.

## 05159 - Ceramics/Pottery

Ceramics/Pottery courses cover the same topics as Creative Art-Comprehensive courses, but focus on creating three-dimensional works out of clay and ceramic material. Particular attention is paid to the characteristics of the raw materials, their transformation under heat, and the various methods used to create and finish objects.

## 05160 - Printmaking/Graphics

Printmaking/Graphics courses cover the same topics as Creative Art-Comprehensive courses, but focus on design principles, printmaking, and graphic design.

## 05161 - Printmaking

Printmaking courses introduce students to a variety of printmaking techniques using processes such as relief printing (monoprint, collograph block); intaglio (etching and engraving); and perigraphy (silkscreen films, stencils, block-out). These courses emphasize design elements and principles and introduce art criticism as applied to fine art prints. Lessons may also include the historical development of printmaking in Western and non-Western cultures.

## 05162 - Graphic Design

Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.

## 05163 - Advertising Design

Advertising Design courses relate and apply creative expression and design principles to the field of advertising and commercial art. The courses offer practical experiences in generating original ideas, executing layouts, and preparing artwork for reproduction. Advertising Design courses may also provide a historical and contemporary view of art as students learn to critique work.

## 05164 - Textiles

Textiles courses teach the same lessons as Creative Art-Comprehensive courses, but do so with a focus on textiles. These courses may survey a wide range of crafts and art forms using textiles, or they may focus on only one type of art form; possibilities include weaving, macramé, quilting, batik, stitchery, and so on

## State Course Codes

High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Visual Arts

## 05165 - Crafts

Crafts courses teach the same lessons as Creative Art-Comprehensive courses, but do so with a focus on crafts. These courses may survey a wide range of crafts, or they may focus on only one type of craft; possibilities include calligraphy, quilting, silk-screening, cake-decorating, tole-painting, maskmaking, knitting, crocheting, paper-making, and so on.

## 05166 - Jewelry

Jewelry courses apply art and design principles to the creation of jewelry. Typically, students explore using various media, such as ceramic, papier-mâché, glass, plastic, copper-enameled, brass, and silver. Course topics include exposure to jewelry of diverse world cultures and the history of jewelry design. Some Jewelry courses may concentrate on metalwork processes such as brazing, soldering, casting, welding, riveting, and finishing as they relate to the creation of jewelry.

## 05167 - Photography

Photography courses expose students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.

## 05168 - Film/Videotape

Film/Videotape courses expose students to the materials, processes, and artistic techniques involved in film, television, or videotape. Students learn about the operation of a camera, lighting techniques, camera angles, depth of field, composition, storyboarding, sound capture, and editing techniques. Course topics may also include production values and various styles of filmmaking (documentary, storytelling, news magazines, animation, and so on). As students advance, the instruction becomes more refined, and students are encouraged to develop their own artistic style. Students may also study major filmmakers, cinematographers, and their films and learn about film, television, and video and their relationships to drama and theater.

## 05169 - Computer-Assisted Art

Computer-Assisted Art courses enable students to discover and explore how the computer can be used to create or to assist in producing various forms of artwork. Computer-Assisted Art courses provide the opportunity to become more adept in both the art form and in the use of the computer.

## 05170 - Art Portfolio

Art Portfolio courses offer students the opportunity to create a professional body of work that reflects their personal style and talent. Students are often encouraged to display their work publicly.

## State Course Codes

## High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Visual Arts

## 05171 - AP Studio Art-General Portfolio

Designed for students with a serious interest in art, AP Studio Art-General Portfolio courses enable students to refine their skills and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses typically emphasize quality of work, attention to and exploration of a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive aspects of the student's art. AP Studio Art-General Portfolio evaluations require submission of artwork exemplifying talent in drawing, color organization, design, and sculpture.

## 05172 - AP Studio Art—Drawing Portfolio

AP Drawing is designed for students with a professional or academic interest in the art of drawing. These courses focus on a variety of concepts and approaches in drawing, enabling students to demonstrate a depth of knowledge of the processes, and a range of abilities, and versatility with media, technique, problem solving, and scope. They can demonstrate such conceptual variety through either the use of one or the use of several media. These courses enable students to refine their skills and create artistic works to submit via portfolio to the College Board for evaluation.

## 05173 - IB Art/Design

IB Art/Design courses prepare students to take the International Baccalaureate Art/Design exams at either the Subsidiary or Higher level. IB Art/Design courses help develop students' aesthetic and creative faculties, offer training in awareness and criticism of art, and enable students to create quality works of art of their own. Students perform both studio and research work; the research component is designed to investigate particular topics or concepts of interest in further detail.

## 05174 - AP 2D Art and Design

AP 2-D Art and Design courses are designed for students with a professional or academic interest in two-dimensional art. These courses focus on a variety of concepts and approaches in drawing and 2-D design, enabling students to demonstrate a range of abilities and versatility with media, technique, problem solving, and scope. Such conceptual variety can be demonstrated through the use of one or several media. Students refine their skills and create artistic works to submit via a portfolio to the College Board for evaluation.

## 05175 - AP 3-D Art and Design

AP 3-D Art and Design courses are designed for students with a professional or academic interest in three-dimensional art. These courses focus on a variety of concepts and approaches in 3-D design and creation, enabling students to demonstrate a range of abilities and versatility with media, technique, problem solving, and scope. They can demonstrate such conceptual variety through the use of one or several media. Students refine their skills and create artistic works to submit via portfolio to the College Board for evaluation.

## State Course Codes

## High School

## Subject Area 05: Fine and Performing Arts (secondary)

## Visual Arts

## 05197 - Visual Arts-Independent Study

Visual Art—Independent Study courses, often conducted with instructors or professional artists as mentors, enable students to explore a particular art form or topic. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## 05198 - Visual Arts-Workplace Experience

Visual Arts-Workplace Experience courses provide students with work experience in a field related to visual arts. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 05199 - Visual Arts-Other

Other Visual Arts courses.

## All Others

## 05201 - Integrated Fine Arts

Integrated Fine Arts courses explore self-expression across the fine arts: any subset or all of the visual arts, music, drama, theater, and literature may be included in the curriculum for these courses. Students both study and critique the works of others and participate in or produce art themselves. These courses often include comparative study of various art forms over time (i.e., the interrelationship of literature, music, and the performing arts of a particular time period and culture).

## 05995 - Fine and Performing Art—Aide

Fine and Performing Arts-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 05997 - Fine and Performing Art-Independent Study

Fine and Performing Art-Independent Study courses, often conducted with instructors or professional artists as mentors, enable students to explore a particular art form. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic of in greater detail, or to develop more advanced skill.

## State Course Codes

High School

## Subject Area 05: Fine and Performing Arts (secondary)

## All Others

## 05998 - Fine and Performing Art—Workplace Experience

Fine and Performing Art—Workplace Experience courses provide students with work experience in a field related to the fine and performing arts. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

05999 - Fine and Performing Art—Other
Other Fine and Performing Art courses.

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06101 - Spanish I

Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

## 06102 - Spanish II

Spanish II courses build upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

## 06103 - Spanish III

Spanish III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06104 - Spanish IV

Spanish IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06105 - Spanish V

Spanish V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06106 - Spanish for Native Speakers

Spanish for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Spanish for Native Speakers courses often move faster than do regular Spanish foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06107 - Spanish Field Experience

Spanish Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Spanish is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06108 - Spanish Conversation and Culture

Spanish Conversation and Culture courses provide students with an introduction to the Spanish language and the culture(s) of Spanish-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06109 - Spanish Literature

Spanish Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Spanish.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06110 - IB Language A (non-English)-Spanish

IB Language A (non-English)—Spanish courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06111 - IB Language B-Spanish

IB Language B—Spanish courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06112 - AP Spanish Language

Designed by the College Board to parallel third-year college-level courses in Spanish Composition and Conversation, AP Spanish Language courses build upon prior knowledge and develop students' ability to understand others and express themselves (in Spanish) accurately, coherently, and fluently in both formal and informal situations. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.

## 06113 - AP Spanish Literature

Designed by the College Board to parallel college-level Introduction to Hispanic Literature courses, AP Spanish Literature courses cover representative works from the literatures of Spain and Spanish America, encompassing all genres. The courses build students' Spanish language proficiency so that they are able to read and understand moderately difficult prose and express critical opinions and literary analyses in oral and written Spanish (an ability equivalent to having completed a third-year college-level Spanish Language course).

## 06121 - French I

Designed to introduce students to French language and culture, French I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. French culture is introduced through the art, literature, customs, and history of the French-speaking people.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06122 - French II

French II courses build upon skills developed in French I, extending students' ability to understand and express themselves in French and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s)

## 06123 - French III

French III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06124 - French IV

French IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the French language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06125 - French V

French V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06126 - French for Native Speakers

French for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), French for Native Speakers courses often move faster than do regular French foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06127 - French Field Experience

French Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where French is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06128 - French Conversation and Culture

French Conversation and Culture courses provide students with an introduction to the French language and the culture(s) of French-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06129 - French Literature

French Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in French.

## 06130 - IB Language A (non-English)-French

IB Language A (non-English)—French courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06131 - IB Language B—French

IB Language B-French courses prepare students to take the International Baccalaureate Language $B$ exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed

## 06132 - AP French Language

Designed to parallel third-year college-level courses in French Composition and Conversation, AP French Language courses build upon prior knowledge and develop students' ability to understand others and express themselves (in French) accurately, coherently, and fluently. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.

## 06133 - AP French Literature

Designed to parallel college-level Introduction to French Literature courses (offered at a third year level), AP French Literature courses cover representative works of French literature and build students' French language proficiency so that they are able to read and understand moderately difficult prose and express critical opinions and analyses in correct oral and written French. The study of literary components (such as character, theme, structure, imagery, style, tone, and so on) is an important focus of AP French Literature.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06141 - Italian I

Designed to introduce students to Italian language and culture, Italian I emphasizes basic grammar and syntax, simple vocabulary and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Italian culture is introduced through the art, literature, customs, and history of the Italian-speaking people.

## 06142 - Italian II

Italian II courses build upon skills developed in Italian I, extending students' ability to understand and express themselves in Italian and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Italian-speaking people to deepen their understanding of the culture(s).

## 06143 - Italian III

Italian III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06144 - Italian IV

Italian IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Italian language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06145 - Italian V

Italian $V$ courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06146 - Italian for Native Speakers

Italian for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Italian for Native Speakers courses often move faster than do regular Italian foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06147 - Italian Field Experience

Italian Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Italian is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06148 - Italian Conversation and Culture

Italian Conversation and Culture courses provide students with an introduction to the Italian language and the culture(s) of Italian-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06149 - Italian Literature

Italian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Italian.

## 06150 - IB Language A (non-English)-Italian

IB Language A (non-English)—Italian courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06151 - IB Language B-Italian

IB Language B—Italian courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06161 - Portuguese I

Designed to introduce students to Portuguese language and culture, Portuguese I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Portuguese culture is introduced through the art, literature, customs, and history of the Portuguese-speaking people.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06162 - Portuguese II

Portuguese II courses build upon skills developed in Portuguese I, extending students' ability to understand and express themselves in Portuguese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Portuguese speaking people to deepen their understanding of the culture(s).

## 06163 - Portuguese III

Portuguese III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06164 - Portuguese IV

Portuguese IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Portuguese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06165 - Portuguese V

Portuguese V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06166 - Portuguese for Native Speakers

Portuguese for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Portuguese for Native Speakers courses often move faster than do regular Portuguese foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06167 - Portuguese Field Experience

Portuguese Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Portuguese is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06168 - Portuguese Conversation and Culture

Portuguese Conversation and Culture courses provide students with an introduction to the Portuguese language and the culture(s) of Portuguese-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06169 - Portuguese Literature

Portuguese Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Portuguese

## 06170 - IB Language A (non-English)—Portuguese

IB Language A (non-English)—Portuguese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06171 - IB Language B—Portuguese

IB Language B-Portuguese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06181 - Romance/Italic Language I

Designed to introduce students to a Romance/Italic language not otherwise described (e.g., Catalan, Sardinian, or Haitian Creole) and culture, Romance/Italic Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06182 - Romance/ltalic Language II

Romance/Italic Language II courses build upon skills developed in Romance/talic Language I, extending students' ability to understand and express themselves in a Romance/Italic language not otherwise described (e.g., Catalan, Sardinian, or Haitian Creole) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06183 - Romance/Italic Language III

Romance/ttalic Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06184 - Romance/Italic Language IV

Romance/Italic Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Romance/talic Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06185 - Romance/Italic Language V

Romance/talic Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06186 - Romance/Italic Language for Native Speakers

Romance/Italic Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue not otherwise described (e.g., Catalan, Sardinian, or Haitian Creole). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Romance/Italic Language for Native Speakers courses often move faster than do regular Romance/Italic Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06187 - Romance/Italic Language Field Experience

Romance/talic Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Romance/Italic language (e.g., Catalan, Sardinian, or Haitian Creole) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06188 - Romance/Italic Language Conversation and Culture

Romance/talic Language Conversation and Culture courses provide students with an introduction to a Romance/Italic language not otherwise described (e.g., Catalan, Sardinian, or Haitian Creole) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Romance Languages

## 06189 - Romance/Italic Literature

Romance/Italic Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Romance/Italic language not otherwise described (e.g., Catalan, Sardinian, or Haitian Creole).

## 06190 - IB Language A (non-English)—Romance/Italic Language

IB Language A (non-English)—Romance/Italic Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06191 - IB Language B—Romance/Italic Language

IB Language B-Romance/Italic Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06199 - Romance/Italic Language-Other

Other Romance/Italic Language courses.

## Germanic Languages

06201 - German I
Designed to introduce students to German language and culture, German I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. German culture is introduced through the art, literature, customs, and history of the German-speaking people.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Germanic Languages

## 06202 - German II

German II courses build upon skills developed in German I, extending students' ability to understand and express themselves in German and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of German-speaking people to deepen their understanding of the culture(s)

## 06203 - German III

German III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06204 - German IV

German IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the German language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06205 - German V

German V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06206 - German for Native Speakers

German for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), German for Native Speakers courses often move faster than do regular German foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06207 - German Field Experience

German Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where German is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Germanic Languages

## 06208 - German Conversation and Culture

German Conversation and Culture courses provide students with an introduction to the German language and the culture(s) of German-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06209 - German Literature

German Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in German.

## 06210 - IB Language A (non-English)-German

IB Language A (non-English)—German courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06211 - IB Language B-German

IB Language B-German courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06212 - AP German Language

Designed to parallel third-year college-level courses in German Language, AP German Language courses build upon prior knowledge and develop students' ability to understand spoken German in various conversational situations, to express themselves (in German) accurately and fluently, and to have a command of the structure of the German language. Students will develop a vocabulary large enough to understand literature, magazine/newspaper articles, films and television productions, and so on.

## 06241 - Germanic Language I

Designed to introduce students to a Germanic language not otherwise described (e.g., Dutch or Flemish) and culture, Germanic Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Germanic Languages

## 06242 - Germanic Language II

Germanic Language II courses build upon skills developed in Germanic Language I, extending students' ability to understand and express themselves in a Germanic language not otherwise described (e.g., Dutch or Flemish) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## 06243 - Germanic Language III

Germanic Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06244 - Germanic Language IV

Germanic Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Germanic Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06245 - Germanic Language V

Germanic Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06246 - Germanic Language for Native Speakers

Germanic Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue not otherwise described (e.g., Dutch or Flemish). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Germanic Language for Native Speakers courses often move faster than do regular Germanic Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06247 - Germanic Language Field Experience

Germanic Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Germanic language (e.g., Dutch or Flemish) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Germanic Languages

## 06248 - Germanic Language Conversation and Culture

Germanic Language Conversation and Culture courses provide students with an introduction to a Germanic language not otherwise described (e.g., Dutch or Flemish) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06249 - Germanic Literature

Germanic Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Germanic language not otherwise described (e.g., Dutch or Flemish).

## 06250 - IB Language A (non-English)-Germanic Language

IB Language A (non-English)—Germanic Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06251 - IB Language B-Germanic Language

IB Language B-Germanic Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

06259 - Germanic Language-Other
Other Germanic Language courses.

## Celtic Languages

## 06261 - Celtic Language I

Designed to introduce students to a Celtic language (e.g., Gaelic or Welsh) and culture, Celtic Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Celtic culture is introduced through the art, literature, customs, and history of Celtic people.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Celtic Languages

## 06262 - Celtic Language II

Celtic Language II courses build upon skills developed in Celtic Language I, extending students' ability to understand and express themselves in a Celtic language (e.g., Gaelic or Welsh) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Celtic people to deepen their understanding of the culture(s).

## 06263 - Celtic Language III

Celtic Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06264 - Celtic Language IV

Celtic Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Celtic Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06265 - Celtic Language V

Celtic Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06266 - Celtic Language for Native Speakers

Celtic Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Celtic Language for Native Speakers courses often move faster than do regular Celtic Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06267 - Celtic Language Field Experience

Celtic Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Celtic language (e.g., Gaelic or Welsh) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Celtic Languages

## 06268 - Celtic Language Conversation and Culture

Celtic Language Conversation and Culture courses provide students with an introduction to a Celtic language (e.g., Gaelic or Welsh) and the culture(s) of Celtic people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06269 - Celtic Literature

Celtic Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Celtic language (e.g., Gaelic or Welsh).

## 06270 - IB Language A (non-English)-Celtic Language

IB Language A (non-English)—Celtic Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06271 - IB Language B-Celtic Language

IB Language B-Celtic Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06279 - Celtic Language-Other

Other Celtic Language courses.

## Greek Languages

## 06281 - Greek I

Designed to introduce students to Greek language and culture, Greek I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Greek culture is introduced through the art, literature, customs, and history of the Greek-speaking people.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

Greek Languages

## 06282 - Greek II

Greek II courses build upon skills developed in Greek I, extending students' ability to understand and express themselves in Greek and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Greek-speaking people to deepen their understanding of the culture(s)

## 06283 - Greek III

Greek III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06284 - Greek IV

Greek IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Greek language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06285 - Greek V

Greek V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06286 - Greek for Native Speakers

Greek for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Greek for Native Speakers courses often move faster than do regular Greek foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06287 - Greek Field Experience

Greek Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Greek is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

Greek Languages

## 06288 - Greek Conversation and Culture

Greek Conversation and Culture courses provide students with an introduction to the Greek language and the culture(s) of Greek-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06289 - Greek Literature

Greek Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Greek

## 06290 - IB Language A (non-English)-Greek

IB Language A (non-English)—Greek courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06291 - IB Language B-Greek

IB Language B-Greek courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06299 - Greek—Other

Other Greek courses.

## Classical Languages

## 06301 - Latin I

Latin I courses expose students to the Latin language and culture, emphasizing basic grammar and syntax, simple vocabulary, and the influence of Latin on current English words. Students will be able to read and write in Latin on a basic level.

## 06302 - Latin II

Latin II courses enable students to expand upon what they have learned in Latin I, increasing their skills and depth of knowledge through the practice of structures, forms, and vocabulary. Reading materials reflect Roman life and culture.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Classical Languages

## 06303 - Latin III

Latin III courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.

## 06304 - Latin IV

Latin IV courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.

## 06305 - Latin V

Latin V courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.

## 06311 - IB Classical Languages-Latin

Latin V courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.

## 06313 - AP Latin (Virgil, Catullus and Horace)

Designed to parallel advanced college-level courses in Latin studies, AP Latin courses build upon and increase knowledge of Latin, enabling students to read the language with comprehension, to accurately translate Latin into English, and to appreciate the stylistic literary techniques used by the authors. AP Latin courses also include study of the political, social, and cultural background of the literary works and their authors, as well as their influence on later literature.

## 06321 - Classical Greek I

Classical Greek I courses expose students to classic Greek language and culture, emphasizing basic grammar, syntax, and simple vocabulary. Students will be able to read and write in Latin on a basic level.

## 06322 - Classical Greek II

Classical Greek II courses enable students to expand upon what they have learned in Classical Greek I, increasing their skills and depth of knowledge through the practice of structures, forms, and vocabulary. Reading materials reflect Greek life and culture.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Classical Languages

## 06323 - Classical Greek III

Classical Greek III courses build students' knowledge of the classic Greek language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Greek texts.

## 06324 - Classical Greek IV

Classical Greek IV courses build students' knowledge of the classic Greek language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Greek texts.

## 06325 - Classical Greek V

Classical Greek V courses build students' knowledge of the classic Greek language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Greek texts.

## 06331 - IB Classical Languages-Greek

IB Classical Languages-Greek courses seek to strike a balance between the study of the classic Greek language itself (structure, meaning, and formulation) and the civilization it reflects (particularly its culture, philosophies, and institutions). Course content enables students to understand, translate, and appreciate a classical Greek text; relate literature to its historical or social background; recognize current relevance of ancient literature; and apply acquired knowledge to other subjects.

## 06359 - Classical Languages-Other

Other Classical Language courses.

## East Asian Languages

## 06401 - Chinese I

Designed to introduce students to Chinese language and culture, Chinese I courses emphasize basic syntax, simple vocabulary, written characters, and spoken tones so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Chinese culture is introduced through the art, literature, customs, and history of Chinese-speaking people.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06402 - Chinese II

Chinese II courses build upon skills developed in Chinese I, extending students' ability to understand and express themselves in Chinese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and phrasing, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Chinese-speaking people to deepen their understanding of the culture(s)

## 06403 - Chinese III

Chinese III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06404 - Chinese IV

Chinese IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Chinese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of language rules and a strong vocabulary.

## 06405 - Chinese V

Chinese V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06406 - Chinese for Native Speakers

Chinese for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Chinese for Native Speakers courses often move faster than do regular Chinese foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06407 - Chinese Field Experience

Chinese Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Chinese is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06408 - Chinese Conversation and Culture

Chinese Conversation and Culture courses provide students with an introduction to the Chinese language and the culture(s) of Chinese-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06409 - Chinese Literature

Chinese Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Chinese.

## 06410 - IB Language A (non-English)-Chinese

IB Language A (non-English)-Chinese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06411 - IB Language B-Chinese

IB Language B-Chinese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06421 - Japanese I

Designed to introduce students to Japanese language and culture, Japanese I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Japanese culture is introduced through the art, literature, customs, and history of the Japanese-speaking people.

## 06422 - Japanese II

Japanese II courses build upon skills developed in Japanese I, extending students' ability to understand and express themselves in Japanese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Japanese-speaking people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06423 - Japanese III

Japanese III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06424 - Japanese IV

Japanese IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Japanese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06425 - Japanese V

Japanese V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06426 - Japanese for Native Speakers

Japanese for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Japanese for Native Speakers courses often move faster than do regular Japanese foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06427 - Japanese Field Experience

Japanese Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Japanese is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06428 - Japanese Conversation and Culture

Japanese Conversation and Culture courses provide an introduction to the Japanese language and the culture(s) of Japanese-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06429 - Japanese Literature

Japanese Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Japanese.

## 06430 - IB Language A (non-English)-Japanese

IB Language A (non-English)—Japanese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06431 - IB Language B—Japanese

IB Language B—Japanese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06441 - Korean I

Designed to introduce students to Korean language and culture, Korean I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Korean culture is introduced through the art, literature, customs, and history of the Korean-speaking people.

## 06442 - Korean II

Korean II courses build upon skills developed in Korean I, extending students' ability to understand and express themselves in Korean and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Korean-speaking people to deepen their understanding of the culture(s).

## 06443 - Korean III

Korean III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06444 - Korean IV

Korean IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Korean language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06445 - Korean V

Korean V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06446 - Korean for Native Speakers

Korean for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Korean for Native Speakers courses often move faster than do regular Korean foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06447 - Korean Field Experience

Korean Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Korean is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06448 - Korean Conversation and Culture

Korean Conversation and Culture courses provide students with an introduction to the Korean language and the culture(s) of Korean-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06449 - Korean Literature

Korean Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Korean.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06450 - IB Language A (non-English)—Korean

IB Language A (non-English)—Korean courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06451 - IB Language B-Korean

IB Language B—Korean courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06481 - East Asian Language I

Designed to introduce students to an East Asian language not otherwise described (e.g., Tibetan and Mongolian) and culture, East Asian Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06482 - East Asian Language II

East Asian Language II courses build upon skills developed in East Asian Language I, extending students' ability to understand and express themselves in an East Asian language not otherwise described (e.g., Tibetan and Mongolian) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## 06483 - East Asian Language III

East Asian Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06484 - East Asian Language IV

East Asian Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the East Asian Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06485 - East Asian Language V

East Asian Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06486 - East Asian Language for Native Speakers

East Asian Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue not otherwise described (e.g., Tibetan and Mongolian). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), East Asian Language for Native Speakers courses often move faster than do regular East Asian Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06487 - East Asian Language Field Experience

East Asian Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where an East Asian language (e.g., Tibetan and Mongolian) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06488 - East Asian Language Conversation and Culture

East Asian Language Conversation and Culture courses provide students with an introduction to an East Asian language not otherwise described (e.g., Tibetan and Mongolian) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06489 - East Asian Literature

East Asian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in an East Asian language not otherwise described (e.g., Tibetan and Mongolian).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## East Asian Languages

## 06490 - IB Language A (non-English)—East Asian Language

IB Language A (non-English)—East Asian Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06491 - IB Language B-East Asian Language

IB Language B—East Asian Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language), Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06499 - East Asian Language-Other

Other East Asian Language courses.

## Southeast Asian Languages

## 06501 - Vietnamese I

Designed to introduce students to Vietnamese language and culture, Vietnamese I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Vietnamese culture is introduced through the art, literature, customs, and history of the Vietnamese-speaking people.

## 06502 - Vietnamese II

Vietnamese II courses build upon skills developed in Vietnamese I, extending students' ability to understand and express themselves in Vietnamese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Vietnamese speaking people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Southeast Asian Languages

## 06503 - Vietnamese III

Vietnamese III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06504 - Vietnamese IV

Vietnamese IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Vietnamese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06505 - Vietnamese V

Vietnamese V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06506 - Vietnamese for Native Speakers

Vietnamese for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Vietnamese for Native Speakers courses often move faster than do regular Vietnamese foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06507 - Vietnamese Field Experience

Vietnamese Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Vietnamese is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06508 - Vietnamese Conversation and Culture

Vietnamese Conversation and Culture courses provide students with an introduction to the Vietnamese language and the culture(s) of Vietnamese-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Southeast Asian Languages

## 06509 - Vietnamese Literature

Vietnamese Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Vietnamese.

## 06510 - IB Language A (non-English)-Vietnamese

IB Language A (non-English)—Vietnamese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06511 - IB Language B-Vietnamese

IB Language B—Vietnamese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language) Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06521 - Filipino I

Designed to introduce students to Filipino language and culture, Filipino I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Filipino culture is introduced through the art, literature, customs, and history of the people of the Philippines.

## 06522 - Filipino II

Filipino II courses build upon skills developed in Filipino I, extending students' ability to understand and express themselves in Filipino and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of the Philippines to deepen their understanding of the culture(s).

## 06523 - Filipino III

Filipino III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Southeast Asian Languages

## 06524 - Filipino IV

Filipino IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Filipino language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06525 - Filipino V

Filipino V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06526 - Filipino for Native Speakers

Filipino for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Filipino for Native Speakers courses often move faster than do regular Filipino foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06527 - Filipino Field Experience

Filipino Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Filipino is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06528 - Filipino Conversation and Culture

Filipino Conversation and Culture courses provide students with an introduction to the Filipino language and the culture(s) of the people of the Philippines, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06529 - Filipino Literature

Filipino Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Filipino.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Southeast Asian Languages

## 06530 - IB Language A (non-English)—Filipino

IB Language A (non-English)—Filipino courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06531 - IB Language B—Filipino

IB Language A (non-English)-Filipino courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06581 - Southeast Asian Language I

Designed to introduce students to a Southeast Asian language not otherwise described (e.g., Malay, Thai, and Lao) and culture, Southeast Asian Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06582 - Southeast Asian Language II

Southeast Asian Language II courses build upon skills developed in Southeast Asian Language I, extending students' ability to understand and express themselves in a Southeast Asian language not otherwise described (e.g., Malay, Thai, and Lao) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## 06583 - Southeast Asian Language III

Southeast Asian Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Southeast Asian Languages

## 06584 - Southeast Asian Language IV

Southeast Asian Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Southeast Asian Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06585 - Southeast Asian Language V

Southeast Asian Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06586 - Southeast Asian Language for Native Speakers

Southeast Asian Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue not otherwise described (e.g., Malay, Thai, and Lao). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Southeast Asian Language for Native Speakers courses often move faster than do regular Southeast Asian Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06587 - Southeast Asian Language Field Experience

Southeast Asian Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Southeast Asian language (e.g., Malay, Thai, and Lao) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06588 - Southeast Asian Language Conversation and Culture

Southeast Asian Language Conversation and Culture courses provide students with an introduction to a Southeast Asian language not otherwise described (e.g., Malay, Thai, and Lao) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06589 - Southeast Asian Literature

Southeast Asian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Southeast Asian language not otherwise described (e.g., Malay, Thai, and Lao).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Southeast Asian Languages

## 06590 - IB Language A (non-English)—Southeast Asian Language

IB Language A (non-English)-Southeast Asian Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06591 - IB Language B-Southeast Asian Language

IB Language B-Southeast Asian Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06599 - Southeast Asian Language-Other

Other Southeast Asian Language courses.

## Balto-Slavic Languages

## 06601 - Russian I

Designed to introduce students to Russian language and culture, Russian I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Russian culture is introduced through the art, literature, customs, and history of the Russian-speaking people.

## 06602 - Russian II

Russian II courses build upon skills developed in Russian I, extending students' ability to understand and express themselves in Russian and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Russian-speaking people to deepen their understanding of the culture(s)

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Balto-Slavic Languages

## 06603 - Russian III

Russian III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06604 - Russian IV

Russian IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Russian language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06605 - Russian V

Russian V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06606 - Russian for Native Speakers

Russian for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Russian for Native Speakers courses often move faster than do regular Russian foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06607 - Russian Field Experience

Russian Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Russian is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06608 - Russian Conversation and Culture

Russian Conversation and Culture courses provide students with an introduction to the Russian language and the culture(s) of Russian-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

High School

## Subject Area 06: World Language and Literature (secondary)

## Balto-Slavic Languages

## 06609 - Russian Literature

Russian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Russian.

## 06610 - IB Language A (non-English)—Russian

IB Language A (non-English)—Russian courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06611 - IB Language-Russian

IB Language B-Russian courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06641 - Balto-Slavic Language I

Designed to introduce students to a Balto-Slavic language not otherwise described (e.g., Polish, Armenian, Serbo-Croatian, and Lithuanian) and culture, Balto-Slavic Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06642 - Balto-Slavic Language II

Balto-Slavic Language II courses build upon skills developed in Balto-Slavic Language I, extending students' ability to understand and express themselves in a Balto-Slavic language not otherwise described (e.g., Polish, Armenian, Serbo-Croatian, and Lithuanian) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## 06643 - Balto-Slavic Language III

Balto-Slavic Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Balto-Slavic Languages

## 06644 - Balto-Slavic Language IV

Balto-Slavic Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Balto-Slavic Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06645 - Balto-Slavic Language V

Balto-Slavic Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06646 - Balto-Slavic Language for Native Speakers

Balto-Slavic Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue not otherwise described (e.g., Polish, Armenian, Serbo-Croatian, and Lithuanian). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Balto-Slavic Language for Native Speakers courses often move faster than do regular Balto-Slavic Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06647 - Balto-Slavic Language Field Experience

Balto-Slavic Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Balto-Slavic language (e.g., Polish, Armenian, Serbo-Croatian, and Lithuanian) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06648 - Balto-Slavic Language Conversation and Culture

Balto-Slavic Language Conversation and Culture courses provide students with an introduction to a Balto-Slavic language not otherwise described (e.g., Polish, Armenian, Serbo-Croatian, and Lithuanian) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while deemphasizing writing and reading the language.

## 06649 - Balto-Slavic Literature

Balto-Slavic Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Balto-Slavic language not otherwise described (e.g., Polish, Armenian, SerboCroatian, and Lithuanian).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Balto-Slavic Languages

## 06650 - IB Language A (non-English)—Balto-Slavic Language

IB Language A (non-English)—Balto-Slavic Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06651 - IB Language B—Balto-Slavic Language

IB Language B-Balto-Slavic Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06659 - Balto-Slavic Language-Other

Other Balto-Slavic language courses.

## Turkic/Ural-Altaic Languages

## 06661 - Turkic/Ural-Altaic Language I

Designed to introduce students to a Turkic/Ural-Altaic language (e.g., Turkish, Finnish, and Hungarian) and culture, Turkic/Ural-Altaic Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06662 - Turkic/Ural-Altaic Language II

Turkic/Ural-Altaic Language II courses build upon skills developed in Turkic/Ural-Altaic Language I, extending students' ability to understand and express themselves in a Turkic/Ural-Altaic language (e.g., Turkish, Finnish, and Hungarian) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Turkic/Ural-Altaic Languages

## 06663 - Turkic/Ural-Altaic Language III

Turkic/Ural-Altaic Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06664 - Turkic/Ural-Altaic Language IV

Turkic/Ural-Altaic Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Turkic/Ural-Altaic Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06665 - Turkic/Ural-Altaic Language V

Turkic/Ural-Altaic Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06666 - Turkic/Ural-Altaic Language for Native Speakers

Turkic/Ural-Altaic Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue (e.g., Turkish, Finnish, and Hungarian). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Turkic/Ural-Altaic Language for Native Speakers courses often move faster than do regular Turkic/Ural-Altaic Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06667 - Turkic/Ural-Altaic Language Field Experience

Turkic/Ural-Altaic Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Turkic/Ural-Altaic language (e.g., Turkish, Finnish, and Hungarian) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06668 - Turkic/Ural-Altaic Language Conversation and Culture

Turkic/Ural-Altaic Language Conversation and Culture courses provide students with an introduction to a Turkic/Ural-Altaic language (e.g., Turkish, Finnish, and Hungarian) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Turkic/Ural-Altaic Languages

## 06669 - Turkic/Ural-Altaic Literature

Turkic/Ural-Altaic Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Turkic/Ural-Altaic language (e.g., Turkish, Finnish, and Hungarian).

## 06670 - IB Language A (non-English)-Turkic/Ural-Altaic Language

IB Language A (non-English)—Turkic/Ural-Altaic Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06671 - IB Language B—Turkic/Ural-Altaic Language

IB Language B-Turkic/Ural-Altaic Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06679 - Turkic/Ural-Altaic Language-Other

Other Turkic/Ural-Altaic language courses.

## Iranian/Persian Languages

## 06681 - Iranian/Persian Language I

Designed to introduce students to an Iranian/Persian language (e.g., Persian, Kurdish, and Pashto) and culture, Iranian/Persian Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06682 - Iranian/Persian Language II

Iranian/Persian Language II courses build upon skills developed in Iranian/Persian Language I, extending students' ability to understand and express themselves in a Iranian/Persian language (e.g., Persian, Kurdish, and Pashto) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Iranian/Persian Languages

## 06683 - Iranian/Persian Language III

Iranian/Persian Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06684 - Iranian/Persian Language IV

Iranian/Persian Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Iranian/Persian Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06685 - Iranian/Persian Language V

Iranian/Persian Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06686 - Iranian/Persian Language for Native Speakers

Iranian/Persian Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue (e.g., Persian, Kurdish, and Pashto). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Iranian/Persian Language for Native Speakers courses often move faster than do regular Iranian/Persian Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06687 - Iranian/Persian Language Field Experience

Iranian/Persian Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where an Iranian/Persian language (e.g., Persian, Kurdish, and Pashto) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06688 - Iranian/Persian Language Conversation and Culture

Iranian/Persian Language Conversation and Culture courses provide students with an introduction to an Iranian/Persian language (e.g., Persian, Kurdish, and Pashto) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Iranian/Persian Languages

## 06689 - Iranian/Persian Literature

Iranian/Persian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in an Iranian/Persian language (e.g., Persian, Kurdish, and Pashto).

## 06690 - IB Language A (non-English)—Iranian/Persian Language

IB Language A (non-English)—Iranian/Persian Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06691 - IB Language B-Iranian/Persian Language

IB Language B-Iranian/Persian Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06699 - Iranian/Persian Language-Other

Other Iranian/Persian language courses.

## Semitic and Near/Middle Eastern Languages

## 06701 - Hebrew I

Designed to introduce students to Hebrew language and culture, Hebrew I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Hebrew culture is introduced through the art, literature, customs, and history of the Hebrew-speaking people.

## 06702 - Hebrew II

Hebrew II courses build upon skills developed in Hebrew I, extending students' ability to understand and express themselves in Hebrew and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Hebrew-speaking people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Semitic and Near/Middle Eastern Languages

## 06703 - Hebrew III

Hebrew III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06704 - Hebrew IV

Hebrew IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Hebrew language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06705 - Hebrew V

Hebrew V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06706 - Hebrew for Native Speakers

Hebrew for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Hebrew for Native Speakers courses often move faster than do regular Hebrew foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06707 - Hebrew Field Experience

Hebrew for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Hebrew for Native Speakers courses often move faster than do regular Hebrew foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06708 - Hebrew Conversation and Culture

Hebrew Conversation and Culture courses provide students with an introduction to the Hebrew language and the culture(s) of Hebrew-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Semitic and Near/Middle Eastern Languages

## 06709 - Hebrew Literature

Hebrew Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Hebrew.

## 06710 - IB Language A (non-English)—Hebrew

IB Language A (non-English)-Hebrew courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06711 - IB Language B-Hebrew

B Language B—Hebrew courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06712 - IB Classical Languages-Hebrew

IB Classical Languages-Hebrew courses seek to strike a balance between the study of the language itself (structure, meaning, and formulation) and the study of the civilization it reflects (particularly its culture, philosophies, and institutions). Course content enables students to understand, translate, and appreciate a classical Hebrew text; relate literature to its historical or social background; recognize current relevance of ancient literature; and apply acquired knowledge to other subjects.

## 06721 - Arabic I

Designed to introduce students to Arabic language and culture, Arabic I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Arabic culture is introduced through the art, literature, customs, and history of the Arabic-speaking people.

## 06722 - Arabic II

Arabic II courses build upon skills developed in Arabic I, extending students' ability to understand and express themselves in Arabic and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Arabic-speaking people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Semitic and Near/Middle Eastern Languages

## 06723 - Arabic III

Arabic III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06724 - Arabic IV

Arabic IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Arabic language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06725 - Arabic V

Arabic V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06726 - Arabic for Native Speakers

Arabic for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Arabic for Native Speakers courses often move faster than do regular Arabic foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06727 - Arabic Field Experience

Arabic Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Arabic is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06728 - Arabic Conversation and Culture

Arabic Conversation and Culture courses provide students with an introduction to the Arabic language and the culture(s) of Arabic-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Semitic and Near/Middle Eastern Languages

## 06729 - Arabic Literature

Arabic Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Arabic.

## 06730 - IB Language A (non-English)—Arabic

IB Language A (non-English)—Arabic courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06731 - IB Language B—Arabic

IB Language B-Arabic courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06732 - IB Classical Languages-Arabic

IB Classical Languages-Arabic courses seek to strike a balance between the study of the language itself (structure, meaning, and formulation) and the study of the civilization it reflects (particularly its culture, philosophies, and institutions). Course content enables students to understand, translate, and appreciate a classical Arabic text; relate literature to its historical or social background; recognize current relevance of ancient literature; and apply acquired knowledge to other subjects.

## 06759 - Semitic and Near/Middle Eastern Languages-Other

Other Semitic and Near/Middle Eastern language courses.

## Non-Semitic African Languages

## 06761 - Swahili I

Designed to introduce students to Swahili language and culture, Swahili I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Swahili culture is introduced through the art, literature, customs, and history of the Swahili-speaking people.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Non-Semitic African Languages

## 06762 - Swahili II

Swahili II courses build upon skills developed in Swahili I, extending students' ability to understand and express themselves in Swahili and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Swahili-speaking people to deepen their understanding of the culture(s)

## 06763 - Swahili III

Swahili III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06764 - Swahili IV

Swahili IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Swahili language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06765 - Swahili V

Swahili V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06766 - Swahili for Native Speakers

Swahili for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Swahili for Native Speakers courses often move faster than do regular Swahili foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also incorporate more of the culture or history of the people than do regular foreign language courses and introduce translation skills.

## 06767 - Swahili Field Experience

Swahili Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where Swahili is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Non-Semitic African Languages

## 06768 - Swahili Conversation and Culture

Swahili Conversation and Culture courses provide students with an introduction to the Swahili language and the culture(s) of Swahili-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## 06769 - Swahili Literature

Swahili Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Swahili.

## 06770 - IB Language A (non-English)—Swahili

IB Language A (non-English)-Swahili courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06771 - IB Language B—Swahili

IB Language B-Swahili courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06781 - Non-Semitic African Language I

Designed to introduce students to a Non-Semitic African language not otherwise described (e.g., Ibo, Yoruba, and Amharic) and culture, Non-Semitic African Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06782 - Non-Semitic African Language II

Non-Semitic African Language II courses build upon skills developed in Non-Semitic African Language I, extending students' ability to understand and express themselves in a Non-Semitic African language not otherwise described (e.g., Ibo, Yoruba, and Amharic) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Non-Semitic African Languages

## 06783 - Non-Semitic African Language III

Non-Semitic African Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06784 - Non-Semitic African Language IV

Non-Semitic African Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Non-Semitic African Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06785 - Non-Semitic African Language V

Non-Semitic African Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06786 - Non-Semitic African Language for Native Speakers

Non-Semitic African Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06787 - Non-Semitic African Language Field Experience

Non-Semitic African Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Non-Semitic African language (e.g., Ibo, Yoruba, and Amharic) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06788 - Non-Semitic African Language Conversation and Culture

Non-Semitic African Language Conversation and Culture courses provide students with an introduction to a Non-Semitic African language not otherwise described (e.g., Ibo, Yoruba, and Amharic) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Non-Semitic African Languages

## 06789 - Non-Semitic African Literature

Non-Semitic African Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Non-Semitic African language not otherwise described (e.g., Ibo, Yoruba, and Amharic).

## 06790 - IB Language A (non-English)—Non-Semitic African Language

IB Language A (non-English)—Non-Semitic African Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06791 - IB Language B—Non-Semitic African Language

IB Language B-Non-Semitic African Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06799 - Non-Semitic African Language-Other

Other Non-Semitic African language courses.

## American Sign Language

## 06801 - American Sign Language I

Designed to introduce students to American Sign Language, American Sign Language I courses enable students to communicate with deaf persons through finger spelling, signed words, and gestures. Course topics may include the culture of and issues facing deaf people.

## 06802 - American Sign Language II

American Sign Language II courses build upon skills developed in American Sign Language I, extending students' ability to understand and express themselves in American Sign Language and increasing their vocabulary and speed. Typically, students learn how to engage in discourse for informative or social purposes and to comprehend the language when signed slowly.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## American Sign Language

## 06803 - American Sign Language III

American Sign Language III courses focus on having students express increasingly complex concepts while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when viewing the language signed at normal rates and conversing easily within limited situations.

## 06804 - American Sign Language IV

American Sign Language IV courses focus on advancing students' skills and abilities to sign and understand the language so that they can maintain simple conversations with sufficient vocabulary and in an acceptable pace and have sufficient comprehension skills to understand the language when signed at a normal pace.

## 06805 - American Sign Language V

American Sign Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs.

## 06819 - American Sign Language-Other

Other American Sign Language courses.

## American Indian Languages

## 06821 - American Indian Language I

Designed to introduce students to a American Indian language not otherwise described (e.g., Navajo, Cherokee, and Kree) and culture, American Indian Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06822 - American Indian Language II

American Indian Language II courses build upon skills developed in American Indian Language I, extending students' ability to understand and express themselves in a American Indian language not otherwise described (e.g., Navajo, Cherokee, and Kree) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## American Indian Languages

## 06823 - American Indian Language III

American Indian Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06824 - American Indian Language IV

American Indian Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the American Indian Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06825 - American Indian Language V

American Indian Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06826 - American Indian Language for Native Speakers

American Indian Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue not otherwise described (e.g., Navajo, Cherokee, and Kree). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), American Indian Language for Native Speakers courses often move faster than do regular American Indian Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06827 - American Indian Language Field Experience

American Indian Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a American Indian language (e.g., Navajo, Cherokee, and Kree) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06828 - American Indian Language Conversation and Culture

American Indian Language Conversation and Culture courses provide students with an introduction to a American Indian language not otherwise described (e.g., Navajo, Cherokee, and Kree) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while deemphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## American Indian Languages

## 06829 - American Indian Literature

American Indian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a American Indian language not otherwise described (e.g., Navajo, Cherokee, and Kree).

## 06830 - IB Language A (non-English)—American Indian Language

IB Language A (non-English)-American Indian Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06831 - IB Language B-American Indian Language

IB Language B-American Indian Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06839 - American Indian Language-Other

Other American Indian language courses.

## Indic Languages

## 06841 - Indic Language I

Designed to introduce students to an Indic language (e.g., Hindi, Urdu, Panjabi, and Romany) and culture, Indic Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06842 - Indic Language II

Indic Language II courses build upon skills developed in Indic Language I, extending students' ability to understand and express themselves in an Indic language (e.g., Hindi, Urdu, Panjabi, and Romany) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Indic Languages

## 06843 - Indic Language III

Indic Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06844 - Indic Language IV

Indic Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Indic Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06845 - Indic Language V

Indic Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06846 - Indic Language for Native Speakers

Indic Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue (e.g., Hindi, Urdu, Panjabi, and Romany). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Indic Language for Native Speakers courses often move faster than do regular Indic Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06847 - Indic Language Field Experience

Indic Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where an Indic language (e.g., Hindi, Urdu, Panjabi, and Romany) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06848 - Indic Language Conversation and Culture

Indic Language Conversation and Culture courses provide students with an introduction to an Indic language (e.g., Hindi, Urdu, Panjabi, and Romany) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Indic Languages

## 06849 - Indic Literature

Indic Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in an Indic language (e.g., Hindi, Urdu, Panjabi, and Romany).

## 06850 - IB Language A (non-English)-Indic Language

IB Language A (non-English)—Indic Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06851 - IB Language B-Indic Language

IB Language B—Indic Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language), Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06859 - Indic Language-Other

Other Indic language courses.

## Malayo-Polynesian Languages

## 06861 - Malayo-Polynesian Language I

Designed to introduce students to a Malayo-Polynesian language (e.g., Malay, Indonesian, Hawaiian, and Samoan) and culture, Malayo-Polynesian Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

## 06862 - Malayo-Polynesian Language II

Malayo-Polynesian Language II courses build upon skills developed in Malayo-Polynesian Language I, extending students' ability to understand and express themselves in a Malayo-Polynesian language (e.g., Malay, Indonesian, Hawaiian, and Samoan) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Malayo-Polynesian Languages

## 06863 - Malayo-Polynesian Language III

Malayo-Polynesian Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## 06864 - Malayo-Polynesian Language IV

Malayo-Polynesian Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Malayo-Polynesian Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

## 06865 - Malayo-Polynesian Language V

Malayo-Polynesian Language V courses extend students' facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

## 06866 - Malayo-Polynesian Language for Native Speakers

Malayo-Polynesian Language for Native Speakers courses support, reinforce, and expand students' knowledge of their own tongue (e.g., Malay, Indonesian, Hawaiian, and Samoan). Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Malayo-Polynesian Language for Native Speakers courses often move faster than do regular Malayo-Polynesian Language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

## 06867 - Malayo-Polynesian Language Field Experience

Malayo-Polynesian Language Field Experience courses place students in an environment in which they interact with native speakers, most typically in a setting where a Malayo-Polynesian language (e.g., Malay, Indonesian, Hawaiian, and Samoan) is the main language spoken. Students strengthen their language skills (reading, writing, listening, and speaking) and increase their ability to interact naturally.

## 06868 - Malayo-Polynesian Language Conversation and Culture

Malayo-Polynesian Language Conversation and Culture courses provide students with an introduction to a Malayo-Polynesian language (e.g., Malay, Indonesian, Hawaiian, and Samoan) and the culture(s) of the people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## Malayo-Polynesian Languages

## 06869 - Malayo-Polynesian Literature

Malayo-Polynesian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a Malayo-Polynesian language (e.g., Malay, Indonesian, Hawaiian, and Samoan).

## 06870 - IB Language A (non-English)—Malayo-Polynesian Language

IB Language A (non-English)-Malayo-Polynesian Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

## 06871 - IB Language B-Malayo-Polynesian Language

IB Language B-Malayo-Polynesian Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

## 06879 - Malayo-Polynesian Language-Other

Other Malayo-Polynesian language courses.

## General

06995 - Foreign Language and Literature-Aide
Foreign Language and Literature-Aide courses offer students the opportunity to assist instructors in preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 06997 - Foreign Language and Literature-Independent Study

Foreign Language and Literature-Independent Study courses, often conducted with instructors as mentors, enable students to explore foreign language-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular language, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 06: World Language and Literature (secondary)

## General


#### Abstract

06998 - Foreign Language and Literature-Workplace Experience Foreign Language and Literature-Workplace Experience courses provide students with work experience in a field related to foreign language and literature. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.


06999 - Foreign Language and Literature-Other
Other Foreign Language and Literature courses.

## Subject Area 07: Religious Education and Theology (secondary)

## 07001 - Religious Foundations

Religious Foundations courses' primary objectives include instruction in the history, tenets, and organization of a religion; development of personal faith and conviction; and exposure to the ways in which daily life may reflect personal religious beliefs. These courses typically include various components particular to a specific religion, such as religious sacraments and symbols, food laws, the authority and structure of the church, the church calendar, and so on.

## 07002 - Comparative Religion

Comparative Religion courses survey and compare the various forms and values of several world religions, offering students a basic understanding of the world's diverse religious faiths and practices. Course topics typically include the belief systems of adherents; the relationships among humans, nature, ancestors, and the spiritual world; and the historical development of each religion.

## 07003 - Eastern Religions

Similar to Comparative Religion, Eastern Religions courses provide students with an overview of various religions and belief systems but focus on those of the Eastern World. Particular religious or philosophical systems of study usually include Buddhism, Hinduism, Islam, Taoism, Shintoism, and Confucianism, among others.

## State Course Codes

High School

## Subject Area 07: Religious Education and Theology (secondary)

## 07004 - Western Religions

Similar to Comparative Religion, Western Religions courses provide students with an overview of various religions and belief systems but focus on those of the Western World. Particular religious or philosophical systems of study usually include Judaism; Christianity (including various faiths such as those of Catholics, Episcopalians, Baptists, Quakers, Mormons, Mennonites, and others); and Native Indian belief systems, among others.

## 07005 - Scriptures

Scriptures courses emphasize understanding and interpreting the sacred writings of a faith (such as the Bible, Torah, Koran, Book of Mormon, and so on) from the standpoint of a religious faith. Course objectives are designed so that students may comprehend the theological, doctrinal, and ethical messages contained within religious scriptures.

## 07006 - Old Testament

Old Testament courses emphasize understanding and interpreting the sacred writings of the Old Testament from the standpoint of a religious faith and may focus on one or several books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages, but may also include critique and commentary.

## 07007 - New Testament

New Testament courses emphasize understanding and interpreting the sacred writings of the New Testament from the standpoint of a religious faith and may focus on one or several religious books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages, but may also include critique and commentary.

## 07008 - Bible History

Bible History courses treat the Bible as a historical document and provide an overview of significant biblical events. The content usually includes geography; the relationship among cultures, belief systems, and the events chronicled in the Bible; and early Jewish or Christian Church history

## 07009-Christology

Christology courses concern the work and life of Jesus Christ and the literature related to him. Course content is typically based on Christian scriptures, leading to an examination of the message of Jesus Christ and applying His message to daily life.

## State Course Codes

High School

## Subject Area 07: Religious Education and Theology (secondary)

## 07010 - Religious Figures

Religious Figures courses offer students the opportunity to examine the lives and messages of one or several people who are central to a religious faith, such as a prophet, apostle, philosopher, or leader. In addition to a historical study of the person (or people), these courses typically emphasize how the teachings of these individuals influence the faith and culture of a religious group.

## 07011 - Liturgy and Prayer

Liturgy and Prayer courses vary widely, usually depending upon the underlying religion, but generally seek to inform students about the meaning and message of public and private worship. Course content typically includes an examination or exploration of common rituals, spoken or sung prayers, and observed sacraments.

## 07012 - Prayer and Spirituality

Prayer and Spirituality courses vary widely, but seek to enable students to experience deeper communion with the divine through public and private worship. Course content may include an examination or exploration of traditional and contemporary practices.

## 07013 - Religious Ethics and Morality

Usually including an introduction to or examination of the tenets of a particular faith, Religious Ethics and Morality courses seek to enable students to apply the moral teachings of a faith to their own lives, to the larger community, and to their decision-making processes. Course content may focus on such issues as peace and justice, death and dying, human sexuality, professional ethics, and human rights.

## 07014 - Justice, Peace, and Faith

Justice, Peace, and Faith courses examine the scriptural foundations for justice, typically with a historical overview of a faith's social teaching. These courses discuss such topics as poverty, hunger, conflict, discrimination, justice, and environmental issues, with a view toward developing students' ability to critically reflect upon and analyze their own roles and responsibilities.

## 07015 - Faith and Lifestyle

Faith and Lifestyle courses focus on the development of young adults from puberty to adulthood, approached from the perspective of a faith or church. In these courses, the religion's values and traditions provide an underpinning for examining such topics as identity, independence, sexuality, employment, and leisure. Typically, Faith and Lifestyle courses include discussions about adult rolessingle life, marriage, religious life, and ordained ministry.

## State Course Codes

## High School

## Subject Area 07: Religious Education and Theology (secondary)

## 07016 - Ministry

Ministry courses introduce students to the vocation of service. Students may learn counseling skills, plan and participate in religious services, and minister to younger students or to members of the local community (assisting in hospitals and convalescent homes, crisis centers, soup kitchens, and so on).

## 07995 - Religious Education and Theology-Aide

Religious Education and Theology-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 07997 - Religious Education and Theology-Independent Study

Religious Education and Theology-Independent Study courses, often conducted with instructors, members of the clergy, or religious leaders as mentors, enable students to explore topics of interest related to religion or theology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular religion, to explore a topic in greater detail, or to develop more advanced skills.

## 07998 - Religious Education and Theology-Workplace Experience

Religious Education and Theology-Workplace Experience courses provide students with work experience in a field related to religion and theology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 07999 - Religious Education and Theology-Other

Other Religious Education and Theology courses.

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## State Course Codes

High School

## Subject Area 08: Physical, Health, and Safety Education (secondary)

## Physical Education

## 08002 - Team Sports

Team Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one team sport (such as volleyball, basketball, soccer, and so on).

## 08003 - Individual/Dual Sports

Individual/Dual Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one individual or dual sport (such as tennis, golf, badminton, jogging/running, racquetball, and so on).

## 08004 - Recreation Sports

Recreation Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one recreational sport or outdoor pursuit (such as adventure activities, croquet, Frisbee, wall climbing, bocce ball, fishing, hiking, cycling, and so on).

## 08005 - Fitness/Conditioning Activities

Fitness/Conditioning Activities courses emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness.

## 08006 - Corps Movement

Corps Movement courses emphasize physical conditioning, fundamentals of movement, group precision, and public performance. The courses may be intended for members of various teams, including flag corps, rifle corps, cheerleading squads, and so on.

## 08007 - Adapted Physical Education

These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.

## 08008 - Gymnastics

Gymnastics courses are designed to help students develop knowledge and skills in gymnastics, stunts, and tumbling while emphasizing safety. Floor gymnastics may be supplemented by the use of gymnastic equipment such as balance beam, uneven bars, parallel bars, rings, and so on. Gymnastic courses may include other components such as the history of gymnastics and conditioning.

## 08009 - Weight Training

Weight Training courses help students develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning.

## State Course Codes

High School

## Subject Area 08: Physical, Health, and Safety Education (secondary)

## Physical Education

## 08010 - Aquatics/Water Sports

Aquatic/Water Sports courses help students develop skills useful or necessary in an aquatic environment. They may focus on swimming and competitive strokes, such as freestyle, breaststroke, butterfly, and so on or may involve team-oriented water sports, such as water polo and relay swimming. These courses may also include (or concentrate exclusively on) diving and/or lifesaving skills.

## 08011 - Tennis

Tennis courses help students develop knowledge, skills, and abilities related to the sport of singles or doubles tennis, including shots (such as serves, forehand strokes, backhand strokes, and lobs), scoring, and strategy.

## 08012 - Self-defense

Self-defense courses help students develop knowledge, skills, and abilities to defend themselves against attack by others, usually incorporating traditional self-defense methods. Students may also be taught techniques from martial arts, addressing the differences among those arts and their contribution to defense and sport.

## 08013 - Specific Sports Activities

Courses in Specific Sports Activities help students develop knowledge, experience, and skills in a single sport or activity (such as basketball, volleyball, track and field, and equestrian events) other than those coded within this section. (Dance is included under the Fine and Performing Arts subject area.)

## 08014 - Physical Education Equivalent

These courses award physical education credit for other at-school activities, such as marching band or cheerleading. (Dance is included under the Fine and Performing Arts subject area.)

## 08015 - Off-Campus Sports

These courses award physical education credit for off-campus sports activities such as swimming or weight training courses taken at a community center or community college.

## 08016 - Lifetime Fitness Education

These courses emphasize acquiring knowledge and skills regarding lifetime physical fitness; content may include related topics such as nutrition, stress management, and consumer issues. Students may develop and implement a personal fitness plan.

## State Course Codes

High School

## Subject Area 08: Physical, Health, and Safety Education (secondary)

## Physical Education

## 08017 - Sports Physiology

Courses in Sports Physiology examine human anatomy and physiology as they pertain to human movement and physical performance in sports activities. These courses may also emphasize the prevention and treatment of athletic injuries.

## 08047 - Physical Education-Independent Study

Courses in Physical Education-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to physical education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular sport or activity, to explore a topic in greater detail, or to develop more advanced skills.

## 08048 - Physical Education-Workplace Experience

Physical Education-Workplace Experience courses provide work experience in a field related to physical education. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences encountered in the workplace.

## 08049 - Physical Education-Other

Other Physical Education courses.

## Health Education

## 08051 - Health Education

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

## 08052 - Health and Fitness

Health and Fitness courses combine the topics of Health Education courses (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

## State Course Codes

High School

## Subject Area 08: Physical, Health, and Safety Education (secondary)

## Health Education

## 08053 - Community Health

Community Health courses cover not only personal health topics (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on), but also more general health issues. These additional topics may include (among others) available community resources, fundamentals of the nation's health care system, contemporary world health issues, and career options within the health field.

## 08054 - Special Needs Health Education

Special Needs Health Education courses focus on the health requirements of individuals with special needs and emphasize meeting those needs within the home setting. These courses provide information regarding the elderly and individuals with disabilities, handicaps, and/or debilitating illnesses, along with strategies to prepare students for their possible roles as caretakers.

## 08055 - Safety and First Aid

Safety and First Aid courses provide specialized instruction in first aid techniques, cardiopulmonary resuscitation (CPR), relief of obstructed airways, and general safety procedures and behaviors. These courses may include such topics as an overview of community agencies and hotlines providing emergency care and information and opportunities for first aid and CPR certification.

## 08056 - Health for Parenting Teens

Designed for pregnant teens and/or parents, topics within Health for Parenting Teens courses cover a wide range of both health and parenting issues, typically including prenatal and postnatal care, health and well-being of young parents, child development, stress management, and parental/adult roles. The courses may also involve academic assistance, career exploration, financial management, and so on.

## 08057 - Health and Life Management (Nutrition and Wellness)

Health and Life Management courses focus as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies. (Nutrition and Wellness explores the relationship of basic nutrition and wellness across the lifespan. It includes an in-depth look at special dietary needs, regulations, technology and the global impact on nutrition and food choices. How to make wise nutritional and wellness choices to develop a healthy self will be a major component of this course as well as an introduction to the occupations related to the field.)

## State Course Codes

High School

## Subject Area 08: Physical, Health, and Safety Education (secondary)

## Health Education

## 08058 - Substance Abuse Prevention

Substance Abuse Prevention courses focus specifically on the health risks of drugs, alcohol and tobacco. These courses provide information on the negative consequences of these products and teach students coping strategies to resist the influences (such as peers and media images) that may entice them to use these substances. Students may also explore the community resources available to them.

## 08067 - Nutrition and Wellness B

Nutrition and Wellness B explores the relationship of basic nutrition and wellness across the lifespan. It includes an in-depth look at special dietary needs, regulations, technology and the global impact on nutrition and food choices. How to make wise nutritional and wellness choices to develop a healthy self will be a major component of this course as well as an introduction to the occupations related to the field.

## 08097 - Health Education-Independent Study

Courses in Health Education-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to health and health education. Independent Study courses may provide students with opportunity to expand expertise in a particular application, to explore a topic of special interest in greater detail, or to develop more advanced skills.

## 08098 - Health Education-Workplace Experience

Health Education-Workplace Experience courses provide work experience in a field related to health education. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences encountered in the workplace.

## 08099 - Health Education-Other

Other Health Education courses.

## Drivers' Education

## 08151 - Drivers' Education-Classroom Only

Drivers' Education-Classroom Only courses provide students with the knowledge to become safe drivers on America's roadways. Topics in these courses include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs).

## State Course Codes

High School

## Subject Area 08: Physical, Health, and Safety Education (secondary)

## Drivers' Education

## 08152 - Drivers' Education-Classroom and Laboratory

Drivers' Education-Classroom and Laboratory courses provide students with the knowledge and experience to become safe drivers on America's roadways. Topics in these courses cover legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs). Experience in driving a vehicle is an essential component of these courses.

## 08197 - Drivers' Education-Independent Study

Courses in Drivers' Education-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to drivers' education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 08198 - Drivers' Education-Workplace Experience

Drivers' Education-Workplace Experience courses provide work experience in a field related to drivers' education. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 08199 - Drivers' Education-Other

Other Driver's Education courses.

## 08201 - Physical Education/Health/Drivers' Education

Physical Education/Health/Drivers' Education courses combine a range of activities and topics involving physical skills, human health issues, and safe driving. They are offered in ways that cover two or three of these areas. The physical education portion of these courses draws on team, individual, dual, recreational, and/or conditioning activities. The human health portion typically covers issues such as nutrition, stress management, drug/alcohol abuse prevention, and first aid. The drivers' education portion usually includes legal obligations and responsibilities, rules of the road and traffic procedures, safe driving strategies, and related topics.

## 08995 - Physical, Health, and Safety Education-Aide

Physical, Health, and Safety Education-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

08997 - Physical, Health, and Safety Education-Independent Study

## State Course Codes

High School

## Subject Area 08: Physical, Health, and Safety Education (secondary)

## Drivers' Education

Courses in Physical, Health, and Safety Education-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to physical, health, and safety education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced physical, health and/or safety skills.

## 08998 - Physical, Health, and Safety Education-Workplace Experience

Physical, Health, and Safety Education-Workplace Experience courses provide work experience in a field related to physical, health, and safety education. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

08999 - Physical, Health, and Safety Education-Other

Other Physical, Health, and Safety Education courses.

## Subject Area 09: Military Science (secondary)

## Genera

## 09001 - Introduction to Jr. ROTC

Introduction to Junior Reserve Officer Training Corps (ROTC) courses introduce students to the purposes and objectives of the Reserve Officer Training Corps program, which seeks to educate high school students in citizenship, promote community service, and instill responsibility. As part of that introduction, course topics typically include a brief history of the military branches in the United States and the basics of military drill, ceremony, and rank structure.

## 09002 - Military Jr. ROTC—unspecified branch

Although individual course sequences may vary, the primary objectives of Military Junior Reserve Officer Training Corps (ROTC) courses are to provide students with instruction in the history, organization, role, objectives, and achievements of a particular branch of the U.S. Armed Forces; help them develop personal fitness, strong character, and leadership qualities; and expose them to the career opportunities provided by the U.S. Armed Services. These courses typically cover such topics as military customs, courtesies, rank, drill, and ceremonies and also emphasize citizenship and scholarship. The course content typically includes subjects related to the particular branch being studied (such as map-reading, nautical skills, aerospace technology, or communication technologies), as well as more general subjects (international law, national defense, celestial navigation, and geopolitical strategy).

## State Course Codes

High School

## Subject Area 09: Military Science (secondary)

## General

## 09003 - ROTC Drill

Reserve Officer Training Corps (ROTC) Drill courses provide students with an additional opportunity to improve their skills in military precision. These courses emphasize marching style and formations, firearm manipulation, body coordination and mechanics, and performing as a member of an orchestrated team. Class members typically participate in ceremonies and competitions.

## 09004 - Military Leadership

Military Leadership courses focus solely on increasing students' leadership skills, particularly as they relate to military operations, customs, and hierarchies. These courses are typically a regular part of the ROTC programs described below (typically the final course within a program series); this Military Leadership course code and title should be used when those descriptions do not apply. The principles and skills taught in these courses include supervision, motivation, evaluation, and setting an example, and their application typically include military drill and inspections, athletic events, and other school activities.

## Army

09051 - Army Junior ROTC I
Army Junior Reserve Officer Training Corps (ROTC) I courses include instruction in the organization and functions of the U.S. Army, leadership skills, and life skills education. The content of these courses cover (but is not limited to) the history and evolution of the Army, including its structure, operations, customs and courtesies; maps and navigation; first aid, personal hygiene, and field sanitation; and substance abuse prevention. These courses also introduce students to principles of leadership and citizenship.

## 09052 - Army Junior ROTC II

Army Junior Reserve Officer Training Corps (ROTC) II courses build upon the content of Army Junior ROTC I and include (but are not limited to) ongoing instruction in leadership principles and citizenship; drill and ceremonies; organizational structure; command and staff relationships, functions, and responsibilities; significant military campaigns and leaders; map-reading and orienteering; weapon safety and marksmanship; and survival training.

## 09053 - Army Junior ROTC III

Army Junior Reserve Officer Training Corps (ROTC) III courses build upon prior Army Junior ROTC courses, giving more emphasis to leadership development. These courses serve to strengthen students' leadership skills (including planning, problem-solving, motivation, and performance appraisal) and management skills (with regard to time, personnel, and other resources) through allowing them to assume leadership duties. Students study topics introduced in earlier years-such as military history, map-reading and orienteering, marksmanship, and drill and ceremonies-at a more advanced level and are also provided with military service opportunities.

## State Course Codes

High School

## Subject Area 09: Military Science (secondary)

## Army

## 09054 - Army Junior ROTC IV

Army Junior Reserve Officer Training Corps (ROTC) IV courses focus on practical leadership by assigning students to command and staff positions in which they present instruction to lower Army Junior ROTC classes and continue to study and review staff functions and actions, staff-commander relationships, and leadership principles. Topics introduced in earlier years may be studied at more advanced levels.

## Navy

## 09101 - Naval Junior ROTC I

Naval Junior Reserve Officer Training Corps (ROTC) I courses emphasize citizenship and leadership development, as well as maritime heritage, sea power, and Naval operations and customs. These courses include (but are not limited to) an introduction to the Naval Junior ROTC program, U.S. Navy mission and organization, maritime geography, naval history, basic seamanship, oceanography, and health education.

## 09102 - Naval Junior ROTC II

Naval Junior Reserve Officer Training Corps (ROTC) II courses build upon the content of Naval Junior ROTC I. These courses include (but are not limited to) leadership principles and discipline, citizenship, naval opportunities and career planning, naval ships and weaponry, seamanship, meteorology and weather, and survival training. Students continue to learn teamwork, naval history, and military principles.

## 09103 - Naval Junior ROTC III

Naval Junior Reserve Officer Training Corps (ROTC) III courses build upon prior Naval Junior ROTC courses. These courses include (but are not limited to) leadership principles and discipline, military justice, international law and the sea, naval intelligence/strategies and national security, and sciences involved in naval operations, such as electricity, electronics, communications technologies, and so on. Students continue to learn teamwork, naval history, and military principles.

## 09104 - Naval Junior ROTC IV

Naval Junior Reserve Officer Training Corps (ROTC) IV courses are focused on practical leadership, placing students in positions where they can learn, practice, and understand skills involved in leading others, such as supervision, motivation, evaluation, setting examples, and problem-solving. Application of these skills usually includes military drill and inspections, athletic events, and other school activities. Topics introduced in earlier years may be studied at more advanced levels.

## State Course Codes

High School

## Subject Area 09: Military Science (secondary)

## Air Force

## 09151 - Air Force Junior ROTC I

Air Force Junior Reserve Officer Training Corps (ROTC) I courses include both aerospace studies and leadership/life skills education. In these courses, leadership/life skills lessons cover the heritage and development of the Air Force, including its structure, operations, customs, and courtesies. Aerospace topics include the development, history, and impact of flight; aircraft and spacecraft; and the environment in which these crafts operate.

## 09152 - Air Force Junior ROTC II

Air Force Junior Reserve Officer Training Corps (ROTC) II courses include both aerospace studies and leadership/life skills education. In these courses, leadership/life skills lessons cover intercommunication skills, drill, and military ceremonies. Aerospace topics emphasize the science of flight, including factors of aerospace power, aircraft flight, and navigation.

## 09153 - Air Force Junior ROTC III

Air Force Junior Reserve Officer Training Corps (ROTC) III courses include both aerospace studies and leadership/life skills education. These courses continue to develop students' life and leadership skills and the ways in which they apply to military life. Aerospace topics emphasize space technology and exploration; examine national defense systems; and advance students' knowledge of aviation, propulsion, and navigation

## 09154 - Air Force Junior ROTC IV

Air Force Junior Reserve Officer Training Corps (ROTC) IV courses include both aerospace studies and leadership/life skills education. The life skills education portion of these courses concentrates on leadership and management principles and career opportunities, and aerospace topics include advanced aerodynamics and aeronautics. Course content may also cover elements of national power and relationships between the nations of the world.

## Marine Corps

09201 - Marine Corps Junior ROTC I
Marine Corps Junior Reserve Officer Training Corps (ROTC) I courses introduce the Marine Corps Junior ROTC program, with an emphasis on personal growth and responsibility along with general military subjects. These courses include (but are not limited to) physical training; health education, including hygiene, first aid, nutrition, and substance abuse prevention; and communication skills. In these courses, students are introduced to and study Marine Corps values and code of conduct; drill and ceremony; military uniforms, customs, and courtesies; military history; and the Marine Corps structure and chain of command.

## State Course Codes

High School

## Subject Area 09: Military Science (secondary)

## Marine Corps

## 09202 - Marine Corps Junior ROTC II

Marine Corps Junior Reserve Officer Training Corps (ROTC) II courses build upon Marine Corps Junior ROTC I. These courses emphasize personal growth and responsibility, leadership, and citizenship along with military subjects that typically include the mission, organization, and history of the Marine Corps; geography, maps, and navigation; drill and ceremony; and military justice. Students learn about such leadership skills as authority, responsibility, and accountability and citizenship topics including U.S. government structures, documents, and symbols.

## 09203 - Marine Corps Junior ROTC III

Marine Corps Junior Reserve Officer Training Corps (ROTC) III courses build upon prior Marine Corps Junior ROTC courses. These courses include (but are not limited to) leadership practice, including training, inspection and evaluation; public service career opportunities; and citizenship responsibilities. These courses cover such personal skills as financial planning, saving and investing, and evaluating credit and insurance terms. Students learn about the structures of other armed service branches, advance their mapping and navigation skills, and may study firearm use, safety and marksmanship. Students continue to learn teamwork, Marine Corps history, and military principles.

## 09204 - Marine Corps Junior ROTC IV

Marine Corps Junior Reserve Officer Training Corps (ROTC) IV courses focus on the practical application of skills learned throughout the program: leadership, communication (written and verbal), personal growth, and public service. These courses emphasize drill and ceremony, physical fitness, marksmanship, land navigation, and military history at more advanced levels than in previous courses.

## Other

## 09995 - Military Science—Aide

Military Science-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 09997 - Military Science-Independent Study

Courses in Military Science-Independent Study, often conducted with instructors/armed services personnel as mentors, enable students to explore topics of interest related to military science. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 09: Military Science (secondary)

## Other

## 09998 - Military Science—Workplace Experience

Military Science-Workplace Experience courses provide students with work experience within the field of military science and are supported by classroom attendance and discussion. In these courses, goals are set for the employment period, and classroom experience may involve further study in the field, improvement of employability skills, or discussion regarding the experiences and problems that students encounter on the job.

09999 - Military Science—Other
Other Military Sciences courses.

## Subject Area 10: Computer and Information Sciences (secondary)

## Computer Literacy

## 10001 - Foundations of Information Technology (Formerly Introduction to Computers)

a course intended to provide students with exposure to various information technology occupations and the information technology pathways available: Network Systems, Information Support and Services, and Programming and Software Development. Students will demonstrate core competencies in safety, electronics and basic digital theory, overview of the internet and operating systems, basic IT terminology and concepts, organization of data and materials, and basic programming. At the conclusion of the course, students should be prepared to make an informed decision about which Information Technology program(s) of study they would like to pursue in conjunction with their IPS.

## 10002 - Computing Systems

Computing Systems courses offer a broad exploration of the use of computers in a variety of fields. These courses have a considerable range of content, but typically include the introduction of robotics and control systems, computer-assisted design, computer-aided manufacturing systems, and other computer technologies as they relate to industry applications.

## 10003 - Computer and Information Technology

Computer and Information Technology courses teach students to operate and use computer and information technology, emphasizing their role as tools to communicate more effectively, conduct research more efficiently, and increase productivity. Course content includes the legal and ethical issues involved with computer technology and use.

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Computer Literacy

## 10004 - Computer Applications

In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.

## 10005 - Business Computer Applications

In Business Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages, particularly those used in the business world. Generally, these courses explore a wide range of applications, including (but not limited to) wordprocessing, spreadsheet, graphics, and database programs, and they may also cover topics such as electronic mail, desktop publishing, and telecommunications.

## 10006-Telecommunications

Telecommunications courses address the growth in global communications and the emerging equipment and systems needed to successfully communicate in a global environment. These courses cover such topics as data communication protocol and systems, government regulations of the communications industry, and the use of cost-effective and productive tools to transmit messages and data. In these courses, students may learn about such communication systems as e-mail, internet or ecommerce, LAN, WAN, voice transmission, cell phone technology, and traditional teleconferencing.

## 10007 - IB Information Technology in a Global Society

IB Information Technology in a Global Society courses prepare students to take the International Baccalaureate Information Technology exams and examine the interaction among information, technology, and society. Course content is designed to help students develop a systematic, problemsolving approach to processing and analyzing information using a range of information tools. In these courses, students also discuss and evaluate how modern information technology affects individuals, relationships among people, and institutions and societies.

## 10008 - Particular Topics in Computer Literacy

These courses examine particular topics related to general computer literacy other than those already described, such as privacy issues or instruction in using a particular software application.

## 10040-Emerging Technologies - Computing

New advances in technology offer promise of more efficiency, convergence of existing technologies, improved productivity and represent progressive development. The degree of impact, status, deployment and economic viability affect future opportunities for society. This course offers opportunity to learn, utilize, and appreciate those impacts in future workforce environments.

10047 - Computer Literacy—Independent Study

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Computer Literacy

Computer Literacy-Independent Study courses, often conducted with instructors as mentors, enable students to explore computer-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 10048 - Computer Literacy-Workplace Experience

Computer Literacy-Workplace Experience courses provide work experience in fields related to computer literacy. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 10049 - Computer Literacy—Other

Other Computer Literacy courses.

10020 - CyberSecurity I
xx

10112 - Network Systems I
xx

## 10900 - CyberSecurity II

xx

## Management Information Systems

## 10051 - Information Support and Services

This course is intended to provide students with exposure to various information technology occupations and the information technology pathways available: Network Systems, Information Support and Services, and Programming and Software Development. Students will demonstrate core competencies in safety, electronics and basic digital theory, overview of the internet and operating systems, basic IT terminology and concepts, organization of data and materials, and basic programming. At the conclusion of the course, students should be prepared to make an informed decision about which Information Technology program(s) of study they would like to pursue in conjunction with their IPS.

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Management Information Systems

## 10052 - Information and Support Services I

This course is designed for students who have chosen to pursue an Information Support and Services program of study to introduce the basic conceptual and practical skills necessary to identify, install, and manage relevant hardware and software in a server/client environment. **Prerequisite Information Support \& Services I or demonstration of all competencies therein.

## 10053 - Database Applications

Database Application courses provide students with an understanding of database development, modeling, design, and normalization. These courses typically cover such topics as SELECT statements, data definition, manipulation, control languages, records, and tables. In these courses, students may use Oracle WebDB, SQL, PL/SQL, SPSS, and SAS and may prepare for certification.

## 10054 - Data Systems/Processing

Data Systems/Processing courses introduce students to the uses and operation of computer hardware and software and to the programming languages used in business applications. Students typically use BASIC, COBOL, and/or RPL languages as they write flowcharts or computer programs and may also learn data-processing skills.

## 10055 - Particular Topics in Management Information Systems

These courses examine particular topics in management information systems other than those already described.

## 10097 - Information Support and Services II

: This is a course designed for students who have chosen to pursue an Information Support and Services program of study to emphasize more advanced conceptual and practical skills necessary to identify, install, and manage relevant hardware and software in information systems. This should be a dual enrollment course with the student completing post-secondary credit hours in the Computer Support Specialist certification track (KBOR). Students should be completing preparatory competencies toward successful completion of the CompTIA Server+ or CompTIA A+ exams and attainment of certification. **Prerequisites Information Support \& Services I and Information Support \& Services II or demonstration of all competencies therein

## 10098 - Work-Based Learning in Information Support and Services

a capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select models of work-based learning, which allow students to interact with industry professionals in order to extend and deepen classroom work and support the development of postsecondary and career readiness knowledge and skills. Competencies during the experience, verified by the WBL coordinator or district representative, should continue to align with attainment of appropriate CompTIA certification(s).

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Management Information Systems

## 10099 - Management Information Systems-Other

Other Management Information Systems courses.

## Network Systems

## 10101 - Network Technology

Network Technology courses address the technology involved in the transmission of data between and among computers through data lines, telephone lines, or other transmission media (such as hard wiring, cable television networks, radio waves, and so on). These courses may emphasize the capabilities of networks, network technology itself, or both. Students typically learn about network capabilities-including electronic mail, public networks, and electronic bulletin boards-and network technology-including network software, hardware, and peripherals involved in setting up and maintaining a computer network.

## 10102 - Networking Systems

Networking Systems courses are designed to provide students with the opportunity to understand and work with hubs, switches, and routers. Students develop an understanding of LAN (local area network), WAN (wide area network), wireless connectivity, and Internet-based communications with a strong emphasis on network function, design, and installation practices. Students acquire skills in the design, installation, maintenance, and management of network systems that may help them obtain network certification.

## 10103 - Area Network Design and Protocols

Area Network Design and Protocols courses address the role of computers in a network system, the Open Systems Interconnection (OSI) model, structured wiring systems, and simple LAN (local area network) and WAN (wide area network) designs.

## 10104 - Router Basics

Router Basics courses teach students about router components, start-up, and configuration using CISCO routers, switches, and the IOS (Internetwork Operation System). These courses also cover such topics as TCP/IP protocol, IP addressing, subnet masks, and network trouble-shooting.

## 10105 - NetWare Routing

NetWare Routing courses introduce students to such topics as Virtual LANs (VLAN) and switched internetworking, comparing traditional shared local area network (LAN) configurations with switched LAN configurations, and they also discuss the benefits of using a switched VLAN architecture. These courses also may cover routing protocols like RIP, IGRP, Novell IPX, and Access Control Lists (ACLs).

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Network Systems

## 10106 - Wide Area Telecommunications and Networking

Wide Area Telecommunications and Networking courses provide students with the knowledge and skills to enable them to design Wide Area Networks (WANs) using ISDN, Frame-Relay, and PPP. Students gain knowledge and skills in network management and maintenance and develop expertise in troubleshooting and assessing the adequacy of network configuration to meet changing conditions.

## 10107 - Wireless Networks

Wireless Networks courses focus on the design, planning, implementation, operation, and troubleshooting of wireless computer networks. These courses typically include a comprehensive overview of best practices in technology, security, and design, with particular emphasis on hands-on skills in (1) wireless LAN set-up and trouble-shooting; (2) 802.11a \& 802.11b technologies, products, and solutions; (3) site surveys; (4) resilient WLAN design, installation, and configuration; (5) vendor interoperability strategies; and (6) wireless bridging.

## 10108 - Network Security

Network Security courses teach students how to design and implement security measures in order to reduce the risk of data vulnerability and loss. Course content usually includes typical security policies; firewall design, installation, and management; secure router design, configuration, and maintenance; and security-specific technologies, products, and solutions.

## 10109 - Essentials of Network Operating Systems

Essentials of Network Operating Systems courses provide a study of multi-user, multi-tasking network operating systems. In these courses, students learn the characteristics of the Linux, Windows 2000, NT, and XP network operating systems and explore a variety of topics including installation procedures, security issues, back-up procedures, and remote access.

## 10110 - Microsoft Certified Professional (MCP)

Microsoft Certified Professional courses provide students with the knowledge and skills necessary to be employed as a network administrator in the latest Windows server-networking environment. Topics include installing, configuring, and trouble-shooting the Windows server. These courses prepare students to set up network connections; manage security issues and shares; and develop policies. Students are typically encouraged to take the MCP exam.

## 10111 - Particular Topics in Networking Systems

These courses examine particular topics in networking systems other than those already described.

## 10147 - Network Systems II

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## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Network Systems

## 10148 - Networking Systems-Workplace Experience

Networking Systems-Workplace Experience courses provide students with work experience in fields related to networking systems. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 10149 - Networking Systems-Other

Other Networking Systems courses.

## Computer Science/Programming

## 10151 - Business Programming

Business Programming courses provide students with experience in using previously written software packages as well as designing and writing programs of their own. The word-processing, spreadsheet, graphics, and database exercises in these courses contain a business industry focus, and the original programs are written in languages typical of this industry (Visual Basic (VB), C++, Java, BASIC, COBOL, and/or RPL).

## 10152 - Computer Programming

Computer Programming courses provide students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and COBOL, may be used instead. Initially, students learn to structure, create, document, and debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, and efficiency. Students may apply the skills they learn to relevant applications such as modeling, data management, graphics, and text-processing.

## 10153 - Visual Basic (VB) Programming

Visual Basic (VB) Programming courses provide an opportunity for students to gain expertise in computer programs using the Visual Basic (VB) language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs and how to use problem-solving techniques. These courses cover such topics as the use of text boxes, scroll bars, menus, buttons, and Windows applications. More advanced topics may include mathematical and business functions and graphics.

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Computer Science/Programming

## 10154 - C++ Programming

C++ Programming courses provide an opportunity for students to gain expertise in computer programs using the $\mathrm{C}_{++}$language. As with more general computer programming courses, the emphasis is on how to write logically structured programs, include appropriate documentation, and use problemsolving techniques. More advanced topics may include multi-dimensional arrays, functions, and records.

## 10155 - Java Programming

Java Programming courses provide students with the opportunity to gain expertise in computer programs using the Java language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. Topics covered in the course include syntax, I/O classes, string manipulation, and recursion.

## 10156 - Computer Programming-Other Language

Computer Programming-Other Language courses provide students with the opportunity to gain expertise in computer programs using languages other than those specified (such as Pascal, FORTRAN, or emerging languages). As with other computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. As students advance, they learn to capitalize on the features and strengths of the language being used.

## 10157 - AP Computer Science A

Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science A courses provide students with the logical, mathematical, and problemsolving skills needed to design structured, well-documented computer programs that provide solutions to real-world problems. These courses cover such topics as programming methodology, features, and procedures; algorithms; data structures; computer systems; and programmer responsibilities.

## 10159 - IB Computing Studies

IB Computer Studies courses prepare students to take the International Baccalaureate Computing Studies exam at either the Subsidiary or Higher level. The courses emphasize problem analysis, efficient use of data structures and manipulation procedures, and logical decision-making. IB Computing Studies courses also cover the applications and effects of the computer on modern society as well as the limitations of computer technology.

## 10160 - Particular Topics in Computer Programming

These courses examine particular topics in computer programming other than those already described.

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Computer Science/Programming

## 10165 - Game Design and Authoring for the Web

Game technologies represent the culmination of logic, sequence, tool utilization, and extension of skill. Programming process for this course will utilize all previously learned factors of programming logic, artistry, and interactivity.

## 10197 - Computer Programming-Independent Study

Computer Programming-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to computer programming. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 10198 - Work-Based Learning in Programming and Software Development

A capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select models of work-based learning, which allow students to interact with industry professionals in order to extend and deepen classroom work and support the development of postsecondary and career readiness knowledge and skills.

## 10199 - Computer Programming-Other

Other Computer Programming courses.

## Media Technology

## 10201 - Web Page Design

Web Page Design courses teach students how to design web sites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages-such as Extensible Hypertext Markup, JavaScript, Dynamic HTML, and Document Object Model-to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.

## 10202 - Computer Graphics

Computer Graphics courses provide students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Media Technology

## 10203 - Interactive Media

Interactive Media courses provide students with the knowledge and skills to create, design, and produce interactive media products and services. The courses may emphasize the development of digitally generated and/or computer-enhanced media. Course topics may include 3D animation, graphic media, web development, and virtual reality. Upon completion of these courses, students may be prepared for industry certification.

## 10204 - Particular Topics in Media Technology

These courses examine particular topics in internet design and applications other than those already described.

## 10210 - Animation

This course emphasizes the development of digitally generated and/or computer-enhanced media, including 2D and 3D spatial elements, graphic representation, management of movement, environmental representation [including texture, color, value, form, line, and space], recording media, and distribution tools and methodologies. Instruction provides venue for such sophisticated, programming sequences and methodologies as are integrated into actions of the characters creating new behaviors.

## 10247 - Media Technology-Independent Study

Media Technology—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to media technology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 10248-Media Technology—Workplace Experience

Media Technology-Workplace Experience courses provide students with work experience in fields related to media technology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 10249 - Media Technology—Other

Other Media Technology courses.

## Information Support and Services

## 10251 - Computer Technology

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## Information Support and Services

Computer Technology courses introduce students to the features, functions, and design of computer hardware and provide instruction in the maintenance and repair of computer components and peripheral devices.

## 10252 - Computer Maintenance

Computer Maintenance courses prepare students to apply basic electronic theory and principles in diagnosing and repairing personal computers and input/output devices. Topics may include operating, installing, maintaining, and repairing computers, network systems, digital control instruments, programmable controllers, and related robotics.

## 10253 - Information Support and Services

Information Support and Services courses prepare students to assist users of personal computers by diagnosing their problems in using application software packages and maintaining security requirements.

## 10254 - IT Essentials: PC Hardware and Software

IT Essentials: PC Hardware and Software courses provide students with in-depth exposure to computer hardware and operating systems. Course topics include the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Students learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, these courses introduce students to networking and often prepare them for industry certification.

## 10255 - CISCO—The Panduit Network Infrastructure Essentials (PNIE)

CISCO—PNIE courses provide students with the knowledge to create innovative network infrastructure solutions. These courses offer students basic cable installer information and help them acquire the skills to build and use the physical layer of network infrastructure and develop a deeper understanding of networking devices.

## 10256 - Particular Topics in Information Support and Services

These courses examine particular topics in computer support, maintenance, and repair other than those already described.

## 10260 - Educational Trainer

Educational Trainer course provides instruction and practice for students who can train teachers, peers, and community in the effective integration of technology. Training on various technology tools, professional demeanor, customer service, and troubleshooting.

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

Information Support and Services

## 10297 - Information Support and Services-Independent Study

Information Support and Services-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to computer information support and services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 10298 - Information Support and Services-Workplace Experience

Information Support and Services-Workplace Experience courses provide students with work experience in fields related to information support and/or service. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 10299 - Information Support and Services-Other

Other Information Support and Services courses.

## All Others

10995 - Computer and Information Sciences-Aide
Computer and Information Sciences-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 10997-Computer and Information Sciences-Independent Study

Computer and Information Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore computer-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 10998 - Computer and Information Sciences-Workplace Experience

Computer and Information Sciences-Workplace Experience courses provide students with work experience in fields related to computer and/or information sciences. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## State Course Codes

High School

## Subject Area 10: Computer and Information Sciences (secondary)

## All Others

## 10999 - Computer and Information Sciences-Other

Other Computer and Information Sciences courses.

## Subject Area 11: Communications and Audio/Visual Technology (secondary)

## Communication

## 11001 - Introduction to Communication

Introduction to Communication courses enable students to understand and critically evaluate the role of media in society. Course content typically includes investigation of visual images, printed material, and audio segments as tools of information, entertainment, and propaganda; improvement of presentation and evaluative skills in relation to mass media; recognition of various techniques for delivery of a particular message; and, in some cases, creation of a media product. The course may concentrate on a particular medium.

## 11002 - Communication Technology

Communication Technology courses enable students to effectively communicate ideas and information through experiences dealing with drafting, design, electronic communication, graphic arts, printing process, photography, telecommunications, and computers. Additional topics covered in the course include information storage and retrieval. Drafting equipment may be used to make scale drawings, including multi-view drawing, photographs, and poster mock-ups.

## 11003 - Particular Topics in Communication

These courses examine specific topics in communication other than those already described.

## 11047-Communication-Independent Study

Communication-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to mass communications. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 11048 - Communication-Workplace Experience

Communication-Workplace Experience courses provide students with work experience in a field related to communication. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## State Course Codes

## High School

## Subject Area 11: Communications and Audio/Visual Technology (secondary)

## Communication

## 11049 - Communication-Other

Other Communication courses.

## Audio and Video Technology and Film

## 11051 - Audio/Visual Production

Audio/Visual Production courses provide students with the knowledge and skills necessary for television, video, film, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within production courses. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be included.

## 11052 - Commercial Photography

Commercial Photography courses provide instruction in the use of cameras and laboratory film processing techniques. Topics covered in the course include composition and color dynamics; contact printing; enlarging; developing film; use of camera meters, air brushes, and other photographic equipment; portrait, commercial, and industrial photography; processing microfilm; and preparing copy for printing or for graphic-arts processing.

## 11053 - Photographic Laboratory and Darkroom

Photographic Laboratory and Darkroom courses prepare students to develop and print still or motion picture film. Topics covered in the course may include controlling resultant prints; touching up negatives; and finishing, coloring, restoring, and copying prints.

## 11054 - Photo Imaging

Photo Imaging courses provide students with the opportunity to effectively communicate ideas and information via digital, film, still and video photography. Topics covered typically include composition, layout, lighting and supplies. More advanced courses may include instruction in specialized camera and equipment maintenance, application to commercial and industrial need and photography business operations.

## 11055 - Video

Video courses enable students to explore video communications, incorporating both the technical and artistic aspects of video media. Topics covered in the course include the use of video equipment and techniques, and students typically create a video presentation. Advanced course topics may include creating various forms of film media including silent film; sport and music video; and self portrait video.

## State Course Codes

High School

## Subject Area 11: Communications and Audio/Visual Technology (secondary)

## Audio and Video Technology and Film

## 11056 - Particular Topics in Audio/Video Technology and Film

These courses examine specific topics in audio and video technology and film other than those already described.

## 11097 - Audio/Video Technology and Film—Independent Study

Audio/Video Technology and Film—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to A/V technology or film. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 11098 - Audio/Video Technology and Film-Workplace Experience

Audio/Video Technology and Film-Workplace Experience courses provide students with work experience in a field related to audio/visual technology and/or film. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 11099 - Audio/Video Technology and Film—Other

Other Audio/Video Technology and Film courses.

## Journalism and Broadcasting

11101 - Journalism
Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography and photojournalism skills may be included.

## 11102 - Photojournalism

Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to improve their photo composition and film development skills, and to apply their art to journalistic endeavors.

## State Course Codes

High School

## Subject Area 11: Communications and Audio/Visual Technology (secondary)

## Journalism and Broadcasting

## 11103 - Broadcasting Technology

Broadcasting Technology courses provide students with the knowledge and skills to produce television broadcast programs. Typically, students prepare and produce short programs, learning the technical aspects of the operation and how to evaluate programming and assess audience reaction and impact.

## 11104 - Publication Production

Publication Production courses provide students with the knowledge and skills necessary to produce the school newspaper, yearbook, literary magazine, or other printed publication. Students may gain experience in several components (writing, editing, layout, production, and so on) or may focus on a single aspect while producing the publication.

## 11105 - Particular Topics in Journalism and Broadcasting

These courses examine specific topics in journalism and broadcasting other than those already described.

## 11147 - Journalism and Broadcasting-Independent Study

Journalism and Broadcasting-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to journalism, broadcasting, and mass media. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 11148 - Journalism and Broadcasting-Workplace Experience

Journalism and Broadcasting-Workplace Experience courses provide students with work experience in a field related to journalism or broadcasting. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 11149 - Journalism and Broadcasting-Other

Other Journalism and Broadcasting courses.

## State Course Codes

High School

## Subject Area 11: Communications and Audio/Visual Technology (secondary)

## Printing Technology and Production

## 11151 - Digital Media Technology

These courses are designed to give students the skills necessary to support and enhance their learning about digital medial technology. Topics covered in the course may include internet research, copyright laws, web-publishing, use of digital imagery, electronic forums, newsgroups, mailing lists, presentation tools, and project planning.

## 11152 - Desktop Publishing

Desktop Publishing courses integrate the knowledge and skills learning in word processing with the concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.

## 11153 - Digital Media Design and Production

Digital Media Design and Production courses teach students the fundamentals of graphic design and production and provide students with the opportunity to apply these principles to printed media, digital presentation media, and interactive media

## 11154 - Commercial Graphic Design

Commercial Graphic Design courses teach students to use artistic techniques to effectively communicate ideas and information to business and customer audiences via illustration and other forms of digital or printed media. Topics covered may include concept design, layout, paste-up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning, painting, collage and computer graphics.

## 11155 - Graphic Technology

Graphic Technology courses help students apply artistic and computer techniques to the interpretation of technical and commercial concepts. Topics covered may include computer assisted art and design, printmaking, concept sketching, technical drawing, color theory, imaging, studio techniques, still life modeling, and commercial art business operations. Advanced topics may include topographic arrangements of print and/or electronic graphic and textual products, printing and lithographic equipment and operations, digital imaging, print preparation, desktop publishing and web page design.

## 11156 - Photography and Printing Technology

Photography and Printing Technology courses expose students to the tools, materials and processes involved in mass production of photography and printing. Types of printing covered in the course may include intaglio, relief, planographic, screen processes printing, silk screening, serigraphy processes and thermograph. Additional topics may include the use of cameras, composition, imposition, presswork, and computer aided publishing.

## State Course Codes

High School

## Subject Area 11: Communications and Audio/Visual Technology (secondary)

## Printing Technology and Production

## 11157 - Photoengraving

Photoengraving courses teach students to photograph illustration and other copy that cannot be set in type, to develop negatives, and to prepare photosensitized metal plates for use in printing.

## 11158 - Print Press Operations

These courses expose students to the necessary skills for operating a print press. Topics covered in this course include how to prepare, operate and maintain printing processes.

## 11159 - Particular Topics in Printing Technology and Production

These courses examine specific topics in printing production, such as book binding or silk screen print making, other than those already described.

## 11197 - Printing Technology-Independent Study

Printing Technology-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to the print medium. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 11198 - Printing Technology-Workplace Experience

Printing Technology-Workplace Experience courses provide students with work experience in a field related to printing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 11199 - Printing Technology-Other

Other Printing Technology courses.

## All Others

11995 - Communication and Audio/Video Technology—Aide
Communication and Audio/Video Technology-Aide courses offer students the opportunity to assist instructors in preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## State Course Codes

High School

## Subject Area 11: Communications and Audio/Visual Technology (secondary)

## All Others

## 11997 - Communication and Audio/Video Technology—Independent Study

Communication and Audio/Video Technology—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to mass communication and its technologies. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 11998 - Communication and Audio/Video Technology—Workplace Experience

Communication and Audio/Video Technology-Workplace Experience courses provide students with work experience in a field related to communication or audio/visual technology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

11999 - Communication and Audio/Video Technology-Other
Other Communication and Audio/Video Technology courses.

## Subject Area 12: Business and Marketing (secondary)

Administration

## 12001-Business/Office Career Exploration

Business/Office Career Exploration courses expose students to the occupational opportunities available in the accounting, administration, data processing, management, and secretarial fields. Emphasis is placed on responsibilities, qualifications, work environment, and career paths. These courses may also include consumer education topics, keyboard exposure, and/or hands-on experience within the various occupational areas.

## 12002- Office Procedures-Comprehensive

Office Procedures-Comprehensive courses provide students with numerous opportunities to explore and understand the responsibilities and duties common to most office personnel. These comprehensive courses cover such topics as communication skills, reception and transmission of information via data processing equipment, filing and record management, mail handling, scheduling meetings and conferences, creating itineraries, and word processing.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Administration

## 12003 - Office and Administrative Technologies

Office and Administrative Technologies courses provide students with instruction and experience in developing technical, problem-solving, and decision-making skills essential for office and/or administrative occupations. Emphasis is placed on integrating and applying knowledge and skills to realistic office and administrative situations utilizing current and relevant technology.

## 12004 - Office Services

Office Services courses introduce students to and help them refine clerical and receptionist skills. Course content typically covers filing, telephone, and keyboarding skills; reprographic machinery and procedures; communications skills; and so on.

## 12005-Keyboarding

Keyboarding courses provide students with an introduction to the keyboard (letters, numbers, and symbols), basic machine operation, and proper keystroke technique. As students progress, they improve their speed and accuracy and produce increasingly complex documents. Such courses help students develop keyboard proficiency, document production skills, and problem-solving skills.

## 12006 - Word Processing

Word Processing courses introduce students to automated document production using one or more software packages. These courses may introduce keyboarding techniques or may require prior experience; in either case, speed and accuracy are emphasized. A parallel focus is placed on the use of software commands and functions to create, edit, format, and manipulate documents, capitalizing on the power offered by word processing software programs. These courses may also cover file and disk management and other computer-related skills.

## 12007-Recordkeeping

Recordkeeping courses help students to develop knowledge and skills related to the principles and procedures involved in recording personal financial transactions as well as transactions typically undertaken by small businesses. Partial emphasis may be placed on personal banking, budgeting, and income tax calculations; additional emphasis is usually placed on cashier and clerk procedures, inventory control for small businesses, database management, merchandising, and payroll.

## 12008 - Particular Topics in Administration

These courses examine specific topics related to business administration not otherwise described, such as a focus on dictation or office machinery, rather than provide a general study of office administration principles and techniques.

## 12009 - Business Communications

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Administration

Business Communications courses help students to develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all phases of communication: speaking, listening, thinking, responding, reading, writing, communicating nonverbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business may be practiced through problem-based projects and real world application.

## 12047-Administration-Independent Study

Administration-Independent Study courses, often conducted with instructors as mentors, enable students to explore business administration-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 12048 - Administration-Workplace Experience

Administration-Workplace Experience courses provide students with work experience in fields related to business administration. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 12049-Administration-Other

Other Administration courses.

## Management

## 12050 - Business Essentials

This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in mathematics, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Management

## 12051 - Introductory Business

Introductory Business courses survey an array of topics and concepts related to the field of business. These courses introduce business concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually provide a brief overview of the American economic system and corporate organization. Introductory Business courses may also expose students to the varied opportunities in secretarial, accounting, management, and related fields.

## 12052 - Business Management

Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.

## 12053 - Entrepreneurship

Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication. Several topics surveyed in Business Management courses may also be included.

## 12054 - Business Law

Business Law identifies and promotes the skills needed in law and law associated professions. Topics include the origins, ethics, structures, and institutions of law. It concentrates on several types of law including criminal, civil, consumer, contract, property, agency, employment, family and environmental law. The intent of the class is to allow areas of concentration once all the competencies are met.

## 12055-Business Principles and Management

Business Principles and Management courses are designed to provide students with an understanding of the American business system, its organizations, and its management. These courses examine the various leadership and management styles of a variety of successful business organizations, large or small.

## 12056 - International Business and Marketing

International Business and Marketing courses examine business management and administration in a global economy. Topics covered in this course typically include the principles and processes of export sales, trade controls, foreign operations and related problems, monetary issues, international business and policy, and applications of doing business in specific countries and markets.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Management

## 12057 - Human Resources and Labor Relations

Human Resources and Labor Relations courses analyze the functions of conflict resolution and collective bargaining. Typically, students examine the history of the labor movement within the United States, the relationship between management and labor, and how organized labor currently operates.

## 12058 - Human Resources Management

Human Resources Management courses provide students with an understanding of the effective use of interpersonal skills in achieving the goals of an organization.

## 12059 - IB Business and Management

IB Business and Management courses prepare students to take the International Baccalaureate Business and Management exam at either the Subsidiary or Higher level. In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts and principles.

## 12097 - Management-Independent Study

Management-Independent Study courses, often conducted with instructors as mentors, enable students to explore business management-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 12098 - Business Management and Entrepreneurship Workplace Experience

Application Level: Business Management Workplace Experience courses provide students with work experience in fields related to business management. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Students are able to take Business Management Workplace Experience as a .5 credit course or year-long 1 credit course for a more in-depth study of the business management industry

12099 - Management—Other
Other Management courses.

## Finance

12101 - Banking and Finance

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Finance

Banking and Finance courses provide students with an overview of the American monetary and banking system as well as types of financial institutions and the services and products that they offer. Course content may include government regulations; checking, savings, and money market accounts; loans; investments; and negotiable instruments.

## 12102-Banking

Banking courses are similar to Banking and Finance courses, but they focus specifically on banking. These courses may also address examining and applying the methods used for measuring the financial performance of banks in addition to examining specialized brokerage products, current issues, and future trends in banking.

## 12103 - Finance

Finance courses are similar to Banking and Finance courses, but they focus specifically on finance, addressing how businesses raise, distribute, and use financial resources while managing risk. Course content typically involves modeling financial decisions (such as borrowing, selling equity or stock, lending or investing) typically undertaken by businesses.

## 12104-Accounting

Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

## 12105 - Business Economics

Business Economics courses integrate economic principles (such as free market economy, consumerism, and the role of American government within the economic system) with entrepreneurship/business concepts (such as marketing principles, business law, and risk).

## 12106 - Risk Management and Insurance

Risk Management and Insurance courses analyze risk management techniques from the viewpoints of those employed in the industry as well as of business owners seeking to meet risk management needs. Insurance products are evaluated in relation to cost and effectiveness.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Finance

## 12107 - Investing

Investing courses emphasize the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stock, bonds, and mutual funds. Students typically review annual reports, predict growth rates, and analyze trends. Stock market simulations are often incorporated into Investing courses.

## 12108 - Advanced Accounting

Advanced Accounting courses expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students learn how to apply standards auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Topics include principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process and further enhancement of accounting skills.

## 12147 - Finance-Independent Study

Finance-Independent Study courses, often conducted with instructors as mentors, enable students to explore business finance-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 12148 - Finance-Workplace Experience

Finance-Workplace Experience courses provide students with work experience in fields related to finance. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 12149 - Finance-Other

Other Finances courses.

## Marketing

## 12151 - Marketing Career Exploration

Geared for students with an interest in marketing, sales, or small business operation, Marketing Career Exploration courses expose students to the opportunities available in retail, wholesale, advertising, and other occupational fields using marketing principles.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Marketing

## 12152 - Marketing-Comprehensive

Marketing-Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

## 12153-Marketing-Fashion

Marketing-Fashion courses typically cover the same scope of topics as Marketing- Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management and entrepreneurship, and so on) but do so with particular attention to the fashion industry. In keeping with the focus on the fashion industry, course topics may also include fashion cycles, fashion history, design, style, and coordination.

## 12154 - Marketing-Real Estate

Marketing—Real Estate courses typically cover the same scope of topics as MarketingComprehensive courses (purchasing, advertising, sales, human relations, management and entrepreneurship, and so on) but do so with particular attention to the real estate industry. In keeping with the focus on real estate, course topics may also include financing, investment, ownership rights, ethics, and other real estate principles.

## 12155-Marketing-Transportation

Marketing-Transportation courses typically cover the same scope of topics as MarketingComprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the transportation industry. In keeping with the focus on this industry, topics include identification and proper use of auto parts and accessories and the sales and service of new and used cars, vans, trucks, and related parts.

## 12156 - Marketing-Food/Beverage Industry

Marketing-Food/Beverage Industry courses typically cover the same scope of topics as Marketing-Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the food and beverage industry. In keeping with the focus on this industry, topics include the unique characteristics and functions of the food and beverage service industry.

## 12157-Marketing-Insurance

Marketing—Insurance courses typically cover the same scope of topics as Marketing- Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the sale or underwriting of accident, health, life, marine, automobile, and causality insurance.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Marketing

## 12158 - Marketing—Floristry

Marketing-Floristry courses typically cover the same scope of topics as Marketing-Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the floristry industry. In keeping with the focus on this field, topics include the unique characteristics and functions of retail and wholesale floral operations.

## 12159 - Marketing-Hospitality/Tourism

Marketing-Hospitality/Tourism courses typically cover the same scope of topics as Marketing-Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the travel, tourism, and lodging industry. In keeping with the focus on this field, topics include the unique characteristics and functions of travel services and hotel/motel operations.

## 12160-Marketing-Merchandising

Marketing-Merchandising courses are designed to provide students with practical backgrounds in retailing, with emphasis on merchandising, promotion/display, selling, and career planning. The content of this course may also include fundamental principles of human relations.

## 12161-Retail Marketing

Retail Marketing courses cover marketing principles and concepts related to the provision of goods or services directly to the consumer, emphasizing store operation, advertisement and display of goods, store security, human relations, and business management and ownership.

## 12162 - Internet Marketing

Internet Marketing covers the principles and functions of marketing from the standpoint of conducting business on the internet. Typically, students develop such skills as using the internet as a marketing tool, conducting a marketing analysis via the internet, planning marketing support activities, managing an electronic marketing campaign, managing/owning a business via the internet, and analyzing the impact of the internet on global marketing.

## 12163 - Sports and Entertainment Marketing

Sports and Entertainment Marketing courses introduce students to and help them refine marketing and management functions and tasks that can be applied in amateur or professional sports or sporting events, entertainment or entertainment events, and the sales or rental of supplies and equipment.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Marketing

## 12164 - Principles of Marketing

Principles of Marketing courses offer students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging, and pricing; and business management.

## 12165 - Principles of Advertising

Principles of Advertising courses expose students to the varied concepts underlying the promotion of products. The topics included in Principles of Advertising courses range considerably, but typically include the psychology of advertising, a study of various media, advertising planning and budgeting, and advertising layout and design principles. Course topics may also include an overview of commercial art and packaging.

## 12166 - Marketing Management

Marketing Management courses typically cover the same scope of topics as MarketingComprehensive courses (purchasing and distribution systems; advertising and sales; and so on) but place a particular emphasis on business management and entrepreneurship, providing exposure to common techniques and problems of management.

## 12167 - Marketing-Other Specialization

Marketing—Other Specialization courses typically cover the same scope of topics as Marketing-Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with attention to a particular industry not specified above. The course may also cover specific topics related to the particular industry being covered.

## 12168 - Marketing Communications

Marketing Communications is an Application-Level course. This course includes activities and discussion related to: advertising, branding, graphic design, packaging, promotion, publicity, sponsorship, public relation, and sales promotion

## 12195 - Integrated Marketing Applications

Integrated Marketing Applications is an Application-Level course. Through this course, students will be actively engaged in utilizing technology and technology applications in the design, production, and implementation of marketing strategies. Students will create print, multi-media, and electronic materials used in the marketing process. Application-level activities will be centered around: advertising, branding, graphic design, packaging, promotion, publicity, sponsorship, public relation, and sales promotion.

High School

## Subject Area 12: Business and Marketing (secondary)

## Marketing

## 12196 - Marketing Research

Marketing Research will focus on how to: (1) specify information needs and design a research study to meet those needs; (2) collect, analyze and use marketing research data to make effective marketing decisions; (3) communicate the research findings and their implications to various publics.

## 12197 - Marketing-Independent Study

Marketing-Independent Study courses, often conducted with instructors as mentors, enable students to explore marketing-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 12198 - Marketing-Workplace Experience

Marketing-Workplace Experience courses provide students with work experience in fields related to marketing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 12199 - Advanced Marketing Workplace Experience

Marketing-Workplace Experience courses provide students with work experience in fields related to marketing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. The student will complete a Work-Based Learning Personalized Learning Plan and place artifacts that demonstrate work experience and technical and employability skill development in the student's IPS electronic portfolio.

## Sales

## 12201 - Cashier/Checker Operations

Cashier/Checker Operations courses provide students with the knowledge and skills to operate a cash register and to handle numerous transactions. Topics typically include cash register procedures; handling cash, credit, checks, food stamps, and other forms of legal tender; human relations; stocking and marking merchandise; and theft prevention. Job search and employability skills are often an integral part of the course.

## 12202 - Principles of Selling

Principles of Selling courses provide students with the knowledge and opportunity to develop in-depth sales competencies. Course content typically includes types of selling, steps in a sale, sales strategies, and interpersonal skills and techniques.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## Sales

## 12247 - Sales-Independent Study

Sales-Independent Study courses, often conducted with instructors as mentors, enable students to explore sales-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 12248 - Sales-Workplace Experience

Sales-Workplace Experience courses provide students with work experience in fields related to sales. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 12249 - Sales-Other

Other Sales courses.

## All Others

12995 - Business and Marketing-Aide
Business and Marketing-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 12997 - Business and Marketing-Independent Study

Business and Marketing-Independent Study courses, often conducted with instructors or professionals as mentors, enable students to explore business or marketing-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 12998 - Business and Marketing-Workplace Experience

Business and Marketing-Workplace Experience courses provide students with work experience in fields related to business and marketing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## State Course Codes

High School

## Subject Area 12: Business and Marketing (secondary)

## All Others

## 12999 - Business and Marketing-Other

Other Business and Marketing courses.

## Subject Area 13: Manufacturing (secondary)

## Manufacturing Technology

## 13001 - Exploration of Manufacturing Occupations

Exploration of Manufacturing Occupations courses introduce and expose students to the career opportunities pertaining to the processing and production of goods. Course topics vary and may include (but are not limited to) systems pertinent to the manufacturing process, properties of various raw materials, and the methods used to transform materials into consumer products. Course activities depend upon the careers being explored; course topics may include entrepreneurship, labor laws, and customer service.

## 13002 - Manufacturing-Comprehensive

Manufacturing-Comprehensive courses introduce students to the various methods used to process and transform materials. Processing techniques covered usually include casting, forming, separating, assembling, and finishing. The courses may also include an overview of management techniques in planning, organizing, and controlling various segments of the manufacturing process, including design, engineering, production, and marketing.

## 13003 - Industrial Arts

Industrial Arts courses expose students to the tools and machines that they may encounter in manufacturing-related occupations and enable them to develop the skills they need to use these tools in various applications. Course topics typically include (but are not limited to) drawing and planning, electricity, graphic arts, woodwork, leatherwork, metalwork, plastics, and power technology. These courses typically cover general safety and career exploration as well.

## 13004 - Industrial Safety/First Aid

Industrial Safety/First Aid courses provide students with instruction in safe operating procedures related to various trades, as well as more general training in emergency first aid and CPR. Course topics may include the importance of standard operation procedures, agencies and regulations related to occupational safety and hazard prevention, and the dangers of particular materials.

## Processing/Production

13052 - Production Methods I

## State Course Codes

High School

## Subject Area 13: Manufacturing (secondary)

## Processing/Production

A comprehensive, technical level course designed to instruct students in the knowledge and skills common to manufacturing occupations using a variety of materials (wood, plastic, metal, composites). (SCED: Material and Processes courses expose students to the tools, equipment, and processes that may be encountered in manufacturing-related occupations. In particular, these courses stress the analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials.) Previously Mass Production.

## 13053 - Metal and Wood Processing/Production

Metal and Wood Processing/Production courses include studying the properties of metals, woods, and composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

## 13054 - Wood Processing/Production

Wood Processing/Production courses include studying the properties of woods and composites made from woods and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

## 13055 - Metal Processing/Production

Metal Processing/Production courses include studying the properties of metals and metal alloys and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

## 13056 - Plastics Processing/Production

Plastics Processing/Production courses include studying the properties of plastics and composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

## 13057 - Ceramic Processing/Production

Ceramic Processing/Production courses include studying the properties of ceramics and heat resistant composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

## State Course Codes

High School

## Subject Area 13: Manufacturing (secondary)

## Processing/Production

## 13058 - Particular Topics in Processing and Production

These courses examine specific topics in processing and production, such as substance analysis, other than those already described.

## 13097 - Processing/Production—Independent Study

Processing/Production-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to processing and production. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 13098 - Processing/Production-Workplace Experience

Processing/Production-Workplace Experience courses provide students with work experience in fields related to manufacturing processing and production. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 13099 - Processing/Production-Other

Other Processing/Production courses.

## Production Systems

## 13101 - Production Systems

Production Systems courses provide students with knowledge and skills related to manufacturing technologies from conception through production. Although courses vary, students typically analyze markets, design and develop prototypes, plan a marketing or sales strategy, manage a production plan, and manufacture useful products. These courses may also explore the evolution and impact of technology on society's social, cultural, and economic systems and institutions.

## 13102 - Electro-Mechanical Systems

Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods.

## State Course Codes

High School

## Subject Area 13: Manufacturing (secondary)

## Production Systems

## 13103 - Product Development

Product Development courses provide students with the opportunity to focus on one or more areas of industrial technology, creatively pursuing new knowledge or solving a technological problem, by designing and building prototypes and working models. Students learn and apply appropriate information in order to complete a project

## 13147 - Production Systems-Independent Study

Production Systems-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to manufacturing systems and/or research. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 13148 - Production Systems-Workplace Experience

Production Systems-Workplace Experience courses provide students with work experience in fields related to manufacturing systems and/or research. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 13149 - Production Systems-Other

Other Production Systems courses.

## 13201 - Metalwork Occupations

Metalwork Occupations courses provide students with theoretical principles and laboratory experiences related to the planning, manufacturing, assembling, testing, and repairing of parts, mechanisms, and structures in which materials are cast, formed, treated, cut, fused, or otherwise processed in some fashion.

## Metalwork

## 13202-Metalworking

Metalworking courses introduce students to the qualities and applications of various metals and the tools used to manipulate and form metal into products. Through one or more projects involving metals, students develop planning, layout, and measurement skills; gain experience in cutting, bending, forging, casting, and/or welding metal; complete projects according to blueprints or other specifications; and may also learn to polish and finish metals. Correct use of metalworking tools and equipment is stressed.

## State Course Codes

High School

## Subject Area 13: Manufacturing (secondary)

## Metalwork

## 13203 - Machining

Machining courses enable students to create metal parts using various machine tools and equipment. Course content may include interpreting specifications for machines using blueprints, sketches, or descriptions of parts; preparing and using lathes, milling machines, shapers, and grinders with skill, safety, and precision; developing part specifications; and selecting appropriate materials.

## 13204 - Computer-Aided Machining (CAM) I

A technical level course that introduces students to the basics of computer aided software and machining techniques. This includes 3D modeling, G code generation, and 2D machining. Previously ComputerAided Manufacturing.

## 13205 - Sheet Metal

An application level course designed to provide students with exposure to and training in the theories, equipment, and skills needed to perform sheet metal layout and fabrication techniques. (SCED: Sheet Metal courses expose students to the skills and information necessary to lay out, fabricate, assemble, install, maintain, and repair items and structures created from sheet metal components. Students learn the safe and efficient operation of various tools and typically gain skill in blueprint reading, welding, and finishing and typically gain skill in blueprint reading, welding, and finishing and polishing metals.)

## 13206 - Particular Topics in Sheet Metal

In these courses students gain knowledge and skills in particular aspects of sheet metal. Examples include individual courses in radial line development, triangulation fabrication, and so on.

## 13207 - Welding

Welding courses enable students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications.

## 13208 - Particular Topics in Welding

In these courses students gain knowledge and skills in particular aspects of welding. Examples include individual courses in each of the following types of welding: gas metal, gas tungsten, and shielded metal and flux core arc welding.

## 13209 - Particular Topics in Metalwork

In these courses students gain knowledge and skills in particular aspects of metalwork (such as foundry work or metallurgy) not otherwise described.

## State Course Codes

High School

## Subject Area 13: Manufacturing (secondary)

## Metalwork

## 13210 - Machine Tool Technology 1a

A comprehensive, technical level course designed to provide students with the basic theories, equipment and skills needed to efficiently operate machining equipment.

## 13247 - Metalwork—Independent Study

Metalwork—Independent Study courses, often conducted with instructors as mentors, enable students to explore metalwork-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 13248 - Metalwork-Workplace Experience

Metalwork-Workplace Experience courses provide students with work experience in the welding, machine technologies, or metalwork fields. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 13249 - Metalwork-Other

Other Metalwork courses.

## Repair

13301 - Appliance Repair
Appliance Repair courses provide students with the knowledge and experience to repair, install, service, and inspect appliances such as stoves, refrigerators, washers, dryers, air conditioners, water heaters, and so on. Students gain an understanding of the mechanics and working systems of these appliances, the skills to read blueprints and specifications, and proficiency in using related tools and products.

## 13302 - Mechanical Power Transmission Systems

A technical level course designed to provide students with knowledge and skills needed to adjust, maintain, and repair parts of machinery and equipment. Includes preventive maintenance, flexible drives, couplings, alignment, bearings/shafts/seals, gears, and cams. (SCED: Equipment Maintenance and Repair courses prepare students to adjust, maintain, replace, and repair parts of machinery and to repair tools, equipment, and machines. The courses may have a general emphasis or may focus on a specific type of machinery or equipment related to a particular industry. Depending upon the intent, course topics may include electric, hydraulic, pneumatic, or mechanic systems; programmable logic and motor control devices, valves, and gates; or supplemental equipment such as fans, hoses, and pipes.) Previously Mechanical Power Transmission and Conveyor Systems.

## State Course Codes

High School

## Subject Area 13: Manufacturing (secondary)

## Repair

## 13347 - Repair-Independent Study

Repair—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to repair. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 13348 - Work Experience in Manufacturing

Course Description: Advanced research and application level course covering specific topics in manufacturing. Should include opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. (Prerequisite: Must take at least 1.0 credit of Technical level course and Application level course combined.) (SCED: Workplace Experience course provides students with work experience in the fields involving repair, supported by classroom attendance and discussion. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.) Previously WorkBased Maintenance Experience.

## 13349 - Repair-Other

Other Repair courses.

## All Others

13995 - Manufacturing-Aide
Manufacturing-Aide courses offer interested students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 13997 - Manufacturing-Independent Study

Manufacturing-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to manufacturing. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 13998 - Work Experience in Manufacturing - Comprehensive

Course Description: An advanced research and application level course covering specific topics in manufacturing. Should include opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. (Prerequisite: Must take at least 1.0 credit of Technical level course and Application level course combined.) Previously Research and Design for Manufacturing.

## State Course Codes

High School

## Subject Area 13: Manufacturing (secondary)

## All Others

## 13999 - Manufacturing-Other

Other Manufacturing courses.

## Subject Area 14: Health Care Sciences (secondary)

## Health Sciences

## 14000 - Health Science - Intro to Health Care

Provides students with the basic knowledge of health/wellness professionals in private business and industry, community organizations, and health care settings. Includes instruction in personal health, community health and welfare, nutrition, epidemiology, disease prevention, fitness and exercise, and health behaviors.

## 14251 - Health Science: Principles of Biomedical Sciences

Health Science courses integrate chemistry, microbiology, chemical reactions, disease processes, growth and development, and genetics with anatomy and physiology of the body systems. Typically, these courses reinforce science, mathematics, communications, health, and social studies principles and relate them to health care.

## 14252 - Biotechnology

Biotechnology courses involve the study of the bioprocesses of organisms, cells, and/or their components and enable students to use this knowledge to produce or refine products, procedures, and techniques. Course topics typically include laboratory measurement, monitoring, and calculation; growth and reproduction; chemistry and biology of living systems; quantitative problem-solving; data acquisition and display; and ethics. Advanced topics may include elements of biochemistry, genetics, and protein purification techniques.

## 14253 - Pharmacology

Pharmacology courses involve a study of how living animals can be changed by chemical substances, especially by the actions of drugs and other substances used to treat disease. Basic concepts of physiology, pathology, biochemistry, and bacteriology are typically brought into play as students examine the effects of drugs and their mechanisms of action.

## 14254 - Particular Topics in Health Sciences

These courses examine particular topics in health sciences other than those already described.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Health Sciences

## 14255 - Biomedical Innovation

In this capstone course, students will design and conduct experiments related to the diagnosis, treatment, and prevention of disease or illness. They will apply their knowledge and skills to answer questions or to solve problems related to the biomedical sciences. They may work with a mentor or advisor from a university, hospital, physician's office, or industry as they complete their work. Students will be expected to present the results of their work to an adult audience, which may include representatives from the local healthcare or business community or the school's biomedical partnership team.

## 14256 - Biotechnology II

Prepares students to apply engineering principles and technical skills in support of engineers engaged in developing biological or medical systems and products. Exploration of health related occupations in biomedical, current advances in technology, and biotechnology related projects to meet current industry needs. Includes instruction in instrument calibration, design and installation testing, system safety and maintenance procedures, procurement and installation procedures, and report preparation.

## 14297 - Health Sciences-Independent Study

Health Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore health-related topics of interest. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 14298 - Health Sciences-Workplace Experience

Health Sciences-Workplace Experience courses provide students with work experience in fields involving the health sciences. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 14299 - Health Sciences-Other

Other Health Sciences courses.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Comprehensive

## 14001 - Exploration of Health Care Occupations

Exploration of Health Care Occupations courses expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, dental care, administrative services, and lab technology). These courses provide experiences in several of these occupational clusters, along with information and knowledge related to the health care industry as a whole.

## 14002 - Health Care Occupations-Comprehensive

Health Care Occupations-Comprehensive courses provide students with an orientation to the health care industry and help refine their health care-related knowledge and skills. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

## Therapeutic Services

14051 - Nursing
Nursing courses place a special emphasis on the particular knowledge and skills required of nurses and/or nursing assistants and aides while covering general health care topics (i.e., patient care, anatomy and physiology, medical terminology, hygiene and disease prevention, first aid and CPR, and laboratory procedures). Topics covered typically include normal growth and development; bathing, feeding, dressing, and transporting patients; basic pharmacology; doctor, nurse, and patient relationships and roles; medical and professional ethics; death and dying; and care of various kinds of patients (e.g., chronically ill, children, new mothers, and so on).

## 14052 - Nursing-LPN

Covering the same scope of topics as Nursing courses, Nursing-LPN courses delve into more depth in order to prepare students for the state's practical nurse licensing examination. Nursing-LPN courses offer the knowledge and experience needed to provide nursing care for patients of all ages, in various stages of sickness or health, and with a variety of disease conditions. Additional topics covered may include community health, nutrition, drug therapy and administration, and mental illness.

## 14053 - Home Health Care

Home Health Care courses teach students how to care for individuals within their homes. Course content relates health care practices and procedures to the home environment, and typically includes patient care, comfort, and safety; anatomy and physiology; the prevention of disease and infection; nutrition and meal preparation; human relations; and first aid and CPR. Topics covered may also include therapy strategies, household management, and employability.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Therapeutic Services

## 14054 - Dental Science

Dental Science courses expose students to the tools, terminology, and procedures necessary for a career in the dental industry. Course content covers a wide range of topics and typically includes dental anatomy and terminology; the identification and use of dental equipment; dental pathologies and procedures; asepsis; dental laboratory procedures; emergency first aid; and the ethical and legal responsibilities of dental care workers. These courses often explore dental specialties and career options.

## 14055 - Emergency Medical Technology - Fundamentals of Emergency Services

Emergency Medical Technology courses place a special emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. The courses may also cover the legal and ethical responsibilities involved in dealing with medical emergencies.

## 14056 - Surgical Technology

Surgical Technology courses emphasize the care and needs of patients undergoing surgery while covering general health care topics (i.e., patient care, anatomy and physiology, medical terminology, hygiene and disease prevention, first aid and CPR, and laboratory procedures). In keeping with that focus, topics may include operation room materials, tools, and procedures; aseptic surgical techniques; preparation and handling of surgical instruments; efficiency in the operating room; and the roles of various medical personnel who are present during surgery.

## 14057 - Vision Care

Vision Care courses expose students to the tools, terminology, and procedures necessary for a career in the optometric or optic field. Vision Care courses typically include the physics of light and refraction; the anatomy, physiology, and terminology associated with the eyes; identification and use of optometric and/or optical equipment; optical procedures; human relations; and the ethical and legal responsibilities of vision care workers.

## 14058 - Optometrics

Optometrics courses provide students with the knowledge, ability, and experiences to prepare, assemble, and/or fit corrective lenses prescribed by a physician or optometrist. Topics covered may include layout and marking, cutting and chipping, edging and beveling, inspection, alignment, dispensing, and selection of eyewear.

## 14059 - Gerontology

Gerontology courses provide students with knowledge and understanding of the processes of adult development and aging. Topics covered may include the study of the biological, economic, psychological, social, and health/fitness aspects of the aging process.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Therapeutic Services

## 14060 - Physical Therapy

Physical Therapy courses provide students with the knowledge and skills necessary to work with patients who need to achieve and maintain functional rehabilitation and to prevent malfunction or deformity. Topics covered typically include therapeutic exercises and activities (such as stretching and strengthening), how to train patients to perform the activities of daily living, the use of special equipment, and evaluation of patient progress.

## 14061 - Respiratory Therapy

Respiratory Therapy courses provide students with the knowledge and skills necessary to work with patients who have breathing or other cardiopulmonary difficulties or disorders. Topics covered typically include identifying deficiencies and abnormalities of the cardiopulmonary system, understanding the various methods of therapies, and understanding how to use special equipment.

## 14062 - Care of Athletes

Care of Athletes courses provide students with the knowledge and skills to understand and perform therapeutic tasks that would be designated by an athletic or fitness trainer. Topics covered may include taping and bandaging, proper use of protective padding, treatment modalities, anatomy and physiology, and medical terminology. Students may learn to measure cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition, and blood pressure. More advanced topics may include injury assessment, the phases of healing, and the use of exercise and equipment to help in the reconditioning of injured athletes.

## 14063 - Particular Topics in Therapeutic Services

These courses examine particular topics in medical therapeutic services other than those already described.

## 14072 - Sports Medicine I

Sports Medicine I will provide students an overview of the specialized health care needed in the wide world of sports and physical activity. Students will learn what sports medicine is and the multidisciplinary approach to athletic health care. The course will also introduce students to basic body systems in addition to the physical and mental demands of physical activity at all levels. The students will be introduced to such things as kinesiology, bleeding and shock, the bones and soft tissue, the foot, ankle, and lower leg, the knee, the hip and pelvis, the elbow, wrist, and hand, the shoulder, the chest and abdomen, the head and face, the spine, and lastly special considerations in athletes.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Therapeutic Services

## 14073 - Sports Medicine II

Sports Medicine II will provide students a hands-on approach to Athletic Training. Topics to be covered are the central training room, the athletic training student-aid program, emergency preparedness, injury game plan, the pre-participation physical examination, rehabilitation and preseason conditioning, nutrition and the athlete, dietary supplements and performance enhancers, sports psychology, assessment and evaluation of sports injuries, therapeutic physical modalities, and proper taping and wrapping. This course allows students to do a series of clinical internships with medical professionals in the community pertaining to sports medicine. These internships are designed for students who have a serious interest in pursuing a career in the sports medicine field.

## 14097 - Therapeutic Services-Independent Study

Therapeutic Services-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to therapeutic services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 14098 - Therapeutic Services-Workplace Experience

Therapeutic Services-Workplace Experience courses provide students with work experience in fields related to therapeutic services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 14099 - Therapeutic Services-Other

Other Therapeutic Services courses.

## Diagnostic Services

## 14101 - Dental Laboratory Technology

Dental Laboratory Technology courses expose students to the principals, tools, terminology, and procedures necessary for a career in a dental laboratory. These courses typically cover many of the same topics as Dental Science, but emphasize making mouth guards, taking impressions, creating various types of dental molds and models, and fabricating prostheses and dental appliances.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Diagnostic Services

## 14102 - Human Body Systems (Med Lab Tech)

This courses provide students with the knowledge and skills necessary for employment in health carerelated laboratories. Topics include basic principles of anatomy and physiology, relevant concepts in microbiology and chemistry, and laboratory techniques (including preparation and analysis of various cultures and specimens). The courses may also cover such components as venipuncture, EKG, and CPR procedures.

## 14103 - EKG Technology - Medical Imaging

In EKG Technology courses, students acquire the knowledge and skills to perform electrocardiograph activities and learn about the cardiovascular system (including its function, diseases, and rhythms); EKG machinery; and the use of drugs and their effects. These courses usually include general health care topics as well, such as basic anatomy and physiology, patient care, first aid and CPR, identification and use of medical equipment, and medical terminology.

## 14104 - Phlebotomy

In Phlebotomy courses, students acquire knowledge, skills, and experiences related to the drawing of blood and typically learn about such topics as infection control, sterilization practices, medical/hospital procedures and environments, diagnostic procedures, and the process of drawing blood.

## 14105 - Particular Topics in Diagnostic Services: Medical Interventions

These courses examine particular topics in diagnostic services other than those already described. This course investigates a variety of interventions involved in the prevention, diagnosis and treatment of disease, methodology for maintaining overall health, and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical services and diagnostics.

## 14147 - Diagnostic Services-Independent Study

Diagnostic Services-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to diagnostic services. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 14148 - Diagnostic Services-Workplace Experience

Diagnostic Services-Workplace Experience courses provide students with work experience in fields related to diagnostic services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Diagnostic Services

## 14149 - Diagnostic Services-Other

Other Diagnostic Services courses.

## Health Information

14151 - Medical/Clerical Assisting
Medical/Clerical Assisting courses enable students to develop knowledge and skills that combine the medical and clerical fields. Students typically develop skills such as patient exam preparation, assessment of vital signs, routine lab procedures, medical transcription, financial accounting, patient and insurance company billing, and record-keeping.

## 14152 - Pharmacy Assisting

Pharmacy Assisting courses emphasize the knowledge and skills necessary to assist a pharmacist or pharmacy technician. Course topics and experiences enable students to understand medical terminology, keep and maintain records, label medications, perform computer patient billing, perform stock inventory, and order supplies. These courses also emphasize pharmaceutical classification, drug interactions, and interpersonal/communication skills.

## 14153 - Medical Office Procedures

Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record-keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties.

## 14154 - Medical Terminology

In Medical Terminology courses, students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

## 14155 - Particular Topics in Health Information

These courses examine particular topics in health Information other than those already described.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Health Information

## 14157 - Health Information

This course introduces and prepares students to perform credentialing, privileging, personnel management, and accreditation compliance services for hospitals and other health care facilities and organization. Includes basic instruction in medical staff organization and management, medical terminology, credentialing and re-credentialing, healthcare accreditation and regulatory standards, health care law, meeting and negotiation management and office information systems management.

## 14197 - Health Information-Independent Study

Health Information-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to health information systems. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 14198 - Health Information-Workplace Experience

Health Information-Workplace Experience courses provide students with work experience in fields related to health Information. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 14199 - Health Information-Other

Other Health Information courses.

## Support Services

## 14201 - Central Service Technology

Central Service Technology courses provide students with knowledge and skills related to the procurement, handling, storage, and distribution of sterile goods and equipment. Course components usually include quality assurance, infection control and isolation techniques, medical terminology and processes, decontamination and sterilization, microbiology, and chemistry.

## 14202 - Health Support Services

Health Support Services courses provide students with knowledge and skills to be used in activities that support patients' primary health care, such as counseling, health education, disease management, and risk reduction. Because support services can be widely defined, course topics typically also include general health care, such as anatomy and physiology, medical terminology, first aid and CPR procedures, and ethical and legal responsibilities.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## Support Services

## 14203 - Health Unit Coordination

Health Unit Coordination courses provide students with instruction and experiences so that they can manage components of nonpatient care activities in health care facilities. Topics covered usually include medical terminology, transcription, and general reception duties and responsibilities; recordkeeping; and stocking medical and office supplies and equipment.

## 14204 - Particular Topics in Support Services

These courses examine particular topics in health support services other than those described.

## 14247 - Health Support Services-Independent Study

Health Support Services-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to health support services. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 14248 - Health Support Services-Workplace Experience

Health Support Services-Workplace Experience courses provide students with work experience in careers related to health support services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 14249 - Health Support Services—Other

Other Health Support Services courses.

## All Others

14995 - Health Care Sciences—Aide
Health Care Sciences-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## State Course Codes

High School

## Subject Area 14: Health Care Sciences (secondary)

## All Others

## 14997 - Health Care Sciences-Independent Study

Health Care Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore health-related topics of interest. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 14998 - Biomedical Workplace Experience

Biomedical Workplace Experience courses provide students with work experience in the health care industry. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 14999 - Health Care Sciences-Other

Other Health Care Sciences courses.

Subject Area 15: Public, Protective, and Government Service (secondary)

## 15001 - Exploration of Public Service Careers

Exploration of Public Service Careers courses expose students to the duties, responsibilities, requirements, and career opportunities within public service. Course topics vary and may include (but are not limited to) protective services; correction, judicial, and probation services; fire protection and fire fighting; public administration; and social work. Course activities depend upon the career clusters that students explore.

## Law Enforcement

15051 - Criminal Justice
Criminal Justice courses train students to understand and apply the principles and procedures essential to the U.S. criminal justice system. These courses explore the principles and structure of the justice system and the law, and course content also typically includes investigation, search and arrest, and laboratory, forensic, and trial procedures. Students may also learn CPR and first aid skills, personal defense tactics, and crime prevention techniques.

## State Course Codes

High School

## Subject Area 15: Public, Protective, and Government Service (secondary)

## Law Enforcement

## 15052 - Corrections

Corrections courses provide instruction regarding the principles and techniques used by institutions that incarcerate, rehabilitate, and monitor people accused or convicted of crimes.

## 15053 - Particular Topics in Law Enforcement

These courses examine specific topics related to law enforcement (such as forensic science), rather than provide a general study of the field.

## 15097 - Law Enforcement-Independent Study

Law Enforcement-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to law enforcement. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 15098 - Law Enforcement—Workplace Experience

Law Enforcement-Workplace Experience courses provide work experience in fields related to law enforcement. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 15099 - Law Enforcement-Other

Other Law Enforcement courses.

## Security and Protection

## 15101 - Public Safety

Public Safety courses introduce students to the field of public safety and extend their knowledge and skills pertaining to the safety and security of homes, workplaces, and the community. These courses cover such topics as policing, law enforcement, emergency service, and private security and corrections and may cover all or a subset of these services.

## 15102 - Security Services

Security Services courses provide instruction regarding the safety and security of buildings and facilities and may extend these lessons to include the security and safety of one's self and other human beings.

## State Course Codes

High School

## Subject Area 15: Public, Protective, and Government Service (secondary)

## Security and Protection

## 15103 - Particular Topics in Security

These courses examine specific topics related to security and protective services, rather than provide a general study.

## 15147 - Security and Protection-Independent Study

Security and Protection-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related the security and protection of the public. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 15148 - Security and Protection-Workplace Experience

Security and Protection-Workplace Experience courses provide work experience in fields related to security and protection. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 15149 - Security and Protection-Other

Other Security and Protection courses.

## Fire Management

## 15151 - Fire Science

Fire Science courses introduce students to the field of fire prevention and control and enable them to extend their knowledge through the use of chemical, physical, and engineering principles to understand factors involved in fires. Course topics typically include the chemistry of combustion, factors that influence fire (such as structural design and meteorology), and safety procedures.

## 15152 - Fire Fighting

Fire Fighting courses offer students the opportunity to learn fire prevention and control under controlled conditions. Typically, students learn about the organization, rules, requirements, and regulations of fire departments; study and practice the tools and techniques used by firefighters to control or extinguish fires; and examine the behavior of fires. These courses also usually include emergency medical procedures and present fire investigation techniques.

## State Course Codes

High School

## Subject Area 15: Public, Protective, and Government Service (secondary)

## Fire Management

## 15153 - Particular Topics in Fire Management

These courses examine specific topics related to fire management (such as hazardous materials handling), rather than provide a general study of the field.

## 15197 - Fire Management-Independent Study

Fire Management-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related fire management. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 15198 - Fire Management-Workplace Experience

Fire Management-Workplace Experience courses provide work experience in fields related to fire management. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 15199 - Fire Management-Other

Other Fire Management courses.

## Government Service

## 15201 - Public Administration

Public Administration courses provide an overview of the structure, roles, and duties of public governments and associated agencies. These courses explore the foundation and evolution of the public service sector, issues related to the provision of services by governmental bodies, and the missions and constraints of various departments within local and state governments. In addition, students may explore a particular public administration topic (such as the tax base and structure, the legislative process, selection of public servants, resource management, and so on) in greater detail.

## 15202 - Community Protection

Community Protection courses provide students with information regarding the personnel and agencies concerned with protection of the home, city, state, and nation. Topics covered typically include civil defense and disaster preparedness; crime prevention; pollution control; fire prevention and control; legal and social systems and principles; and public health. These topics may be explored from the viewpoint of a community resident and citizen using these services or of that of one interested in pursuing a public service career.

## State Course Codes

High School

## Subject Area 15: Public, Protective, and Government Service (secondary)

## Government Service

## 15203 - Public Policy

Public Policy courses provide students with the opportunity to design, propose, and analyze programs and policies implemented by government agencies. Activities typically include identifying social issues and problems, generating recommendations, using data to quantify the extent of a problem or evaluate its solution, communicating ideas and findings, and understanding decision-making processes.

## 15247 - Government Service-Independent Study

Government Service-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related the provision of government services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 15248 - Government Service-Workplace Experience

Government Service-Workplace Experience courses provide work experience in fields related to government service. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 15249 - Government Service-Other

Other Government Service courses.

## All Others

## 15995 - Public, Protective, and Government Service-Aide

Public, Protective, and Government Service-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 15997 - Public, Protective, and Government Service-Independent Study

Public, Protective, and Government Service-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to public, protective, and government service. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 15: Public, Protective, and Government Service (secondary)

## All Others

## 15998 - Public, Protective, and Government Service-Workplace Experience

Public, Protective, and Government Service-Workplace Experience courses provide students with work experience in a field related to public, protective, and/or government service. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 15999 - Public, Protective, and Government Service-Other

Other Public, Protective, and Government Service courses.

## Subject Area 16: Hospitality and Tourism (secondary)

## 16001 - Exploration of Hospitality Careers

Exploration of Hospitality Careers courses survey a wide array of topics while exposing students to the variety of career opportunities in hospitality fields (such as food service, lodging, tourism, and recreation). These courses serve to introduce students to the general field of hospitality, providing an opportunity to identify a focus for continued study.

## Restaurant, Food and Beverage Services

## 16051 - Exploration of Restaurant, Food and Beverage Services

Exploration of Restaurant, Food, and Beverage Services courses provide students with an overview of the restaurant, food, and beverage service industry. Topics covered include industry terminology, the history of restaurant, food, and beverage services, introduction to marketing, and the various careers available in the industry.

## 16052 - Culinary Essentials

The Culinary Essentials course provides students with knowledge and skills related to commercial and institutional food service establishments. Course topics include career pathways, employability skills, sanitation and safety procedures, measurements, tools and equipment, food preparation and production.

## State Course Codes

High School

## Subject Area 16: Hospitality and Tourism (secondary)

## Restaurant, Food and Beverage Services

## 16053 - Culinary Arts

Food Service courses provide instruction regarding nutrition, principles of healthy eating, and the preparation of food. Among the topics covered are large-scale meal preparation, preserving nutrients throughout the food preparation process, use and care of commercial cooking equipment, food storage, advances in food technology, sanitation, management, and the careers available in the food service industry. Formerly Food Service

## 16054 - Nutrition and Food Preparation

Nutrition and Food Preparation courses provide students with knowledge and skills about food preparation and/or production, with a strong emphasis on nutrition, balanced diets, and satisfying special dietary needs. Topics typically include assessing nutrient content, the science of food and nutrition, physiology and utilization of nutrients. Course content may also cover additives, contaminants, food borne illnesses, and food technology.

## 16055-Culinary Arts II

Restaurant Management and Operations courses provide students with knowledge and skills related to commercial and institutional food service establishments, with an emphasis on management. Course topics therefore include guest service and relationships, planning, resource management, and other topics related to managing and operating restaurants. Formerly Restaurant Management and Operations

## 16056 - Baking and Pastry I

Culinary Art Specialty courses provide instruction in a particular type of cooking or culinary style. Examples of such specialty fields include baking, creating and decorating wedding cakes, Middle Eastern cuisine, and so on. These courses emphasize skills specific to the type of culinary art being studied. Formerly Culinary Art Specialty

## 16057 - Baking and Pastry II

These courses examine specific topics related to Restaurant, Food, and Beverage Services, such as catering, rather than provide a general study of the industry or of specific topics already described. Formerly Particular Topics in Restaurant, Food and Beverage Services

## 16097-Restaurant, Food and Beverage Services-Independent Study

Restaurant, Food, and Beverage Services-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the restaurant, food, and beverage services industry. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 16098 - Culinary Workplace Experience

## State Course Codes

High School

## Subject Area 16: Hospitality and Tourism (secondary)

## Restaurant, Food and Beverage Services

Restaurant, Food, and Beverage Services-Workplace Experience courses provide work experience in fields related to restaurant, food, and beverage services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Formerly Restaurant, Food and Beverage Services-Workplace Experience

## 16099 - Restaurant, Food and Beverage Services-Other

Other Restaurant, Food and Beverage Service courses.

## Lodging

## 16101 - Foundations of Hospitality and Lodging

Exploration of Lodging Careers courses provide an overview of the lodging industry. Topics covered include lodging terminology, the history of lodging, introduction to marketing, and the various careers available in the lodging industry. Formerly Exploration of Lodging Careers

## 16102 - Lodging-Comprehensive

Lodging-Comprehensive courses introduce students to the lodging industry and refine their related knowledge and skills. Topics covered typically include property management, guest psychology and relationships, lodging operations, food and beverage services, and other topics related to support services within the lodging industry.

## 16103 - Institutional Maintenance

Institutional Maintenance courses present the knowledge and skills required for service work within institutions. Topics covered typically include housekeeping and laundry services, care and cleaning of facilities, and safety and sanitation procedures, in addition to career opportunities, business responsibilities, and other types of ongoing maintenance.

## 16104 - Particular Topics in Lodging

These courses examine specific topics in lodging such as convention planning or hotel management rather than provide a general study of the industry or of specific topics already described.

## State Course Codes

High School

## Subject Area 16: Hospitality and Tourism (secondary)

## Lodging

## 16147 - Lodging-Independent Study

Lodging-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the lodging industry. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 16148 - Hospitality and Lodging Management

Lodging-Workplace Experience courses provide work experience in fields related to lodging. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Formerly Lodging-Workplace Experience

## 16149 - Lodging-Other

Other Lodging courses.

## Travel and Tourism

## 16151 - Foundations of Travel and Tourism

Introduction to Travel and Tourism courses provide an overview of the travel and tourism industry. Topics covered in this course may include travel and tourism terminology, the history of travel, introduction to marketing, and the various careers available in travel and tourism.

## 16152 - Travel and Tourism-Comprehensive

Travel and Tourism-Comprehensive courses provide the knowledge and skills necessary to work in the travel industry such as sales techniques, marketing principles, and entrepreneurial skills. Additional skills learned in these courses typically include travel agency procedures, airline reservation systems, public relations, hotel/motel registration systems and services, and conference and convention planning.

## 16153 - World Travel and Tourism

World Travel and Tourism courses provide the knowledge and skills necessary to work in the travel industry, with a focus on travel outside of the United States. Topics covered may include geography of the continents; customs, cultures, and tourist destinations in other countries; special documentation needed for international travel; and planning events to client specifications.

## State Course Codes

High School

## Subject Area 16: Hospitality and Tourism (secondary)

## Travel and Tourism

## 16154 - Eco-tourism

Eco-tourism courses provide the knowledge and skills necessary to work in the travel industry, with particular attention paid to conservation and environmental issues surrounding travel and tourism. Topics covered may include recreational opportunities related to on- and off-site attractions and environmental and ecological principles.

## 16155 - Particular Topics in Travel and Tourism

These courses examine specific topics in travel and tourism such as the airline reservation and ticketing system rather than provide a general study of the industry or of specific topics already described.

## 16197-Travel and Tourism—Independent Study

Travel and Tourism-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the travel and tourism industry. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 16198 - Travel and Tourism-Workplace Experience

Travel and Tourism-Workplace Experience courses provide work experience in fields related to travel and tourism. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 16199 - Travel and Tourism—Other

Other Travel and Tourism courses.

## Recreation, Amusement and Attractions

## 16201 - Exploration of Recreation, Amusement and Attractions

Exploration of Recreation, Amusement, and Attractions courses provide an overview of the recreation industry. Topics covered in this course may include industry terminology; the history of recreation, amusement, and attractions; introduction to marketing; and the various careers available in the industry.

## State Course Codes

High School

## Subject Area 16: Hospitality and Tourism (secondary)

## Recreation, Amusement and Attractions

## 16202 - Recreation, Amusement and Attractions-Comprehensive

Recreation, Amusement, and Attractions-Comprehensive courses provide students with the attitudes, skills, and knowledge needed for employment in theme parks, attractions and outdoor recreation facilities, exhibitions, and event planning. Topics covered may include planning trade shows, fairs, and conferences; outdoor recreation and management; financial transactions; salesmanship; guest services and satisfaction; culture and customs; computer and industry technology; eco-tourism; client information; and planning specialized events while incorporating themes, timelines, budgets, target audiences, agendas, and public relations.

## 16203 - Particular Topics in Recreation, Amusement and Attractions

These courses examine specific topics in recreation, amusement, and attractions such as local opportunities rather than provide a general study of the industry.

## 16247-Recreation, Amusement and Attractions-Independent Study

Recreation, Amusement, and Attractions-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the recreation, amusement, and attractions industry. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 16248-Recreation, Amusement and Attractions-Workplace Experience

Recreation, Amusement, and Attractions-Workplace Experience courses provide work experience in fields related to recreation, amusement, and attractions. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 16249 - Recreation, Amusement and Attractions-Other

Other Recreation, Amusement and Attractions courses.

## All Others

## 16995 - Hospitality and Tourism—Aide

Hospitality and Tourism—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## State Course Codes

High School

## Subject Area 16: Hospitality and Tourism (secondary)

## All Others

## 16997 - Hospitality and Tourism—Independent Study

Hospitality and Tourism—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the hospitality and tourism industry. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 16998 - Hospitality and Tourism-Workplace Experience

Hospitality and Tourism-Workplace Experience courses provide work experience in fields related to hospitality and tourism. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 16999 - Hospitality and Tourism-Other

Other Hospitality and Tourism courses.

## Subject Area 17: Architecture and Construction (secondary)

## Construction-General

## 17001 - Construction Careers Exploration

Construction Career Exploration courses expose students to the opportunities available in constructionrelated trades, such as carpentry, masonry, air conditioning/refrigeration, plumbing, and so on. Students learn about the processes involved in construction projects and may engage in a variety of small projects. These courses emphasize responsibilities, qualifications, work environment, rewards, and career paths within construction-related fields.

## 17002 - Construction-Comprehensive

Construction-Comprehensive courses provide students with basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.

## State Course Codes

High School

## Subject Area 17: Architecture and Construction (secondary)

## Construction-General

## 17003 - Carpentry

Carpentry courses provide information related to the building of wooden structures, enabling students to gain an understanding of wood grades and construction methods and to learn skills such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finish work inside of buildings, and do limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills.

## 17004 - Framing Carpentry

Framing Carpentry courses provide students with much of the same knowledge as general carpentry courses (knowledge of various types and grades of woods, proper and safe use of hand and power tools, and site selection and preparation), but place a special emphasis on construction methods applicable to floor, wall, roof, and/or stair framing. Course content may also include insulation installation and painting.

## 17005 - Particular Topics in Carpentry

These courses cover specific aspects of building construction or carpentry. All coursework focuses upon a particular skill or set of skills related to one subtopic, such as floor framing, wall and partition framing, interior finishing, or exterior finishing.

## 17006-Woodworking

Woodworking courses introduce students to the various kinds of woods used in industry and offer experience in using selected woodworking tools. Students design and construct one or more projects and may prepare a bill of materials. Correct and safe use of tools and equipment is emphasized. As students advance, they focus on learning the terminology necessary to use power tools successfully, developing skills to safely use these tools in the workshop and becoming familiar with various kinds of wood-finishing materials. Advanced students typically design a project, prepare bills of materials, construct, and finish proposed projects.

## 17007-Woodworking Principles

A comprehensive course designed to instruct students in the basic knowledge and skills required for cabinetmaking and furniture design

## 17008 - Masonry

Masonry courses enable students to learn to construct interior and exterior walls, columns, doorways, window openings, fireplaces, chimneys, and foundations from brick and concrete block. Along with other activities, students may mix and spread cement and mortar, read blueprints and plans, and estimate materials needed for a project. Other topics may also include how to layout buildings on footings and how to establish grades using a surveying transit.

## State Course Codes

High School

## Subject Area 17: Architecture and Construction (secondary)

## Construction-General

## 17009 - Building Maintenance

Building Maintenance courses train students to maintain commercial, industrial, and residential buildings and homes. Instruction is provided in the basic maintenance and repair of air conditioning, heating, plumbing, electrical, and other mechanical systems. Topics covered may include identifying and using hand and power tools safely; installing and repairing floor coverings, walls, and ceilings; installing and repairing doors, windows, screens, and cabinets; applying finishes to prepared surfaces; and repairing roofs, masonry, plumbing, and electrical systems.

## 17010 - Home Maintenance

Home Maintenance courses provide students with knowledge and skills related to devices and systems found in the home. Course content may include electrical wiring, plumbing, window and door repair and installation, wall and floor repair and finishing, furniture repair and finishing, and small appliance repair.

## 17011 - Wall Finishings

Wall Finishings courses prepare students to finish exterior or interior surfaces by applying protective coating materials such as paint, lacquer, wallpaper, plaster, or stucco. Course topics may include instruction in making, mixing, and matching paint colors; applying coating with various types of equipment; applying wallpaper; lathing, preparing surfaces, smoothing, and finishing.

## 17012 - Upholstering

Upholstering courses prepare students in all aspects of upholstering furniture. Topics covered may include installing, repairing, arranging, and securing the springs, filler, padding and cover materials of chairs, couches and mattresses; cutting, sewing and trimming; cushion filling, tufting, and buttoning; and wood refinishing.

## 17014 - Concrete Foundations

Concrete Foundations courses cover concrete and its relationship to construction and concrete safety and testing techniques.

## 17015 - Construction Estimating

Construction Estimating courses provide students with the opportunity to learn the fundamental principles of construction estimating. Course topics typically include procedures for estimating costs in different divisions of a project and determining the critical quantities of materials obtained from a set of plans.

## State Course Codes

High School

## Subject Area 17: Architecture and Construction (secondary)

## Construction-General

## 17016 - Construction Management

Construction Management courses introduce students to the concept of the project team, use of documents on a construction site, submittals, shop drawings, jobsite layout, meeting control, safety management, changes and claims forms, documents, and project closeout record keeping. Topics may also include construction law, construction contracts, and how to work with owners and subcontractors.

## 17047-General Construction-Independent Study

General Construction-Independent Study courses, often conducted with instructors as mentors, enable students to explore construction-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 17048 - General Construction-Workplace Experience

General Construction-Workplace Experience courses provide work experience in a field related to construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 17049-General Construction-Other

Other General Construction courses.

## Air Conditioning, Heating, and Plumbing

## 17051-Air Conditioning

Air Conditioning courses offer students specialized training related to the design, installation, and repair of air conditioning systems for residential and commercial use. These courses may emphasize the theory and design of electrical, electronic, mechanical, and pneumatic control systems used in air conditioning systems; they might also (or instead) focus on procedures used in troubleshooting, servicing, and installing components of air conditioning systems.

## 17052 - Refrigeration

Refrigeration courses provide students with exposure to and training in the theories, equipment, and skills needed to design, install, and repair commercial and residential refrigeration systems. Course topics typically include the theory of thermodynamics, measurement of pressures and temperatures, components and common accessories of refrigeration systems, and repair and safety procedures.

## State Course Codes

High School

## Subject Area 17: Architecture and Construction (secondary)

## Air Conditioning, Heating, and Plumbing

## 17053 - Heating

Heating courses offer students training specific to the design, installation, and repair of heating systems for residential use. Topics typically include electric, gas, and/or steam systems; ventilation procedures; safety practices; and installation and trouble-shooting techniques.

## 17054-Air Conditioning/Refrigeration

Air Conditioning/Refrigeration courses enable students to develop the combined skills and knowledge to install, maintain, adjust, and repair both air conditioning and refrigeration systems.

## 17055 - Air Conditioning, Heating, and Refrigeration

In Air Conditioning, Heating, and Refrigeration courses, students learn the basic principles of these systems, along with how to identify and safely use tools/equipment used in the trade.

## 17056 - Heating, Ventilation, and Air Conditioning

These courses synthesize basic and advanced principles in heating, ventilation, and air conditioning and include topics such as air filtration methods, humidity control, and the installation and maintenance of heat pumps, furnaces, and air conditioners. Students also learn about climate control systems; electrical wiring; systems design; sizing, fabricating, and installing ductwork; installing and maintaining climate control systems; and safety.

## 17057 - Particular Topics in HVACR

These courses offer students specialized training in aspects or topics that are common to various climate control systems (heating, ventilation, air conditioning, and refrigeration systems); such topics may include electrical components, diagrams and blueprints, welding and soldering techniques, and so on.

## 17058 - Plumbing

Plumbing courses provide students with instruction in installing waste and vent systems, water and gas pipes, trim, and fixtures. Skills taught include cutting and joining various types of pipe (for instance, steel, plastic) using various methods (cement, seat method, and so on).

## 17059 - Plumbing and Heating

Plumbing and Heating courses address the installation, assembly, maintenance, and repair of piping, plumbing, heating equipment, and water and drainage systems. Topics covered include the computation of heat losses and BTU requirements and blueprint reading. Students gain experience with electric, gas, and oil furnaces; vacuum pumps; air compressors; and mechanical and pneumatic testing equipment.

## State Course Codes

High School

## Subject Area 17: Architecture and Construction (secondary)

## Air Conditioning, Heating, and Plumbing

## 17060 - HVAC \& Plumbing Systems

Course designed to teach basic skills required for installation of HVAC and plumbing systems

## 17061 - Pipefitting Technology

Course design to teach exposure to and training in the theories, equipment and skills needed to perform pipefitting techniques

## 17062 - Skilled Mechanical Crafts

A course to introduce students to the basic skills necessary for occupations in skilled mechanical crafts (plumbing, HVAC, pipefitting, sheet metal, refrigeration).

## 17097-Air Conditioning, Heating and Plumbing-Independent Study

Air Conditioning, Heating, and Plumbing-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to air conditioning, heating and plumbing. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 17098 - Air Conditioning, Heating and Plumbing-Workplace Experience

Air Conditioning, Heating, and Plumbing-Workplace Experience courses provide work experience in a field related to air conditioning, heating, and/or plumbing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 17099 - Air Conditioning, Heating and Plumbing-Other

Other Air Conditioning, Heating and Plumbing courses.

## Electricity/Electronics

## 17101 - Exploration of Electricity/Electronics

Exploration of Electricity/Electronics courses offer instruction in the theory of electricity and in the terminology, skills, and safety procedures common to careers involving electricity and electronics. Topics include (but are not limited to) Ohm's law, electrical equipment, wire systems, and so on; career exploration is often (but not always) an integral part of these courses.

## State Course Codes

## High School

## Subject Area 17: Architecture and Construction (secondary)

## Electricity/Electronics

## 17102 - Electricity-Comprehensive

Electricity-Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. These courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, commercial, and/or industrial buildings; installing lighting, power circuits, and cables; and estimating job costs. As students progress, their projects become more complex and expansive. In these courses, safety is stressed, and a career exploration component may be offered.

## 17103 - Residential Wiring

Covering many of the same topics as Electricity-Comprehensive courses, Residential Wiring courses apply the knowledge and skills that students acquire to the electrical systems found in family dwellings. Because these courses emphasize residential electricity, topics may also include cable installation, telephone systems, and the installation of lighting fixtures, outlets, and so on. Maintenance and repair skills are often included as course topics.

## 17104 - Industrial Electricity

Covering many of the same topics as Electricity-Comprehensive courses, Industrial Electricity courses apply the knowledge and skills that students acquire to the electrical systems used in industry. Because of this emphasis, these courses may also cover the installation of transformers and control devices, emergency generator systems, and other industrial applications.

## 17105 - Particular Topics in Electricity

These courses provide students with specialized knowledge and help them develop skills in particular topics concerning the nature, behavior, and application of electrical current.

## 17106 - Electronics-Comprehensive

Electronics-Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electronic field as well as typically cover the theory of electricity. Course topics may include AC, DC, analog, and integrated circuitry and solid state and digital devices, amplifiers, and semiconductors. Skills covered may involve the repair, maintenance, and building of electronic equipment such as radios, television sets, and industrial equipment.

## 17107 - Particular Topics in Electronics

Individual courses in this category offer specialized training in topics related to electronics such as diodes, transistors, digital techniques, solid-state devices, analog circuits, and microprocessors.

## 17108 - Electricity/Electronics-General

## State Course Codes

High School

## Subject Area 17: Architecture and Construction (secondary)

## Electricity/Electronics

Electricity/Electronics-General courses teach fundamental concepts of electricity and electronics, including safety procedures, and may introduce students to the available occupations in electrical and electronic industries. Topics covered typically include components of circuits; reading schematics and diagrams; electricity and electronics as sources of energy; signal transmission; and using equipment common to these occupations, such as ammeters, voltmeters, capacitor checkers, transistor testers, signal generators, and ohmmeters.

## 17109 - Particular Topics in Electricity/Electronics

These courses provide instruction in the theory and skills needed in fields involving electricity and electronics and related fields that focus on electrical wiring or electronic signals.

## 17110-Analog and Digital Circuits

In these courses, analog and digital circuits and systems are compared. Topics covered include binary and continuously variable currents and signals (typically in the context of voltage), waveforms, signal loss and distortion, modulation, and signal processing. These courses may also introduce other media, such as sound waves and liquids.

## 17111 - Analog Circuits

Analog Circuit courses emphasize currents and voltages that have continuously variable signals and, due to that emphasis, concentrate on signal modulation, transmission and reception, signal loss and distortion, and waveforms. These courses may also address conversion techniques.

## 17112 - Digital Circuits

Digital Circuit courses emphasize currents and voltages that have binary states and, due to that emphasis, concentrate on transmission and reception of binary data, signal loss, and processing circuitry. These courses may also address conversion techniques.

## 17113 - Electrical \& Security Systems

Course design to teach basic skills required for installation of electrical and security systems

## 17147 - Electricity/Electronics—Independent Study

Electricity/Electronics-Independent Study courses, often conducted with instructors as mentors, enable students to explore electricity- or electronics-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 17: Architecture and Construction (secondary)

## Electricity/Electronics

## 17148 - Electricity/Electronics—Workplace Experience

Electricity/Electronics-Workplace Experience courses provide students with work experience in a field related to electricity and/or electronics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 17149 - Electricity/Electronics—Other

Other Electricity/Electronics courses.

## All Others

17995 - Architecture and Construction—Aide
Architecture and Construction-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 17997 - Architecture and Construction-Independent study

Architecture and Construction-Independent Study courses, often conducted with instructors as mentors, enable students to explore architecture and construction-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 17998 - Architecture and Construction-Workplace Experience

Architecture and Construction-Workplace Experience courses provide students with work experience in a field related to architecture or construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 17999 - Architecture and Construction-Other

Other Architecture and Construction courses.

## State Course Codes

High School
Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Comprehensive

## 18001 - Introduction to Agriculture and Natural Resources

Introduction to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.

## 18002 - Agriscience

Agriculture-Comprehensive courses cover a wide range of agricultural topics, including plant and animal science, production, and processing; agricultural mechanics, including tool and machine operation and repair; construction and repair of farm structures; business operations and management; and the careers available in the agricultural industry. They may also include topics such as chemical and soil science, ecology, agricultural marketing, and veterinary science.

## 18003 - Agriculture and Natural Resources-Comprehensive

Agriculture and Natural Resources-Comprehensive courses cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; agricultural construction; business operations and management; and the careers available in the agricultural/natural resources industry. They may also include topics such as chemical and soil science, forestry, agricultural marketing, and veterinary science.

## 18004 - Introduction to Floral Design

This is an introductory course that allows the students to explore the floral careers and the floral design business.

## 18048-Ag Internship

Ag Internship provides students to gain knowledge and skills for various Agriculture Careers. Students will provide a detailed log of experiences and hours while participating.

## All Others

18049-Ag Advanced Internship
This course allows additional time for students to be exposed to careers in an internship area as related to the AFNR cluster in a specific career.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## All Others

## 18050 - Supervised Agriculture Experience

This is an application level course designed to provide students in the AFNR cluster with electronic record keeping experience. This course will allow the student to develop personal financial literacy and make decisions based on actual experiences in developing and managing an SAE.

## 18995 - Agriculture, Food, and Natural Resources-Aide

Agriculture, Food, and Natural Resources-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 18997 - Agriculture, Food, and Natural Resources-Independent Study

Courses in Agriculture, Food, and Natural Resources-Independent Study, often conducted with instructors as mentors, enable students to explore topic of interest related to agriculture, food, and natural resources. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 18998 - Agriculture, Food, and Natural Resources-Workplace Experience

Agriculture, Food, and Natural Resources-Workplace Experience courses provide students with work experience in fields related to agriculture, food, and natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 18999 - Agriculture, Food, and Natural Resources-Other

Other Agriculture, Food, and Natural Resources courses.

## Plant Systems

## 18051 - Plant Systems Science (Formerly Production/Science)

Plant Production/Science courses provide knowledge about the propagation of plants for food and fiber. These courses may cover such topics as soil science, irrigation, pest and weed control, food and fiber processing, and farm operations. They may also cover the knowledge and skills needed to produce all types of crops or may emphasize a particular area of the agricultural industry.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Plant Systems

## 18052 - Horticultural Science (FormerlyGeneral Horticulture)

General Horticulture courses expose students to the art and science of growing plants, shrubs, trees, flowers, fruits, and vegetables. In doing so, they cover a wide variety of topics, including greenhouse and nursery operations, soils and media mixtures, fruit and vegetable production, turf/golf course management, interior and exterior plantscaping, irrigation systems, weed and pest control, and floral design.

## 18053- Ornamental Horticulture

Similar to General Horticulture, Ornamental Horticulture courses provide information regarding the care and propagation of plants, flowers, trees, and shrubs, but place a special emphasis on those used for decorative and aesthetic purposes. Because of this particular emphasis, Ornamental Horticulture courses usually concentrate on nurseries and greenhouses and on the floristry industry.

## 18054 - Turf and Landscape Management

Turf and Landscape Management courses provide instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design. These courses emphasize applying such knowledge and skill to the design, establishment, and maintenance of lawns, parks, open space, and similar environments.

## 18055 - Soil Science

Soil Science courses involve the study of soil properties, including soil chemistry, biology, fertility, mineralogy, and hydrology. Topics covered may also include soil conservation, irrigation, and management.

## 18056 - Particular Topics in Plant Systems

These courses examine specific topics related to Plant Systems, such as floral design, hydroponics, or landscaping, rather than provide a general study of plant systems or horticulture.

## 18057 - Floriculture and Greenhouse management

Plant Identification and floral design are necessary knowledge skills along with the selection of greenhouse plants and management of greenhouses for production of plants and flowers in the industry.

## 18058 - Plant and Soil Science

Courses expose students to the art and science of growing plants, shrubs, trees, flowers, fruits, agriculture crops and vegetables. In doing so, they cover a wide variety of topics, including greenhouse and nursery operations, soils \& media mixtures, soil chemistry, fertility, mineralogy, hydrology, soil conservation, irrigation, fruit and vegetable production, turf/golf course management, interior and exterior plantscaping, irrigation systems, weed \& pest control, \& floral design.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Plant Systems

## 18059 - Landscape Science I

Courses provide instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design. These courses emphasize applying such knowledge \& skill to the design, establishment, and maintenance of lawns, parks, open space \& similar environments. This course would include opportunities to design public and private spaces

## 18060 - Principles of Agriculture Science - Plant

Provides an overview of the plant industry, careers and the anatomical, taxonomy, physiological structures of plants. Photosynthesis, respiration and transpiration of plants and the interdependence of plants and their growth. Soilless systems, Reproduction, plant diseases and marketing of plant products

## 18061 - Landscape Science II

Student may develop career opportunities through internships with local Horticulture Businesses. Advanced knowledge and skills will be developed in plant genetics. Biotechnology through science based research projects, advanced based designs utilizing tropical, specialty and non-native plants.

## 18062 - Turf and Landscape

Course provides instruction in plant identification and landscape design. The principles of turf selection, maintenance and design of irrigations systems for public and private systems. Turf diseases. Insects and fertilizer usage are covered in this course.

## 18063 - Floriculture

Prepares students for the floral design business with a basic floral ID and arrangements used in the floral industry for special occasions.

## 18064 - Floriculture and Landscape Design

Courses provide instruction that incorporates plant science, soil and media mixtures, plant identification in the florist industry and landscape design. These courses emphasize applying such knowledge \& skill to the design, floral arrangements for various occasions and design public and private facilities internal and external areas

## 18065 - Landscape Design

Course that prepares students to maintain indoor and outdoor environments. Includes instruction in plant science, climate, irrigation, nutrition, irrigation, and turf management

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Plant Systems

## 18066 - Floral Design

Course that prepare students for the flower catering services with instruction in purchasing, storage, delivery, floral design and arranging for various occasions

## 18067 - Nursery and Landscape Design

Courses provide instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design. These courses emphasize applying such knowledge \& skill to the design, establishment, and maintenance of lawns, parks, open space \& similar environments

## 18068 - Greenhouse Production and Management

Students will have the opportunity to produce, market different types of greenhouse plants grown in the schools greenhouse. Skills in management, plant identification, pests control, starting plants, watering, fertilizing, and salesmanship will be developed.

## 18069 - Floral Design II

Allows student to develop plans for selection of various flowers, greens and arrangement for floral occasions followed up by marketing and cost plans.

## 18071 - Applications in Horticulture

Applications in Horticulture provides instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design. This course will expose students to the art and science of growing plants, shrubs, trees, flowers, fruits, agriculture crops and vegetables. The course emphasizes applying such knowledge \& skill to the design, establishment, and maintenance of lawns, parks, open space \& similar environments. This course would include opportunities to design public and private spaces. Students will have the opportunity to produce, market different types of greenhouse plants grown in the schools greenhouse. Skills in management, plant identification, pests control, starting plants, watering, fertilizing, and salesmanship will be developed.

## 18081 - Crop \& Range Management

Crop \& Range Management course imparts the application and skills needed to bring plant products to market. It may cover a wide variety of topics, including plant production, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. This course may present an overview of product processing or may specialize in specific plant products and challenges related to range and pasture management.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Plant Systems

## 18097 - Plant Systems-Independent Study

Courses in Plant Systems—Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to plant systems. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 18098 - Plant Systems—Workplace Experience

Plant Systems-Workplace Experience courses provide work experience in fields related to plant systems (care, propagation, and processing). Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 18099 - Plant Systems-Other

Other Plant Systems courses.

## Animal Systems

## 18101-Animal Production/Science

Animal Production/Science courses impart information about the care and management of domestic and farm animals. These courses may cover animal nutrition, health, behavior, selection, reproduction, anatomy and physiology, facilities, product processing, and marketing. Students may study a particular species (swine, cattle, horses, fowl, sheep, and so on), or they may learn how to care for and maintain livestock as a more inclusive study.

## 18102 - Small Animal Care

Small Animal Care courses focus on the care and management of small animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study. Course topics may include kennel operations and sales.

## 18103 - Large Animal Care

Large Animal Care courses focus on the care and management of large animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, use of qualitative and quantitative analyses for decision making, facilities, handling and training, and grooming are typical areas of study. Course topics may include product processing and marketing.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Animal Systems

## 18104 - Equine Science

Equine Science courses focus on the care and management of horses. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study.

## 18105 - Veterinary Science

Veterinary Science courses impart information about the causes, diagnosis, and treatment of diseases and injuries of animals, typically emphasizing domestic and farm animals. Course topics focus on anatomy and physiology, nutrition, behavior, and reproduction, but may also include other areas of study as appropriate.

## 18106 - Particular Topics in Animal Systems

These courses examine specific topics related to animal care and management, production, or processing, such as equine training or animal waste management, rather than provide a general study of animal care and the systems related to their growth and management.

## 18108 - Principles of Agriculture Science - Animal

Overview of the animal industry. Anatomical and Physiological Structures of animals, Naming of animals, nutrition, reproduction, genetics, animal health, selection, marketing and animal products

## 18147-Animal Systems-Independent Study

Courses in Animal Systems-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to animal systems. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 18148 - Animal Systems-Workplace Experience

Animal Systems-Workplace Experience courses provide work experience in fields related to animal systems (management, care, and/or processing). Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 18149 - Animal Systems—Other

Other Animal Systems courses.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Agribusiness

## 18201-Agribusiness Management - Agricultural Business

Agribusiness Management courses provide students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. These courses may cover topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decisionmaking, commodities, and building leadership skills. These courses may also incorporate a survey of the careers within the agricultural industry.

## 18202-Agricultural Entrepreneurship

Agricultural Entrepreneurship courses focus on the personal skills necessary for success in entrepreneurial ventures in the agricultural industry. Topics include setting goals, assessing and solving problems, evaluating financial progress and success, business planning, information management and evaluation, and recordkeeping.

## 18203 - Agricultural Leadership

Agricultural Leadership courses help students develop leadership skills with a focus on opportunities in the food, fiber, and natural resources industries. Topics may include but are not limited to human relationships and effective communication, decision-making and problem-solving, leadership qualities and styles, and ensuring successful completion of group activities.

## 18204 - Particular Topics in Agribusiness

These courses examine specific topics related to Agribusiness, such as international agriculture or commodities, rather than provide a general study of agribusiness principles.

## 18205 - Agriculture Communications

Courses help students develop leadership skills with a focus on opportunities in the food, fiber, \& natural resources industries. Topics may include but are not limited to human relationships and effective communication, decision-making and problem-solving, leadership qualities and styles, and ensuring successful completion of group activities

## 18206 - Research in Agriculture

Allows students to prepare, conduct and evaluate science based projects as they relate to science in agriculture in the classroom, shop or greenhouse.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Agribusiness

## 18247 - Agribusiness-Independent Study

Courses in Agribusiness-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to agribusiness. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 18248 - Agribusiness-Workplace Experience

Agribusiness-Workplace Experience courses provide work experience in fields related to agribusiness. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 18249-Agribusiness-Other

Other Agribusiness Courses

## 18220 - Applications in Agribusiness

Applications in Agribusiness provide students with the information and skills necessary for career success in agribusiness and in the operation of entrepreneurial ventures. Topics include economic principles, budgeting, risk management, finance, business law, insurance and resource management. Other possible topics are: development of a business plan, employee/employer relations problem solving and decision making, using computers. A survey of the careers within the agricultural industry is also incorporated. This course focuses specifically on the marketing and promotional strategies for agricultural products. Students will develop a marketing plan for a specific product including target audience research and presentation skills. Agricultural sales techniques for products will also be covered.

## 18317 - Advanced Food Science

Allows students to develop knowledge and skills used by the food supply careers as a nutritionist, food chemist, chef, or process engineer. Emphasis will be placed on food chemistry, nutrition and digestion, quality food factors, food safety and biotechnology. Students will be able to explore food preparation of another country and to understand and appreciate ethnic foods from a global perspective which includes hands on laboratory experiences.

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## 18320 - Applications in Biotechnology in Agriculture

Applications in Ag Biotechnology introduce theory and methods relating to applications of biotechnology in agriculture. The course emphasizes emerging laboratory technologies in the area of agricultural biotechnology including food and natural resource management. The course will explore plan and animal genetic engineering, alternative fuel production, food production, agricultural pests and controls, and other topics.

## Agricultural Production/Processing

## 18301 - Plant and Animal Science

Agricultural Production courses combine content related to animal and plant production, providing comprehensive coverage of the production functions of the agricultural industry. These courses typically cover such topics as care and management of farm animals, crop production and harvesting, plant and animal insect and disease control, efficient resource management, and farm management.

## 18302 - Advanced Plant and Animal Science

Agricultural Processing courses impart the knowledge and skills needed to bring animal and plant products to market. They may cover a wide variety of topics, including care and maintenance of animals or plants, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Agricultural Processing courses may present an overview of agricultural processing or may specialize in particular types of products.

## 18303 - Plant Processing

Plant Processing courses impart the knowledge and skills needed to bring plant products to market. They may cover a wide variety of topics, including plant production, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Plant Processing courses may present an overview of product processing or may specialize in specific plant products.

## 18304-Animal Processing

Animal Processing courses impart the knowledge and skills needed to bring animal products to market. Although these courses may present an overview of animal care and maintenance, they typically emphasize quality selection, product preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Animal Processing courses may present an overview of several types of animal products or may specialize in particular products, such as meat, leather, wool, dairy products, and so on.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Agricultural Production/Processing

## 18305 - Food Product Processing

Food Product Processing courses impart the knowledge and skills needed to produce and manufacture food products for the consumer market. These courses focus on food products while covering a variety of topics, such as quality selection and preservation, equipment care and sanitation, government regulations, marketing, consumer trends, and product research and development.

## 18306 - Aquaculture

Aquaculture courses impart the knowledge and skills needed for producing fish, plants, and other species living in an aquatic environment, and course topics typically include the selection, propagation, harvesting, and marketing of those species. Instruction may also address aquatic and marine biology, ecosystems, water quality and management, and business practices.

## 18307 - Agriculture and Society

Agriculture and Society courses provide an overview of the importance of, impact on, and relationships between agricultural endeavors and society at large. These courses typically emphasize economic and environmental factors and impacts (such as urban and agricultural water use) and the influences of society on agricultural endeavors (including production, processing, and distribution). Current technological advances (such as genetic engineering) may also be discussed.

## 18308-Agricultural Biotechnology

Agricultural Biotechnology courses apply biological principles and understanding to plant and animal science in order to produce or refine agricultural products. Course topics typically include but are not limited to microbiology, genetics, growth and reproduction, structural basis of function in living systems, chemistry of living systems, quantitative problem-solving, and data acquisition and display. These courses also often cover the ethics of biotechnology.

## 18309 - Particular Topics in Agricultural Production/Processing

These courses examine specific topics related to producing and processing agricultural products (such as meat cutting) rather than provide a general study of production or processing.

## 18310 - Food Science II

Allows students to develop knowledge and skills used by the food supply careers as a nutritionist, food chemist, chef, or process engineer. Emphasis will be placed on food chemistry, nutrition and digestion, quality food factors, food safety and biotechnology. Students will be able to explore food preparation of another country and to understand and appreciate ethnic foods from a global perspective which includes hands on laboratory experiences.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Agricultural Production/Processing

## 18311 - Advanced Plant and Animal Science

Includes a study of the animal and plant production, management, marketing of products, by products, consumer awareness and safety involved in producing consumable products. Nutrition, breeding, reproduction, disease prevention, and pesticide control are included in this class.

## 18347 - Agricultural Production and Processing-Independent Study

Courses in Agricultural Production and Processing-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to agricultural production and processing. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 18348 - Agricultural Production and Processing-Workplace Experience

Agricultural Production and Processing-Workplace Experience courses provide students with work experience in fields related to agricultural production and processing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 18349 - Agricultural Production and Processing-Other

Other Agricultural Production and Processing courses.

## Agricultural Mechanics and Construction

## 18401 - Agriculture Mechanics/Equipment/Structures

Agriculture Mechanics/Equipment/Structures courses provide students with the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. While learning to apply basic industrial knowledge and skills (engine mechanics, power systems, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; a study of electricity and power principles; and safety procedures.

## 18402 - Agriculture Mechanics and Equipment

Agriculture Mechanics and Equipment courses provide students with the engineering and power technology principles, skills, and knowledge that are specifically applicable to the agricultural industry. Typical topics include the operation, maintenance, and repair of power, electrical, hydraulic, and mechanical systems.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Agricultural Mechanics and Construction

## 18403-Agriculture Structures

Agriculture Structures courses provide students with the skills and knowledge that are specifically applicable to the construction, maintenance, and repair of structures integral to the agricultural industry, including but not limited to animal enclosures, irrigation systems, and storage facilities. In these courses, students typically study design, planning, and construction knowledge and skills (such as survey, carpentry, plumbing, concrete, and electrical systems), in addition to the safe operation of tools and machines.

## 18404 - Agricultural Metal Fabrication Technology (Formerly Agriculture Welding)

Formerly known as Agriculture Welding, Agricultural Metal Fabrication Technology courses provide students with the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. In learning to apply basic industrial knowledge and skills (engines, power, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; an introduction or review of electricity and power; and safety procedures.

## 18405 - Particular Topics in Agricultural Mechanics and Construction

These courses examine specific topics related to agricultural mechanics and construction, such as specific vehicles or structures, rather than provide a general study of mechanics and construction techniques.

## 18407 - Advanced Agriculture Welding II

Courses provide students with the skills \& knowledge that are specifically applicable to the welding industry with advance blueprint reading and welding in the $\mathrm{OH}, \mathrm{V}$ and H position along with pipe welding and TIG welding that could result in welding certification

## 18408-Agricultural Welding III

The student will gain skills and knowledge for the G.T.A.W. (Gas tungsten arc welding) process. Equipment setup, welding safety, welding in the flat and horizontal position and perform visual inspection of welds. This course ties in with the AWS SENSE certification and is articulated to post - secondary.

## 18409 - Agriculture Fabrication

Courses provide students with the skills \& knowledge that are specifically applicable to the construction, maintenance, and repair of structures integral to the agricultural industry, including but not limited to animal enclosures, irrigation systems, \& storage facilities. In these courses, students typically study design, planning, \& construction knowledge \& skills (such as survey, carpentry, plumbing, concrete, \& electrical systems), in addition to the safe operation of tools and machines

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Agricultural Mechanics and Construction

## 18410 - Small Gas Engines

Courses provide students with the opportunity to learn how to service \& recondition small engines, typically emphasizing two and four-cycle engines. Courses provide student with opportunities to troubleshoot and repair speed controls, lubrication, ignition, fuel, power transfer, cooling, exhaust, and starting systems; use hand, power, and overhaul tools; and read and interpret service manuals and parts' catalogs. Applications may include lawn mowers, tractors, tillers, power tools

## 18411 - Agriculture Power

Courses enable students to understand the principles underlying various kinds of mechanics (aircraft, auto, diesel, \& marine) and how energy is converted, transmitted, \& controlled. Topics typically include maintaining \& servicing machines, engines \& devices while emphasizing energy sources, electricity, and power transmission. The courses may also provide information on career opportunities within the field of mechanics and/or transportation

## 18412 - Agriculture Metals

Course provide instruction in layout and design of metal skills, soldering, brazing and other cold metal work

## 18413 - Agriculture Plastics

Course provides students the opportunity to explore plastics in Agriculture and how plastics are used in the Ag Industry

## 18414 - Agricultural Welding IV

The student will gain necessary knowledge and skills for S.M.A.W (shielded metal arc welding) G.M.A.W (Gas Metal Arc Welding) G.T.A.W for the AWS SENSE welding certification. Additional course work in basic math and metal measurements, use of blueprints and symbols in welding designs, and basic metallurgy and metal identification will complete the welding certification.

## 18447-Agricultural Mechanics and Construction-Independent Study

Courses in Agricultural Mechanics and Construction-Independent Study, often conducted with instructors as mentors, enable students to topics of interest related to agricultural mechanics and/or construction. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Agricultural Mechanics and Construction


#### Abstract

18448 - Agricultural Mechanics and Construction—Workplace Experience Agricultural Mechanics and Construction-Workplace Experience courses provide work experience in fields related to agricultural mechanics and construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.


18449-Agricultural Mechanics and Construction-Other
Other Agricultural Mechanics and Construction courses.

## Natural Resources

18501 - Wildlife and Recreation Management (Formerly Wildlife Management)
Formerly known as Wildlife Management, Wildlife and Recreation Management courses provide students with the opportunity to understand and appreciate the importance of maintaining the land and ecological systems that enable non-domesticated animals to thrive. These courses emphasize how humans and animals may both take advantage of the same land or how to gain economic benefits from the land while not degrading its natural resources or depleting plant or animal populations. Students may also learn how to manage wildlife and lands for recreational purposes.

## 18502 - Forestry Management (Formerly Forestry)

Formerly known as Forestry, Forestry Management courses provide students with the information and experience necessary for the cultivation, management, and care of forests or timberlands. These courses cover topics such as the processes of regeneration and reforestation, harvesting and conservation of natural resources, erosion and pest control, trail development and maintenance, mapping and surveying, operation of forestry tools, government regulations, environmental stewardship, and urban forestry, including the principles of selecting, planting, and caring for trees in urban settings. Settings may include streets, parks, commercial/industrial landscape settings, and recreational use of forests. These courses also address forestry harvesting and methods to manage, protect, and harvest timber stands and specialty forest crops; equipment maintenance and repair; the selection, planting, transplanting, and harvesting of trees; forest management; and safety procedures.

## 18503 - Forestry Harvesting

Forestry Harvesting courses involve the study of methods to manage, protect, and harvest timber stands and specialty forest crops; equipment maintenance and repair; the selection, planting, transplanting, and harvesting of trees; forest management; and safety procedures.

## State Course Codes

High School

## Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Natural Resources

## 18504 - Natural Resources Management

Natural Resources Management courses combine the fields of ecology and conservation with planning for the efficient use and preservation of land, water, wildlife, and forests. Within the general area of natural resources management, these courses usually cover specific topics and uses, such as hunting or fishing preserves, forest production and management, wildlife preservation, and human outdoor recreation.

## 18505 - Particular Topics in Natural Resources

These courses examine specific topics related to natural resources, such as urban forestry or hunter education, rather than provide a general study of natural resource principles and topics.

## 18506 - Alternative Energy

Alternative Energy courses help students identify renewable and nonrenewable energy sources and natural resources. Topics typically include alternative energy sources and their respective advantages and disadvantages; the impact of conventional and alternative energy sources on the environment; the efficiency of energy production from various sources; and careers in the fields of alternative energy and sustainability.

## 18507 - Energy Resources in Agriculture

Course will cover the modern sources of energy that are used in agriculture related to wind, ethanol, and Biodiesel fuels

## 18547 - Natural Resources-Independent Study

Courses in Natural Resources-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to natural resources. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 18548 - Natural Resources-Workplace Experience

Natural Resources-Workplace Experience courses provide students with work experience in fields related to natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 18549 - Natural Resources-Other

Other Natural Resources courses.

High School
Subject Area 18: Agriculture, Food, and Natural Resources (secondary)

## Subject Area 19: Human Services (secondary)

## 19001 - Human Services Career Exploration

Human Services Career Exploration courses introduce and expose students to the career opportunities pertaining to the provision of personal and consumer services for other human beings. Course topics vary and may include (but are not limited to) caring for others, education, cosmetology, apparel/textiles, entrepreneurship, labor laws, and customer service. Course activities depend upon the careers being explored.

## 19297 - Community Connections

Community Connections provides community based/school based learning experiences typically within the family and consumer sciences classroom. Learning goals are set by the student, teacher and community partners to create experiences and/or discussions to enhance the development of the workplace skills (e.g. leadership, empathy, communication, problem solving, cooperation, critical thinking, and resource management) needed to be successful in service related careers. **This course has a pre-requisite of a 1.0 credit within Human Services Cluster Pathways courses.

## 19298 - Career Connections

Career Connections provides human services/family and consumer sciences related work-based learning experiences (paid or unpaid) outside the traditional classroom. Learning goals are set by the student, teacher and employer/adult mentor to create field experiences and/or discussions related to human services/ family and consumer sciences occupational technical skills. **This course has a prerequisite of a 1.0 credit within Human Services Cluster Pathways courses.

## Child and Elder Care

19051 - Orientation to Early Childhood Development
Orientation to Early Childhood Education provides students with the knowledge and skills to meet the physical, intellectual, emotional, and social growth requirements needed for early childhood development. Students will examine career paths within early childhood education, education and related services at the entry, technical and professional levels. Formerly Child Care

## 19052 - Foundations of Early Childhood Development

Foundations to Early Childhood Education provides students with knowledge of developing the physical, intellectual, emotional, and social growth of young children in a variety of childcare settings. Formerly Child Care

## State Course Codes

High School

## Subject Area 19: Human Services (secondary)

## Child and Elder Care

## 19053 - Elder Care

Elder Care courses emphasize the care of human beings as they grow older. These courses involve the study of the biological, physiological, social, and psychological needs and concerns of the elderly, and deal with the aging process, death, and dying in a realistic manner. Elder Care courses may cover work and personal habits appropriate to the field, and may also offer the opportunity to explore various careers.

## 19054 - Child and Adult Care Services (Formerly Caregiving Service)

Formerly known as Caregiving Service, Child and Adult Care Services courses emphasize the care of human beings who are unable or who need assistance to care for themselves. These courses involve the study of the biological, physiological, social, and psychological needs and concerns of young children, the elderly, and/or the disabled. Additional topics may include planning daily routines; appropriate environments and activities; growth and aging processes; and techniques for managing a center or working in others' homes.

## 19055 - Particular Topics in Child and Elder Care

These courses examine specific topics related to child and elder care, such as regulations of the industry or caring for people with special needs, rather than providing a general study of child and elder care.

## 19097 - Child and Elder Care-Independent Study

Child and Elder Care-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to child and elder care. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 19098-Child and Elder Care-Workplace Experience

Child and Elder Care-Workplace Experience courses provide students with work experience in fields related to caring for others. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 19099 - Child and Elder Care-Other

Other Child and Elder Carecourses.

## State Course Codes

High School

## Subject Area 19: Human Services (secondary)

## Child and Elder Care

## 19255 - Family Studies

The Family Studies course explores the roles and responsibilities of parents such as how society, media, technology and diversity impact their ability to balance work and family. It also includes the development of children and parents as their earliest teacher. Parenting styles and family stages are explored as is the changing demographics which will change the face of the US family. Parenting and behavior guidance skills are strengthened through a study of positive family relationships, child abuse and neglect, safety, and health practices. Occupations related to meeting the needs of families will be analyzed. This course will promote the creation of healthy and sustainable families be they their own or those they work with.

## 19261 - Human Growth and Development

Human Growth and Development courses focus on the application of human development theories and stages of growth to the relationships among individuals at various stages of life, as well as provide an understanding of how people change across their lifespans. Course content may include the application of human development theories in family systems and community settings. Interactions of grandparents and their grandchildren, adult children and their aging parents, as well the similarities between caring for the elderly and caring for young children may also be explored.

## Cosmetology

## 19101-Cosmetology—Licensing

Cosmetology-Licensing courses provide students with the knowledge and skills applicable to the care of hair, skin, and nails, and prepare students for the state's Board of Cosmetology examinations. Almost always a series of courses with a specified number of instructional hours, Cosmetology- Licensing courses also require applied experience. Course content covers such topics as human anatomy and skin conditions, chemistry and bacteriology, sanitation and sterilization, state laws and regulations, and shop management. These courses provide students with experiences in shampooing, cutting, styling, bleaching, coloring, tinting, waving, and relaxing hair and providing facials and manicures.

## 19102 - Barbering

Barbering courses provide students with the skills and experience to shave, style, and trim mustaches and beards and to cut, shampoo, and style hair. Course topics include hygiene, skin and scalp disease, and use of equipment. Barbering courses may aim to prepare students for the state's licensing examinations, and may include topics similar to those included in Cosmetology courses.

## 19103 - Hair Styling

Hair Styling courses provide students with the skills and experience to cut, shampoo, and style hair. Course topics include hygiene, skin and scalp disease, and use of equipment. These courses provide students with experiences in shampooing, cutting, styling, bleaching, coloring, tinting, waving, and relaxing hair.

## State Course Codes

## High School

## Subject Area 19: Human Services (secondary)

## Cosmetology

## 19104-Cosmetology—Non-licensing

Cosmetology-Non-licensing courses provide students with the knowledge and skills applicable to the care of hair, skin, and nails, but do not necessarily prepare students for the state's Board of Cosmetology examinations. Students gain experience in hair care, facials, and manicures; course topics usually include human anatomy, sanitation and sterilization, and related chemistry and bacteriology. Shop management and state regulations may also be included.

## 19105-Cosmetology—Nail Specialization

Cosmetology—Nail Specialization courses offer students experience in providing manicures, pedicures, and nail extension treatments. These courses may also include topics such as hygiene, entrepreneurship, human relations, and other related subject matter.

## 19106-Cosmetology—Facial Specialization

Cosmetology-Facial Specialization courses offer students information and experience related to skin care, the provision of facials, make-up application, and facial massage. These courses may also include topics such as hygiene and sanitation, human anatomy and skin conditions, entrepreneurship, and/or human relations.

## 19107 - Particular Topics in Cosmetology

These courses examine specific topics related to cosmetology not otherwise described, such as electrolysis, rather than providing a general study.

## 19147-Cosmetology-Independent Study

Cosmetology-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to cosmetology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 19148 - Cosmetology-Workplace Experience

Cosmetology-Workplace Experience courses provide students with work experience in the cosmetology field. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 19149-Cosmetology—Other

Other Cosmetology Carecourses.

## State Course Codes

High School

## Subject Area 19: Human Services (secondary)

## Education

## 19151 - Teaching Profession

Teaching Profession courses introduce students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. These courses typically expose students to and train them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education.

## 19152 - Teaching Internship

Educational Methodology courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their own teaching objectives, to design lesson plans, and to experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques.

## 19153 - Teaching - Early Childhood Education

Formerly known as Early Childhood Education, Teaching-Early Childhood Education courses address child development, care, and education issues, so that students can guide the development of young children in an educational setting. Study typically includes planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements for teaching young children.

## 19154 - Particular Topics in Education - Educational Leadership and Training A

These courses examine specific topics in education other than those already described, such as management of school-age children, rather than providing a general study of the teaching profession.

## 19155 - Educational Research and Innovation

Courses introduce students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. These courses typically expose students to and train them in classroom management, student behavior, leadership, and human relations skills, assessment of student progress, teaching strategies and various career opportunities in the field of education. This course includes advanced work experience opportunities

## 19156-Teaching Internship

Courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their own teaching objectives, to design lesson plans, and to experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques. This course includes advanced work experience opportunities

## State Course Codes

High School

## Subject Area 19: Human Services (secondary)

## Education

## 19197 - Education-Independent Study

Education-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 19198 - Education-Workplace Experience - Educational Leadership and Training B

Education-Workplace Experience courses provide students with work experience in fields related to education. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 19199 - Education-Other

Other Education Carecourses.

## 19251 - Introduction to Family and Consumer Sciences

Introduction to Family and Consumer Sciences offers a look into the many occupations linked to providing for the basic needs of children, individuals and families. Occupations may include: nutrition educator, child care provider, social worker, foster parent, credit counselor, geriatric care provider, senior citizen care director, food service provider, restaurant manager, culinary artists, interior designer, fashion production and design, event planner and teacher.

## 19258 - Career and Life Planning

This course will introduce students to the skills and strategies needed to be focused, productive individuals. Emphasis is placed on goal-setting, decision making, time and personal management. Development of workplace skills, knowledge and attitudes needed to be successful in various career, community and family settings will be incorporated throughout this course.

## Apparel and Furnishings

## 19201 - Apparel Production I (Formerly Clothing \& Textiles)

Clothing and Textiles courses introduce students to and expand upon the various aspects of apparel, garment construction, and the textile industry, conveying the commercial application of design principles, production processes, and maintenance techniques. These courses usually address the selection, characteristics, care, and repair of various textiles; operation and care of commercial sewing machines; design, construction, and production of fabrics and/or garments; and career opportunities in the garment or textile industry.

## State Course Codes

## High School

## Subject Area 19: Human Services (secondary)

## Apparel and Furnishings

## 19202 - Clothing/Textile Maintenance

Clothing/Textile Maintenance courses provide students with the knowledge and skills to clean, care for, and maintain clothing and textiles. Course topics typically include dry cleaning and laundering techniques, identifying fabrics and the optimal cleaning agents and processes, instruction in altering and repairing garments, and the safe use of the equipment, tools, and agents.

## 19203 - Apparel Production II (Formerly Apparel Construction)

Apparel Construction courses provide students with the knowledge and skill to construct, alter, and repair clothing and textile products. Course topics typically include taking measurements, creating and preparing patterns, and various sewing techniques; topics may also include customer service, fashion design principles, and business management. These courses may also offer specialized knowledge in a particular type of garment.

## 19204 - Apparel and Textile Services

Apparel and Textile Services courses introduce students to and expand upon various services that concern the care and maintenance of apparel, textiles, and furnishing. Course topics may include upholstery, dry cleaning, commercial sewing, and tailoring.

## 19205 - Home Furnishing

Home Furnishing courses provide students with basic knowledge regarding furnishing and decorating home environments. While exploring design principles, personal needs and style, and decision-making, students may also explore the following topics: color, texture, furniture styles and arrangement, lighting, window treatments, floor and wall coverings, and home improvement/modification. Home Furnishing courses may also cover architectural style and design and take a larger look at housing problems or current housing issues.

## 19206 - Home Furnishings Production

Home Furnishings Production courses enable students to plan, select, and construct upholstery, slip covers, draperies and other window treatments, and other home accessories. Some courses may emphasize upholstery exclusively. Course content typically includes proper use of equipment, interior decorating principles, and employability skills.

## 19207 - Particular Topics in Apparel and Furnishings

These courses examine specific topics in apparel and furnishings other than those already described, such as tailoring or shoe repair, rather than providing a general study.

## 19247 - Apparel and Furnishings-Independent Study

## State Course Codes

High School

## Subject Area 19: Human Services (secondary)

## Apparel and Furnishings

Apparel and Furnishings-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to apparel, textiles, and furnishings. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 19248 - Apparel and Furnishings-Workplace Experience

Apparel and Furnishings-Workplace Experience courses provide students with work experience in fields related to apparel, textiles, and furnishings. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 19249-Apparel and Furnishings-Other

Other Apparel and Furnishings Carecourses.

## 19256-Clothing/Sewing

Clothing/Sewing courses introduce students to and expand their knowledge of various aspects of wearing apparel, sewing, and fashion. These courses typically include wardrobe planning; selection, care, and repair of various materials; and construction of one or more garments. They may also include related topics, such as fashion design and history, the social and psychological aspects of clothing, careers in the clothing industry, and craft sewing.

## 19263 - Interior Design 1 (State Title) /Home Environments and Design

Interior Design courses provide students with knowledge and skills regarding interior design. While exploring design principles, personal needs and style and decision making, students may have an opportunity to explore such topics as color, texture, furniture styles and arrangement, lighting, window treatments, floor, wall coverings and home improvement/modification.

## All Others

## 19252 - Food Preparation and Health Management

Formerly known as Food and Nutrition, Food Preparation and Health Management courses provide students with an understanding of food's role in society, instruction in how to plan and prepare meals, and information about the nutritional and health benefits of minimizing processed and prepared food and prepackaged/prepared meals from one's diet. These courses not only build on the basic skills of food preparation but also address financial considerations and recipe conversion to make foods healthier. Some courses place a heavier emphasis on a balanced diet, while others concentrate on specific types of food preparation (such as low sodium, low fat, or increased whole foods). These courses will also address current issues such as organic foods and vegan cooking.

## State Course Codes

High School

## Subject Area 19: Human Services (secondary)

## All Others

## 19253 - Nutrition and Wellness

This course will examine components of interpersonal and intrapersonal well-being. Students will prepare for careers related to nutrition and wellness concepts by taking an in-depth look at various types of diets, nutrition information, and disease prevention to identify and apply healthy practices for a lifetime of wellness. Additionally, students will explore a variety of physical activities.

## 19254 - Food Science

Food Science courses offer opportunities for students to study the composition, structure, and properties of foods and their components as well as the consumption of food and the chemical changes that occur during the processing, storage, preparation, and consumption of food for the consumer. These courses often explore the effects of various materials, microorganisms, and processes on food products through laboratory experiments and can address food innovations to meet the needs of society. Culinary techniques and the safe handling of food in the home environment are commonly included.

## 19257 - Leadership Service in Action

Leadership Service in Action empowers individuals to assume advocacy roles which support families, communities and consumers by researching social issues, developing and implementing an action plan, and applying decision making through civic engagement and service learning.

## 19259-Family and Interpersonal Relationships

Formerly known as Family Living, Family and Interpersonal Relationships courses emphasize building and maintaining healthy interpersonal relationships among family members and other members of society. These courses often emphasize (but are not limited to) topics such as the responsibilities of a family and wage earner, balancing a career and personal life, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, the family life cycle, and life stages. They also cover topics related to stages of growth and social/dating practices

## 19260-Relationships and Personal Development

Relationships and Personal Awareness provides students with ability to develop intrapersonal, interpersonal and cognitive competencies in personal, family and community settings. Students will analyze the impact of conditions that could influence the well-being of individuals, families and communities. Human services related career opportunities are incorporated throughout the course.

## 19995 - Human Services—Aide

Human Services-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## State Course Codes

High School

## Subject Area 19: Human Services (secondary)

## All Others

## 19997 - Human Services—Independent Study

Human Services-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to providing human services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 19998 - Human Services-Workplace Experience

Human Services-Workplace Experience courses provide students with work experience in a field related to the provision of human services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 19999 - Human Services-Other

Other Human Services Care courses.

## Subject Area 20: Transportation, Distribution and Logistics (secondary)

## Transportation Technology

## 20001 - Exploration of Transportation, Distribution and Logistics

Exploration of Transportation, Distribution, and Logistics courses introduce students to careers that involve the planning, management, and movement of people, materials, and products using any of several modes of transport. Such careers may also involve infrastructure, vehicular maintenance and repair, and operating or managing facilities that hold what is being transported. Therefore, specific course topics vary widely and depend upon the careers being explored.

## Operation

## 20051 - Truck and Bus Driving

Truck and Bus Driving courses instruct students in the proper and safe handling and operation of trucks and buses. Strategies for driving in hazardous conditions, observing laws and regulations, loading cargo or passengers, documenting cargo loads, and expectations of driving careers are all typical course topics.

## State Course Codes

High School

## Subject Area 20: Transportation, Distribution and Logistics (secondary)

## Operation

## 20052 - Heavy Equipment Operation

Heavy Equipment Operation courses enable students to safely operate the heavy equipment used for mining, construction, and utility industries. Typically, courses also include light maintenance principles and techniques.

## 20053 - Aviation

Aviation courses provide students with an understanding of the science of flight and typically include the history, regulations, and possible career paths within the aviation industry. Aviation courses usually cover physics, the relationships of weight and balance, principles of navigation and flight control, ground and airport operations and services, and Federal Aviation Agency regulations.

## 20054 - Boat Operation

Boat Operation courses typically cover operation and maintenance of marine vehicles, marine navigation, and emergency procedures, as well as other skills necessary or useful for work or life at sea (e.g., loading and unloading or cooking). Specific topics may include docking and undocking a vessel, engine maintenance, commercial fishing, firefighting aboard ship, and CPR.

## 20097 - Operation-Independent Study

Operation-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to the operation of vehicles. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 20098-Operation-Workplace Experience

Operation-Workplace Experience courses provide students with work experience in fields related to the operation of vehicles. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 20099-Operation-Other

Other Operation courses.

## Mechanics and Repair

## State Course Codes

High School

## Subject Area 20: Transportation, Distribution and Logistics (secondary)

## Mechanics and Repair

Energy/Power courses focus on one or several aspects of energy and power in transportation and work. Course content may include various sources of energy and their use in society (for example, characteristics, availability, conversion, storage, environmental impact, and socioeconomic aspects of various energy sources); principles involved in various means of energy transfer, such as electricity/electronics, hydraulics, pneumatics, heat transfer, and wind/nuclear/solar energies; and the transmission and control of power through mechanical or electrical devices such as motors and engines.

## 20102 - Power and Mechanics

Power and Mechanics courses enable students to understand the principles underlying various kinds of mechanics (aircraft, auto, diesel, and marine) and how energy is converted, transmitted, and controlled. Topics typically include maintaining and servicing machines, engines, and devices while emphasizing energy sources, electricity, and power transmission. The courses may also provide information on career opportunities within the field of mechanics and/or transportation.

## 20103 - Introduction to Automobiles

Primarily intended as a personal automobile mechanics course, but also useful for students exploring future careers in automotive technologies, Introduction to Automobiles courses expose students to the various mechanical systems in automobiles and provide basic experience in maintenance tasks. The course may also cover career opportunities in the automotive and/or transportation fields.

## 20104 - Automotive Mechanics-Comprehensive

Automotive Mechanics-Comprehensive courses emphasize the diagnosis and repair of automobile engines and support systems such as brakes, cooling, drive trains, electrical/electronics components, emission, fuel, ignition, steering, suspension, and transmissions. Course topics often include the comprehension and use of repair manuals, safety, and employability skills (including shop management and entrepreneurship).

## 20105 - Particular Topics in Automotive Mechanics

These courses provide instruction in the mechanics of a particular system or condition, such as transmissions, brakes, fuel, exhaust, or electrical systems, rather than providing a general study of diagnosis and repair of automobile mechanics.

## 20106 - Automotive Service

Automotive Service courses emphasize preventative auto maintenance and automobile troubleshooting. Course content typically includes tune-up, oil change, and lubrication skills; tire replacement, alignment, and balancing; and basic knowledge of brake, cooling, electrical, emission, fuel, ignition, steering, suspension, and transmission systems. These courses may also include public relations, sales techniques, and service station management.

## 20107 - Diesel Mechanics-Comprehensive

## State Course Codes

High School

## Subject Area 20: Transportation, Distribution and Logistics (secondary)

## Mechanics and Repair

Diesel Mechanics-Comprehensive courses prepare students to maintain and repair diesel engines and related systems. Specific course topics may include principles underlying diesel engines, analyzing electrical circuits and systems, troubleshooting and repairing cooling systems, testing and repairing air conditioning charging systems, reading and interpreting service manuals, and identifying the principles and components of fuel injection systems. Courses may also cover safety, employability skills, and entrepreneurship.

## 20108 - Particular Topics in Diesel Mechanics

These courses cover specific topics relevant to occupations involving the maintenance and repair of vehicles with diesel engines, such as buses and trucks. One topic (or several closely related topics) concerning diesel mechanics is covered in specific detail in this type of course.

## 20109 - Small Vehicle Mechanics

Small Vehicle Mechanics courses equip students with the knowledge and skill to repair and maintain engines in small vehicles (e.g., motorcycles, all-terrain vehicles, snowmobiles, and mopeds). Topics include (but are not limited to) maintaining frames and suspension, wheels and brakes, and drive trains; servicing fuel, exhaust, and electrical systems; performing tune-ups; and maintaining and repairing engines. Students may also learn safety on the job, employability skills, and entrepreneurship.

## 20110 - Small Engine Mechanics

Small Engine Mechanics courses provide students with the opportunity to learn how to service and recondition small engines, typically emphasizing two- and four-cycle engines. These courses provide students with opportunities to troubleshoot and repair speed controls, lubrication, ignition, fuel, power transfer, cooling, exhaust, and starting systems; use hand, power, and overhaul tools; and read and interpret service manuals and parts' catalogs. Applications may include lawn mowers, tractors, tillers, power tools, and so on.

## 20111 - Marine Mechanics

The content of Marine Mechanics courses includes the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems as applied to boat and/or ship engines; boat rigging; trailers; and marine-related merchandise. Courses may also cover communication, human relations, and employability skills, as well as safe, efficient work practices.

## 20112 - Heavy Equipment Mechanics

Heavy Equipment Mechanics courses include the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems of heavy equipment such as that used in mining, construction, and utility industries.

## State Course Codes

High School

## Subject Area 20: Transportation, Distribution and Logistics (secondary)

## Mechanics and Repair

## 20113 - Aircraft Power Plant

Aircraft Power Plant courses provide students with the information necessary to troubleshoot, test, repair, and install aircraft engines. Course content usually includes engine ignition, electrical, lubrication, cooling, exhaust, and fuel systems, along with aircraft instrumentation and safety features.

## 20114 - Aircraft Airframe

Aircraft Airframe courses offer students information and instruction related to the structure and mechanics of aircraft, typically including hydraulic, pneumatic, instrumental, fuel, electrical, cabin atmosphere, and landing gear systems. Aircraft Airframe courses may also cover aircraft metals and coverings and related welding skills.

## 20115 - Automotive Detailing and Reconditioning

Automotive Detailing and Reconditioning courses provide students with knowledge and skills related to repairing, refinishing, and detailing automobiles. Course topics typically include painting and refinishing, plastics and adhesives, damage analysis, and repair, in addition to occupational safety, employability, and entrepreneurship skills.

## 20116 - Automotive Body Repair and Refinishing-Comprehensive

Automotive Body Repair and Refinishing courses provide students with knowledge and skills regarding the repair and refinishing of damaged or used cars. Course content may include (but is not limited to) stretching and shrinking auto body sheet metal; welding skills; frame and metal straightening; repair of fiberglass and synthetic materials; removing, repairing, and installing auto body parts such as panels, hoods, doors, and windows/glass; preparing vehicles and vehicle surfaces for refinishing; painting; applying body fillers; and estimating material and labor costs.

## 20117 - Particular Topics in Automotive Body Repair and Refinishing

These courses provide specific instruction in individual topics relevant to the repair and refinishing of automobile bodies and surfaces. One topic or several closely related topics (such as nonstructural part replacement, auto body welding, or plastic repair) receive particular attention in this type of course.

## 20118 - Boat Repair/Refinishing

Boat Repair/Refinishing courses convey a broad range of information and skills about how to repair and refinish boat mechanics, structures, and surfaces. In these courses, students become proficient in marine terminology, learn how to describe types of marine manufacturing and occupations, and prepare new and existing wood, fiberglass, and metal surfaces for painting or refinishing. These courses often cover safety, employability skills, and entrepreneurship.

## State Course Codes

High School

## Subject Area 20: Transportation, Distribution and Logistics (secondary)

## Mechanics and Repair

## 20147 - Mechanics and Repair-Independent Study

Mechanics and Repair-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to the maintenance of vehicles and engines. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 20148 - Mechanics and Repair-Workplace Experience

Mechanics and Repair-Workplace Experience courses provide students with work experience in fields related to the maintenance of vehicles and engines. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 20149 - Mechanics and Repair-Other

Other Mechanics and Repair courses.

## Distribution and Logistics

## 20151 - Distribution-Comprehensive

Distribution-Comprehensive courses provide students with knowledge and skills related to the safe and efficient delivery of commodities to various markets. Course content typically includes the comparative advantages of various forms of transportation, distribution networks, processes for tracking large shipments of material, transportation of goods in a safe and secure manner, and packaging.

## 20152 - Warehouse Operations

Warehouse Operations courses convey the principles and processes underlying the receiving, loading and unloading, tracking, and storing of large quantities of materials. Course topics typically include a variety of logistical implications for moving materials by several different modes of transportation, safety and security, and appropriate storage techniques.

## 20197 - Distribution and Logistics-Independent Study

Distribution and Logistics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to distribution and logistics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 20: Transportation, Distribution and Logistics (secondary)

## Distribution and Logistics

## 20198 - Distribution and Logistics-Workplace Experience

Distribution and Logistics-Workplace Experience courses provide students with work experience in fields related to distribution and logistics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 20199 - Distribution and Logistics-Other

Other Distribution and Logistics courses.

## All Others

20995 - Transportation, Distribution and Logistics—Aide
Transportation, Distribution, and Logistics-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 20997 - Transportation, Distribution and Logistics-Independent Study

Transportation, Distribution, and Logistics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to transportation, distribution, and logistics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 20998 - Transportation, Distribution and Logistics-Workplace Experience

Transportation, Distribution, and Logistics-Workplace Experience courses provide students with work experience in fields related to transportation, distribution, and logistics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences encountered in the workplace.

## 20999 - Transportation, Distribution and Logistics-Other

Other Transportation, Distribution and Logistics courses.

## Subject Area 21: Engineering and Technology (secondary)

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Engineering

## 21001 - Pre-Engineering Technology

Pre-Engineering Technology courses integrate technology-oriented applications of mathematics and science into pre-engineering activities for students. Course topics may include material sciences, technology processes, enterprises, and career opportunities.

## 21002 - Engineering Applications

Engineering Applications courses provide students with an overview of the practical uses of a variety of engineering applications. Topics covered usually include hydraulics, pneumatics, computer interfacing, robotics, computer-aided design, computer numerical control, and electronics.

## 21003 - Engineering Technology

Engineering Technology courses provide students with the opportunity to focus on one or more areas of industrial technology. Students apply technological processes to solve real engineering problems; develop the knowledge and skills to design, modify, use, and apply technology; and may also design and build prototypes and working models. Topics covered in the course include the nature of technology, use of technology, and design processes.

## 21004 - Principles of Engineering

Principles of Engineering courses provide students with an understanding of the engineering/technology field. Students typically explore how engineers use various technology systems and manufacturing processes to solve problems; they may also gain an appreciation of the social and political consequences of technological change.

## 21005 - Engineering-Comprehensive

Engineering-Comprehensive courses introduce students to and expand their knowledge of major engineering concepts such as modeling, systems, design, optimization, technology-society interaction, and ethics. Particular topics often include applied engineering graphic systems, communicating technical information, engineering design principles, material science, research and development processes, and manufacturing techniques and systems. The courses may also cover the opportunities and challenges in various branches of engineering.

## 21006 - Engineering Design

Engineering Design courses offer students experience in solving problems by applying a design development process. Often using solid modeling computer design software, students develop, analyze, and test product solutions models as well as communicate the features of those models.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Engineering

## 21007 - Engineering Design and Development

Engineering Design and Development courses provide students with the opportunity to apply engineering research principles as they design and construct a solution to an engineering problem. Students typically develop and test solutions using computer simulations or models but eventually create a working prototype as part of the design solution.

## 21008 - Digital Electronics

Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices.

## 21009 - Robotics

Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

## 21010 - Computer Integrated Manufacturing

Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.

## 21011 - Civil Engineering

Civil Engineering courses expose students to the concepts and skills used by urban planners, developers, and builders. Students may be trained in soil sampling and analysis, topography and surveying, and drafting or blueprint-reading. Additional course topics may include traffic analysis, geologic principles, and urban design.

## 21012 - Civil Engineering and Architecture

Civil Engineering and Architecture courses provide students with an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship of both fields. Students typically use software to address real world problems and to communicate the solutions that they develop. Course topics typically include the roles of civil engineers and architects, project-planning, site-planning, building design, project documentation, and presentation.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Engineering

## 21013 - Aerospace Engineering

Aerospace Engineering courses introduce students to the world of aeronautics, flight, and engineering. Topics covered in the course may include the history of flight, aerodynamics and aerodynamics testing, flight systems, astronautics, space life systems, aerospace materials, and systems engineering.

## 21014 - Biotechnical Engineering

Biotechnical Engineering courses enable students to develop and expand their knowledge and skills in biology, physics, technology, and mathematics. Course content may vary widely, drawing upon diverse fields such as biomedical engineering, biomolecular genetics, bioprocess engineering, agricultural biology, or environmental engineering. Students may engage in problems related to biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering, biomedical devices, human interfaces, bioprocesses, forensics, and bioethics.

## 21015 - Particular Topics in Engineering

These courses examine specific topics in engineering other than those already described.

## 21016 - Research in Environmental Science and Engineering

Research in Environmental Science and Engineering courses examine the mutual relationships between organisms and their environment to identify and analyze environmental problems, evaluate the relative risks associated with the problems, and examine engineering solutions for resolving and/or preventing them. Topics covered include environmental and ecological processes, energy and sustainability, interconnected biological and human systems, the impact of humans on natural systems, cultural and societal contexts of environmental problems, and the utilization of engineering designs that will ensure sustainable systems.

## 21047 - Engineering-Independent Study

Engineering-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to engineering. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 21048 - Workplace Experience

Engineering-Workplace Experience courses provide students with work experience in an engineeringrelated field. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Engineering

## 21049 - Engineering-Other

Other Engineering courses.

## 21057 - Laser/Fiber Optics

Laser/Fiber Optics courses cover the history, safety, and theory of laser light and laser systems. In these courses, various laser system configurations and operations are examined.

## 21060 - Wind Energy

Wind Energy courses introduce students to the terminology and other aspects of the wind industry. Course topics may include, but are not limited to, the history and development of the wind industry, types and applications of various wind turbines, environmental and economic issues of the wind industry, and the future of the industry.

## 21061 - Wind Turbine Construction and Operation

Wind Turbine Construction and Operation courses provide students with an understanding of wind turbine operation and the wind energy industry. This course enable students to study site preparation and construction, turbine component specifications and manufacturing, operation and maintenance programs, and data acquisition and assessment.

## 21109 - Research \& Design for Pre-Construction

Advanced research and application course that covers specific topics in design \& pre-construction (drafting/architecture) to include management and "green design" skills

## 21201 - Foundations of Electronics

A technical level course that offers instruction in the basic concepts of electronics and electronic components; electrical quantities and units; basic circuits, laws and measurements; circuit components; multiple-load circuits; complex-circuit analysis; magnetism and electromagnetism; alternating current and voltage; power in ac circuits; capacitance; inductance; transformers; R, C, and L circuits; electric motors; instruments and measurements; algebraic, trigonometric, and logarithmic tenets as applied to electronic components, theory of electricity and in the terminology, skills, and safety procedures common to careers involving electricity and electronics. Students will demonstrate acceptable soldering and desoldering techniques, knowledge of surface mount technology, methods for building circuitry and proper utilization of electronic components such as capacitors, LEDs, and transistors.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## 21020 - Biological Engineering (BioE)

BioE is a rigorous activity, project, and problem-based course in which students investigate and design solutions to solve real-world challenges related to world food security, renewable energy, and clean drinking water. Students completing BioE will develop an understanding of the scientific and technological foundations for each of the problems. Students apply their knowledge and skills as they use an engineering design process to design and test solutions that help solve these global challenges.

## Technology

## 21051 - Technological Literacy

Technological Literacy courses expose students to the communication, transportation, energy, production, biotechnology, and integrated technology systems and processes that affect their lives. The study of these processes enables students to better understand technological systems and their applications and uses.

## 21052 - Technological Processes

Technological Processes courses provide students with the opportunity to focus on one or more areas of industrial technology, applying technological processes to solve real problems and developing the knowledge and skills to design, modify, use, and apply technology appropriately. Students may examine case studies, explore simulations, or design and build prototypes and working models.

## 21053 - Emerging Technologies

Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber options, electronics, robotics, computer technologies, CAD/CAM, communication modalities, and transportation technologies.

## 21054 - Technology Innovation and Assessment

Technology Innovation and Assessment courses use engineering design activities to help students understand how criteria, constraints, and processes affect design solutions and provide students with the skills to systematically assess technological developments or solutions. Course topics may include brainstorming, visualizing, modeling, simulating, constructing, testing, and refining designs.

## 21055 - Aerospace Technology

Aerospace Technology courses introduce students to the technology systems used in the aerospace industry and their interrelationships. Examples of such systems include satellite communications systems, composite materials in airframe manufacturing, space station constructions techniques, space shuttle propulsion systems, aerostatics, and aerodynamics.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Technology

## 21056 - Particular Topics in Technology Applications

These courses examine specific topics in technology applications other than those already described.

## 21097-Technology—Independent Study

Technology—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to technology systems and processes. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 21098 - Technology—Workplace Experience

Technology-Workplace Experience courses provide students with work experience in a field related to technological systems and structures. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 21099 - Technology-Other

Other Technology courses.

## Drafting

## 21058 - Geospatial Technology

Geospatial Technology courses provide students with experiences pertaining to the study of geographic information systems (GIS), global positioning systems (GPS), remote sensing (RS), digital image processing simulator (DIPS), Geodesy, automated cartography (Auto-Carto), land surveying (LS), and navigation. These courses may use spatial analysis models and guidelines for integrating, interpreting, analyzing, and synthesizing geographic data, with a focus on both the implications and limitations of such technologies. Other topics may include interfacing with telecommunications and automated database management systems.

## 21101 - Drafting Careers Exploration

Geared for students with an interest in careers that use drafting skills and applications, Drafting Careers Exploration courses expose students to the opportunities available for draftspeople (engineering, architectural, industrial, and so on). These courses serve to introduce basic skills and the field in general, providing students with the opportunity to identify a focus for continued study or to determine that their interests lie elsewhere.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Drafting

## 21102 - Drafting-General

Drafting-General courses, usually offered as a sequence of courses, introduce students to the technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting-General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.

## 21103 - Drafting-Architectural

Drafting—Architectural courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from architectural applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on interior and exterior residential (and light commercial) design, site orientation, floor plans, electrical plans, design sketches, and presentation drawings. In addition, students may prepare scale models.

## 21104 - Drafting-Civil/Structural

Drafting-Civil/Structural courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from civil engineering and/or structural applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on skills needed for typography and survey work.

## 21105 - Drafting-Electrical/Electronic

Drafting-Electrical/Electronic courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from electric and/or electronic fields. These courses are intended to help students develop general drafting skills, but place a particular emphasis on those skills needed for electrical and electronic schematics.

## 21106 - Drafting-Technical/Mechanical

Drafting-Technical/Mechanical courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from industrial applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on sectioning, auxiliary views, revolutions, and surface development. In these courses, students typically learn basic machining and fabrication processes as they draw schematic diagrams featuring cams, gears, linkages, levers, pulleys, and so on.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Drafting

## 21107 - CAD Design and Software

Frequently offered as an intermediary step to more advanced drafting courses (or as a concurrent course), CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.

## 21108 - Production Blueprint Reading

Blueprint Reading courses provide students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.

## 21111 - GIS Technology

GIS Technology courses provide familiarity with tools necessary to design and utilize discipline specific data. Areas covered are: Mapping, Cartography and Computer Assisted Drafting, Photogrammetry and Remote Sensing, Spatial Statistics, and Geographic Information Display Systems. Students will learn to identify appropriate tools for specific tasks and work with data input from maps, aerial photos, and satellite imagery to build further representation utilizing the tools covered.

## 21112 - GIS Spatial Application

GIS Spatial Applications courses apply technology skills to build and utilize representations of threedimensional space to provide location information, data collection, and statistical information to build representations appropriate for use in areas such as conservation, urban planning, flight, human networks, geographic surveying and topography, and patterns and processes related to multidimensional data.

## 21147 - Drafting-Independent Study

Drafting-Independent Study courses, often conducted with instructors as mentors, enable students to explore drafting-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 21148 - Drafting-Workplace Experience

Drafting-Workplace Experience courses provide work experience in a field related to drafting. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## Drafting

## 21149 - Drafting-Other

Other Drafting courses.

## 21150 - Advanced Drafting/CAD

An advanced, application level course designed to build on and apply the skills learned in Drafting/CAD. (Prerequisite: Drafting/CAD.)


#### Abstract

All Others

\section*{21205 - Project Management and Resource Scheduling}

Project Management courses provide students with the information and skills necessary for success in managing projects and operating logistical ventures in technology, business, and industry. This course covers scheduling of resources (including personnel, budget, timelines, and equipment), utilization of Gantt charts, economic principles within the workplace, and risk management. Other possible topics include developing a business plan, finance, business law, marketing and promotion strategies, insurance employee/employer relations, problem-solving and decision-making, and building leadership skills. These courses may also incorporate a survey of the careers within technology and engineering industries.


## 21252 - Materials Science and Engineering

Materials Science and Engineering courses expose students to the tools, machines, and processes that may be encountered in the interface between manufacturing and engineering. In particular, these courses stress the study of properties and analysis of those materials: testing and processing metals, plastics, woods, ceramics, and composite materials utilized in the process of constructing usable products. These courses enable students to experience development of an idea into a finished product, with instruction in planning, designing, selecting materials, and using appropriate tools and machines.

## 21995 - Engineering and Technology—Aide

Engineering and Technology-Aide courses offer students the opportunity to assist instructors in preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 21997 - Engineering and Technology-Independent Study

Engineering and Technology-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to engineering and/or technology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

High School

## Subject Area 21: Engineering and Technology (secondary)

## All Others

## 21998 - Engineering and Technology—Workplace Experience

Engineering and Technology—Workplace Experience courses provide students with work experience in a field related to engineering or technology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## 21999 - Engineering and Technology-Other

Other Engineering and Technology courses.

## Subject Area 22: Miscellaneous (secondary)

## Academic Enrichment

## 22001 - Standardized Test Preparation

Standardized Test Preparation courses help prepare students for national standardized tests such as the PSAT, SAT, and ACT. In particular, these courses assist students in developing and/or expanding their vocabulary, test-taking, and reasoning skills through study, lecture, and practice drills. Course topics may include vocabulary review; root words, prefixes, and suffixes; mathematical concepts, logic, and rules; and general problem-solving and test-taking strategies.

## 22002 - State Test Preparation

State Test Preparation courses prepare students for particular state tests required for graduation. These courses may cover specific content areas (such as citizenship, mathematics, language arts, and so on) according to individual student needs, or they may provide a more general course of study, similar to the Standardized Test Preparation course described above.

## 22003 - Study Skills

Study Skills courses prepare students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note-taking; vocabulary skills; and test-taking skills. The courses may also include exercises designed to generate organized, logical thinking and writing.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Academic Enrichment

## 22004 - Dropout Prevention Program

Dropout Prevention Program courses vary widely, but typically are targeted at students who have been identified as being at risk of dropping out of or failing in school. Course content may include study skills and individual tutorials; job preparation, readiness, application, or interview skills; communication skills; personal assessment and awareness activities; speaker presentations; and small group seminars.

## 22005 - Tutorial

Tutorial courses provide students with the assistance they need to successfully complete their coursework. Students may receive help in one or several subjects.

## 22006 - Study Hall

Study Hall courses provide students with the opportunity and time to complete classroom assignments or school projects. Students typically work on their own, without the help of a tutor; however, they are supervised and usually remain in the classroom.

## 22108 - IB Creativity, Activity, Service

IB Creativity, Activity, and Service (CAS) courses are a required extracurricular component of the International Baccalaureate program. The CAS requirement emphasizes the importance of life outside of the world of scholarship and encourages young people to share their energies and special talents while they develop awareness, concern, and the ability to work cooperatively with others. Participation in theater productions, sports, and community service are examples of activities that fulfill the CAS course requirements.

## 22110-AP Seminar

Designed by the College Board to parallel college-level courses in critical thinking and communications, AP Seminar courses provide students with the opportunity to explore complex real world issues through cross-curricular lenses. Course topics vary and may include local, civic, or global issues and interdisciplinary subject areas. Courses typically emphasize research, communication, and criticalthinking skills to explore the issues addressed. Students may also examine source materials such as articles and other texts; speeches and personal accounts; and relevant artistic and literary works.

## 22112 - AP Research

Designed by the College Board to parallel college-level courses in independent research, AP Research courses provide students with the opportunity to conduct an in-depth, mentored research project. Course topics include research methods, ethical research practicies, and accessing, analyzing, and synthesizing information to address a research question. Courses culminate with an academic thesis paper and an oral defense of the research design, approach, and findings.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Staff Assistance

## 22051 - Office Aide

Office Aide courses provide students with the opportunity to work in campus offices, developing skills related to clerical office work. Duties may include typing, filing, record-keeping, receiving visitors, answering the telephone, and duplicating, among others. These courses emphasize appropriate work attitudes, human relations, and proper office procedures.

## 22052 - Guidance Aide

Guidance Aide courses provide students with the opportunity to work in the campus guidance office. Duties may include typing, filing, record-keeping, assisting students, answering the telephone, and duplicating, among others. Students may also act as guides to new students. These courses emphasize appropriate work attitudes, human relations, and proper office procedures.

## 22053 - Library/AVC Aide

Library/AVC Aide courses provide students with the opportunity to work in the library or in media and audiovisual centers. Duties may include collecting, distributing, and categorizing materials; operating audiovisual equipment; assisting students and teachers; and performing clerical duties. Students typically gain experience in library science and/or media and audiovisual technology.

## 22054 - Tutoring Practicum

Tutoring Practicum courses provide students with the opportunity to offer tutorial assistance to their peers or to younger students. After an initial training period during which students learn how to work with other students and how to make use of the available resources (e.g., staff, written material, audiovisual aids, and so on), students engage in tutoring and assisting others who need or request help.

## School Organization/Leadership

## 22101 - Leadership

Leadership courses are designed to strengthen students' personal and group leadership skills. Typically intended for students involved in extracurricular activities (especially as officers of organizations or student governing bodies), these courses may cover such topics as public speaking, effective communication, human relations, parliamentary law and procedures, organization and management, and group dynamics.

## 22102 - School Orientation

School Orientation courses provide students with an introduction to the culture of their school so that they understand staff expectations and the school's structure and conventions. These courses may vary widely according to the philosophy, aims, and methods of each school.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## School Organization/Leadership

## 22103 - School Governance

School Governance courses convene students as an entire student body to discuss common concerns, organize groups for action, make decisions, and solve school-related problems. Because of the nature of these courses, they are typically offered at private, alternative, or experimental schools.

## 22104 - Community Service

Community Service courses provide students with the opportunity to volunteer their time, energy, and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.

## 22105 - Values Clarification

Values Clarification courses enable students to explore individual and societal actions and implications in order to help them develop personal values and make decisions about their lives. Examples of discussion topics include philosophy and religion, world resource allocation, genetic engineering, environmental issues, and death-related issues (euthanasia, suicide, and abortion).

## 22106 - Seminar

Seminar courses vary widely, but typically offer a small peer group the opportunity to investigate areas of interest. Course objectives may include improvement of research and investigatory skills, presentation skills, interpersonal skills, group process skills, and problem-solving and critical thinking skills. Seminars aimed at juniors and seniors often include a college and career exploration and planning component.

## Career Exploration/Development

## 22151 - Career Exploration

Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.

## 22152 - Employability Skills

Employability Skills courses help students match their interests and aptitudes to career options with a focus on using employment information effectively, acquiring and improving job-seeking and interview skills, composing job applications and resumes, and learning the skills needed to remain in and advance within the workplace. Course content may also include consumer education and personal money management topics.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Career Exploration/Development

## 22153 - Diversified Occupations

Diversified Occupations courses help students enter the workforce through career exploration, job search and application, and the development of positive work attitudes and work-related skills. These courses typically cover such topics as career planning and selection, money management, communication skills, interpersonal business relationships and behaviors, and personal responsibility. Employment may be a required component of these courses, or students may be required to enroll concurrently in a work experience course.

## Family and Consumer Science

## 22201 - Family and Consumer Science-Comprehensive

Family and Consumer Science-Comprehensive courses are inclusive studies of the knowledge and skills that are useful for the efficient and productive management of the home. Course topics typically include foods and nutrition; clothing; child development and care; housing design, decoration, and maintenance; consumer decisions and personal financial management; and interpersonal relationships.

## 22202 - Food and Nutrition

Food and Nutrition courses provide students with an understanding of food's role in society, instruction in how to plan and prepare meals, experience in the proper use of equipment and utensils, and background on the nutritional needs and requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on specific types of food preparation. Although these courses may present career opportunities in the food service industry, their emphasis is not career-related.

## 22203 - Food Science

Food Science courses offer opportunities to study the composition, structure, and properties of foods and the chemical changes that occur during the processing, storage, preparation, and consumption of food. These courses often explore the effects of various materials, microorganisms, and processes on food products through laboratory experiments.

## 22204 - Child Development/Parenting

Child Development/Parenting courses provide students with knowledge about the physical, mental, emotional, and social growth and development of children from conception to pre-school age. In addition, these courses help students discover how parents should respond to the various stages of childhood. Course content typically includes topics such as prenatal and birth processes; responsibilities and difficulties of parenthood; fundamentals of children's emotional and physical development; and the appropriate care of infants, toddlers, and young children.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Family and Consumer Science

## 22205 - Clothing/Sewing

Clothing/Sewing courses introduce students to and expand their knowledge of various aspects of wearing apparel, sewing, and fashion. These courses typically include wardrobe planning; selection, care, and repair of various materials; and construction of one or more garments. They may also include related topics, such as fashion design, fashion history, the social and psychological aspects of clothing, careers in the clothing industry, and craft sewing.

## 22206 - Life Skills

Life Skills courses provide students with information about a wide range of subjects to assist them in becoming wise consumers and productive adults. These courses often emphasize such topics as goalsetting, decision-making, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.

## 22207 - Self Management

Self-Management courses introduce students to the skills and strategies helpful in becoming more focused, productive individuals. These courses typically emphasize goal-setting; decision-making; managing time, energy, and stress; and identifying alternatives and coping strategies. They may also allow students to explore various career and lifestyle choices.

## 22208 - Family Living

Family Living courses emphasize building and maintaining healthy interpersonal relationships among family members and other members of society. These courses often emphasize (but are not limited to) topics such as social/dating practices, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, and the various stages of life. They may also cover topics related to individual self-development, career development, personal awareness, and preparation for the responsibilities of a family member and wage earner.

## 22209 - Personal Development

Similar to Family Living courses, but more focused on the individual, Personal Development courses emphasize strengthening self-esteem, recognizing and resisting negative peer pressure, and developing coping skills for dealing with changes within one's self and within others. These courses may also have a substance-abuse prevention component.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Family and Consumer Science

## 22210 - Consumer \& Personal Finance

Consumer and Personal Finance teaches essential personal finance skills and habits for independent living as a young adult. Topics explored include career and lifestyle management, savings and investing, credit and debt, insurance, taxes and social security, budget planning, rental leases, auto financing, and consumer protection. Activities will focus on students making decisions that will assist them with living on their own.

## 22211 - Home Décor

Home Décor courses provide students with knowledge and skills regarding interior design and decoration of the home for the individual or family. While exploring design principles, personal needs and style, and decision-making, students may have an opportunity to explore such topics as color, texture, furniture styles and arrangement, lighting, window treatments, floor and wall coverings, and home improvement/modification. These courses emphasize personal (rather than commercial) use and application of home décor principles.

## 22212 - Residential Interior Design - Interior Design II

An application level course designed to instruct students in skills necessary to design interior spaces that apply design elements and principles to spaces for residential and special needs (e.g. single family homes, multi-family structures, homes for special needs, child care centers, retirement homes, etc.). Topics will include meeting client's needs, legislated codes, historic considerations, current and future trends, and public policy.

## 22213 - Nutrition \& Health Science

Nutrition \& Health Science courses focus on biological systems and personal health topics such as nutrition, stress management, drug/alcohol abuse prevention as functions of biological impact on body systems. Key biological concepts addressed include: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease.

## 22218 - Family Studies B

The Family Studies B course explores the roles and responsibilities of parents such as how society, media, technology and diversity impact their ability to balance work and family. It also includes the development of children and parents as their earliest teacher. Parenting styles and family stages are explored as is the changing demographics which will change the face of the US family. Occupations related to meeting the needs of families will be analyzed. This course will promote the creation of healthy and sustainable families be they their own or those they work with.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Family and Consumer Science

## 22220 - Consumer and Personal Finance B

Consumer and Personal Finance B, explores the relationship of basic money management and consumer decision-making across the lifespan. It includes an in-depth look at risk management, use of credit, consumer rights and responsibilities, setting goals and impact of the family on personal financial decision making. How to make wise choices to develop a healthy financial self will be a major component of this course as well as an introduction to the occupations related to the field.

## 22245 - Family and Consumer Science-Aide

Family and Consumer Science-Aide courses offer students the opportunity to assist instructors in preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

## 22247 - Family and Consumer Science-Independent Study

Family and Consumer Science-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to home- and self-management. Independent Study courses may provide students with an opportunity to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 22249 - Family and Consumer Science-Other

Other Family and Consumer Science courses.

## 22255 - Leadership Service in Action

Leadership Service in Action courses provide students with the opportunity to analyze real world issues of concern, refine an action plan and apply leadership, teamwork and decision making skills through civic engagement and service learning within Family and Consumer Sciences. The course promotes empowerment of students to assume advocacy roles in family, community and FCS/human services business and industry environments.

## 22270 - Community Connections

Community Connections course provide community based/school based learning experiences mainly within the family and consumer sciences classroom. Learning goals are set by the student, teacher and community partners to create experiences and/or discussions to enhance the development of the 21st century skills (i.e. leadership, empathy, communication, problem solving, cooperation, critical thinking, and resource management) needed to be successful in human services/family and consumer sciences related careers.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Family and Consumer Science

## 22275 - Career Connections

Career Connections courses provide human services/family and consumer sciences related work-based learning experiences (paid or unpaid) outside the traditional classroom. Learning goals are set by the student, teacher and employer/adult mentor to create field experiences and/or discussions related to human services/ family and consumer sciences occupational technical skills.

## Support Services

## 22250 - Career \& Community Connections

Career and Community Connections is the Application level course for the learner to apply technical skills in a professional learning experience, unpaid or paid, outside or within the school environment. Included will be continued development and finalization of the student's portfolio. Career and Community Connections provides the opportunity for learners to focus on career related topics, team building and effectiveness in the world of work, and acquiring job-seeking skills and retention needed to advance within the workplace

## 22251 - Community Living

Community Living courses place a special emphasis on the student's relationship to the surrounding community. Instruction varies with the students and their needs; however, these courses provide the skills necessary for independent functioning within the surrounding environment. Course topics may also include available community resources and how to access them, emergency skills, and independent living strategies.

## 22252 - Communication Instruction

Communication Instruction courses are typically individualized according to each student's condition and needs. Increasing the student's communication skills-oral expression, listening comprehension, reading, and writing -is emphasized; communication techniques in several areas (educational, social, and vocational) are often explored.

## 22253 - Social Development Instruction

Social Development Instruction courses teach students the social skills needed for independent functioning within the community. Topics may include self-control, self-expression, obeying rules, decision-making, appropriate situational behavior, interacting with others, and maintaining relationships. Students may develop independence, self-confidence, and self-reliance.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## Support Services

## 22254 - Developmental Support

Developmental Support courses are customized according to each student's condition and needs, emphasizing an increase in skill or control of body and mind function. Examples of support may include refinement of gross and fine motor skills, development of visual perception, and improvement in eyehand coordination.

## 22990 - Financial Literacy

Financial literacy course provides students with an understanding of the concepts, principles and skills involved in making and applying sound financial decisions. This course emphasizes earning income, spending, saving, investing, managing credit and managing risk.

## All Others

## 22995 - Miscellaneous—Aide

Miscellaneous-Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula or to assist other staff members in fulfilling their duties. Students may provide tutorial or instructional assistance to other students. Note: if the particular subject area is known, use the code associated with the Aide course within that subject area.

## 22997 - Miscellaneous-Independent Study

Miscellaneous-Independent Study courses, typically organized as a mentorship with a teacher or outside professional, enable students to conduct investigations related to their field(s) of interest. Note: if the particular subject area is known, use the code associated with the Independent Study course within that subject area.

## 22998 - Miscellaneous—Workplace Experience

Miscellaneous-Workplace Experience courses provide students with work experience in a field related to their interests. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Note: if the particular subject area is known, use the code associated with the Workplace Experience course within that subject area.

## 22999 - Miscellaneous-Other

Other Miscellaneous courses.

## State Course Codes

High School

## Subject Area 22: Miscellaneous (secondary)

## All Others

## Subject Area 30: Art, AV Technology, and Communications Cluster

## 30005 - Introduction to Drawing

Introduction to Drawing emphasizes the development of fundamental drawing skills. Focus will be on the application of art theory, processes and techniques that increase the power of observation. Instruction includes the elements and principles of design as applied in composition through hard copy and/or electronic software.

## 30006 - Introduction to Drawing and Design

Introduction to Drawing and Design emphasized the development of fundamental drawing skills for students learning graphic design. Focus will be on the application of art theory, processes and techniques that increase the power of observation. Instruction includes the elements and principles of design as applied in composition through hard copy and/or electronic software.

## 30100-21st Century Journalism

21st Century Journalism promotes the development of the skill set needed today and in the future. Topics include an exploration of the role media and the communications industry has in society, the development of the technical skills related to journalistic writing and interviewing, as well as understand the ethical and legal issues related to the field.

## 30101 - Principles of Illustration

A principle of lllustration explores a variety of media, tools and supports as a means to communicate ideas. Topics include an understanding of illustration as it applicable to careers in graphic design, animation, fashion/textile design, industrial design, web design, architecture, interior design and/or fine arts. Techniques in traditional and digital illustration applications will be explored as directly linked to ever-changing social trends.

## 30102 - Graphic Design Fundamentals

Graphic Design Fundamentals provides a basic understanding of the graphic design process. Topics include analyzing the design elements and principles, exploring industry tools, software and equipment and learning composition techniques to develop a quality product.

High School

## Subject Area 30: Art, AV Technology, and Communications Cluster

## 30103 - Audio Video Production Fundamentals

Audio Video Production Fundamentals provides a basic understanding of producing video for a variety of uses. Topics include analyzing the pre-production, production and post-production process, as well as explore the equipment and techniques used to develop a quality audio video product.

## 30104 - Digital Media Technology

Digital Media Technology teaches the technical skills needed to work with electronic media. Topics include exploring the use of digital imaging and video today and in the future, a study of the relationship of work flow to project planning and completion and the software, equipment and tools used in the industry.

## 30105 - Photo Imaging

Photo Imaging teaches the technical skills need to produce quality images for use in a variety of applications. Topics include use of equipment, software and techniques to take, edit and manipulate digital images.

## 30110 - Essentials of Fashion, Apparel and Interior Design (Previously known as Interior and Textile Design)

Essentials of Interior and Textile Design introduces students to and expands upon the various aspects of industry, conveying the commercial application of principles and elements of design, production processes, and maintenance techniques to meet the design needs of humans. This course will also provide a discussion and exploration of career opportunities in interior, textiles, and set/exhibit design.

## 30111 - Fashion Trends (previously known as Trends in Interior and Textile Design)

A trend in Interior and Textile Design examines special topics in interiors and apparel that meet the needs of humans now and projected in the future, rather than providing a general study. Topics include sustainable design, shelter/apparel for diverse populations (such as aging, special needs, etc.), and how trends are developed. Additional topics will be generated as trends are identified.

## 30112 - F.A.I.D. Merchandizing and entrepreneurship (previously known as Interior and Textile Merchandising)

Interior and Textile Merchandising is a course that centers upon the merchandising of interior and textile products in a variety of settings. Topics include exploring cycles, trends and style as well as the techniques in coordination, promotion, display and sales of interior and textile items. Basic management and entrepreneurship will be introduced as will the relationship of the skills to set and exhibit design.

## Subject Area 30: Art, AV Technology, and Communications Cluster

## 30150 - Video Production

Video Production applies the technical skills learned in Audio Video Production Fundamentals by allowing students to orchestrate projects from setting the objectives to the post-production evaluation. The subject of the presentation may be determined in a number of ways, but must address an authentic need. The complexity of the presentation is not the focus of this course but the experience of the entire process is, including planning the presentation, setting up the studio (if applies), acting as the videographer, and editor to make it fluid and seamless.

## 30151 - Digital Media Design and Production

Digital Media Design and Production will provide students with the opportunity to apply the fundamental techniques learned in the Digital Media Technology course through the production of a multi-media project for public presentation. Topics include developing a production schedule, working as a team, utilizing composition principles, and embedding audio, video or other content in digital formats.

## 30160 - F.A.I.D. Studio (previously known as Interior and Textile Design Studio)

Interior and Textile Design Studio provides students with the opportunity to expand knowledge and experiences with 4-dimensional design forms as they relate to human needs. Topics will include the language, materials, and processes used to apply the design elements and principles based upon designers, periods, and styles. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own design styles to meet the needs of a client. This application course is client driven in the interior, textile or apparel fields.

## Subject Area 31: Information Technology Cluster

## 31001 - Introduction to Computer Coding

Students develop an introductory understanding of fundamental computer science concepts and apply computational thinking skills to solve problems through the use of entry level coding tools for computers and/or mobile devices.

## 31002 - Introduction to Physical Computing

Students develop an understanding of programming for the physical world, including but not limited to the Internet of Things (IoT), microcontrollers, robotics, and other physical computing devices that are in use in our world.

High School

## Subject Area 31: Information Technology Cluster

## 31090 - Graphic Design Project Management

This course gives students an opportunity to apply the skills obtained in technical level graphic design courses in a project-oriented environment. Local Education Agencies are encouraged to develop Personalized Learning coursework representative of explicit objectives measured against specific target employment skills that are not available in other courses. These competencies should be enumerated. Competencies may reflect the particular work environment, workplace experience and/or the essential skills addressed reflective of previous coursework.

## 31091 - Digital Media Project Management

This course gives students an opportunity to apply the skills obtained in technical level digital media courses in a project-oriented environment. Local Education Agencies are encouraged to develop Personalized Learning coursework representative of explicit objectives measured against specific target employment skills that are not available in other courses. These competencies should be enumerated. Competencies may reflect the particular work environment, workplace experience and/or the essential skills addressed reflective of previous coursework.

## 31094 - AP Computer Science Principles

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

## 31095 - Applied Concepts of Network Systems

Students acquire personalized learning representing explicit objectives measured against specific target employment skills that are not available in other courses. The personalization of learning will be based on a particular work environment, workplace experience and/or the essential skills addressed from previous coursework.

## 31096 - Web and Digital Communications Project Management

The Web and Digital Communications Project Management course provides students with the information and skills necessary for success in managing projects and operating logistical ventures in technology, business, and industry. This course covers scheduling of resources (including personnel, budget, timelines, and equipment), utilization of Gantt charts, economic principles within the workplace, and risk management. Other possible topics include developing a business plan, finance, business law, marketing and promotion strategies, insurance employee/employer relations, problem-solving and decision-making, and building leadership skills. These courses may also incorporate a survey of the careers within technology and engineering industries.

## 31097 - Information Support Project Management \& Resource Scheduling

High School

## Subject Area 31: Information Technology Cluster

Course gives students who are not able to find an internship or a cooperative work environment the ability to apply what they learned from the Technical level course. The course will be administered by a teacher in the school with the goal of providing a project base curriculum for the student to solve real world problems. (Example: Analyze existing and planned business environments and develop a strategy for the implementation of information support and services that address the business needs.) Ways to implement would include having student enter CTSO competitions (e.g. Business Professional of America, Network Design Team competition or Cisco Networking Academy NetRiders). Instructor must be able to create a curriculum based on the requirements of the competition.

## 31098 - Programming and Software Development Project Management

The Programming and Software Development Project Management course provides students with the information and skills necessary for success in managing projects and operating logistical ventures in technology, business, and industry. This course covers scheduling of resources (including personnel, budget, timelines, and equipment), utilization of Gantt charts, economic principles within the workplace, and risk management. Other possible topics include developing a business plan, finance, business law, marketing and promotion strategies, insurance employee/employer relations, problem-solving and decision-making, and building leadership skills. These courses may also incorporate a survey of the careers within technology and engineering industries.

## 31099 - Network Systems Project Management and Resource Scheduling

Course gives students who are not able to find an internship or cooperative work environment the ability to apply what they learned from the Technical level course. The course will be administered by a teacher in the school with the goal of providing a project base curriculum for the student to solve real world problems. (Example Analyze existing and planned business environments and develop a strategy for the implementation of a network infrastructure that addresses the business needs.) Ways to implement would having student enter CTSO competitions (e.g. Business Professional of America: Network Design Team competition or Cisco Networking Academy NetRiders. Instructor must be able to create a curriculum based on the requirements of the competition.

## Subject Area 32: Business Management and Administration Cluster

## Business Entrepreneurship and Management

## 32200 - Applied Business Development

Applied Business Development students will practice skills of planning, organizing, directing and controlling functions of operating a business while assuming the responsibilities and risk involved. Students will develop skills in enterprise development, market analysis and financial preparation.

## State Course Codes

High School

## Subject Area 32: Business Management and Administration Cluster

## Business Entrepreneurship and Management

## 32998 - Advanced Business Management and Entrepreneurship Workplace Experience

Application Level: Advanced Business Management \& Entrepreunership Workplace Experience is a course which expands on the knowledge and skills a student has learned throughout the entire pathway of courses and provides a second level of application in the industry.

## Subject Area 33: Finance Cluster

## 33108 - Advanced Accounting

Advanced Accounting courses expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students learn how to apply standards auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Topics include principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process and further enhancement of accounting skills.

## 33109 - College Accounting

The course includes financial accounting, managerial accounting and financial statement analysis topics. Compared to the traditional, stand-alone financial accounting and managerial accounting courses, this course encompasses more topics and learning outcomes than the traditional financial accounting course, and at least a quarter of the topics and learning outcomes in a traditional managerial course.

## 33110 - Advanced Spreadsheet Applications

Advanced Spreadsheet Applications allows students to develop knowledge and skills regarding the basic concepts of spreadsheets. Students will learn how to format cells, ranges, and worksheets, work with data, use basic and advanced formulas and functions, create and modify charts, and insert pictures and shapes to a worksheet. (Technical Level Course)

## 33200 - Advanced Finance - Workplace Experience

Advanced Finance Workplace Experience is a course which expands on the knowledge and skills a student has learned throughout the entire pathway of courses and provides a second level of application in the industry. (Application Level Course)

## Subject Area 34: Hospitality and Tourism Cluster

High School

## Subject Area 34: Hospitality and Tourism Cluster

## 34052 - Event Planning and Management

This course provides students with the knowledge and skills related to the event planning and implementation process. It will include establishing client relationships, the importance of communication, planning process, resource management, quality service and staffing issues.

## 34053 - Fouondation of Travel and Tourism

Foundations of Travel and Tourism will assist students in charting a career path in one of the world's largest industries... travel and tourism. It will look at the different segments of the tourism industry and explore careers that the industry offers. It looks at the economic impact and the ramifications of development to the economy. Students will also explore emerging trends and the impact of technology.

## 34056 - Culinary Art I

This course integrates the knowledge, skills and practices required for careers in the restaurant industry. Topics include the sources, symptoms and prevention measures for common food illnesses, meal management, correct use of food production equipment and production and facility management principles. Students will also begin to develop culinary skills for a variety of food products.

## 34059 - Baking and Pastry II

This course builds upon the Baking and Pastry I course by refining and expanding skills of production management. Topics also include analyzing the scientific reactions during production and expanding the skill development to address the finer aspects of the field.

## 34155 - Lodging Management

This is the second in a sequence of courses related to the lodging industry that shares more specifics related to working within the business. It will include property management, guest services, hotel/motel registration systems, services and amenities. Other topics may include, but not limited to basic business practices, quality service, staffing issues and current technology

## 34159 - Lodging Management II

This is the third in a sequence of lodging courses that expands the understanding of the industry to include the trends, marketing and an in-depth look at customer service issues (i.e. communication skills, conflict resolution, active listening).

High School

## Subject Area 34: Hospitality and Tourism Cluster

## 34198 - Culinary Applications

This course applies the skills needed in the culinary arts profession. It includes the application of skills within a school-based, community-based experience or work-based internship and will cover an introduction of all aspects of an industry. Students enrolled in this course are expected to have mastered skills in the culinary field so that they are able to apply them in authentic experiences following industry standards and regulations. Local prerequisites apply.

## 34200 - Lodging Management Applications

This course is designed to provide an authentic experience within the lodging industry. Content will include the analysis, observation and demonstration of skills necessary for success. An introduction to all aspects of the industry will be included (i.e. management, financial, front office, housekeeping, food service and guest services).

## Travel and Tourism

## 34054 - Foundations of Hospitality \& Lodging

This course provides students with an overview of the knowledge and skills related to the business of lodging. It will include an exploration of the many aspects of the industry, basic processes and procedures (i.e. housekeeping, check in procedures) as well as the guest cycle.

## Restaurants and Food and Beverage Services

## 34057 - Baking and Pastry I

This course looks at the baking and pastry industry, and the equipment and procedures required. Topics include baking science, ingredient function and methods used for a quality product based upon industry standards.

## 34058 - Culinary Arts II

Culinary Arts II builds upon the Culinary Arts I course by expanding student knowledge, skills and practices. Whereas Culinary Arts I focused on beginning culinary skill development, Culinary Arts II expands those skills as well adds topics such as event management, internal and external customer service and working with special dietary needs.

High School

## Subject Area 35: Marketing Cluster

## 35162 - Digital Marketing

Digital Marketing covers the principles and functions of marketing from the standpoint of conducting business on the Internet. Typically, students develop these useful skills: using the Internet as a marketing tool, conducting a marketing analysis via the Internet, planning marketing support activities, managing an electronic marketing campaign, managing/owning a business via the Internet, and analyzing the impact of the Internet on global marketing.

## 35168 - Marketing Communications

Marketing Communications is an Application-Level course. This course includes activities and discussion related to: advertising, branding, graphic design, packaging, promotion, publicity, sponsorship, public relation, and sales promotion.

## 35300 - Marketing Applications

Marketing Applications furthers student understanding and skills in the various marketing functions. Students coordinate channel management with other marketing activities, discuss the nature of marketing plans, generate product ideas, coordinate activities in the promotional mix, and demonstrate specialized sales processes and techniques. Economic and financial concepts are also stressed throughout the course. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course along with four projects.

## Subject Area 36: Health Sciences Cluster

## 36002 - Health Science II A

This course provides students with an orientation to the health care industry and helps refine their health care-related knowledge and skills. Topics covered include (but are not limited to) an overview of health care delivery; anatomy and physiology; identification of medical equipment and supplies; medical terminology; hygiene and disease prevention.

## 36003 - Health Science II B

This course provides students with an orientation to the health care industry and helps refine their health care-related knowledge and skills. Topics covered include (but are not limited to) patient care, including assessment of vital signs, body mechanics, and diet; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

High School

## Subject Area 36: Health Sciences Cluster

## 36053 - Home Health Care

This course will teach students how to care for individuals within their homes. Course content will include patient care, comfort, and safety; anatomy and physiology; the prevention of disease and infection; nutrition and meal preparation; human relations; and first aid and CPR. Additional topics that must be included to receive a full credit are therapy strategies, household management and employability.

## 36054 - Dental Assistant

This course prepares students to assist a dentist or dental hygienist performing the functions of a dental practice. Topics include a detailed study of dental instruments, their care and function, chairside assisting, patient preparation, front office functions, and selected dental office laboratory procedures.

## 36055 - Emergency Medical Technology B

This course will place an emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. Content may also cover legal and ethical responsibilities involved in dealing with medical emergencies. To receive a full credit for this course, topics above and beyond those listed above must be integrated into the curriculum.

## 36152 - Pharmacy Assistant

The course content for this course will emphasize the knowledge and skills necessary to assist a pharmacist or pharmacy technician. Course content will enable the student to understand medical terminology, keep and maintain records, label medications, perform computer patient billing, perform stock inventory, and order supplies. To receive a full credit for this course, it must include pharmaceutical classification, drug interactions and interpersonal/communication skills. (This is a 1 credit course.)

## 36154 - Medical Terminology

In this course students will learn how to identify medical terms by analyzing their components. This course will emphasize defining medical prefixes, root words, suffixes, and abbreviations. To receive a full credit for this course a primary focus must be integrated into the course to emphasize the development of both oral and written skills in the language used to communicate within health care professions. (This is a 1 credit course)

High School

## Subject Area 36: Health Sciences Cluster

## 36156 - Certified Medication Aide

A program that prepares students to administer prescribed medications; observe and report patient reactions and side effects; and perform related emergency and recording duties under the supervision of nurses and/or physicians. Includes instruction in basic anatomy and physiology, common medications and their effects, taking vital signs, oxygen administration, medication administration and application, record-keeping, and patient observation.

## 36157 - Pharmacy Technician

This course will help students learn the information needed to start a career as a Pharmacy Technician. Course content will include an understanding of the role the pharmacy profession, pharmacy procedures and safety, drug interactions and reactions, an overview of various drug categories, pharmacy law and ethical responsibilities, and a pharmacy technician practicum. These standards will prepare the student for a technical assessment directly aligned to the standards.

## 36252 - Biotechnology B

This course is the study of the bioprocesses of organisms, cells, and/or their components. The course will enable students to use this knowledge to produce or refine products, procedures, and techniques. Course topics include laboratory measurement, monitoring and calculation; growth and reproduction; chemistry and biology of living systems; quantitative problem-solving; data acquisition and display; and ethics. Advanced topics must be included for the 1 credit course biochemistry and genetics.

## 36254 - Special Health Science Topics B

This course will examine particular topics in health science other than those taught in the core sequence of courses. Topics to be included in this course are Pharmacy Technician, Sports Medicine, Phlebotomy, Gerontology, and Veterinary Assistant. To receive a full credit for this course, topics above and beyond those listed above must be integrated into the curriculum.

## 36991 - Health Science III

This course content will provide students with work experience in the five career pathways. Goals are typically set cooperatively by the student, parents, teachers and employers. The course will include classroom activities involving research of the various careers in the health profession and one rotation within each of the five pathways for the Health Science Education cluster. The rotational clinical/shadowing experience for students may occur at a variety of settings (i.e., dentist office, Therapeutic; occupational therapy, diagnostic; social worker, Health Informatics; interpreter, Support Services; pharmacy, Biotechnology). The work experience may be paid or unpaid.

## Subject Area 36: Health Sciences Cluster

## 36992 - Health Care Work Experience 1 cr.

Students are required to rotate through a career from each of the five pathways for a Health Science Education cluster. Work experience only is developed to provide a rotational clinical/shadowing experience for the students at a variety of settings (i.e., dentist office, Therapeutic; occupational therapy, diagnostic; social worker, Health Informatics; interpreter, Support Services; pharmacy, Biotechnology). Goals are typically set cooperatively by the student, parents, teacher and employer. The work experience may be paid or unpaid.

## 36993 - Health Care Work Experience 2 cr.

Students are required to rotate through a career from each of the five pathways for a Health Science Education cluster. Work experience only is developed to provide a rotational clinical/shadowing experience for the students at a variety of settings (i.e., dentist office, Therapeutic; occupational therapy, diagnostic; social worker, Health Informatics; interpreter, Support Services; pharmacy, Biotechnology). Goals are typically set cooperatively by the student, parents, teacher and employer. The work experience may be paid or unpaid. Additional course content may include but is not limited to leadership skills and research of personal career interests in healthcare.

## 36994 - Health Science VI (Classroom and Work Experience)

This course provides an opportunity for students to participate in both the classroom and in one or more work experience rotations in each of the five pathways of the Health Science Education career cluster. During rotation opportunities, students will gain knowledge and skills required of all aspects of the healthcare profession. Students must complete at least five (5) rotations during the semester that encompass occupations representing Diagnostic Services, Therapeutic Services, Health Informatics, Support Services and Biotechnology. Teaching and learning experiences to be included but not limited to are portfolio development, documentation of daily shadowing experiences, appropriate communication skills, and proper application of HIPPA rules and regulations. Additional course content may include but is not limited to leadership skills and research of personal career interests in healthcare.

## 36995 - Health Science VII

This course provides an opportunity for students to participate in both the classroom and in two or more work experience rotations in each of the five pathways of the Health Science Education career cluster. During rotation opportunities, students will gain knowledge and skills required of all aspects of the healthcare profession. Students must complete at least five (5) rotations during the year that encompass occupations representing Diagnostic Services, Therapeutic Services, Health Informatics, Support Services and Biotechnology. Teaching and learning experiences to be included but not limited to are portfolio development, documentation of daily shadowing experiences, appropriate communication skills, and proper application of HIPPA rules and regulations. Additional course content may include but is not limited to leadership skills and research of personal career interests in healthcare. Students enrolled in this course will be required to complete additional two-week rotations in specialized health science pathways leading to an industry recognized certification (EMT, CNA, Pharmacy Tech, Phlebotomy, etc.).

## State Course Codes

Subject Area 37: Agriculture, Food, and Natural Resources Cluster

## 37506 - Environmental Resources and Wildlife

Courses combine the fields of ecology \& conservation with planning for the efficient use and preservation of land, water, wildlife, and forests. Within the general area of natural resources management, these courses usually cover specific topics \& uses, such as hunting or fishing preserves, forest production and management, wildlife ID, production and/or ecosystems management and preservation, and human outdoor recreation.

## Subject Area 38: Architecture and Construction Cluster

## 38001 - Introduction to Industrial Technology

An introductory level course designed to instruct students in the basic skills necessary to all occupations in the Construction, Manufacturing and Transportation career clusters.

## 38002 - Residential Carpentry II

An advanced comprehensive course designed to instruct students in skills pertaining to rough construction and finish work.

## 38007 - Cabinet \& Furniture Design II

An advanced level application course designed to provide students with experience in constructing cases, cabinets, counters, furniture and interior woodwork.

## 38015 - Commercial Construction Careers II

An advanced level application course designed to instruct students in the design and management areas of commercial construction.

## 38050 - Advanced Studies

This is an advanced level application course covering specific research-based topics in architectural design.

## 38100 - Workplace Experience in A\&C

An advanced application level course that offers students an opportunity to apply knowledge and skills in an actual workplace setting, outside of the school setting, that explores all aspects of the selected industry, builds relationships with industry professionals, and creates a seamless transition from secondary to postsecondary pursuits and job satisfaction. Students should have completed other pathway courses at the technical and application level prior to this course.

## State Course Codes

## High School

## Subject Area 38: Architecture and Construction Cluster

## 38110 - Comprehensive Workplace Experience in A\&C

An advanced application level course that offers students an opportunity to apply knowledge and skills in an actual workplace setting, outside of the school setting, that explores all aspects of the selected industry, builds relationships with industry professionals, and creates a seamless transition from secondary to postsecondary pursuits and job satisfaction. Students should have completed other pathway courses at the technical and application level prior to this course.

## Construction and Design

## 38010 - Advanced Materials Technology

A progressive application level course furthering the study of CNC equipment, composite panel products, and veneering, and the processes involved with fabricating goods with these technologies.

## 38012 - Sheet Metal and HVACR

A comprehensive, application level course that provides training in the theories, equipment, and skills necessary to perform sheet metal procedures, and to install and maintain HVAC and Refrigeration systems.

## 38212 - Commercial \& Industrial Interior Architectural Design

An application level course designed to instruct students in the skills necessary to design interior spaces that acknowledge client needs, legislated codes, historic, current and future trends, and public policy for commercial and industrial buildings (e.g. office buildings, warehouses and manufacturing sites, etc.).

## Subject Area 39: Manufacturing Cluster

## 39010 - Automated Integrated Systems

Course Description: An advanced application level course that focus on Programable Logic Control (PLCs) systems. This includes instruction in basic numbering sytstems, computer terminology, PLC functions, structure, memory, language, point I/O addressing, programing, and PLC communications. (Prerequisiste: Robotics.) Previously Automated Systems.

## State Course Codes

## High School

## Subject Area 39: Manufacturing Cluster

## 39052 - Production Methods II

An application level course which builds on skills learned in Production Methods I and is designed to instruct students in advanced knowledge and skills required for fabricating products using a variety of materials (wood, plastic, metal, composites). (Prerequisite: Production Methods I.) Previously Mass Production II.

## 39108 - Production Print Reading II

A technical level course designed to develop advanced skills and knowledge needed to interpret drawings related to manufacturing occupations. Course uses examples from a wide variety of industrial and technological applications including drawings, schematics, diagrams, multi-view drawings, computer models, dimensioning, and other trade prints. (Prerequisite: Production Blueprint Reading.) Previously Advanced production Blueprint Reading.

## 39109 - Maintenance Blueprint Reading

Provides students with the knowledge and skills to interpret the variety of drawings used in maintenance occupations including: blueprints, schematics, flow diagrams, and other trade prints.

## 39203 - Machine Tool Technology 1a

A comprehensive, technical level course designed to provide students with experience in the basic theories, equipment and skills needed to perform machining skills. Machine tool safety and shop math will be emphasized throughout the course.

## 39204 - Machine Tool Technology II

An application level course designed to provide students with advanced machining skills and further opportunities to apply those skills.

## 39205 - Computer-Aided Machining (CAM II)

An application level course that builds on skills learned in Computer-Aided Machining (CAM) I. This course introduces advanced methods used in creating computer-generated models and machining practices. (Prerequisite: Computer-Aided Machining (CAM) I.)

## 39207 - Welding Processes I

A comprehensive, technical level course designed to provide students with the knowledge and skills in basic welding theories and terminology needed to perform welding procedures. Previously Production Welding Processes I.

## State Course Codes

High School

## Subject Area 39: Manufacturing Cluster

Course Description: An advanced, application level courses that builds on skills learned in Welding Processes I (39207) and provides opportunities for applying welding skills. (Prerequisite: Welding Processes I.) Previously Production Welding Processes II.

## 39302 - Hydraulics \& Pneumatics

Explains the fundamental concepts of fluid power. Covers the principles of fluid power, calculations of physical properties of fluids and their ability to do work. Introduces the various fluid power components, symbols, and circuits. Introduces troubleshooting of fluid power components and systems with an emphasis on safety. (For Manufacturing Pathway: Recommend students to take Mechanical Power Transmission Systems prior to this course.)

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Mobile Equipment Maint.

## 40050 - Automotive Information

Provides students with the opportunity to learn practical car maintenance skills. They will attain basic skills and knowledge needed to own and maintain a vehicle. The students will learn what to consider when buying a car, shopping for car insurance, acquiring a title, etc.

## 40100 - Introduction to Transportation

This course gives students an overview of transportation industry skills and career opportunities, as well as the education rquired to acquire each career.

## 40150 - General Service I

A technical level course designed to provide students with basic theories and information needed to develop an understanding of automotive and light truck vehicles.

## 40152 - General Service II

A Comprehensive, application level course designed to provide students with knowledge in the theory of operation, the equipment and the skills necessary for employment in the field of automotive and light truck service.

## State Course Codes

High School

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Mobile Equipment Maint.

## 40154 - General Service III

An advanced, comprehensive, application level course that provides students opportunities to perform inspection, diagnosis and repair of automobiles and light-duty trucks. May include Work-Based Learning (WBL) opportunities. (Prerequisite: General Service II.)

## 40200 - Electronic and Electrical Systems I

A comprehensive, technical level course designed to provide students with the basic theories, equipment, and skills needed to inspect and service electrical systems.

## 40202 - Electronic and Electrical Systems II

A comprehensive, application level course designed to provide students with the basic skills needed to inspect, service, and repair electrical circuits and devices. (Prerequisite: Electronic \& Electrical Systems I.) Previously Advanced Electronic/Electrical Systems.

## 40204-Brakes I

A comprehensive, technical level course designed to provide students with the basic theories, equipment, and skills needed to inspect and service braking systems. Previously Brakes.

## 40206 - Brakes II

A comprehensive, application level course designed to provide students with the basic skills needed to inspect, service and repair braking systems to industry standards. (Prerequisite: Brakes I). Previously Advanced Brakes.

## 40208 - Drive Train Technology

A comprehensive, technical level course designed to provide students with the basic theories and skills needed to inspect and service drive train components.

## 40210 - Alternative Power

A technical level course designed to provide students with basic theories and information needed to develop an understanding of alternative power used in transportation.

## 40212 - Small Engines \& Powertrains I

A comprehensive, technical level course designed to instruct students in the knowledge and skills common to all small engine operations and repair. Previously Small Gas Engines and Powertrains.

## State Course Codes

High School

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Mobile Equipment Maint.

## 40214 - Small Engines \& Powertrains II

A comprehensive, application level course designed to provide students with advanced knowledge and skills common to all small engine operations and repair. (Prerequisite: Small Engines and Powertrains I.) Previously Advanced Small Gas Engines and Powertrains.

## 40216 - Engine mechanical Repair

A comprehensive technical level covers the tools, skills, and techniques required to perform base engine mechanical repair and testing. This includes engine removal, installation, and maintenance.

## 40218 - Diesel Engine Technology

A comprehensive, technical level course to instruct students in the knowledge and skills common to diesel engine operations.

## 40220 - Engine Performance I

A comprehensive, technical level course designed to provide students with the basic skills needed to inspect, understand and diagnose engine control systems. Previously Engine Performance.

## 40222 - Engine Performance II

A comprehensive, application level course designed to provide students with the skills needed to inspect, service and repair engine control systems.

## 40224 - Steering \& Suspension I

A comprehensive, technical level course designed to provide students with the basic theories, equipment, and skills needed to inspect and service steering and suspension systems. Previously Steering and Suspension.

## 40226 - Steering and Suspension II

A comprehensive, application level course designed to provide students with the advanced skills needed to inspect, service and repair steering and suspension systems. (Prerequisite: Steering and Suspension I). Previously Advanced Steering and Suspension.

## 40228 - Mobile HVAC

A comprehensive technical level course designed to provide students with the basic and advanced theory of operation, service and repair of the air-conditioning, heating and vehicle cooling system as it relates to the mobile climate control system.

## State Course Codes

High School

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Mobile Equipment Maint.

## 40250 - Work Experience in Transportation

An advanced research and application level course covering specific topics in transportation. Should include opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. (Prerequisite: Must take at least 1.0 credit of Technical level course and Application level course combined.) Previously Research \& Emerging Trends in Transportation

## 40251 - Work Experience in Transportation - Comprehensive

An advanced research and application course covering specific topics in transportation. Should include opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. In relationship to the half credit version, the full credit version requires more in-depth research opportunities, the creation of a portfolio documentation of internship activities, and the completion of the OSHA 10 Safety Certification course. (Prerequisite: Must take at least 1.0 credit of Technical level course and Application level course combined.) Previously Research \& Emerging Trends in Transportation.

## 40300 - Auto Collision I

A comprehensive, technical level course designed to instruct students in the knowledge and skills common to the Auto Collision Industry.

## 40302 - Auto collision II

A comprehensive, application level course designed to provide students with the advanced skills needed to perform diagnosis and repair in the Auto Collision Industry.

## 40308 - Auto Refinishing Comprehensive

A comprehensive course designed to instruct students in the knowledge and skills common to the Auto Refinishing Industry.

## 40310 - Auto Refinishing I

A comprehensive, technical level course designed to instruct students in the knowledge and skills common to the Auto Refinishing Industry.

## 40312 - Auto Refinishing II

A comprehensive, application level course designed to provide students with the advanced skills needed to perform diagnosis and repair in the Auto Refinishing Industry. (Prerequisite: Auto Refinishing I.)

## State Course Codes

High School

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Mobile Equipment Maint.

## 40314 - Custom Refinishing \& Applications A

A comprehensive, application level course designed to provide students with the skills needed to perform diagnosis and repair in the Custom Refinishing Industry.

## 40315 - Custom Refinishing \& Applications B

An advanced application level course offering students further opportunities for creative applications in custom refinishing.

## Aviation Maintenance

## 40400 - Hand \& Power Tools

Provides technical knowledge used in Aviation and Manufacturing area related to hand and power tools.

## 40410 - Aviation Fundamentals

A technical level course providing students with an introduction to the fundamentals related to materials, processes, and history of Aviation.

## 40420 - Aviation systems

40420 - A technical level course providing students with an in-depth knowledge of the major components and systems of an Aircraft.

## 40430 - Aviation Engine Basics

A comprehensive technical level course designed to instruct students in the principles and concepts related to basic engine operation.

## 40450-AC Electronics

A course that teaches the fundamental concepts of Alternating Current.

## 40460 - DC Electronics

A course that teaches students the fundamental concepts of Direct Current.

## 40470 - Microcontrollers

A course that teaches students the fundamental concepts of Micro-processing and controllers

## State Course Codes

High School

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Aviation Maintenance

## 40480 - Integrated Circuits

A course that teaches the fundamental concepts of Integrated Circuits and Circuit Design.

## 40490 - Unmanned Aircraft Systems (UAS)

A course that will provide students with the academic knowledge about commercial remote pilot operations, while also giving hands-on experience planning and executing UAS missions. (Prerequisite: Aviation Fundaments or Aviation Systems.) Previously Drones.

## 40500 - Aviation Engine Performance I

Application level course designed to teach fundamentals of reciprocal operation systems related to aviation engines.

## 40510 - Aviation Engine Performance II

Application level course designed to teach fundamentals of diagnostic procedures and practices common to Aviation engine performance.

## 40520-Aviation Material Processes

An application level course designed to teach students skills and materials required for manufacturing, assembly, and repair of aircraft.

## 40530 - Aviation Pneumatics \& Hydraulics

An application level course designed to teach students the basic theory and technical knowledge required to service pneumatic and hydraulic systems.

## 40540 - Flight Training

This course builds upon knowledge previously learned on aircraft systems. Students will additionally explore weather, operations, and basic navigation principles. (Prerequisite: Aviation Systems or Aviation Fundamentals.)

## Aviation

## 40491 - Introduction to Unmanned Aircraft Systems

Introduction to the history of Unmanned Aircraft Systems and survey of current UAS platforms, terminology, challenges to airspace integration and operational theory. This course will prepare the student for the FAA Part 107 Remote Pilot in Command exam.

## State Course Codes

High School

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Aviation

## 40492 - Unmanned Aircraft Systems Flight Safety Practices

This course will provide students with the study of the common hazards, errors, and misconceptions about UAS flight, including preventive and safety measures in the areas of personnel, injury and property damage, UAS components, environmental factors, and airspace requirements. This course will prepare the student for the UAS Flight Safety Certificate exam

## 40700 - Work Experience in Aviation

An advanced topics, research, and application course covering specific topics in aviation. Opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. (Prerequisite: Must take at least 1.0 credit of Technical and Application level courses combined.)

## 40701 - Work Experience in Aviation - Comprehensive

An advanced topics, research, and application course covering specific topics in aviation. Opportunities for Work-Based Learning (WBL) such as in-house training, job shadowing, and/or internships. (Prerequisite: Must take at least 1.0 credit of Technical and Application level courses combined.)

## Aviation Production

## 40600 - Tooling I

In this course students learn to utilize tools and processes in Aviation tool assembly.

## 40610 - Tooling II

This course teaches students the skills necessary to create and produce Aviation fixtures and jigs.

## 40620 - Aerostructures I

An application level course designed to teach students a general overview of assembly techniques used in Aviation.

## 40630 - Aerostructures II

An application level course designed to teach students to master the techniques associated with aerospace mechanical assembly.

## 40640 - Composites I

An application level course designed to teach students the fundamentals of Composite Theory Materials Equipment \& Processes.

## State Course Codes

High School

## Subject Area 40: Transportation, Distribution, and Logistics Cluster

## Aviation Production

## 40650 - Composites II

An application level course designed to teach students Composite, Assembly, \& Repair.

## Subject Area 41: Science, Technology, Engineering, and Mathematics Cluster

## 41010 - Technical Introduction to Computer Science

Students develop an understanding of computer science concepts and use computational thinking skills to solve problems through a variety of programming languages and platforms. Students also develop skills in collaboration and teamwork through the use of work models such as pair programming. This course provides a rich technical foundation for continued study.

## 41011 - Computer Science and Software Engineering

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. This course can be a student's first course in computer science, although we encourage students without prior computing experience to start with Technical Level Introduction to Computer Science. This course helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cyber security, robotics, and simulation.

## 41020 - Computer Science Application (CSA)

CSA focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java ${ }^{\mathrm{TM}}$ and other industry-standard tools.

## 41030 - Simulation and Modeling (SAM)

In (SAM), students create models and simulate social, physical, and biological systems. Students apply statistics and data analysis to understand systems and predict behavior, and they compare models to complex, real data. Students create simulations to communicate central ideas in the physical, biological, and social sciences and deepen their understanding of concepts in discrete math and computer science. This course emphasizes collaboration, professional writing, and the scientific method.

## State Course Codes

High School

## Subject Area 41: Science, Technology, Engineering, and Mathematics Cluster

## 41034 - Artificial Intelligence (AI)

Al students will develop artificially intelligent systems that create solutions to real problems found in science and industry. Students analyze problems for computational difficulty and analyze solutions for computational efficiency. Students engage in a wide array of applications, including automated vehicles and computer vision.

## 41036 - Cyber Security

This course introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in this course, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyberinfrastructure that moves and processes information safely.

## 41037 - Computational Problem Solving (CPS)

Computational Problem Solving offers students the opportunity to work in a team to deliver a software solution to a real-world design problem. Teams start by defining problems, which might originate from CPS students, community, or industry clients, or students in other problem-based courses, and use the Agile design process to develop a software solution. Effective practices in problem solving, documentation, software development, presentation, and collaboration are central to the course.

## Engineering

## 41048 - Workplace Experience in Engineering

Application level workplace experience /internship completed by students at a business location or within the school that is an engineering occupational experience.

## 41310 - Introduction to Engineering

An Introductory level course designed to introduce students to concepts in Engineering with a focus on Science, Technology, Engineering, \& Math; including units on safety and tools, computer use, design, automation, robotics, space, flight, and electricity.

## 41320 - Principles of Applied Engineering

A Technical level course designed to expand student knowledge in the area of applied engineering and allow students to apply learning related to multiple topics in the field of Engineering.

## State Course Codes

High School

## Subject Area 41: Science, Technology, Engineering, and Mathematics Cluster

## Engineering

## 41355 - Materials Science in Engineering

An application level course designed to teach students the properties, classes, uses and selection of materials for various applications.

## 41500 - Part Design

This is an application course that teaches students Part Design process through creation of solid parts without complex contours. (CATIA 1)

## 41505 - Assembly Design

This is an application course that teaches students Assembly Design through the use of advanced assembly and navigation tools. (CATIA 2)

## 41510 - Wireframe \& Surfaces

This is an application course that teaches students Wireframe \& Surfaces design geometry used to create complex contours. (CATIA 3)

## 41515 - Aerospace Drawings

This is an application course that teaches students Technical Illustration techniques used to create technical drawings for Aviation. (CATIA 4)

## 41520 - Special Projects and Research in Aviation

An advanced level production design course that incorporates advanced techniques of aviation design with additional software packages specific to the production and application of aviation parts and systems. (Must be preceded by all Aviation Design Strand Application courses, except for Workplace Experience)

## Energy

## 41100 - Introduction to Energy

An introductory level course designed to teach students about the occupations in the Energy field and the skills required for those occupations.

## State Course Codes

## High School

## Subject Area 41: Science, Technology, Engineering, and Mathematics Cluster

## Energy

## 41105 - Energy Industry Fundamentals

Energy Industry Fundamentals provides a broad understanding of the electric and natural gas utility industry and the energy generation, transmission, and distribution infrastructure. The course includes business models, regulations, types of energy and their conversion to useable energy such as electric power, emerging technologies, how generated power is transmitted and distributed to the point of use, and the connection to careers in the energy industry.

## 41110 - Alternative Energy

A comprehensive course designed to instruct students in basic knowledge and skills of renewable and non-renewable energy sources, how these sources negatively \& positively impact our world, and the importance of developing alternative energy sources.

## 41150 - Energy, Power and Society

A Technical level course in which students will compare various energy sources, analyze the modern demands of power usage, and evaluate the economic, environmental, and social impacts of renewable and nonrenewable energy sources.

## 41160 - Wind Energy Operations

A Technical level course in which students will learn many facets of the rapidly growing wind energy industry, to include topics such as mechanical, electrical, safety, and historical aspects of wind energy.

## 41170 - Fundamentals of Electricity \& Electronics

A Technical level course designed to instruct students in terminology and basic concepts related to the field electricity and electronics.

## 41207 - Intro to Environmental Science

An introductory level course designed to teach students about the concepts of our environment.

## 41250 - Research \& Design for Energy

An application level course which may include student research projects and/or workplace/internship experience related to the field of Energy in the areas of mechanical, wind, electricity/electronics, environmental, and/or transmission systems.

## 41260 - Research \& Design for Energy Comprehensive

An application level course which allows more in-depth student research projects and/or workplace/internship experience related to the field of Energy.

## State Course Codes

High School

## Subject Area 41: Science, Technology, Engineering, and Mathematics Cluster

## Energy

## 41270 - Advanced Electricity \& Electronics

An Application level course designed to allow students to apply theory and technical skills learned previously to troubleshoot complex electricity and electronic circuitry and systems.

## STEM

## 41350 - Project Management

An application / college level course to teach students the concepts of managing large work-related projects at the contractor level. Must be directly tied to the student's occupational area of interest.

## Subject Area 42: Education and Training Cluster

## 42251 - Teaching Observation

Teaching observation courses build upon the understanding of the requirements of the teaching profession through student observations and study of best practices in multiple classroom settings. Observation analysis will be focused around the elements of effective instruction - planning and preparation, the learning environment, instructional strategies, and teacher/trainer professional responsibilities.

## Subject Area 43: Government and Public Administration Cluster

## Government and Public Administration

## 43001 - Intro to Government and Public Administration

This course will introduce students to the knowledge and skills of serving the general public in a variety of occupations. Topics will include identifying personal strengths and weaknesses and setting career goals, leadership, teamwork and problem solving, analyzing leadership roles and identifying leadership opportunities within the school.

## State Course Codes

High School

## Subject Area 43: Government and Public Administration Cluster

## Government and Public Administration

## 43105 - Government and Public Administration Fundamentals

This course will look at meeting the needs of the U.S. culture through positions within Government and Public Administration. Topics will include the role of government in providing services for the US population, the impact of the US on other nations as well as the impact of other nations on the US, and the professional traits required of those in this field. In addition, it will look at the problem solving and critical thinking processes, and leadership and teamwork practices.

## 43115 - Media and Public Relations

This course will build skills needed to communicate messages to the public as it relates to topics of concern. Topics will include conflict awareness, reliability of sources, creating publicity materials, public relations campaigns and working with media.

## 43250 - Governance Applications

This course applies the skills needed in government and public administration professions. It includes the application of leadership and teamwork within the classroom or as an intern at a work location. Topics may include working with budgets, negotiation/communication with co-workers, developing proposals, making oral presentations and making informed decisions to meet an identified need.

## Subject Area 44: Law, Public Safety, and Security Cluster

## 44001 - Intro to Law, Public Safety, Corrections, \& Security

An introductory course designed to provide students with knowledge of occupations available in the Law, Public Safety and Security fields and introduce them to the legal system, professional conduct, safety, and types of crime.

## 44005 - Introduction to Emergency Medical Services (EMS)

An introductory level course designed to provide students with knowledge of the history of modern emergency medical services in the United States and how those services have progressed and changed over time.

## 44010 - IT in Service Professions

A technical level course designed to provide students with the knowledge needed to perform the written and other communication duties associated with careers in LPSS.

## State Course Codes

High School

## Subject Area 44: Law, Public Safety, and Security Cluster

## 44020 - Public Safety Physical Education

A technical level course designed to assist students enrolled in a LPSS Pathway maintain a healthy lifestyle and prepare to take the CPAT Certification Test

## 44050 - EMS First Responder

A technical level course designed to instruct students in the requirements and skills to obtain national certifications for First Aid, CPR and Emergency Medical Responder.

## 44055 - EMT-Bridge

A technical level course designed to provide students with basic knowledge and skills needed to pursue postsecondary training the Emergency Medical field (ie., EMT, Paramedic).

## 44060 - EMT

A technical level course designed to provide skills and knowledge necessary to sit for the EMT certification test. Course is taught by a certified EMT instructor and follows competencies set forth by the certifying agency.

## 44065 - EMT II

An Application Level course that is a continuation of the EMT I Technical Level course, designed to further the students' knowledge and skills needed to attain EMT certification.

## 44070 - Hazardous Materials for the First Responder

A Technical Level course designed to provide students with information for awareness, recognition, \& protocols of hazardous materials, needed for employment in Law, Public Safety \& Security occupations.

## 44080 - Fire Service Special Operations

A comprehensive, technical level course intended to follow the Introduction to LPSCS class before moving into Fire Science I. Course will showcase the myriad of specialty disciplines existing as a subset within fire service emergency response

## 44100 - Fire Science I

The first of two courses designed to provide students with the knowledge and skills to obtain a Fire Fighter I national certification.

## State Course Codes

High School

## Subject Area 44: Law, Public Safety, and Security Cluster

## 44101 - Fire Science II

The second of two courses designed to provide students with the knowledge and skills to obtain a Fire Fighter I national certification.

## 44200 - Law Enforcement I

The first of two courses designed to provide students with the skills and knowledge necessary to obtain entrance to the Law Enforcement or Highway patrol Academy.

## 44201 - Law Enforcement II

The second of two courses designed to provide students with the skills and knowledge necessary to obtain entrance to the Law Enforcement or Highway Patrol Academy.

## 44210 - Certified Protection Officer

An application level course designed to provide students with the skills and knowledge needed to obtain national certification as a CPO (Security Guard).

## 44215 - Corrections Officer

An application level course designed to provide students with the skills and knowledge needed to obtain entry-level employment as a corrections officer in the local, state and/or federal detention system.

## 44220 - Public Safety Telecommunications

An application level course designed to provide students with the skills and knowledge needed to obtain national certification in PST and enable them to enter employment as a 911 Telecommunicator.

## 44224 - Forensic Science

An application level course that follows a background in biology and chemistry and provides students with a basic knowledge and skills needed to pursue postsecondary training in LPSS careers requiring Forensic Science (ie., Forensic Anthropology, Forensic Medicine, Medical Examiner).

## 44225 - Forensic Science I

An application level course that follows a comprehensive background in biology and chemistry and provides students with an in-depth knowledge and skills needed to pursue postsecondary training in LPSS careers requiring Forensic Science (ie., Forensic Anthropology, Forensic Medicine, Medical Examiner). This course needs to covers additional topics from those covered in the .5 credit version and should go more in depth with the topics in the .5 credit version.

## State Course Codes

High School

## Subject Area 44: Law, Public Safety, and Security Cluster

## 44226 - Forensic Science II

An application level course that expands upon skills learned in the technical level course and provides students with knowledge and skills needed to pursue postsecondary training in LPSS careers requiring Forensic Science (i.e., Forensic Anthropology, Forensic Medicine, Medical Examiner).

## 44298 - Work Experience in LPSCS

An application level course designed to provide LPSS students with opportunities to apply skills learned in the pathway to real-life situations in various LPSS careers.

## 44300 - Practical Law

This course will study the basic legal principles common to a broad base of everyday business activities and will provide practical law information necessary to develop problem-solving skills in our legal society. Topics include, but are not limited to, criminal law, juvenile law, torts, family law, discrimination, writing a brief and employee rights.

## 44305 - Foundations in Law

This course helps students understand why we live under the rule of law, and how laws are created, enforced, interpreted, and changed. The course enables students to examine diverse areas of law, including criminal, civil, constitutional, and international. It also explores civil rights issues and the role of advocacy, civics, and the media in our legal system.

## 44310 - Legal Proceedings

This is an application course in which students will demonstrate technical skills related to careers in the legal and judicial field, and analyze the impact of legal and judicial careers on community health and service. Previously "Youth Court."

## Subject Area 45: Human Services Cluster

## 45001 - Introduction to Family and Consumer Sciences

Introduction to Family and Consumer Sciences offers a look into the many occupations (paid and unpaid) linked to providing for the basic needs of children, individuals and families. Occupations will include nutrition educator, child care provider, social worker, foster parent, credit counselor, geriatric care provider, senior citizen care director, food service provider, restaurant manager, culinary artists, interior/textile designer, event planner and family and consumer sciences teacher.

## State Course Codes

High School

## Subject Area 45: Human Services Cluster

## 45004 - Human Growth and Development - The Early Years

Human Growth and Development - The Early Years provides students with knowledge about the physical, intellectual, emotional, and social growth (PIES) and development of children. Course content will provide an overview of life stages from prenatal and birth processes and fundamentals of children's milestone development during the early years. Previously Human Growth and Development A.

## 45014 - Lifespan Development

Life Span Development prepares students for occupations associated with meeting the needs of people by learning about physical, intellectual, emotional and social development from childhood to death. In addition, this course helps students discover how individuals respond to the various stages of the life span with a strong tie to teen years, adulthood and later years. Previously Human Growth \& Development B.

## 45250 - Career \& Community Connections

Career and Community Connections is the Application level course for the learner to apply technical skills in a professional learning experience, unpaid or paid, outside or within the school environment. Included will be continued development and finalization of the student's portfolio. Career and Community Connections provides the opportunity for learners to focus on career related topics, team building and effectiveness in the world of work, and acquiring job-seeking skills and retention needed to advance within the workplace.

Middle School/Jr. High

## Subject Area 51: English Language and Literature (ms/jr. high)

51001 - English Language Arts (Middle)
English Language Arts (Middle)

## 51002 - Developmental Reading (Middle)

Developmental Reading (Middle)

## 51003 - At-Risk English Language Arts (Middle)

At-Risk English Language Arts (Middle)

## Middle School/Jr. High

## Subject Area 51: English Language and Literature (ms/jr. high)

## 51007 - IB Language A (English), Middle Years Program

International Baccalaureate (IB) Language A (English), Middle Years Program courses include instruction in the instrumental function of a language, emphasizing skills in listening, viewing, speaking, reading, and writing, as well as literature encompassing a variety of periods and genres.

## 51008 - English as a Second Language

English as a Second Language (ESL) courses are designed for English language acquisition, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. These courses provide a foundation of the basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles, to succeed in content classrooms, and to move into "regular" English courses. ESL courses may also include an orientation to the customs and culture of the diverse population in the United States.

## 51009 - Language Arts Laboratory

Language Arts Laboratory courses provide instruction in basic language skills, integrating reading, writing, speaking, and listening, while placing great emphasis on the progress of individual students. Course content depends upon students' abilities and may include vocabulary building, improving spelling and grammar, developing writing and composition skills, reading silently or aloud, and improving listening and comprehension abilities.

## 51034 - Language Arts (grade 6)

Language Arts (grade 6) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. These courses may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 6.

## 51035 - Language Arts (grade 7)

Language Arts (grade 7) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. Beyond emphasizing different uses for language, these courses may also include using language (particularly written text) to construct meaning and connections. Specific content depends upon state standards for grade 7.

## State Course Codes

## Middle School/Jr. High

## Subject Area 51: English Language and Literature (ms/jr. high)

## 51036 - Language Arts (grade 8)

Language Arts (grade 8) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses use various genres of literature to improve reading skills, and they link writing exercises for different purposes to those reading selections. Specific content depends upon state standards for grade 8.

## 51037 - Language Arts

This course represents Language Arts courses that are not grade differentiated. It should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Language Arts, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated in this course code.

## 51046 - Reading (grade 6)

Reading (grade 6) courses build upon students' prior knowledge and skill in reading and may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 6.

## 51047 - Reading (grade 7)

Reading (grade 7) courses build upon students' prior knowledge and skill in reading and may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 7.

## 51048 - Reading (grade 8)

Reading (grade 8) courses build upon students' prior knowledge and skill in reading. Typically, these courses use various genres of literature to improve reading skills, and link exercises for different purposes to those reading selections. Specific content depends upon state standards for grade 8.

## 51049 - Reading

This course represents Reading courses that are not grade differentiated. It should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades. The grade span element should be included to define which grades may be incorporated by this course code.

## State Course Codes

## Middle School/Jr. High

## Subject Area 51: English Language and Literature (ms/jr. high)

## 51053 - Literature

Literature courses offer the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are often required. Literature courses may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people.

## 51066 - Strategic Reading

Strategic Reading courses are intended to improve a student's vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note taking or for understanding and evaluating the important points of a text.

## 51067 - Assisted Reading

Assisted Reading courses offer students the opportunity to focus on their reading skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension up to the desired level or to develop strategies to read more efficiently.

## 51068 - Corrective Reading

Corrective Reading courses offer diagnostic and remedial activities designed to correct reading difficulties and habits that interfere with students' progress in developing reading skills and understandings. Activities are chosen to increase or improve students' reading comprehension, reading technique, and general literacy skills.

## 51097 - Literature-Independent Study

Courses in Literature-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to literature. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 51103 - Composition

Composition courses focus on students' writing skills and develop their ability to compose different types of papers for a range of purposes and audiences. These courses enable students to explore and practice descriptive, narrative, persuasive, or expositive styles as they write paragraphs, essays, letters, applications, formal documented papers, or technical reports. Although composition courses may present some opportunities for creative writing, their focus usually remains on nonfiction, scholarly, or formal writing.

## State Course Codes

## Middle School/Jr. High

## Subject Area 51: English Language and Literature (ms/jr. high)

## 51104 - Creative Writing

Creative Writing courses offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft. Although most creative writing classes cover several expressive forms, others concentrate exclusively on one particular form (such as poetry or playwriting).

## 51136 - Writing (grade 6)

Writing (grade 6) courses build upon students' prior knowledge and skill in writing and may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 6.

## 51137 - Writing (grade 7)

Writing (grade 7) courses build upon students' prior knowledge and skill in writing and may emphasize the use of language for different effects and to construct meaning and connections. Specific content depends upon state standards for grade 7.

## 51138 - Writing (grade 8)

Writing (grade 8) courses build upon students' prior knowledge and skill in writing. Typically, these courses use writing exercises to expand students' understanding of the different purposes of written communication. Specific content depends upon state standards for grade 8.

## 51139 - Writing

This course represents Writing courses that are not grade differentiated. It should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades. The grade span element should be included to define which grades may be incorporated by this course code.

## 51147 - Composition—Independent Study

Composition-Independent Study courses, often conducted with instructors as mentors, allow students to explore particular topics within the field of language arts (emphasizing composition). Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 51149 - Composition-Other

## Middle School/Jr. High

## Subject Area 51: English Language and Literature (ms/jr. high)

## 51151 - Public Speaking

Public Speaking courses enable students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small- and large-group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

## 51155 - Communications

Communications courses focus on the application of written and oral communication skills through a variety of formal and informal experiences. The courses are performance based and emphasize effective interpersonal and team-building skills. Communications courses may also involve the study of how interpersonal communications are affected by stereotypes, nonverbal cues, vocabulary, and stylistic choices.

## 51197 - Speech—Independent Study

Speech—Independent Study courses, often conducted with instructors as mentors, allow students to explore particular topics within the field of language arts (emphasizing speech). Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 51199 - Speech-Other

## 51203 - English-Test Preparation

English—Test Preparation courses provide to students activities in analytical thinking and with the skills and strategies associated with standardized test taking. Topics covered include vocabulary, reading comprehension, and writing strategies, as well as time management, scoring procedures, and dealing with test-related stress. Course materials may include national and state standardized test review materials, current assessment software programs, and previous standardized examinations.

## 51991 - Language Arts Laboratory

Language Arts Laboratory courses provide instruction in basic language skills, integrating reading, writing, speaking, and listening, while placing great emphasis on the progress of individual students. Course content depends upon students' abilities and may include vocabulary building, improving spelling and grammar, developing writing and composition skills, reading silently or aloud, and improving listening and comprehension abilities.

## State Course Codes

## Middle School/Jr. High

## Subject Area 51: English Language and Literature (ms/jr. high)

## 51992 - English Proficiency Development

English Proficiency Development courses are designed to assist students in acquiring the skills necessary to pass proficiency examinations.

## 51996 - English Language and Literature-Supplemental

English Language and Literature-Supplemental courses, designed to be taken in addition to or in coordination with other English language and literature courses, provide instruction to assist students in acquiring English language arts skills so that students attain necessary grade-level skills or reach a desired competency level.

## 51997 - English Language and Literature-Independent Study

English Language and Literature-Independent Study courses, often conducted with instructors as mentors, allow students to explore particular topics within the field of language arts. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

51999 - English Language and Literature-Other

Subject Area 52: Mathematics (ms/jr. high)

52001 - Mathematics (Middle)
Mathematics (Middle)

## 52002 - Developmental Mathematics (Middle)

Developmental Mathematics (Middle)

## 52003 - At-Risk Mathematics (Middle)

At-Risk Mathematics (Middle)

## State Course Codes

## Middle School/Jr. High

## Subject Area 52: Mathematics (ms/jr. high)

## 52036 - Mathematics (grade 6)

Mathematics (grade 6) courses typically emphasize skills in numerical operations (including basic operations and their proper order); measurement; patterns; simple functions; geometry; and concepts of data analysis, including statistics and probability. Specific content depends upon state standards for grade 6.

## 52037 - Mathematics (grade 7)

Mathematics (grade 7) courses typically emphasize proficiency in skills involving numbers and operations; measurement; patterns; functions; algebraic formulas; geometry; and concepts of data analysis, including statistics and probability. Specific content depends upon state standards for grade 7.

## 52038 - Mathematics (grade 8)

Mathematics (grade 8) courses typically emphasize proficiency in skills involving numbers and operations, measurement, patterns, simple functions, algebra, geometry, statistics, and probability. Specific content depends upon state standards for grade 8.

## 52039 - Mathematics

This course represents Mathematics courses that are not grade differentiated and should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Mathematics, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 52047 - Foundation Math—Independent Study

Foundation Math—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to foundational mathematics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 52049 - Foundation Math-Other

## 52051 - Pre-Algebra

Pre-Algebra courses increase students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.

## State Course Codes

## Middle School/Jr. High

## Subject Area 52: Mathematics (ms/jr. high)

## 52052 - Algebra I

Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first-degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

## 52061 - Integrated Math—Multiyear Equivalent

Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. The multiperiod sequence of Integrated Math replaces the traditional Algebra I-Geometry-Algebra II sequence of courses, and usually covers the following topics during a 3- or 4year sequence: algebra, functions, geometry from both synthetic and algebraic perspectives, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

## 52069 - Algebra-Other

## 52071 - Informal Geometry

Informal Geometry courses emphasize a practical approach to the study of geometry and de-emphasize an abstract, formal approach. Topics typically include properties of and work with plane and solid figures; inductive methods of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

## 52072 - Geometry

Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

## 52073 - Analytic Geometry

Analytic Geometry courses include the study of the nature and intersection of lines and planes in space, including vectors, the polar coordinate system, equations and graphs of conic sections, rotations and transformations, and parametric equations.

## State Course Codes

## Middle School/Jr. High

## Subject Area 52: Mathematics (ms/jr. high)

## 52074 - Principles of Algebra and Geometry

Principles of Algebra and Geometry courses combine the study of some pre-algebra and algebra topics with introductory geometry topics. These courses include the study of formulas; algebraic expressions; first-degree equations and inequalities; the rectangular coordinate system; area, perimeter, and volume of geometric figures; and properties of triangles and circles.

## 52075 - Particular Topics in Geometry

These courses examine specific topics in geometry, such as solid or technical geometry, rather than provide a general study of the field of geometry.

## 52079-Geometry-Other

## 52132 - IB Mathematics, Middle Years Program

International Baccalaureate (IB) Mathematics, Middle Years Program courses are built on a framework of five branches of mathematics: number, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics. The program encourages students to develop an understanding of mathematical reasoning and processes, the ability to apply mathematics and evaluate the significance of results, the ability to develop strategies for problems in which solutions are not obvious, and the acquisition of mathematical intuition.

## 52157 - Consumer Math

Consumer Math courses reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

## 52991 - History of Math

History of Math courses include a study of the historical development of numbers, computation, algebra, and geometry. Figures critical to the development of mathematics (e.g., Pythagoras, Pascal, and Descartes) or important developments (e.g., pi, decimal fractions, probability theory, and calculus) often form the backbone of these classes.

## State Course Codes

## Middle School/Jr. High

## Subject Area 52: Mathematics (ms/jr. high)

## 52993 - Mathematics-Test Preparation

Mathematics-Test Preparation courses provide to students activities in analytical thinking and with the skills and strategies associated with taking standardized tests (such as the PSAT, SAT, and ACT). Topics covered include strategies for arithmetic, algebra, geometry, and quantitative comparison problems as well as time management, scoring procedures, calculator usage, and management of testrelated stress.

## 52994 - Mathematics Proficiency Development

Mathematics Proficiency Development courses are designed to assist students in acquiring the skills necessary to pass proficiency examinations.

## 52996 - Mathematics-Supplemental

Mathematics-Supplemental courses, designed to be taken in addition to or in coordination with other mathematics courses, provide instruction to assist students in acquiring mathematic skills so that students attain necessary grade-level skills or reach a desired competency level.

## 52997 - Mathematics-Independent Study

Mathematics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to mathematics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 52999 - Mathematics-Other

## Subject Area 53: Life and Physical Sciences (ms/jr. high)

## 53001 - Science (Middle)

Science (Middle)

53002 - Developmental Science (Middle)
Developmental Science (Middle)

## State Course Codes

## Middle School/Jr. High

## Subject Area 53: Life and Physical Sciences (ms/jr. high)

## 53008 - Earth/Space Science

Earth/Space Science covers basic principles of earth and space science. These may include plate tectonics, rocks and the rock cycle, weather, ocean currents, movements of the Earth, moon, and planets, components of the galaxy and universe, or other topics consistent with state academic standards for earth and space science.

## 53009 - Particular Topics in Earth Science

Particular Topics in Earth Science courses concentrate on a particular subtopic within the field of earth science (such as oceanography, meteorology, physical geography, and so on) that is not otherwise described within this classification system.

## 53047 - Earth Science-Independent Study

Earth Science-Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other science courses or may serve as an opportunity to explore a topic of special interest.

## 53049 - Earth Science--Other

## 53051 - Biology

Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

## 53063 - Particular Topics in Biology

Particular Topics in Biology courses concentrate on a particular subtopic within the field of biology (such as botany, zoology, genetics, and so on) that is not otherwise described within this classification system.

## 53097 - Biology—Independent Study

Biology—Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other science courses or may serve as an opportunity for students to explore a topic of special interest.

## 53099 - Biology--Other

## State Course Codes

## Middle School/Jr. High

## Subject Area 53: Life and Physical Sciences (ms/jr. high)

## 53101 - Chemistry

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

## 53108 - Particular Topics in Chemistry

Particular Topics in Chemistry courses concentrate on a particular subtopic within the field of chemistry (such as chromatography and spectrometry) that is not otherwise described in this classification system.

## 53147 - Chemistry—Independent Study

Chemistry—Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other rigorous science courses or may serve as an opportunity to explore a topic of special interest.

## 53149 - Chemistry-Other

## 53151 - Physics

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

## 53153 - Principles of Technology

Principles of Technology courses focus on the study of the forces and laws of nature and their application to modern technology. Equilibrium, motion, momentum, energy conversion, electromagnetism, and optical phenomena are presented in the context of current, real-world applications. Demonstrations, math labs, and applied laboratory experiments are an integral part of the Principles of Technology curriculum.

## 53158 - Life Science

Life Science courses cover the basic principles of life and life processes. These topics may include cells, species, ecosystems, reproduction, genetics, or other topics consistent with state academic standards for life science.

## State Course Codes

## Middle School/Jr. High

Subject Area 53: Life and Physical Sciences (ms/jr. high)

## 53159 - Physical Science (prior-to-secondary)

Physical Science (prior-to-secondary) courses cover basic principles of physical science, such as matter, energy, force, and motion. Topics may include conservation of energy and matter, the atomic model, the periodic table, electricity, or other topics consistent with state academic standards for physical science.

## 53162 - Particular Topics in Physics

Particular Topics in Physics courses concentrate on a particular subtopic within the field of physics (such as optics, thermodynamics, quantum physics, and so on) that is not otherwise described in this classification system.

## 53197 - Physics-Independent Study

Physics-Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other rigorous science courses or may provide an opportunity for students to explore a topic of special interest.

## 53199 - Physics--Other

## 53201 - Integrated Science

The specific content of Integrated Science courses varies, but they draw upon the principles of several scientific specialties-earth science, physical science, biology, chemistry, and physics-and organize the material around thematic units. Common themes covered include systems, models, energy, patterns, change, and constancy. These courses use appropriate aspects from each specialty to investigate applications of the theme.

## 53202 - Unified Science

Unified Science courses combine more than one branch of science into a cohesive study or may integrate science with another discipline. General scientific concepts are explored, as are the principles underlying the scientific method and experimentation techniques.

## 53203 - IB Sciences, Middle Years Program

International Baccalaureate (IB) Sciences, Middle Years Program courses provide to students a body of knowledge and an understanding of the scientific approach to problem solving. It may be organized as biology, chemistry, and physics, or as an integrated sciences course. The course requires students to formulate hypotheses, design and carry out experiments to test them, and evaluate results.

## State Course Codes

## Middle School/Jr. High

## Subject Area 53: Life and Physical Sciences (ms/jr. high)

## 53236 - Science (grade 6)

Science (grade 6) courses typically include subject matter from several strands of science, including earth/space sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 6.

## 53237 - Science (grade 7)

Science (grade 7) courses build on previous years of scientific inquiry and typically include subject matter from several strands of science, including earth sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 7 .

## 53238 - Science (grade 8)

Science (grade 8) courses typically include subject matter from several strands of science, including earth sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 8.

## 53239 - Science

This course represents Science courses that are not grade differentiated; and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Science, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 53994 - Life and Physical Sciences-Proficiency Development

Life and Physical Sciences-Proficiency Development courses are designed to assist students in acquiring the skills necessary to pass proficiency examinations related to the life sciences and physical sciences.

## 53996 - Life and Physical Sciences-Supplemental

Life and Physical Sciences-Supplemental courses, designed to be taken in addition or in coordination with other life and physical science courses, provide instruction to assist students in acquiring science skills so that students attain necessary grade-level skills or reach a desired competency level.

## State Course Codes

## Middle School/Jr. High

## Subject Area 53: Life and Physical Sciences (ms/jr. high)

## 53997 - Life and Physical Sciences—Independent Study

Life and Physical Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore scientific topics of interest, using advanced methods of scientific inquiry and experimentation. These courses may be offered in conjunction with other rigorous science courses or may serve as an opportunity to explore a topic of special interest.

## 53999 - Life and Physical Sciences-Other

## Subject Area 54: Social Sciences and History (ms/jr. high)

## 54001 - History Comprehensive (Middle)

History Comprehensive (Middle)

## 54002 - Developmental History Comprehensive (Middle)

Developmental History Comprehensive (Middle)

## 54003 - Psychology (Middle)

Psychology (Middle)

## 54047 - Geography—Independent Study

Geography-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within geography. Independent Study courses may provide an opportunity for students to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## 54051 - World History—Overview

World History-Overview courses provide an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History-Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.

## State Course Codes

## Middle School/Jr. High

## Subject Area 54: Social Sciences and History (ms/jr. high)

## 54061 - World Area Studies

World Area Studies courses examine the history, politics, economics, society, and/or culture of one or more regions of the world, such as Africa, Latin America, the former Soviet Union, Far East Asia, and the Middle East. These courses may focus primarily on the history of a particular region or may take an interdisciplinary approach to the contemporary issues affecting the region. Furthermore, these courses may emphasize one particular country (other than the United States) rather than a region or continent.

## 54062 - World People Studies

World People Studies courses allow students to study various types of subgroups that have something in common such as religion, gender, or culture. Similar in style to World Area Studies, but focusing on a group of people rather than on a specific region, these courses examine a subgroup's history, politics, economics, and/or culture.

## 54063 - Western Civilization

Western Civilization courses apply an interdisciplinary approach to the study of Western cultural traditions, frequently using a chronological framework. Course content typically includes a survey of the major developments in and contributors to art and architecture, literature, religion and philosophy, and culture. These courses may also cover intellectual and political movements.

## 54064 - Contemporary World Issues

Contemporary World Issues courses enable students to study political, economic, and social issues facing the world. These courses may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.

## 54097 - World History—Independent Study

World History-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within world history. Independent Study courses may provide an opportunity for students to expand their expertise in a particular period or area, to explore a topic of special interest, or to develop more advanced skills.

## 54101 - U.S. History-Comprehensive

U.S. History-Comprehensive courses provide an overview of the history of the United States, examining time periods from Constitutional Age to International Expansion or after. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.

## State Course Codes

## Middle School/Jr. High

## Subject Area 54: Social Sciences and History (ms/jr. high)

## 54105 - State-Specific Studies

State-Specific Studies courses examine the history, politics, economics, society, and/or cultures of one state in the United States. This course may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.

## 54106 - Contemporary U.S. Issues

Contemporary U.S. Issues courses study the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

## 54107 - U.S. Ethnic Studies

U.S. Ethnic Studies courses examine the history, politics, economics, society, and/or culture of one or more of the racial/ethnic groups in the United States. These courses may focus primarily on the history of an individual racial/ethnic group or may take a more comprehensive approach to studying the contemporary issues affecting racial/ethnic groups overall.

## 54147 - U.S. History-Independent Study

U.S. History-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within U.S. History. Independent Study courses may provide an opportunity for students to expand their expertise in a particular period or area, to explore a topic in greater detail, or to develop more advanced skills.

## 54149 - U.S. History-Other

## 54151 - U.S. Government-Comprehensive

U.S. Government-Comprehensive courses provide an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. These courses may examine the structure and function of state and local governments and may cover certain economic and legal topics.

## 54161-Civics

Civics courses examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.

## State Course Codes

## Middle School/Jr. High

## Subject Area 54: Social Sciences and History (ms/jr. high)

## 54171 - IB Humanities, Middle Years Program

International Baccalaureate (IB) Humanities, Middle Years Program courses aim to develop the understanding and application of concepts (time, place and space, change, systems and global awareness) and skills (technical, analytical, problem solving, and investigative). Content may include topics such as geography, history, economics, politics, civics, sociology, anthropology, and psychology.

## 54197 - Government, Politics, and Law-Independent Study

Government, Politics, and Law-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within one of the fields of Government, Politics, and Law. These courses may provide an opportunity for students to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## 54199 - Government, Politics, and Law-Other

## 54337 - Social Studies (grade 7)

Social Studies (grade 7) courses provide continued development of understanding and skills in the social studies disciplines: history, geography, civics and government, and economics. Specific content depends upon state standards for grade 7.

## 54436 - Social Studies (grade 6)

Social Studies (grade 6) courses provide a greater understanding of social studies disciplines, including history, geography, civics and government, and economics. These courses often focus on the history, culture, and government of various specific world societies. Typically, students develop skills used in the social studies disciplines. Specific content depends upon state standards for grade 6.

## 54438 - Social Studies (grade 8)

Social Studies (grade 8) courses provide continued development of understanding and skills in the social studies disciplines: history, geography, civics and government, and economics. Typically, these courses focus on single disciplines at a time (e.g., state-specific history and government, U.S. history, world history, or civics) to develop discipline-related skills. Specific content depends upon state standards for grade 8.

## State Course Codes

## Middle School/Jr. High

## Subject Area 54: Social Sciences and History (ms/jr. high)

## 54439 - Social Studies

This course represents Social Studies courses that are not grade differentiated; and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades, or when the content descriptions above do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 54996 - Social Sciences and History-Supplemental

Social Sciences and History-Supplemental courses, designed to be taken in addition to or in coordination with other social sciences and history courses, provide instruction to assist students in acquiring social studies/social science skills so that students attain necessary grade-level skills or reach a desired competency level.

## 54997 - Social Sciences and History-Independent Study

Social Sciences and History-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within one of the fields of social studies. These courses provide an opportunity for students to expand their expertise in a particular specialization, to explore a topic of special interest, or to develop more advanced skills.

## 54999 - Social Sciences and History-Other

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55001 - Art (Middle)

Art (Middle)

## 55002 - Music (Middle)

Music (Middle)

## 55003 - Vocal Music (Middle)

Vocal Music (Middle)

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55004 - Instrumental Music (Middle)

Instrumental Music (Middle)

## 55005 - Fine Arts Humanities (Middle)

Fine Arts Humanities (Middle)

## 55006 - Speech (Middle)

Speech (Middle)

## 55007 - Debate/Forensics (Middle)

Debate/Forensics (Middle)

55008 - Drama/Theater (Middle)<br>Drama/Theater (Middle)

## 55036 - Dance (grade 6)

Dance (grade 6) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 6.

## 55037 - Dance (grade 7)

Dance (grade 7) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 7.

## 55038 - Dance (grade 8)

Dance (grade 8) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 8.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55039 - Dance

This course represents Dance courses that are not grade differentiated; and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Dance, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 55047 - Dance-Independent Study

Dance-Independent Study courses, often conducted with instructors or professional dancers/choreographers as mentors, enable students to explore a particular dance form. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## 55049 - Dance-Other

## 55051 - Introducation to Theater

Introduction to the Theater courses provide an overview of the art, conventions, and history of the theater. Although the courses sometimes include experiential exercises, they emphasize learning about the theater rather than performance. Students learn about one or more of the following topics: basic techniques in acting, major developments in dramatic literature, major playwrights, the formation of theater as a cultural tradition, and critical appreciation of the art.

## 55052 - Theatre Arts

Theatre arts courses focus on the study and performance of drama, including musical theatre. These courses review a wide range of scripted materials, such as plays, screenplays, teleplays, readers' theatre scripts, dramatic criticism, creation of original dramatic works, and the role of dramatic arts in society. In addition, students work collaboratively on performances.

## 55053 - Drama-Comprehensive

Drama-Comprehensive courses are intended to help develop students' experience and skill in one or more aspects of theatrical production. Initial courses are usually introductory in nature, providing an overview of the features of drama, such as acting, set design, stage management, and so on. The more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55054 - Exploration in Drama

Exploration in Drama courses are designed to enhance students' understanding of life through the study and performance of dramatic works. They emphasize developing students' ability to express themselves and establish personal criteria for the critical evaluation of drama activities.

## 55076 - Drama (grade 6)

Drama (grade 6) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 6.

## 55077 - Drama (grade 7)

Drama (grade 7) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. As appropriate, students may focus on acting techniques and traditions, other aspects of drama (staging, lighting, costuming), or both. Specific course content conforms to any existing state standards for grade 7.

## 55078 - Drama (grade 8)

Drama (grade 8) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. As appropriate, students may focus on acting techniques and traditions, other aspects of drama (staging, lighting, costuming), or both. Specific course content conforms to any existing state standards for grade 8.

## 55079 - Drama

This course represents Drama courses that are not grade differentiated; and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Drama, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 55097 - Drama—Independent Study

Drama-Independent Study courses, often conducted with instructors or artists as mentors, enable students to explore a particular theatrical form. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55099 - Drama-Other

Misc.

## 55101 - General Band

General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of nonspecified band literature styles (concert, marching, orchestral, and modern styles).

## 55102 - Concert Band

Courses in Concert Band are designed to promote students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances.

## 55103 - Marching Band

Courses in Marching Band are intended to develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances.

## 55104 - Orchestra

Orchestra courses are designed to develop students' abilities to play brass, woodwind, percussion, and string instruments, covering a variety of string and orchestral literature styles.

## 55105 - Contemporary Band

Contemporary Band courses help students develop their techniques for playing brass, woodwind, percussion, and string instruments, as well as guitars and keyboards, focusing primarily on contemporary stage band literature styles, such as traditional jazz, jazz improvisation, and rock.

## 55106 - Instrumental Ensembles

Instrumental Ensemble courses are intended to develop students' technique for playing brass, woodwind, percussion, and/or string instruments in small ensemble groups. Instrumental Ensemble courses cover one or more instrumental ensemble or band literature styles.

## 55110-Chorus

Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55111 - Vocal Ensembles

Vocal Ensemble courses are intended to develop vocal techniques and the ability to sing parts in small ensemble or madrigal groups. Course goals may include the development of solo or improvisational singing ability and may emphasize one or several ensemble literature styles.

## 55116 - Music History/Appreciation

Music History/Appreciation courses survey different musical styles and periods with the intent of increasing students' enjoyment of musical styles and/or developing their artistic or technical judgment. Music History/Appreciation courses may also focus on developing an understanding of a particular style or period.

## 55118 - Music Appreciation

Similar in nature to Music History/Appreciation courses, Music Appreciation courses focus specifically on students' appreciation of music. They are designed to help students explore the world of music and to develop an understanding of the importance of music in their lives.

## 55136 - Music (grade 6)

Music (grade 6) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 6.

## 55137 - Music (grade 7)

Music (grade 7) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 7 .

## 55138 - Music (grade 8)

Music (grade 8) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 8.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55139 - Music

This course represents Music courses that are not grade differentiated; and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Music, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 55147 - Music-Independent Study

Music-Independent Study courses, often conducted with instructors, professional musicians, or voice coaches as mentors, enable students to explore music-related topics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## 55149 - Music-Other

## 55151-Art Appreciation

Art Appreciation courses introduce students to the many forms of art and help them form an aesthetic framework through which they can judge and critique art of various ages and cultures. These courses also explore the place and significance of art in our society.

## 55152 - Art History

Art History courses introduce students to significant works of art, artists, and artistic movements that have shaped the art world and have influenced or reflected periods of history. These courses often emphasize the evolution of art forms, techniques, symbols, and themes.

## 55154 - Creative Art-Comprehensive

Creative Art-Comprehensive courses provide to students the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55155 - Creative Art—Drawing/Painting

Creative Art—Drawing/Painting courses cover the same topics as Creative Art-Comprehensive courses, but focus on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

## 55156 - Creative Art-Drawing

Creative Art—Drawing courses cover the same topics as Creative Art—Drawing/Painting, but focus on drawing. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, and so on), but some courses may focus on only one medium.

## 55157 - Creative Art-Painting

Creative Art-Painting courses cover the same topics as Creative Art—Drawing/Painting, but focus on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

## 55158 - Creative Art-Sculpture

Creative Art-Sculpture courses cover the same topics as Creative Art-Comprehensive courses, but focus on creating three-dimensional works. Students typically work with several media (such as clay, ceramics, wood, metals, textiles, and so on), but some courses may focus on only one medium.

## 55159 - Ceramics/Pottery

Ceramics/Pottery courses cover the same topics as Creative Art-Comprehensive courses, but focus on creating three-dimensional works out of clay and ceramic material. Particular attention is paid to the characteristics of the raw materials, their transformation under heat, and the various methods used to create and finish objects.

## 55165 - Crafts

Crafts courses teach the same lessons as Creative Art-Comprehensive courses, but do so with a focus on crafts. These courses may survey a wide range of crafts, or they may focus on only one type of craft; possibilities include calligraphy, quilting, silk screening, cake decorating, tole painting, mask making, knitting, crocheting, paper making, and so on.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55167 - Photography

Photography courses expose students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.

## 55168 - Film/Videotape

Film/Videotape courses expose students to the materials, processes, and artistic techniques involved in film, television, or videotape. Students learn about the operation of a camera, lighting techniques, camera angles, depth of field, composition, storyboarding, sound capture, and editing techniques. Course topics may also include production values and various styles of filmmaking (documentary, storytelling, news magazines, animation, and so on). As students advance, the instruction becomes more refined, and students are encouraged to develop their own artistic style. Students may also study major filmmakers, cinematographers, and their films and learn about film, television, and video and their relationships to drama and theater.

## 55186 - Art (grade 6)

Art (grade 6) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 6.

## 55187 - Art (grade 7)

Art (grade 7) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 7.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55188 - Art (grade 8)

Art (grade 8) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 8.

## 55189 - Art

This course represents Art courses that are not grade differentiated; and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades, or when the content descriptions above do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 55197 - Visual Art—Independent Study

Visual Art—Independent Study courses, often conducted with instructors or professional artists as mentors, enable students to explore a particular art form or topic. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.

## 55199 - Visual Arts-Other

## 55201 - Integrated Fine Arts

Integrated Fine Arts courses explore self-expression across the fine arts: any subset or all of the visual arts, music, drama, theater, and literature may be included in the curriculum for these courses. Students both study and critique the works of others and participate in or produce art themselves. These courses often include comparative study of various art forms over time-i.e., the interrelationship of literature, music, and the performing arts of a particular time period and culture.

## 55202 - IB Arts, Middle Years Program

International Baccalaureate (IB) Arts, Middle Years Program courses include visual and performing arts and organize learning around the creative cycle. These courses bring students into contact with art forms and aesthetic values of several cultures and help students master artistic techniques.

## State Course Codes

## Middle School/Jr. High

## Subject Area 55: Fine and Performing Arts (ms/jr. high)

## 55997 - Fine and Performing Arts-Independent Study

Fine and Performing Arts-Independent Study courses, often conducted with instructors or professional artists as mentors, enable students to explore a particular art form. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic of in greater detail, or to develop more advanced skills.

## 55999 - Fine and Performing Arts-Other

Subject Area 56: World Language and Literature (ms/jr. high)

## 56001 - Spanish (Middle)

Spanish (Middle)

56002 - French (Middle)
French (Middle)

56003 - German (Middle)
German (Middle)

56004 - Latin (Middle)
Latin (Middle)

56005 - Chinese (Middle)
Chinese (Middle)

56006 - Japanese (Middle)
Japanese (Middle)

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56007 - Russian (Middle) <br> Russian (Middle)

## 56008 - American Sign Language (Middle)

American Sign Language (Middle)

## 56009 - Other Foreign Language (Middle)

Other Foreign Language (Middle)

## 56010 - Foreign Language Exploration (Middle)

Foreign Language Exploration (Middle)

## 56036 - Foreign Language (grade 6)

oreign Language (grade 6) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Cultural and/or historical aspects of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 6.

## 56037 - Foreign Language (grade 7)

Foreign Language (grade 7) courses emphasize the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Grammar and syntax, vocabulary, and applicable accents typically are studied so that students have the knowledge and ability to express themselves and understand others. Students usually explore the customs, history, and art forms of the people(s) whose language is being studied. Specific content depends upon state standards for grade 7.

## 56038 - Foreign Language (grade 8)

Foreign Language (grade 8) courses emphasize the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Grammar and syntax, vocabulary, and applicable accents typically are studied so that students have the knowledge and ability to express themselves and understand others. Students usually explore the customs, history, and art forms of the people(s) whose language is being studied. Specific content depends upon state standards for grade 8.

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56039 - Foreign Language

This course represents Foreign Language courses that are not grade differentiated; and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades, or when the content descriptions above do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 56100 - Spanish

Spanish courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Spanish language and students' knowledge of Spanish-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

## 56101 - IB Language B (Spanish), Middle Years Program

International Baccalaureate (IB) Language B (Spanish), Middle Years Program courses enable students to gain competence in modern Spanish; these courses also encourage respect for and understanding of other languages and cultures.

## 56120 - French

French courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the French language and students' knowledge of French-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s).

## 56121 - IB Language B (French), Middle Years Program

International Baccalaureate (IB) Language B (French), Middle Years Program courses enable students to gain competence in modern French and encourage respect for and understanding of other languages and cultures.

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56140 - Italian

Italian courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Italian language and students' knowledge of Italian-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Italian-speaking people to deepen their understanding of the culture(s).

## 56141 - IB Language B (Italian), Middle Years Program

Language B (Italian), Middle Years Program courses enable students to gain competence in modern Italian and encourage respect for and understanding of other languages and cultures

## 56160 - Portuguese

Portuguese courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Portuguese language and students' knowledge of Portuguese-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Portuguese-speaking people to deepen their understanding of the culture(s).

## 56161 - IB Language B (Portuguese), Middle Years Program

International Baccalaureate (IB) Language B (Portuguese), Middle Years Program courses enable students to gain competence in modern Portuguese and encourage respect for and understanding of other languages and cultures.

## 56200 - German

German courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the German language and students' knowledge of German-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of German-speaking people to deepen their understanding of the culture(s).

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56201 - IB Language B (German), Middle Years Program

International Baccalaureate (IB) Language B (German), Middle Years Program courses enable students to gain competence in modern German and encourage respect for and understanding of other languages and cultures.

## 56280 - Greek

Greek courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Greek language and students' knowledge of Greek-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Greek-speaking people to deepen their understanding of the culture(s).

## 56281 - IB Language B (Greek), Middle Years Program

This course allows students to gain competence in modern Greek and encourages respect for and understanding of other languages and cultures.

## 56300 - Latin

Latin courses introduce and then extend students' skills in reading and writing Latin language and students' knowledge of Roman life and culture. Initial courses emphasize structures, forms, grammar and syntax, and vocabulary, so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand original Latin texts), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Rome to deepen their understanding of the culture(s).

## 56320 - Classical Greek

Classical Greek courses introduce and then extend students' skills in reading and writing classical Greek language and students' knowledge of Grecian life and culture. Initial courses emphasize structures, forms, grammar and syntax, and vocabulary, so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand original Greek texts), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of ancient Greece to deepen their understanding of the culture(s).

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56400 - Chinese

inese courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Chinese language and students' knowledge of Chinese-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Chinese-speaking people to deepen their understanding of the culture(s).

## 56401 - IB Language B (Chinese), Middle Years Program

International Baccalaureate (IB) Language B (Chinese), Middle Years Program courses enable students to gain competence in modern Chinese and encourage respect for and understanding of other languages and cultures.

## 56420 - Japanese

Japanese courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Japanese language and students' knowledge of Japanese-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Japanese-speaking people to deepen their understanding of the culture(s).

## 56421 - IB Language B (Japanese), Middle Years Program

International Baccalaureate (IB) Language B (Japanese), Middle Years Program courses enable students to gain competence in modern Japanese and encourage respect for and understanding of other languages and cultures.

## 56440 - Korean

Korean courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Korean language and students' knowledge of Korean-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Korean-speaking people to deepen their understanding of the culture(s).

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56441 - IB Language B (Korean), Middle Years Program

International Baccalaureate (IB) Language B (Korean), Middle Years Program courses enable students to gain competence in modern Korean and encourage respect for and understanding of other languages and cultures.

## 56500 - Vietnamese

Vietnamese courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Vietnamese language and students' knowledge of Vietnamese-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Vietnamese-speaking people to deepen their understanding of the culture(s).

## 56501 - IB Language B (Vietnamese), Middle Years Program

International Baccalaureate (IB) Language B (Vietnamese), Middle Years Program courses enable students to gain competence in modern Vietnamese and encourage respect for and understanding of other languages and cultures.

## 56520 - Filipino

Filipino courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Filipino language and students' knowledge of Filipino-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Filipino-speaking people to deepen their understanding of the culture(s).

## 56521 - IB Language B (Filipino), Middle Years Program

IB (International Baccalaureate) Language B (Filipino), Middle Years Program courses enable students to gain competence in modern Filipino and encourage respect for and understanding of other languages and cultures.

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56600 - Russian

Russian courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Russian language and students' knowledge of Russian-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Russian-speaking people to deepen their understanding of the culture(s).

## 56601 - IB Language B (Russian), Middle Years Program

International Baccalaureate (IB) Language B (Russian), Middle Years Program courses allow students to gain competence in modern Russian and encourage respect for and understanding of other languages and cultures.

## 56700 - Hebrew

Hebrew courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Hebrew language and students' knowledge of Hebrew-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Hebrew-speaking people to deepen their understanding of the culture(s).

## 56701 - IB Language B (Hebrew), Middle Years Program

International Baccalaureate (IB) Language B (Hebrew), Middle Years Program courses enable students to gain competence in modern Hebrew and encourage respect for and understanding of other languages and cultures.

## 56720 - Arabic

Arabic courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Arabic language and students' knowledge of Arabic-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Arabic-speaking people to deepen their understanding of the culture(s).

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56721 - IB Language B (Arabic), Middle Years Program

International Baccalaureate (IB) Language B (Arabic), Middle Years Program courses allow students to gain competence in modern Arabic and encourage respect for and understanding of other languages and cultures.

## 56760 - Swahili

Swahili courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Swahili language and students' knowledge of Swahili-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Swahili-speaking people to deepen their understanding of the culture(s).

## 56761 - IB Language B (Swahili), Middle Years Program

International Baccalaureate (IB) Language B (Swahili), Middle Years Program courses allow students to gain competence in modern Swahili and encourage respect for and understanding of other languages and cultures.

## 56800 - American Sign Language

American Sign Language courses introduce and then extend students' ability to communicate with deaf persons through finger spelling, signed words, and gestures. Initial courses emphasize vocabulary and physical expression so that students have an understanding of the language and its rules and conventions. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others), seeking to enable students to express more complex concepts, and to do so more easily. Course topics may include the culture of and issues facing deaf people.

## 56801 - IB Language B (American Sign Language), Middle Years Program

International Baccalaureate (IB) Language B (American Sign Language), Middle Years Program courses allow students to gain competence in modern American Sign Language and encourage respect for and understanding of other languages and cultures.

## State Course Codes

## Middle School/Jr. High

## Subject Area 56: World Language and Literature (ms/jr. high)

## 56820 - American Indian Language

American Indian Language courses introduce and then extend students' skills in speaking, reading, writing, and comprehending an American Indian language (e.g., Navajo, Cherokee, and Kree) and students' knowledge of Native American cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Native American people to deepen their understanding of the culture (s).

## 56821 - IB Language B (American Indian Language), Middle Years Program

International Baccalaureate (IB) Language B (American Indian Language), Middle Years Program courses allow students to gain competence in a modern American Indian Language and encourage respect for and understanding of other languages and cultures.

## 56997 - Foreign Language and Literature-Independent Study

Foreign Language and Literature-Independent Study courses, often conducted with instructors as mentors, enable students to explore foreign language-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular language, to explore a topic in greater detail, or to develop more advanced skills.

## 56999 - Foreign Language and Literature-Other

## Subject Area 57: Religious Education and Theology (ms/jr. high)

## 57001 - Religious Education and Theology (Middle)

Religious Education and Theology (Middle)

## 57005 - Scriptures

Scriptures courses emphasize understanding and interpreting the sacred writings of a faith (such as the Bible, Torah, Koran, Book of Mormon, and so on) from the standpoint of a religious faith. Course objectives are designed so that students may comprehend the theological, doctrinal, and ethical messages contained within religious scriptures.

## State Course Codes

## Middle School/Jr. High

## Subject Area 57: Religious Education and Theology (ms/jr. high)

## 57006 - Old Testament

Old Testament courses emphasize understanding and interpreting the sacred writings of the Old Testament from the standpoint of a religious faith and may focus on one or several books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages, but may also include critique and commentary.

## 57007 - New Testament

New Testament courses emphasize understanding and interpreting the sacred writings of the New Testament from the standpoint of a religious faith and may focus on one or several religious books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages, but may also include critique and commentary.

## 57008 - Bible History

Bible History courses treat the Bible as a historical document and provide an overview of significant biblical events. The content usually includes geography; the relationship among cultures, belief systems, and the events chronicled in the Bible; and early Jewish or Christian Church history.

## 57015 - Faith and Lifestyle

Faith and Lifestyle courses focus on the development of young adults from puberty to adulthood, approached from the perspective of a faith or church. In these courses, the religion's values and traditions provide an underpinning for examining such topics as identity, independence, sexuality, employment, and leisure. Typically, Faith and Lifestyle courses include discussions about adult roles-single life, marriage, religious life, and ordained ministry.

## 57997-Religious Education and Theology-Independent Study

Religious Education and Theology-Independent Study courses, often conducted with instructors, members of the clergy, or religious leaders as mentors, enable students to explore topics of interest related to religion or theology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular religion, to explore a topic in greater detail, or to develop more advanced skills.

## 57999 - Religious Education and Theology—Other

## Subject Area 58: Physical, Health, and Safety Education (ms/jr. high)

## State Course Codes

## Middle School/Jr. High

Subject Area 58: Physical, Health, and Safety Education (ms/jr. high)

## 58001 - Physical Education (Middle) <br> Physical Education (Middle)

## 58002 - Health (Middle)

Health (Middle)

## 58003 - Individual/Dual Sports

Individual/Dual Sports courses provide to students the knowledge, experience, and opportunity to develop skills in more than one individual or dual sport (such as tennis, golf, badminton, jogging/running, racquetball, and so on).

## 58004 - Recreation Sports

Recreation sports courses provide to students the knowledge, experience, and opportunity to develop skills in more than one recreational sport or outdoor pursuit (such as adventure activities, croquet, Frisbee, wall climbing, bocce ball, fishing, hiking, cycling, and so on).

## 58005 - Fitness/Conditioning Activities

Fitness/Conditioning Activities courses emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness.

## 58007 - Adapted Physical Education

These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.

## 58008 - Gymnastics

Gymnastics courses are designed to help students develop knowledge and skills in gymnastics, stunts, and tumbling while emphasizing safety. Floor gymnastics may be supplemented by the use of gymnastic equipment such as the balance beam, uneven bars, parallel bars, rings, and so on. Gymnastic courses may include other components such as the history of gymnastics and conditioning.

## 58010 - Aquatics/Water Sports

Aquatic Sports courses help students develop skills useful or necessary in an aquatic environment. They may focus on swimming and competitive strokes, such as freestyle, breaststroke, butterfly, and so on or may involve team-oriented water sports, such as water polo and relay swimming. These courses may also include (or concentrate exclusively on) diving and/or lifesaving skills.

## State Course Codes

## Middle School/Jr. High

## Subject Area 58: Physical, Health, and Safety Education (ms/jr. high)

## 58013 - Specific Sports Activities

Courses in Specific Sports Activities help students develop knowledge, experience, and skills in a single sport or activity (such as basketball, volleyball, track and field, and equestrian events) other than those coded within this section. (Dance is included under the Fine and Performing Arts subject area.)

## 58014 - Physical Education Equivalent

Physical Education Equivalent courses award physical education credit for other at-school activities, such as marching band or cheerleading. (Dance is included under the Fine and Performing Arts subject area.)

## 58015 - Off-Campus Sports

Off-Campus Sports courses award physical education credit for off-campus sports activities (e.g., swimming, weight training, or any individual or team sports) taken at a community center or other location off the school campus.

## 58016 - Lifetime Fitness Education

Lifetime Fitness Education courses emphasize acquiring knowledge and skills regarding lifetime physical fitness; content may include related topics such as nutrition, stress management, and consumer issues. Students may develop and implement a personal fitness plan.

## 58036 - Physical Education (grade 6)

Physical Education (grade 6) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 6 .

## 58037 - Physical Education (grade 7)

Physical Education (grade 7) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 7.

## Middle School/Jr. High

## Subject Area 58: Physical, Health, and Safety Education (ms/jr. high)

## 58038 - Physical Education (grade 8)

Physical Education (grade 8) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 8.

## 58039 - Physical Education

This course represents Physical Education courses that are not grade differentiated and it should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades, or when the content descriptions above do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

## 58040 - IB Physical Education, Middle Years Program

International Baccalaureate (IB) Physical Education, Middle Years Program courses aim to facilitate physical, intellectual, emotional, and social development, and to cultivate a healthy and active lifestyle. These courses include activities that are enjoyable and contribute to healthy living. They help students develop motor skills necessary to participate in a variety of physical activities, and to learn about the nature of physical fitness.

## 58047 - Physical Education—Independent Study

Courses in Physical Education-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to physical education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular sport or activity, to explore a topic in greater detail, or to develop more advanced skills.

## 58049 - Physical Education-Other

## 58051 - Health Education

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

## State Course Codes

## Middle School/Jr. High

Subject Area 58: Physical, Health, and Safety Education (ms/jr. high)

## 58052 - Health and Fitness

Health and Fitness courses combine the topics of Health Education courses (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

## 58057 - Health and Life Management

Health and Life Management courses focus as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decisionmaking, communication, interpersonal, and coping skills and strategies.

## 58058 - Substance Abuse Prevention

Substance Abuse Prevention courses focus specifically on the health risks of drugs, alcohol, and tobacco. These courses provide information on the negative consequences of these products and teach students coping strategies to resist the influences (such as peers and media images) that may entice them to use these substances. Students may also explore the community resources available to them.

## 58097 - Health Education-Independent Study

Courses in Health Education-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to health and health education. Independent Study courses may provide the opportunity for students to expand expertise in a particular application, to explore a topic of special interest in greater detail, or to develop more advanced skills.

## 58997 - Physical, Health, and Safety Education-Independent Study

Courses in Physical, Health, and Safety Education-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to physical, health, and safety education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced physical, health, and/or safety skills.

## 58999 - Physical, Health, and Safety Education-Other

## State Course Codes

## Middle School/Jr. High

## Subject Area 59: Military Science (ms/jr. high)

## 59001 - Military Science (Middle)

Military Science (Middle)

## Subject Area 60: Computer and Information Science (ms/jr. high)

## 60001 - Computers (Middle)

Computers (Middle)

## 60002 - Computing Systems

Computing Systems courses offer a broad exploration of the use of computers in a variety of fields. These courses have a considerable range of content, but typically include the introduction of robotics and control systems, computer-assisted design, computer-aided manufacturing systems, and other computer technologies as they relate to industry applications.

## 60003 - Computer and Information Technology

Computer and Information Technology courses teach students to operate and use computer and information technology, emphasizing their role as tools to communicate more effectively, conduct research more efficiently, and increase productivity. Course content includes the legal and ethical issues involved with computer technology and use.

## 60004 - Computer Applications

In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.

## 60008 - Particular Topics in Computer Literacy

In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.

## State Course Codes

## Middle School/Jr. High

## Subject Area 60: Computer and Information Science (ms/jr. high)

## 60010 - Computer Literacy

Computer Literacy courses provide to students the knowledge and ability to use computers and technology efficiently. Typically, course content includes exposure to word-processing, spreadsheet, and presentation applications, but also may include the various uses of computers in modern society. Specific course content aligns with state standards to promote students' technological literacy.

## 60049 - Computer Literacy-Other

## 60201 - Web Page Design

Web Page Design courses teach students how to design websites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages-such as Extensible Hypertext Markup, JAVA Script, Dynamic HTML, and Document Object Model-to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.

## 60202 - Computer Graphics

Computer Graphics courses provide the opportunity for students to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.

## 60203 - Interactive Media

Interactive Media courses provide to students the knowledge and skills to create, design, and produce interactive media products and services. The courses may emphasize the development of digitally generated and/or computer-enhanced media. Course topics may include 3D animation, graphic media, web development, and virtual reality.

## 60247 - Media Technology—Independent Study

Media Technology-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to media technology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

## Middle School/Jr. High

## Subject Area 60: Computer and Information Science (ms/jr. high)

## 60997 - Computer and Information Sciences-Independent Study

Computer and Information Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore computer-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 60999 - Computer and Information Sciences-Other

## Subject Area 61: Communications and Audio/Visual Technology (ms/jr. high)

## 61001 - Journalism (Middle)

Journalism (Middle)

## 61002 - Multimedia (Middle)

Multimedia (Middle)

## 61003 - Newspaper (Middle)

Newspaper (Middle)

## 61004 - Yearbook (Middle)

Yearbook (Middle)

## 61047 - Communication-Independent Study

Communication-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to mass communications. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

61049 - Communication -Other

## State Course Codes

## Middle School/Jr. High

## Subject Area 61: Communications and Audio/Visual Technology (ms/jr. high)

## 61051 - Audio/Visual Production

Audio/Visual Production courses provide to students the knowledge and skills necessary for television, video, film, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within production courses. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be included.

## 61052 - Commercial Photography

Commercial Photography courses provide instruction in the use of cameras and laboratory filmprocessing techniques. Topics covered in the course include composition and color dynamics; contact printing; enlarging; developing film; use of camera meters, air brushes, and other photographic equipment; portrait, commercial, and industrial photography; processing microfilm; and preparing copy for printing or for graphic-arts processing.

## 61053 - Photographic Laboratory and Darkroom

Photographic Laboratory and Darkroom courses prepare students to develop and print still or motion picture film. Topics covered in the course may include controlling resultant prints; touching up negatives; and finishing, coloring, restoring, and copying prints.

## 61054 - Photo Imaging

Photo Imaging courses provide the opportunity for students to effectively communicate ideas and information via digital, film, still and video photography. Topics covered typically include composition, layout, lighting and supplies. More advanced courses may include instruction in specialized camera and equipment maintenance, application to commercial and industrial need and photography business operations.

## 61055 - Video

Video courses enable students to explore video communications, incorporating both the technical and artistic aspects of video media. Topics covered in the course include the use of video equipment and techniques, and students typically create a video presentation. Advanced course topics may include creating various forms of film media including silent film; sport and music video; and self portrait video.

## 61056 - Particular Topics in Audio/Video Technology and Film

These courses examine specific topics in audio and video technology and film other than those already described.

## State Course Codes

## Middle School/Jr. High

## Subject Area 61: Communications and Audio/Visual Technology (ms/jr. high)

## 61099 - Audio/Video Technology and Film—Other

## 61101 - Journalism

Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography and photojournalism skills may be included.

## 61102 - Photojournalism

Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide the opportunity for students to improve their photo composition and film development skills, and to apply their art to journalistic endeavors.

## 61103 - Broadcasting Technology

Broadcasting Technology courses provide to students the knowledge and skills to produce television broadcast programs. Typically, students prepare and produce short programs, learning the technical aspects of the operation and how to evaluate programming and assess audience reaction and impact.

## 61104 - Publication Production

Publication Production courses provide to students the knowledge and skills necessary to produce the school newspaper, yearbook, literary magazine, or other printed publication. Students may gain experience in several components (writing, editing, layout, production, and so on) or may focus on a single aspect while producing the publication.

## 61105 - Particular Topics in Journalism and Broadcasting

These courses examine specific topics in journalism and broadcasting other than those already described.

## 61147 - Journalism and Broadcasting—Independent Study

Journalism and Broadcasting—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to journalism, broadcasting, and mass media. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

## Middle School/Jr. High

## Subject Area 61: Communications and Audio/Visual Technology (ms/jr. high)

## 61149 - Journalism and Broadcasting-Other

## 61151 - Digital Media Technology

These courses are designed to give students the skills necessary to support and enhance their learning about digital medical technology. Topics covered in the course may include internet research, copyright laws, web-publishing, use of digital imagery, electronic forums, newsgroups, mailing lists, presentation tools, and project planning.

## 61152 - Desktop Publishing

Desktop Publishing courses integrate the knowledge and skills learning in word processing with the concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.

## 61159 - Particular Topics in Printing Technology and Production

These courses examine specific topics in printing production, such as bookbinding or silkscreen printmaking, other than those already described.

## 61197 - Printing Technology-Independent Study

Printing Technology-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to the print medium. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 61199 - Printing Technology-Other

## 61997 - Communication and Audio/Video Technology—Independent Study

Communication and Audio/Video Technology—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to mass communication and its technologies. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 61999 - Communication and Audio/Video Technology-Other

## Middle School/Jr. High

## Subject Area 61: Communications and Audio/Visual Technology (ms/jr. high)

## Subject Area 62: Business and Marketing (ms/jr. high)

## 62001 - Business (Middle)

Business (Middle)

## 62005 - Keyboarding

Keyboarding courses provide an introduction to the keyboard (letters, numbers, and symbols), basic machine operation, and proper keystroke technique. As students progress, they improve their speed and accuracy and produce increasingly complex documents. Such courses help students develop keyboard proficiency, document production skills, and problem-solving skills.

## 62006 - Word Processing

Word Processing courses introduce students to automated document production using one or more software packages. These courses may introduce keyboarding techniques or may require prior experience; in either case, speed and accuracy are emphasized. A parallel focus is placed on the use of software commands and functions to create, edit, format, and manipulate documents, capitalizing on the power offered by word-processing software programs. These courses may also cover file and disk management and other computer-related skills.

## 62008 - Particular Topics in Administration

These courses examine specific topics related to business administration not otherwise described, such as a focus on dictation or office machinery, rather than provide a general study of office administration principles and techniques.

## 62047 - Administration-Independent Study

Administration-Independent Study courses, often conducted with instructors as mentors, enable students to explore business administration-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 62051 - Introductory Business

Introductory Business courses survey an array of topics and concepts related to the field of business. These courses introduce business concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually provide a brief overview of the American economic system and corporate organization. Introductory Business courses may also expose students to the varied opportunities in secretarial, accounting, management, and related fields.

## State Course Codes

## Middle School/Jr. High

## Subject Area 62: Business and Marketing (ms/jr. high)

## 62097 - Management-Independent Study

Management-Independent Study courses, often conducted with instructors as mentors, enable students to explore business management-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 62101 - Banking and Finance

Banking and Finance courses provide an overview of the American monetary and banking system as well as types of financial institutions and the services and products that they offer. Course content may include government regulations; checking, savings, and money market accounts; loans; investments; and negotiable instruments.

## 62147 - Finance-Independent Study

Finance-Independent Study courses, often conducted with instructors as mentors, enable students to explore business finance-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 62151 - Marketing Career Exploration

Marketing Career Exploration courses expose students to the opportunities available in retail, wholesale, advertising, and other occupational fields using marketing principles.

## 62152 - Marketing-Comprehension

Marketing-Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include market research, the purchasing process, distribution systems, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship.

## 62197 - Marketing-Independent Study

Marketing-Independent Study courses, often conducted with instructors as mentors, enable students to explore marketing-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## State Course Codes

## Middle School/Jr. High

## Subject Area 62: Business and Marketing (ms/jr. high)

## 62997 - Business and Marketing-Independent Study

Business and Marketing-Independent Study courses, often conducted with instructors or professionals as mentors, enable students to explore business or marketing-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 62999 - Business and Marketing-Other

## Subject Area 63: Manufacturing (ms/jr. high)

## 63001 - Exploration of Technology Labs (Middle)

Exploration of Technology Labs (Middle)

63002 - Industrial Technology (Middle)
Industrial Technology (Middle)

## 63003 - Production Technology (Middle)

Production Technology (Middle)

## 63004 - Technology Education (Middle)

Technology Education (Middle)

## 63005 - Communication Technology (Middle)

Communication Technology (Middle)

## 63052 - Material and Processes

Materials and Processes courses expose students to the tools, machines, and processes that may be encountered in manufacturing-related occupations. In particular, these courses emphasize the analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials.

## State Course Codes

## Middle School/Jr. High

## Subject Area 63: Manufacturing (ms/jr. high)

## 63997 - Manufacturing-Independent Study

Manufacturing-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to manufacturing. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

## 63999 - Manufacturing-Other

## Subject Area 64: Health Care Sciences (ms/jr. high)

## 64001 - Health Care Services (Middle)

Health Care Services (Middle)

## 64002 - Health Care Occupations-Comprehensive

Health Care Occupations-Comprehensive courses provide an orientation to the health care industry and help refine students' health care-related knowledge and skills. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

## 64997 - Health Care Sciences-Independent Study

Health Care Sciences-Independent Study courses, often conducted with instructors as mentors, enable students to explore health-related topics of interest. Independent Study courses may provide an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.

64999 - Health Care Sciences-Other

## State Course Codes

## Middle School/Jr. High

Subject Area 65: Public, Protective, and Government Service (ms/jr. high)

## 65001 - Public, Protective, and Government Services (Middle)

Public, Protective, and Government Services (Middle)

## 65997 - Public, Protective, and Government Service-Independent Study

Public, Protective, and Government Service-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to public, protective, and government service. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

65999 - Public, Protective, and Government Services-Other

Subject Area 66: Hospitality and Tourism (ms/jr. high)

## 66001 - Hospitality and Tourism (Middle)

Hospitality and Tourism (Middle)

## 66997 - Hospitality and Tourism—Independent Study

Hospitality and Tourism-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the hospitality and tourism industry. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

66999 - Hospitality and Tourism-Other

## State Course Codes

## Middle School/Jr. High

## Subject Area 67: Architecture and Construction (ms/jr. high)

## 67001 - Architecture and Construction (Middle)

Architecture and Construction (Middle)

## 67002 - Construction-Comprehensive

Construction-Comprehensive courses provide the basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide experiences and information (typically including career opportunities and training requirements) regarding constructionrelated occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.

## 67997 - Architecture and Construction-Independent Study

Architecture and Construction-Independent Study courses, often conducted with instructors as mentors, enable students to explore architecture and construction-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 67999 - Architecture and Construction-Other

| Subject Area 68: Agriculture, Food, and Natural Resources (ms/jr. high) |
| :--- |
| 68001 - Agriculture (Middle) |
| Agriculture (Middle) |
| 68002 - Agriculture-Comprehensive |
| Agriculture-Comprehensive courses cover a wide range of agricultural topics, including plant and |
| animal science, production, and processing; agricultural mechanics, including tool and machine |
| operation and repar; construction and repair of farm structures; business operations and management; |
| and the careers available in the agricultural industry. Courses may also include topics such as chemical |
| and soil science, ecology, agricultural marketing, and veterinary science. |

## State Course Codes

## Middle School/Jr. High

## Subject Area 68: Agriculture, Food, and Natural Resources (ms/jr. high)

## 68003 - Agriculture and Natural Resources-Comprehensive

Agriculture and Natural Resources-Comprehensive courses cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; agricultural construction; business operations and management; and the careers available in the agricultural/natural resources industry. Courses may also include topics such as chemical and soil science, forestry, agricultural marketing, and veterinary science.

## 68997 - Agriculture, Food, and Natural Resources-Independent Study

Courses in Agriculture, Food, and Natural Resources-Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to agriculture, food, and natural resources. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

68999 - Agriculture, Food, and Natural Resources-Other

## Subject Area 69: Human Services (ms/jr. high)

## 69001 - Human Services (Middle)

Human Services (Middle)

## 69997 - Human Services-Independent Study

Human Services-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to providing human services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

69999 - Human Services-Other

## State Course Codes

## Middle School/Jr. High

## Subject Area 70: Transportation, Distribution and Logistics (ms/jr. high)

70001 - Power, Energy, Transportation Technology (Middle)<br>Power, Energy, Transportation Technology (Middle)

## 70997 - Transportation, Distribution, and Logistics-Independent Study

Transportation, Distribution, and Logistics-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to transportation, distribution, and logistics. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 70999 - Transportation, Distribution, and Logistics-Other

## Subject Area 71: Engineering and Technology (ms/jr. high)

71001 - Engineering and Technology (Middle)
Engineering and Technology (Middle)

## 71002 - Engineering Applications

Engineering Applications courses provide an overview of the practical uses of a variety of engineering applications. Topics covered usually include hydraulics, pneumatics, computer interfacing, robotics, computer-aided design, computer numerical control, and electronics.

## 71003 - Engineering Technology

Engineering Technology courses provide an opportunity to focus on one or more areas of industrial technology. Students apply technological processes to solve real engineering problems; develop the knowledge and skills to design, modify, use, and apply technology; and may also design and build prototypes and working models. Topics covered in the course include the nature of technology, use of technology, and design processes.

## State Course Codes

## Middle School/Jr. High

## Subject Area 71: Engineering and Technology (ms/jr. high)

## 71004 - Principles of Engineering

Principles of Engineering courses provide an understanding of the engineering/technology field. Students typically explore how engineers use various technology systems and manufacturing processes to solve problems; they may also gain an appreciation of the social and political consequences of technological change.

## 71005 - Engineering-Comprehensive

Engineering-Comprehensive courses introduce students to and expand their knowledge of major engineering concepts such as modeling, systems, design, optimization, technology-society interaction, and ethics. Particular topics often include applied engineering graphic systems, communication of technical information, engineering design principles, material science, research and development processes, and manufacturing techniques and systems. The courses may also cover the opportunities and challenges in various branches of engineering.

## 71006 - Engineering Design

Engineering Design courses offer students experience in solving problems by applying a design development process. Often using solid modeling computer design software, students develop, analyze, and test product solutions models and communicate the features of those models.

## 71009 - Robotics

Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

## 71047 - Engineering-Independent Study

Engineering-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to engineering. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 71049 - Engineering-Other

## 71051 - Technological Literacy

Technological Literacy courses expose students to the communication, transportation, energy, production, biotechnology, and integrated technology systems and processes that affect their lives. The study of these processes enables students to better understand technological systems and their applications and uses.

## Middle School/Jr. High

## Subject Area 71: Engineering and Technology (ms/jr. high)

## 71052 - IB Technology, Middle Years Program

International Baccalaureate (IB) Technology, Middle Years Program courses are essentially concerned with solving problems, and they encourage students to investigate, design, plan, create, and evaluate. Content is balanced among systems, information, and materials, but the particular technology subjects may vary.

## 71097-Technology-Independent Study

Technology-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to technology systems and processes. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 71102 - Drafting-General

Drafting-General courses introduce students to the technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting-General courses use exercises from a variety of applications to provide to students the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.

## 71147 - Drafting-Independent Study

Drafting-Independent Study courses, often conducted with instructors as mentors, enable students to explore drafting-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 71997 - Engineering and Technology-Independent Study

Engineering and Technology-Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to engineering and/or technology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## 71999 - Engineering and Technology-Other

## State Course Codes

## Middle School/Jr. High

## Subject Area 72: Miscellaneous (ms/jr. high)

## 72001 - Miscellaneous (Middle) <br> Miscellaneous (Middle)

72002 - Family and Consumer Science (Middle)<br>Middle School level Family and Consumer Science

## 72003 - Study Skills

Study Skills courses prepare students for success in high school and/or postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note taking; vocabulary skills; and test-taking skills. The courses may also include exercises designed to generate organized, logical thinking and writing.

## 72004 - Dropout Prevention Program

Dropout Prevention Program courses vary widely, but typically are targeted at students who have been identified as being at risk of dropping out of or failing in school. Course content may include study skills and individual tutorials; career exploration or job readiness skills; communication skills; personal assessment and awareness activities; speaker presentations; and small-group seminars.

## 72005 - Tutorial

Tutorial courses provide the assistance students need to successfully complete their coursework. Students may receive help in one or several subjects.

## 72006 - Study Hall

Study Hall courses provide the opportunity and time for students to complete classroom assignments or school projects. Students typically work on their own, without the help of a tutor; however, they are supervised and usually remain in the classroom.

## 72007 - Advancement Via Individual Determination (AVID)

AVID courses encourage students to pursue college readiness (and eventual enrollment). Typically, the courses offer activities that enable students to learn organizational and study skills, enhance their critical thinking skills, receive academic assistance as necessary, and be motivated to aspire to college education.

## State Course Codes

## Middle School/Jr. High

## Subject Area 72: Miscellaneous (ms/jr. high)

## 72101 - Leadership

Leadership courses are designed to strengthen students' personal and group leadership skills. Typically intended for students involved in extracurricular activities (especially as officers of organizations or student governing bodies), these courses may cover such topics as public speaking, effective communication, human relations, parliamentary law and procedures, organization and management, and group dynamics.

## 72102 - School Orientation

School Orientation courses provide to students an introduction to the culture of their school so that they understand staff expectations and the school's structure and conventions. These courses may vary widely according to the philosophy, aims, and methods of each school.

## 72103 - School Governance

School Governance courses convene students as an entire student body to discuss common concerns, organize groups for action, make decisions, and solve school-related problems. Because of the nature of these courses, they are typically offered at private, alternative, or experimental schools.

## 72104 - Community Service

Community Service courses provide the opportunity for students to volunteer their time, energy, and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.

## 72105 - Values Clarification

Values Clarification courses enable students to explore individual and societal actions and implications in order to help them develop personal values and make decisions about their lives. Examples of discussion topics include philosophy and religion, world resource allocation, genetic engineering, environmental issues, and death-related issues (euthanasia, suicide, and abortion).

## 72106 - Seminar

Seminar courses vary widely, but typically offer to a small peer group the opportunity to investigate areas of interest. Course objectives may include improvement of research and investigatory skills, presentation skills, interpersonal skills, group process skills, and problem-solving and critical-thinking skills.

## Middle School/Jr. High

## Subject Area 72: Miscellaneous (ms/jr. high)

## 72151 - Career Exploration

Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests, with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.

## 72152 - Employability Skills

Employability Skills courses help students match their interests and aptitudes to career options, with a focus on using employment information effectively, acquiring and improving job-seeking and interview skills, composing job applications and resumes, and learning the skills needed to remain in and advance within the workplace. Course content may also include consumer education and personal money management topics.

## 72153 - Exploration of Career Pathways

This course will introduce middle school students to career exploration through the study of various career and technical education (CTE) topics and occupations. Students will complete a series of engaging, multidiscipline modules and conduct self-driven exploration aligned to their individual plans of study (IPS). Completion of interest inventory surveys will help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their future careers. Student experiences such as business tours and field trips, job shadowing, career mentorships, simulations and mock interviews are encouraged.

## 72201 - Family and Consumer Science-Comprehensive

Family and Consumer Science-Comprehensive courses are inclusive studies of knowledge and skills that are useful for the efficient and productive management of the home. Course topics typically include foods and nutrition; clothing; child development and care; housing design, decoration, and maintenance; consumer decisions and personal financial management; and interpersonal relationships.

## 72202 - Food and Nutrition

Food and Nutrition courses provide an understanding of food's role in society, instruction in how to plan and prepare meals, experience in the proper use of equipment and utensils, and background on the nutritional needs and requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on specific types of food preparation. Although these courses may present career opportunities in the food service industry, their emphasis is not career related.

# Middle School/Jr. High 

## Subject Area 72: Miscellaneous (ms/jr. high)

## 72203 - Food Science

Food Science courses offer opportunities for students to study the composition, structure, and properties of foods and the chemical changes that occur during the processing, storage, preparation, and consumption of food. These courses often explore the effects of various materials, microorganisms, and processes on food products through laboratory experiments.

## 72205 - Clothing/Sewing

Clothing/Sewing courses introduce students to and expand their knowledge of various aspects of wearing apparel, sewing, and fashion. These courses typically include wardrobe planning; selection, care, and repair of various materials; and construction of one or more garments. They may also include related topics, such as fashion design, fashion history, the social and psychological aspects of clothing, careers in the clothing industry, and craft sewing.

## 72206 - Life Skills

Life Skills courses provide information about a wide range of subjects to assist students in becoming wise consumers and productive adults. These courses often emphasize such topics as goal setting, decisionmaking, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.

## 72207-Self-Management

Self-Management courses introduce students to the skills and strategies helpful in becoming more focused, productive individuals. These courses typically emphasize goal setting; decisionmaking; management of time, energy, and stress; and identification of alternatives and coping strategies. They may also allow students to explore various career and lifestyle choices.

## 72208 - Family Living

Family Living courses emphasize building and maintaining healthy interpersonal relationships among family members and other members of society. These courses often emphasize (but are not limited to) topics such as social/dating practices, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, and the various stages of life. They may also cover topics related to individual self-development, career development, personal awareness, and preparation for the responsibilities of a family member and wage earner.

## 72209 - Personal Development

Similar to Family Living courses, but more focused on the individual, Personal Development courses emphasize strengthening self-esteem, recognizing and resisting negative peer pressure, and developing coping skills for dealing with changes within one's self and within others. These courses may also have a substance-abuse prevention component.

## Middle School/Jr. High

## Subject Area 72: Miscellaneous (ms/jr. high)

## 72210 - Consumer Economics/Personal Finance

Consumer Economics/Personal Finance courses provide an understanding of the concepts and principles involved in managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also provide an overview of the American economy.

## 72249 - Family and Consumer Science-Other

## 72250 - Exploratoty

Exploratory courses provide a brief introduction to a variety of topics, typically elective subject areas, often in the form of discrete units or modules. Students may choose to take courses later that allow them to pursue the topics introduced in more depth. Topics may vary widely and span multiple subject areas within one course.

## 72260 - IB Personal Project, Middle Years Program

International Baccalaureate (IB) Personal Project, Middle Years Program courses occur during the final year of the program and should result in a significant piece of work that is the product of the student's own initiative and creativity. Students choose their projects, which may take many forms, and complete them under the supervision of a teacher. Projects involve planning, research, and a high degree of personal reflection.

## 72295 - Miscellaneous--Aide

Miscellaneous-Aide courses offer the opportunity for students to assist instructors in preparing, organizing, or delivering course curricula or to assist other staff members in fulfilling their duties. Students may provide tutorial or instructional assistance to other students.

## 72299 - Miscellaneous-Other

## State Course Codes

## Elementary

## Subject Area 80: Elementary Self-Contained (elementary)

## 80001 - Single Grade Self-Contained Classroom (Elementary)

Single Grade Self-Contained Classroom where courses are not differentiated by subject area-that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses.

## 80002 - Multi-grade Self-Contained Classroom (Elementary)

Multi-grade Self-Contained Classroom where courses are not differentiated by subject area-that is, instances in which students are enrolled in a multi-grade specified grade and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses.

## Subject Area 81: English Language and Literature (elementary)

## 81001 - English Language Arts (Elementary)

English Language Arts (Elementary)

## 81002 - Reading (Elementary)

Reading (Elementary)

## 81003 - Language Arts (early childhood education)

Language Arts (early childhood education) courses develop students' readiness for language arts learning in reading, writing, listening, and speaking. Courses may include activities related to phonics, phonemic awareness, and vocabulary. Content is age appropriate and conforms to any existing state standards for early childhood education.

## 81004 - Language Arts (pre-kindergarten)

Language Arts (pre-kindergarten) courses develop students' readiness for language arts learning in reading, writing, listening, and speaking. Courses may include activities related to phonics, phonemic awareness, and vocabulary. Content is age appropriate and conforms to any existing state standards for pre-kindergarten education.

## 81005 - Language Arts (Kindergarten)

Language Arts (kindergarten) courses engage students in activities to develop their language arts skills (reading, writing, listening, and speaking). Course content may emphasize storytelling or reading aloud and evoking a written, oral, or pictorial response. Specific content depends upon state standards for kindergarten.

## State Course Codes

## Elementary

## Subject Area 81: English Language and Literature (elementary)

## 81010 - Language Arts (Grade 1)

Language Arts (grade 1) courses include the four aspects of language use: reading, writing, speaking, and listening. These courses may emphasize recognition of and response to various types of text, extension of vocabulary and writing skills, and the connection of language to the expression of ideas. Specific content depends upon state standards for grade 1.

## 81020 - Language Arts (Grade 2)

Language Arts (grade 2) courses include the four aspects of language use: reading, writing, speaking, and listening. These courses may build students' skills in independent reading and writing by increasing reading and writing fluency, vocabulary, and recognition of word and language patterns. They may also introduce or reinforce the rules of grammar. Specific content depends upon state standards for grade 2.

## 81030 - Language Arts (Grade 3)

Language Arts (grade 3) courses include the four aspects of language use: reading, writing, speaking, and listening. These courses may emphasize independent reading and writing in a variety of assignments. Some emphasis may also be placed on presentation or oral communication skills. Specific content depends upon state standards for grade 3.

## 81040 - Language Arts (Grade 4)

Language Arts (grade 4) courses include the four aspects of language use: reading, writing, speaking, and listening. These courses may emphasize independent reading and writing in a variety of assignments and require students to respond to different material in different ways. Grammar and usage of the English language may also be emphasized. Specific content depends upon state standards for grade 4.

## 81050 - Language Arts (Grade 5)

Language Arts (grade 5) courses include the four aspects of language use: reading, writing, speaking, and listening. These courses may extend students' skills in composition, writing for particular purposes or audiences, distinguishing meaning and literary functions in texts, and fluency in reading. Specific content depends upon state standards for grade 5.

## 81103 - Reading (early childhood education)

Reading (early childhood education) courses develop students' readiness for language arts, particularly focusing on reading skills. Courses may include activities related to phonics, phonemic awareness, and vocabulary. Content is age-appropriate and conforms to any existing state standards for early childhood education.

## State Course Codes

## Elementary

## Subject Area 81: English Language and Literature (elementary)

## 81104 - Reading (pre-kindergarten)

Reading (pre-kindergarten) courses develop students' readiness for language arts, particularly focusing on reading skills. Courses may include activities related to phonics, phonemic awareness, and vocabulary. Content is age-appropriate and conforms to any existing state standards for pre-kindergarten education.

## 81105 - Reading (Kindergarten)

Reading (kindergarten) courses engage students in activities to develop their reading skills. Course content may emphasize storytelling or reading aloud and evoking a written, oral, or pictorial response. Specific content depends upon state standards for kindergarten.

## 81110 - Reading (grade 1)

Reading (grade 1) courses focus on reading skills and may emphasize recognition of and response to various types of text; extension of vocabulary; and the connection of language to the expression of ideas. Specific content depends upon state standards for grade 1.

## 81120 - Reading (grade 2)

Reading (grade 2) courses focus on reading skills and may build students' skills in independent reading by increasing reading fluency, vocabulary, and recognition of word and language patterns. Specific content depends upon state standards for grade 2.

## 81130 - Reading (grade 3)

Reading (grade 3) courses focus on reading skills and may emphasize independent reading in a variety of assignments. Some emphasis may also be placed on presentation skills. Specific content depends upon state standards for grade 3.

## 81140 - Reading (grade 4)

Reading (grade 4) courses focus on reading skills and may emphasize independent reading in a variety of assignments and require students to respond to different material in different ways. Specific content depends upon state standards for grade 4.

## 81150 - Reading (grade 5)

Reading (grade 5) courses focus on reading skills and may extend students' skills in distinguishing meaning and literary functions in texts, and fluency in reading. Specific content depends upon state standards for grade 5.

## State Course Codes

## Elementary

## Subject Area 81: English Language and Literature (elementary)

## 81200 - Writing (early childhood education)

Writing (early childhood education) courses develop students' readiness for language arts, particularly focusing on writing. Content is age appropriate and conforms to any existing state standards for early childhood education.

## 81204 - Writing (pre-kindergarten)

Writing (pre-kindergarten) courses develop students' readiness for language arts, particularly focusing on writing. Content is age appropriate and conforms to any existing state standards for pre-kindergarten education.

## 81205 - Writing (kindergarten)

Writing (kindergarten) courses engage students in activities to develop their writing skills. Course content may emphasize storytelling or personal expression. Specific content depends upon state standards for kindergarten.

## 81210 - Writing (grade 1)

Writing (grade 1) courses focus on writing skills and may emphasize recognition and creation of various types of text; extension of vocabulary and writing skills; and the connection of language to the expression of ideas. Specific content depends upon state standards for grade 1.

## 81220 - Writing (grade 2)

Writing (grade 2) courses focus on writing skills and may build students' skills in independent writing by increasing writing fluency, vocabulary, and recognition of word and language patterns. They may also introduce or reinforce the rules of grammar and spelling. Specific content depends upon state standards for grade 2.

## 81230 - Writing (grade 3)

Writing (grade 3) courses focus on writing skills and may emphasize independent writing in a variety of assignments. Some emphasis may also be placed on presentation skills. Specific content depends upon state standards for grade 3.

## 81240 - Writing (grade 4)

Writing (grade 4) courses focus on writing skills and may emphasize independent writing in a variety of assignments and require students to respond to different materials in different ways. Grammar and usage of the English language may also be emphasized. Specific content depends upon state standards for grade 4.

## State Course Codes

## Elementary

## Subject Area 81: English Language and Literature (elementary)

## 81250 - Writing (grade 5)

Writing (grade 5) courses focus on writing skills and may extend students' skills in writing for particular purposes or audiences, distinguishing meaning and literary functions in texts, and fluency in writing. Specific content depends upon state standards for grade 5.

## Subject Area 82: Mathematics (elementary)

## 82001 - Mathematics (Elementary)

Mathematics (Elementary)

## 82003 - Mathematics (early childhood education)

Mathematics (early childhood education) courses cover foundational skills and concepts related to mathematics. Content is age appropriate and conforms to any existing state standards for early childhood education.

## 82004 - Mathematics (pre-kindergarten)

Mathematics (pre-kindergarten) courses cover foundational skills and concepts related to mathematics. Content is age appropriate and conforms to any existing state standards for pre-kindergarten education.

## 82005 - Mathematics (kindergarten)

Mathematics (kindergarten) courses typically introduce and reinforce basic concepts of mathematics such as counting whole numbers and understanding patterns, time, and money. Specific content depends upon state standards for kindergarten.

## 82010 - Mathematics (grade 1)

Mathematics (grade 1) courses typically help build a conceptual foundation in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. These courses often require students to develop their numerical fluency and to make calculation predictions. Specific content depends upon state standards for grade 1.

## State Course Codes

## Elementary

## Subject Area 82: Mathematics (elementary)

## 82020 - Mathematics (grade 2)

Mathematics (grade 2) courses typically continue to build a conceptual foundation in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. These courses often require students to develop their numerical fluency, particularly in addition and subtraction, and to solve problems using those operations as well as estimation. Specific content depends upon state standards for grade 2.

## 82030 - Mathematics (grade 3)

Mathematics (grade 3) courses typically emphasize number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. These courses often require students to improve their numerical fluency, adding multiplication and division to addition and subtraction operations, using whole numbers and parts (quarters, thirds, halves), and estimation. Specific content depends upon state standards for grade 3.

## 82040 - Mathematics (grade 4)

Mathematics (grade 4) courses typically emphasize number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. Course content may include activities that help students increase operational fluency, make connections between abstract symbols and concrete events or concepts, or present conclusions based on data. Specific content depends upon state standards for grade 4.

## 82050 - Mathematics (grade 5)

Mathematics (grade 5) courses typically emphasize number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. Course content may include activities that help students increase operational fluency, make connections between abstract symbols and concrete events or concepts, or present their mathematical reasoning. Specific content depends upon state standards for grade 5.

## Subject Area 83: Life and Physical Sciences (elementary)

## 83001 - Science (Elementary)

Science (Elementary)

## State Course Codes

## Elementary

## Subject Area 83: Life and Physical Sciences (elementary)

## 83228 - Science (early childhood education)

Science (early childhood education) courses cover foundational skills and concepts related to science, such as investigation and observation. Content is age appropriate and conforms to any existing state standards for early childhood education.

## 83229 - Science (pre-kindergarten)

Science (pre-kindergarten) courses cover foundational skills and concepts related to science, such as investigation and observation. Content is age-appropriate and conforms to any existing state standards for pre-kindergarten education.

## 83230 - Science (kindergarten)

Science (kindergarten) courses encourage students to observe and describe properties of organisms, systems, and the environment. Students may raise questions, identify patterns, and record observations. Specific content depends upon state standards for kindergarten.

## 83231 - Science (grade 1)

Science (grade 1) courses allow students to identify interactions and patterns in objects and events and to record observations in written or visual form. Typically, students investigate systems of living organisms and the environment. Specific content depends upon state standards for grade 1.

## 83232 - Science (grade 2)

Science (grade 2) courses continue to introduce students to basic scientific processes and principles. Course content may include identification of patterns, classification and sequencing, or manipulation of systems to observe interactions between parts and record the effects of change. Specific content depends upon state standards for grade 2.

## 83233 - Science (grade 3)

Science (grade 3) courses involve observation, measurement, and description of simple systems. Course content may include the scientific process; life and environmental science; and physical, earth, and space science. Specific content depends upon state standards for grade 3.

## 83234 - Science (grade 4)

Science (grade 4) courses typically explore complex systems, such as plant and animal adaptation, forces and motion, and physical and chemical changes in matter, or content consistent with state academic standards. Students may identify causes and effects of change, make predictions, and gather data from multiple sources. Specific content depends upon state standards for grade 4.

## 83235 - Science (grade 5)

## State Course Codes

## Elementary

## Subject Area 83: Life and Physical Sciences (elementary)

Science (grade 5) courses build on the study of various systems. They may include identification and description of cycles, comparisons of forms of matter and energy, forces, or content consistent with state academic standards. Students may make comparisons and interpret and analyze information. Specific content depends upon state standards for grade 5.

## Subject Area 84: Social Sciences and History (elementary)

## 84001 - History Comprehensive (Elementary)

History Comprehensive (Elementary)

## 84003 - Social Studies (early childhood education)

Social Studies (early childhood education) courses provide a developmentally appropriate understanding of social studies concepts, helping students begin to develop an understanding of self and others; the concept of time (past and present events); and skills conducive to citizenship, such as group decisionmaking. Content is age appropriate and conforms to any existing state standards for early childhood education.

## 84004 - Social Studies (pre-kindergarten)

Social Studies (pre-kindergarten) courses provide a developmentally appropriate understanding of social studies concepts, helping students begin to develop an understanding of self and others; the concept of time (past and present events); and skills conducive to citizenship, such as group decisionmaking.
Content is age appropriate and conforms to any existing state standards for pre-kindergarten education.

## 84005 - Social Studies (kindergarten0

Social Studies (kindergarten) courses generally provide initial foundations in the social studies disciplines: history, geography, civics and government, and economics. Specific content depends upon state standards for kindergarten.

## 84010 - Social Studies (grade 1)

Social Studies (grade 1) courses develop foundational skills in the social studies disciplines: history, geography, civics and government, and economics. These disciplines are often taught together and organized around a theme. Specific content depends upon state standards for grade 1.

## State Course Codes

## Elementary

## Subject Area 84: Social Sciences and History (elementary)

## 84020 - Social Studies (grade 2)

Social Studies (grade 2) courses help students reach greater understanding of the social studies disciplines: history, geography, civics and government, and economics. Courses often offer study of these disciplines in an integrated fashion, through the context of a specific theme or discipline, such as state-based social studies or the history of a people. Specific content depends upon state standards for grade 2.

## 84030 - Social Studies (grade 3)

Social Studies (grade 3) courses build on previous knowledge and introduce concepts in the social studies disciplines: history, geography, civics and government, and economics. Instruction of the disciplines is often integrated for instructional purposes. Students may study these disciplines through the context of a specific theme or discipline, such as state-based social studies or U.S. history. Specific content depends upon state standards for grade 3.

## 84040 - Social Studies (grade 4)

Social Studies (grade 4) courses continue to develop skills in history, geography, civics and government, and economics. Although the four disciplines are typically integrated, these courses may take a more discipline-specific approach, such as concentrating on U.S. history, state-specific history, or civic engagement for periods of time. Specific content depends upon state standards for grade 4.

## 84050 - Social Studies (grade 5)

Social Studies (grade 5) courses continue to develop skills in history, geography, civics and government, and economics. These courses may be more discipline-specific (dividing up state history, U.S. history, geography, government, and so on). Specific content depends upon state standards for grade 5.

## Subject Area 85: Fine and Performing Arts (elementary)

## 85001 - Art (Elementary)

Art courses provide students developmentally appropriate activities to foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards.

## State Course Codes

## Elementary

## Subject Area 85: Fine and Performing Arts (elementary)

## 85002 - Music (Elementary)

Music courses provide developmentally appropriate activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Specific course content conforms to any existing state standards.

## 85003 - Vocal Music (Elementary)

Vocal music provides the opportunity for students to learn and sing a variety of styles and develop an appreciation for music. Students learn vocal techniques and have the ability to sing different parts.

## 85004 - Instrumental Music (Elementary)

General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of non-specified band literature styles.

## 85103 - Dance (early childhood education)

Dance (early childhood education) courses provide developmentally appropriate activities to create awareness of bodily movement and its potential for creativity, expression, and communication. Specific course content conforms to any existing state standards for early childhood education.

## 85104 - Dance (pre-kindergarten)

Dance (pre-kindergarten) courses provide developmentally appropriate activities to create awareness of bodily movement and its potential for creativity, expression, and communication. Specific course content conforms to any existing state standards for pre-kindergarten.

## 85105 - Dance (kindergarten)

Dance (kindergarten) courses provide developmentally appropriate activities to create awareness of bodily movement and its potential for creativity, expression, and communication. Specific course content conforms to any existing state standards for kindergarten.

## 85110 - Dance (grade 1)

Dance (grade 1) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 1.

## 85120 - Dance (grade 2)

## Elementary

## Subject Area 85: Fine and Performing Arts (elementary)

Dance (grade 2) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 2.

## 85130 - Dance (grade 3)

Dance (grade 3) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 3.

## 85140 - Dance (grade 4)

Dance (grade 4) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 4.

## 85150 - Dance (grade 5)

Dance (grade 5) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 5.

## 85203 - Drama (early childhood education)

Drama (early childhood education) courses provide developmentally appropriate activities to enable students to express themselves through dramatic play and storytelling. Specific course content conforms to any existing state standards for early childhood education.

## 85204 - Drama (pre-kindergarten)

Drama (pre-kindergarten) courses provide developmentally appropriate activities to enable students to express themselves through dramatic play and storytelling. Specific course content conforms to any existing state standards for pre-kindergarten.

## State Course Codes

## Elementary

## Subject Area 85: Fine and Performing Arts (elementary)

## 85205 - Drama (kindergarten)

Drama (kindergarten) courses provide developmentally appropriate activities to enable students to express themselves through dramatic play and storytelling. Specific course content conforms to any existing state standards for kindergarten.

## 85206 - Drama (grade 1)

Drama (grade 1) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Specific course content conforms to any existing state standards for grade 1.

## 85220 - Drama (grade 2)

Drama (grade 2) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Specific course content conforms to any existing state standards for grade 2.

## 85230 - Drama (grade 3)

Drama (grade 3) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Specific course content conforms to any existing state standards for grade 3.

## 85240 - Drama (grade 4)

Drama (grade 4) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 4.

## 85250 - Drama (grade 5)

Drama (grade 5) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 5 .

## State Course Codes

## Elementary

## Subject Area 85: Fine and Performing Arts (elementary)

## 85303 - Music (early childhood education)

Music (early childhood education) courses provide developmentally appropriate activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Specific course content conforms to any existing state standards for early childhood education.

## 85304 - Music (pre-kindergarten)

Music (pre-kindergarten) courses provide developmentally appropriate activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Specific course content conforms to any existing state standards for pre-kindergarten.

## 85305 - Music (kindergarten)

Music (kindergarten) courses provide developmentally appropriate activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Specific course content conforms to any existing state standards for kindergarten.

## 85310 - Music (grade 1)

Music (grade 1) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 1.

## 85320 - Music (grade 2)

Music (grade 2) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and to incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 2.

## 85330 - Music (grade 3)

Music (grade 3) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 3.

## State Course Codes

## Elementary

## Subject Area 85: Fine and Performing Arts (elementary)

## 85340 - Music (grade 4)

Music (grade 4) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 4.

## 85350 - Music (grade 5)

Music (grade 5) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 5.

## 85403 - Art (early childhood education

Art (early childhood education) courses provide to students developmentally appropriate activities to foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for early childhood education.

## 85404 - Art (pre-kindergarten)

Art (pre-kindergarten) courses provide to students developmentally appropriate activities to foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for pre-kindergarten.

## 85405 - Art (kindergarten)

Art (kindergarten) courses provide to students developmentally appropriate activities to foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for kindergarten.

## State Course Codes

## Elementary

## Subject Area 85: Fine and Performing Arts (elementary)

## 85410 - Art (grade 1)

Art (grade 1) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, and strengthen their critical abilities. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for grade 1.

## 85420 - Art (grade 2)

Art (grade 2) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, and strengthen their critical abilities. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for grade 2.

## 85430-Art (grade 3)

Art (grade 3) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, and strengthen their critical abilities. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for grade 3.

## 85440 - Art (grade 4)

Art (grade 4) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 4.

## 85450 - Art (grade 5)

Art (grade 5) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 5.

## Elementary

## Subject Area 85: Fine and Performing Arts (elementary)

## Subject Area 86: World Language and Literature (elementary)

## 86001 - Spanish Language (Elementary)

Spanish courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Spanish language and student's knowledge of Spanish-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules.

## 86002 - French Language (Elementary)

French courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the French language and student's knowledge of French-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules.

## 86003 - German Language (Elementary)

German courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the German language and student's knowledge of German-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules.

## 86004 - Latin Language (Elementary)

Latin courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Latin language and student's knowledge of Latin-speaking cultures. Initial courses emphasize structures, forms, grammar and syntax, vocabulary, so that students have an understanding of the language and its rules.

## 86005 - Chinese Language (Elementary)

Chinese courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Chinese language and student's knowledge of Chinese-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules.

## 86006 - Japanese Language (Elementary)

Japanese courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Japanese language and student's knowledge of Japanese-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules.

## State Course Codes

## Elementary

## Subject Area 86: World Language and Literature (elementary)

## 86007 - Russian Language (Elementary)

Russian courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Russian language and student's knowledge of Russian-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules.

## 86008 - American Sign Language (Elementary)

American Sign Language courses introduce and then extend students' ability to communicate with deaf persons through finger spelling, signed words, and gestures. Initial courses emphasize vocabulary and physical expression so that students have an understanding of the language and its rules and conventions.

## 86009 - Other Foreign Language (Elementary)

Other Foreign Language (Elementary)

## 86103 - Foreign Language (early childhood education)

Foreign Language (early childhood education) courses engage students in developmentally appropriate activities to acquire the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Course content typically includes some introduction to other cultures. Specific content depends upon state standards for early childhood education.

## 86104 - Foreign Language (pre-kindergarten)

Foreign Language (pre-kindergarten) courses engage students in developmentally appropriate activities to acquire the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Course content typically includes some introduction to other cultures. Specific content depends upon state standards for pre-kindergarten.

## 86105 - Foreign Language (kindergarten)

Foreign Language (kindergarten) courses engage students in developmentally appropriate activities to acquire the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Course content typically includes some introduction to other cultures. Specific content depends upon state standards for kindergarten.

## State Course Codes

## Elementary

## Subject Area 86: World Language and Literature (elementary)

## 86110 - Foreign Language (grade 1)

Foreign Language (grade 1) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. These courses may emphasize recognition of written words, vocabulary, speech patterns, and grammar. Cultural aspects (major events, foods, art, and so on) of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 1.

## 86120 - Foreign Language (grade 2)

Foreign Language (grade 2) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. These courses may emphasize recognition of written words, vocabulary, speech patterns, and grammar so that students become more independent communicators. Cultural aspects (major events, foods, art, and so on) of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 2.

## 86130 - Foreign Language (grade 3)

Foreign Language (grade 3) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. These courses may emphasize recognition of written words, vocabulary, speech patterns, and grammar so that students become more independent communicators. Cultural aspects (major events, foods, art, and so on) of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 3.

## 86140 - Foreign Language (grade 4)

Foreign Language (grade 4) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Cultural and/or historical aspects of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 4.

## 86150 - Foreign Language (grade 5)

Foreign Language (grade 5) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Cultural and/or historical aspects of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 5 .

## State Course Codes

## Elementary

## Subject Area 87: Religious Education and Theology (elementary)

## 87001 - Religious Education and Theology (Elementary)

Religious education courses' primary objectives include instruction in the history, tenets, and organization of a religion; development of personal faith and conviction; and exposure to the ways in which daily life may reflect personal religious beliefs. These courses typically include various components particular to a specific religion, such as sacraments and symbols, food laws the authority and structure of the church, the church calendar, and so on.

## Subject Area 88: Physical, Health, and Safety Education (elementary)

## 88001 - Physical Education (Elementary)

Physical Education (Elementary)

## 88002 - Health (Elementary)

Health (Elementary)

## 88003 - Physical Education (early childhood education)

Physical Education (early childhood education) courses emphasize fundamental movement skills, body awareness and control, safety, and the enjoyment of physical activity. Specific content depends upon state standards for early childhood education.

## 88004 - Physical Education (pre-kindergarten)

Physical Education (pre-kindergarten) courses emphasize fundamental movement skills, body awareness and control, safety, and the enjoyment of physical activity. Specific content depends upon state standards for pre-kindergarten.

## 88005 - Physical Education (kindergarten)

Physical Education (kindergarten) courses emphasize fundamental movement skills, body awareness and control, safety, and the enjoyment of physical activity. Specific content depends upon state standards for kindergarten.

## State Course Codes

## Elementary

## Subject Area 88: Physical, Health, and Safety Education (elementary)

## 88010 - Physical Education (grade 1)

Physical Education (grade 1) courses typically emphasize knowledge and skills that lead to health, enjoyment, and social development through physical activity. Course content may include activities that strengthen gross and fine motor skills, body awareness, safety, and the relationship between physical activity and health. Specific content depends upon state standards for grade 1.

## 88020 - Physical Education (grade 2)

Physical Education (grade 2) courses typically emphasize knowledge and skills that lead to health, enjoyment, and social development through physical activity. Course content may include activities that strengthen gross and fine motor skills, body awareness, safety, and the relationship between physical activity and health. Specific content depends upon state standards for grade 2.

## 88030 - Physical Educatin (grade3)

Physical Education (grade 3) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Locomotor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 3.

## 88040 - Physical Educatin (grade 4)

Physical Education (grade 4) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Locomotor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 4.

## 88050 - Physical Educatin (grade 5)

Physical Education (grade 5) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Locomotor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 5 .

## State Course Codes

## Elementary

## Subject Area 89: Early Childhood (elementary)

## 89001 - Early Childhood / Pre-School

Early Childhood Education courses that are not differentiated by subject area-that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for early childhood education.

## Subject Area 90: Computer and Information Science (elementary)

## 90001 - Computers (Elementary)

Courses in computers at the elementary level provide students with the knowledge and ability to use computers and technology efficiently. Level of difficulty will be congruent with grade. Basic knowledge of computer literacy is covered as well as possibly exposure to word-processing, spreadsheet, and presentation applications, but also may include the various uses of computers in modern society. Specific course content aligns with state standards to promote students' technological literacy.

## Subject Area 92: Miscellaneous (elementary)

## 92001 - Miscellaneous (Elementary)

Miscellaneous (Elementary)

## 92002 - Standardized Test Preparation

Standardized Test Preparation courses help to prepare students for national standardized tests. In particular, these courses assist students in developing and/or expanding their vocabulary, test-taking, and reasoning skills through study, lecture, and practice drills. Course topics may include vocabulary review; root words, prefixes, and suffixes; mathematical concepts, logic, and rules; and general problemsolving and test-taking strategies.

## 92003 - State Test Preparation

State Test Preparation courses prepare students for particular state tests required for graduation. These courses may cover specific content areas (such as citizenship, mathematics, language arts, and so on) according to individual student needs, or they may provide a more general course of study, similar to the Standardized Test Preparation course described above.

## State Course Codes

## Elementary

## Subject Area 92: Miscellaneous (elementary)

## 92005 - Tutorial

Tutorial courses provide the assistance students need to successfully complete their coursework. Students may receive help in one or several subjects.

## 92006 - Study Hall

Study Hall courses provide the opportunity and time for students to complete classroom assignments or school projects. Students typically work on their own, without the help of a tutor; however, they are supervised and usually remain in the classroom.

## 92151 - Career Exploration

Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests, with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.

## 92250 - Exploratory

Exploratory courses provide a brief introduction to a variety of topics, typically elective subject areas, often in the form of discrete units or modules. Students may choose to take courses later that allow them to pursue the topics introduced in more depth. Topics may vary widely and span multiple subject areas within one course.


[^0]:    Subject Area 08: Physical, Health, and Safety Education (secondary)
    Physical Education

    ## 08001 - Physical Education

    Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.

