

The Minnesota Common Course Catalogue

January 2011

Based on the National Center for Education Statistics (NCES)
School Codes for Exchange of Data (SCED)

Minnesota Department of
Education

Subject Area: 01 English Language and Literature

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span, unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete MCCC course descriptions for most accurate classification.*

- A. Some local courses combine two or more MCCC course classifications or topics and no MCCC classification exists for that local combination. If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC classification number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- B. Local IB or AP **Preparation** courses **should not** be classified as the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course classification that best describes their content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses at the local level or call for additional academic requirements beyond simple pre-requisites.
- C. Reading course classifications are listed in this Subject Area under **Category B: Literature/Reading** with the exceptions of *01991 English Proficiency–Writing* and *01992 English Proficiency–Reading*, which are in **Category F: All Others** and describe courses that assist students in acquiring language proficiency to pass state or local assessments in reading and writing.
- D. The only English as a Second Language (ESL) classification in this Subject Area is *01009 English as a Second Language—Transition Language Arts*. Additional ESL course classifications are listed in **23 Academic and Career Development/Category F. English Language Development**.
- E. All humanities course classifications are listed in **04 Social Sciences and History/Category G. Humanities**. Local courses that are divided into *IB Theory of Knowledge I* and *II* are both classified under the one course, *04304 IB Theory of Knowledge*.

- F. The only theater course classification in this Subject Area is *01061 Literature of a Genre*, which would be an appropriate classification for courses that focus specifically on drama as a literary genre. All other theater classifications are listed in **05 Visual and Performing Arts/Category B. Theater**.
- G. Journalism, broadcasting and print publication/production classifications are listed in **11 Communication and Audio/Visual Technology**.
- H. Classify film study courses offered as language arts courses under *01061 Literature of a Genre*. Classify film study courses offered as theater courses under *05061 Film Study*, visual arts film study courses that are not production courses under *05151 Art Appreciation* and IB film study courses under *05174 IB Film Study*. These last three course classifications are in **05 Visual and Performing Arts**.
- I. Two course classifications with almost the same title, *01155 Communications* listed in this Subject Area and *11001 Introduction to Communications* listed in **11 Communication and Audio/Visual Technology**, describe very different courses:
1. *01155 Communications* describes courses that emphasize development of written and oral communication skills including interpersonal and team-building skills.
 2. *11001 Introduction to Communications* describes courses that emphasize study and evaluation of various media and their roles in and impact on society.
- J. Media and communication courses, depending on the focus, are listed in several different subject areas. Courses that emphasize:
1. Study and evaluation of media and their roles in society, print and broadcast journalism, and printing technology and production, including desktop publishing are listed in **11 Communication and Audio/Visual Technology**.
 2. Artistic endeavor, including the history, art and analysis of media arts; creation of media art works; and/or the creation of multi-media art works are listed in **05 Visual and Performing Arts**.
 3. Use of technology such as software programs for web page design or other graphic design work including interactive media products and services are listed in **10 Computer and Information Sciences**.
- K. Course classifications for literature and social studies paired courses that offer both language arts and social studies credits (typically in two class periods) are listed in this Subject Area. One course is *01055 American Literature/Social Studies Combination*; the other course is *01057 World or British Literature/Social Studies Combination*.
- L. If no MCCC course classification adequately describes a local course, use the course "Other" at the end of the Subject Area to create a classification and insert a brief description of the local course.

III. English Language and Literature course categories

A. Comprehensive Language Arts	01(001) – 01(050)
B. Literature/Reading	01(051) – 01(100)
C. Composition/Writing	01(101) – 01(150)
D. Speech and Communication	01(151) – 01(200)
E. Linguistics	01(201) – 01(250)
F. All Others	01(991) – 01(999)

A. Comprehensive Language Arts

01001 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—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)

Courses usually offer a balanced focus on composition and literature. Typically, students write persuasive, critical, and creative multi-paragraph compositions. Students study various literary genres to improve reading rate and comprehension level, develop skills to determine an author's intent and theme and recognize the techniques used by an author to deliver his or her message.

01003 English/Language Arts III (11th grade)

Courses continue to develop students' writing skills by emphasizing clear, logical writing patterns, word choice and usage in essays and research papers. Students continue to read works of literature, which are often the basis for the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

01004 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 while continuing to develop their language arts skills. Typically, students write multi-paragraph essays, but they may also write one or more major research papers.

01005 AP English Language and Composition

Courses follow the College Board's suggested curriculum designed to parallel college-level English courses and expose students to prose written in a variety of periods, disciplines and rhetorical contexts. They emphasize the interaction of the author's purpose, intended audience and content. Students write on a variety of subjects for various purposes.

01006 AP English Literature and Composition

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

01007 AP Combined English Language/Literature and Composition

Courses follow the College Board's suggested curriculum designed to parallel college-level English courses for AP English Language and Composition and AP Literature and Composition as listed above.

01008 IB Language A (English)

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. Content includes in-depth study of literature chosen from the appropriate IB list of texts and authors. Students write analyses of this literature as well as other oral and written assignments. Content is designed to improve students' fluency in the English language.

01009 English as a Second Language (ESL)—Transition Language Arts

Courses are designed for English Language Learners and typically blend speaking, listening, reading and writing and provide a transition from ESL to mainstream high school language arts/English courses. These courses may include preparation for state assessments in reading and writing. They are taught by an English teacher and an ESL teacher or one teacher with dual certification in English and ESL.

01010 Language Arts Laboratory

Courses may integrate reading, writing, speaking and listening or emphasize reading or writing. Focus is on the individual student progress. Content varies according to each individual student's needs and abilities, but developing writing skills, improving reading skills, building vocabulary, improving grammar and listening skills are typically included.

01011 English/Language Arts Comprehensive—Multi-Grade Level

Courses are not grade-level differentiated. They typically offer a balanced study of composition and literature, including speaking and listening skill development for multi-grade levels.

B. Literature/Reading**01051 English/Literature (freshmen and sophomores)**

Courses are designed for freshmen and/or sophomores and typically introduce two or more genres of literature (novel, short story, and poetry). Exploration of each genre's literary elements, determination of theme and intent, and examination of vocabulary and semantics are often included. Writing assignments are often based on or related to the literature studied.

01052 English/Literature (juniors and seniors)

Courses are designed for juniors and/or seniors and emphasize reading comprehension and critical-thinking skills. They explore advanced literary techniques, such as irony, satire, humor, connotation, tone, rhythm and symbolism with the aim of creating sophisticated readers. Writing assignments are required as an additional method to improve critical-thinking and analytic skills.

01053 Literature

Courses offer students the opportunity to examine the themes presented in a body of literature. Critical thinking skills are developed as students determine the assumptions underlying a reading selection and as they determine how the work reflects the times and culture. Oral discussion and written compositions are an integral part of literature courses. Courses may address a particular genre or a theme, or survey works of a particular time or people.

01054 American Literature

Courses focus upon commonly known American authors and their work. Students improve their critical-thinking skills as they determine the assumptions underlying selected works and understand a work of literature reflects the society and the time. Oral discussion and written compositions are an integral part of literature courses.

01055 American Literature/Social Studies Combination

Courses typically integrate the study of American literature with an overview of U.S. history and may include aspects of geography, civics, government and economics. These courses may also include aspects of culture such as music and art. A two-period per day course may be required to achieve the same objectives as separate courses in social studies and literature.

01056 British Literature

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

01057 World or British Literature/Social Studies Combination

Courses integrate the study of World or British literature with an overview of World or English history and may include aspects of geography, civics, government and economics. These courses may also include aspects of culture such as music and art. A two-period per day class may be required to achieve the same objectives as separate social studies and literature courses.

01058 World Literature

Courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills through examination of diverse literary traditions and the influences of those traditions. Oral discussion and written compositions are part of these courses.

01059 Biblical Literature

Courses have the same goals as general literature courses—the improvement of students’ language arts and critical-thinking skills. Students may compare techniques, styles and themes of the various books of the Bible; examine the Bible’s influence on secular literature; and study historical events of Biblical times. Oral discussion and written compositions are part of these courses.

01060 Literature of an Author

Courses have the same goals as general literature courses—the improvement of students’ language arts and critical-thinking skills. Students determine the assumptions underlying selected works of a particular author by comparing techniques, styles, and themes among different works and reflecting upon the time in which the author lived. Oral discussion and written compositions are part of these courses.

01061 Literature of a Genre

Courses have the same goals as general literature courses—the improvement of students’ language arts and critical-thinking skills. They focus on one or several genres such as poetry, essay, biography, short story, drama and so on. Students determine the assumptions underlying selected works and examine the structure, techniques and intentions of the genre. Oral discussion and written compositions are part of these courses. **This classification includes film study courses.**

01062 Literature of a Period

Courses have the same goals as general literature courses—the improvement of students’ language arts and critical-thinking skills. They focus on the literature written during or about a particular time, such as the French Revolution or the 1960s. Students determine the assumptions underlying selected works, reflect upon the influence of events and attitudes, and compare the points of view of various writers. Oral discussion and written compositions are part of these courses.

01063 Literature of a Place

Courses have the same goals as general literature courses—the improvement of students’ language arts and critical-thinking skills. They focus on a particular geographic region. Students determine the assumptions underlying selected works and study how the literature reflects the land, society and history of the region. Oral discussion and written compositions are part of these courses.

01064 Literature of a People

Courses have the same goals as general literature courses—the improvement of students’ language arts and critical-thinking skills. They focus on literature written by or about people who share a particular characteristic such as religion, culture or gender. Students determine the assumptions underlying selected works, reflect upon the influence of a common characteristic, and compare the points of view. Oral discussion and written compositions are part of these courses.

01065 Literature of a Theme

Courses have the same goals as general literature courses—the improvement of students’ language arts and critical-thinking skills. They focus on a particular theme, such as The American Dream, Society and Self, Exploration, or War and Peace as expressed from several points of view.

01066 Strategic Reading

Courses advance students’ critical-thinking and analysis skills, reading rate and comprehension level, and vocabulary most often in preparation for college reading requirements. These courses may emphasize works of fiction, nonfiction and/or textbooks. They often include advanced strategies for note taking and/or understanding and evaluating important points of a text.

01067 Assisted Reading

Courses focus on developing individual student reading skills and remediation is targeted to each student’s particular weakness(s). Courses are typically designed to improve each student’s reading comprehension and rate and/or to develop strategies to read more efficiently.

01068 Corrective Reading

Courses offer diagnostic and remedial activities designed to correct reading difficulties that interfere with students’ progress in developing reading skills and understandings. Activities improve reading comprehension, reading technique and general literacy skills. They may include time management, note taking and strategies for determining main ideas and supporting details in a text.

01069 Postsecondary Developmental Reading

Course content includes remediation in reading concepts and skills assessed in postsecondary reading placement tests and enable students to satisfy postsecondary enrollment readiness requirements. Courses are typically offered at the postsecondary institution, but students most often receive high school reading/language art or elective credit not college credit.

C. Composition/Writing**01101 English/Composition (freshmen and sophomores)**

Courses are designed for freshmen and/or sophomores. They address the writing processes and practices necessary for producing successful compositions. Students typically write persuasive, critical, and creative multi-paragraph essays and compositions. The study of literature to expose students to exemplary illustrations of various forms of writing may be included.

01102 English/Composition (juniors and seniors)

Courses are designed for juniors and/or seniors. They reinforce the logic and critical-thinking skills that accompany good writing, while emphasizing word choice, usage and writing mechanics. Courses provide continued and advanced instruction in writing for a variety of purposes and audiences, but may focus on college or business preparation. Literature study in which students analyze examples of several genres may be included.

01103 Composition

Courses focus on developing students' abilities to compose different types of writing for a range of purposes and audiences. They enable students to explore and practice descriptive, narrative, persuasive or expository styles as they write paragraphs, essays, letters, applications, formal documented papers or technical reports. The focus usually remains on nonfiction or scholarly writing; however, creative writing may be included.

01104 Creative Writing

Courses develop a student's writing technique and style in poetry, short story, drama, essays and other forms of prose. The emphasis of these courses is on writing; however, students may study exemplary texts to obtain a fuller appreciation of the form and craft. Some creative writing classes cover several forms; others concentrate on one particular form.

01105 Research/Technical Writing

Courses prepare students to write research papers and/or technical reports. They emphasize research of both primary and secondary sources; organization of material, thoughts, and arguments; and writing in a persuasive or technical style.

01106 Postsecondary Development Writing

Course content includes remediation in writing concepts and skills assessed in postsecondary writing placement tests and enable students to satisfy postsecondary enrollment readiness requirements. Courses are typically offered at the postsecondary institution, but students most often receive high school writing/language arts or elective credit not college credit.

D. Speech and Communication**01151 Public Speaking**

Courses develop students' communication skills in a variety of speaking situations such as small and large group discussions or delivery of speeches in front of audiences. 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.

01152 Forensic Speech—Inclusive

Courses develop students' oral skills. They typically focus on logic and reasoning, the organization of thought and supporting materials, and effective presentation of voice and body. Courses are often linked to an extracurricular program, and students learn the methods, aims, and styles of a variety of events such as debate, expository speaking, radio broadcast, oral interpretation and dramatic interpretation.

01153 Forensic Speech—Debate

Courses develop students' oral skills. They typically focus on logic and reasoning, research and analysis, organization of thought and supporting materials, argumentative style and skill, and effective presentation of voice and body. Courses are often linked to an extracurricular debate programs and introduce students to the methods, aims, and styles used in various kinds of debates such as formal or Lincoln-Douglas.

01154 Forensic Speech—Individual Event

Courses develop students' oral skills. Topics depend upon the event(s) taught, but usually emphasize effective presentation of voice and body, thoughtful interpretation of literature, logic and reasoning, and the organization of thought and supporting materials. Courses are often linked to an extracurricular program and introduce one or several individual event categories such as exposition, oral interpretation, dramatic interpretation, and radio broadcast.

01155 Communications

Courses focus on the application of oral and written communication skills through a variety of formal and informal experiences. They emphasize developing effective interpersonal skills and may include team-building components. How interpersonal communications are affected by stereotypes, nonverbal cues, vocabulary and stylistic choices may be included.

01156 Applied Language Arts/Communications

Courses develop language arts skills—reading, writing, listening, and speaking while concentrating on the practical application of communication. They use technical reports and manuals, business letters, resumes, and applications as examples rather than emphasize language arts skills as applied to literary materials.

E. Linguistics**01201 English Morphology and Grammar**

Courses involve the study of the English language, including 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

Courses trace the development of English, concentrating on historical and cultural influences while examining 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

Courses provide activities in analytical thinking, including 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 stress. Materials may include ACT, SAT and PSAT review materials, current assessment software programs and previous standardized examinations.

F. All Others**01991 English Proficiency—Writing**

Courses are designed to assist students in acquiring the skills necessary to pass state writing proficiency tests.

01992 English Proficiency—Reading

Courses are designed to assist students in acquiring the skills necessary to pass state reading and/or writing proficiency tests.

01993 Seminar/Project—English Language and Literature

Courses vary widely, but typically allow students to investigate areas of interest in English Language or Literature and may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

01995 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 Credit Recovery—English/Language Arts

Courses are designed to enable students to recover credits required for graduation in the English/language arts curriculum area.

01997 English Language and Literature—Independent Study

Courses are often conducted with instructors as mentors and enable students to explore particular topics within the field of language arts. These courses may serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

01999 English Language and Literature—Other

(Insert local course description)

Subject Area: 02 Mathematics

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grade levels in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combination of topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. Local IB or AP **Preparation** courses **should not** be classified as the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course classification that best describes the content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses in the local course title, course description or by additional requirements beyond simple pre-requisites.
- D. There are two different course classifications that focus on improving students’ math skills and test scores:
 - 1. *02954 Mathematics Proficiency Development* focuses on assisting students in acquiring math skills to pass state or local proficiency assessments.
 - 2. *02953 Mathematics—Test Preparation* is preparation for national standardized tests such as PSAT, SAT, and ACT.
- E. Computer and technology courses are listed in **10 Computer and Information Sciences** with the exception of *02156 Computer Math with Algebra*. The focus of *02156* is on computer systems, programming and using the computer to solve math problems.

- F. There are two math courses for English Language Learners in this Subject Area:
1. 02955 *English as a Second Language—Transition Mathematics*.
 2. 02956 *Bilingual Mathematics*

Additional ESL math course classifications are listed in **23 Academic and Career Development/Category F. English Language Development**.

III. Mathematics course categories

- | | |
|---|-------------------|
| A. Foundation Mathematics (<i>basic/remedial</i>) | 02(001) – 02(050) |
| B. Pure Mathematics | 02(051) – 02(150) |
| C. Applied Mathematics | 02(151) – 02(200) |
| D. Probability and Statistics | 02(201) – 02(250) |
| E. Other Mathematics | 02(951) – 02(999) |

A. Foundation Mathematics

(Note: All courses in this category must be documented as basic/remedial)

02001 Informal Mathematics

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

02002 General Math

Courses reinforce and expand students' foundational math 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; and solving and graphing simple equations and inequalities.

02003 Particular Topics in Foundation Math

Courses examine particular topics in Foundation math, such as arithmetic or basic conceptual skills, rather than provide a general overview.

02004 Postsecondary Developmental Math

Course content includes remediation in mathematical concepts and skills assessed in postsecondary math placement tests and enables students to satisfy postsecondary enrollment readiness requirements. Courses are typically offered at the postsecondary institution, but students most often receive either high school math or elective credit not college credit.

B. Pure Mathematics

02051 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.

02052 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

Courses typically cover the same topics as the first half or semester of Algebra I but at a slower pace for students who need more time to address the concepts, knowledge and skills. They generally include 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

Courses typically cover the same topics as the second half or semester of Algebra I but at a slower pace for students who need more time to address the concepts, knowledge and skills. They generally include 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

Courses review and extend algebra and geometry concepts for students who have already taken Algebra I and Geometry. These 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

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.

02057 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. These courses may introduce topics in discrete math, elementary probability and statistics, matrices and determinants, and sequences and series.

02058 Particular Topics in Algebra

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

02061 Integrated Math—multi-year equivalent

Courses emphasize the teaching of mathematics as problem-solving, communication, and reasoning. They 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.

02071 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.

02072 Geometry

Courses emphasize an abstract, formal approach to the study of geometry and 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

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

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.

02075 Particular Topics in Geometry

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

02101 Number Theory

Courses review the properties and uses of integers and prime numbers, and extend this information to congruences and divisibility.

02102 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

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

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

Courses cover topics of both Trigonometry and Math Analysis and 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

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

Courses cover topics of both Trigonometry and Analytic Geometry and 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

Course cover topics from both Math Analysis and Analytic Geometry and 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

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

Courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math 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

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

02112 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

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

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

02122 Multivariate Calculus

Courses include the study of hyperbolic functions, improper integrals, directional derivatives, and multiple integration and its applications.

02123 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

Courses follow the College Board's suggested curriculum designed to parallel college-level calculus courses. These courses provide students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. They introduce calculus and include the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of-change problems); and integral calculus (including anti-derivatives and the definite integral).

02125 AP Calculus BC

Courses follow the College Board's suggested curriculum designed to parallel college-level calculus courses. They provide students with an intuitive understanding of the concepts of calculus and experience with its methods and applications while requiring additional knowledge of the theoretical tools of calculus. They assume a thorough knowledge of elementary functions, and cover all of the calculus topics in AP Calculus AB. They also include the following topics: vector functions, parametric equations, and polar coordinates; rigorous definitions of finite and nonexistent limits; derivatives of vector functions and parametrically defined functions; advanced techniques of integration and advanced applications of the definite integral; and sequences and series.

02126 Particular Topics in Calculus

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

Courses prepare students to take the International Baccalaureate Mathematical Studies exam at the Subsidiary or Higher level. They are 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

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

Courses prepare students to take the International Baccalaureate Mathematics and Computing exam at the Subsidiary Level (SL). They give students a working knowledge of a high level programming language and sound mathematical training. 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. Courses also contain components on computer problem solving and programming; topics regarding computer hardware, software, modes of operation, and data types and structures.

02134 IB Further Mathematics—SL

Courses prepare students to take the International Baccalaureate Further Mathematics at the Subsidiary Level. Course topics include geometry; statistics and probability; sets, relations and groups, series and differential equations; and discrete mathematics.

02141 Particular Topics in Analytic Mathematics

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

C. Applied Mathematics

02151 General Applied Math

Courses reinforce general math 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 Math

Courses reinforce general math 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.

02153 Technical Math

Courses extend students' proficiency in mathematics and often apply these skills to technical and/or industrial situations and problems. These courses 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.

02156 Computer Math with Algebra

Courses are intended for students who have attained Algebra I objectives and include a study of computer systems, programming, and using the computer to solve math problems.

02157 Consumer Math

Courses reinforce general math topics, such as arithmetic, using rational numbers, measurement, ratio and proportion, and basic statistics. Students apply skills to consumer problems and situations such as budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

D. Probability and Statistics**02201 Probability and Statistics**

Courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics typically 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

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

Courses follow the College Board's suggested curriculum and are designed to parallel college-level statistics. They 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

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

E. Other Mathematics

02951 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, Descartes) or important developments (e.g., pi, decimal fractions, probability theory, calculus) often form the backbone of these classes.

02952 Seminar/ Project—Mathematics

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in Mathematics. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

02953 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 and calculator usage.

02954 Mathematics Proficiency Development

Courses are designed to assist students in acquiring the skills necessary to pass state or local proficiency examinations.

02955 English as a Second Language (ESL)—Transition Mathematics

Courses are designed for English Language Learners and typically expand students' math knowledge and skills and may include preparation for state math assessments. They may include a general overview of mathematical thinking and skills or focus on particular topics. These courses often provide a transition from ESL to mainstream high school mathematics courses and are taught by a math teacher and an ESL teacher or one teacher with dual certification in mathematics and ESL.

02956 Bilingual Mathematics

Courses are taught in the student's native language, expanding the math knowledge and skills of English Language Learners and often prepare them for state math assessments. These courses may include a general overview of mathematical thinking and skills, focus on particular topics, such as algebra, geometry, trigonometry, calculus, statistics and probability, or address these topics using an integrated approach.

02995 Credit Recovery—Mathematics

Courses are designed to enable students to recover credits required for graduation in the mathematics curriculum area.

02996 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.

02997 Mathematics—Independent Study

Courses, often conducted with instructors as mentors, enable students to explore topics of interest related to mathematics. These courses may serve as an opportunity for students to expand their expertise, to explore a topic in detail, or to develop advanced skills.

02999 Mathematics—Other

(Insert local course description)

Subject Area 03: Life and Physical Sciences

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete course descriptions for most accurate classification.*

- A. Some local courses combine two or more MCCC course classifications or topics and no MCCC course exists for that local combination. If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- B. Local IB or AP **Preparation** courses **should not** be classified as the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course classification that best describes the content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses in the local course title or description or call for additional requirements beyond simple pre-requisites.
- C. The two English Language Learner course classifications in this Subject Area are:
 - 1. *03215 English as a Second Language—Transition Science.*
 - 2. *03216 Bilingual Science*Additional ESL course classifications are listed in **23 Academic and Career Development/Category F. English Language Development.**
- D. Taxidermy courses should be classified under *03099 Biology—Other.*
- E. Forensic science classifications include *03063 Forensics—Biology Emphasis*, *03108 Forensics—Chemistry Emphasis*, *033162 Forensics—Physics Emphasis* and *03204 Forensics—Integrated Study.*
- F. Courses that focus on remediation of students’ science knowledge and skills to improve performance on state science examinations should be classified as *03994 Biology/Life Science—Proficiency Development.*
- G. Environmental science courses are most often classified under *03003 Environmental Science* or *03062 Conceptual Biology.*

G. Project Lead the Way engineering courses are listed in **21 Engineering and Technology**.

H. Project Lead the Way biomedical courses are in listed **14 Health Care Sciences**.

III. Life and Physical Science course categories

A. Earth Science 03(001) – 03(050)

B. Biology 03(051) – 03(100)

C. Chemistry 03(101) – 03(150)

D. Physics 03(151) – 03(200)

E. Integrated/Other 03(201) – 03(999)

A. Earth Science

03001 Earth Science

Courses offer insight into the environment on earth and the earth's environment in space. They present the concepts and principles essential to understanding of the dynamics and history of the earth and typically explore oceanography, geology, astronomy, meteorology, and geography.

03002 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 studied.

03003 Environmental Science

Courses examine the mutual relationships among organisms and their environments. They examine the interrelationships among plants, animals, and humans and may include one or more of the following subjects: ecosystems, population and growth studies, ecological concepts, pollution, photosynthesis, recycling and regeneration, and conservation of natural resources.

03004 Astronomy

Courses examine the solar system, stars, galaxies, and interstellar bodies. They introduce and use astronomic instruments and typically explore theories regarding the origin and evolution of the universe, space and time.

03005 Marine Science

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

03006 Meteorology

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

03007 Physical Geography

Courses examine the constraints and possibilities the physical environment places on human development. They 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

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

03049 Earth Science—Other

(Insert local course description)

B. Biology**03051 Biology**

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

03052 Biology—Advanced Studies

Courses usually follow a comprehensive initial study of biology and cover biological systems in more detail. Topics explored may include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms.

03053 Anatomy and Physiology

Courses usually follow a comprehensive initial study of biology and examine the human body and biological systems in more detail. Students learn anatomical terminology, study cells and tissues, explore functional systems such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems. They may dissect mammals.

03054 Anatomy

Courses examine 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

Courses examine all major systems, tissues, and muscle groups in the human body to support understanding of how these systems interact and their role in maintaining homeostasis. Courses may also cover such topics as cell structure and function, metabolism, and the human life cycle.

03056 AP Biology

Courses adhere to the curricula recommended by the College Board and are designed to parallel college level introductory biology courses. They stress basic facts and their synthesis into major biological concepts. Content covers three general areas: molecules and cells, including biological chemistry and energy transformation; genetics and evolution; and organisms and populations, including taxonomy, plants, animals, and ecology. Laboratory experiments are included.

03057 IB Biology

Courses prepare students to take the IB Biology exams at either the Subsidiary or Higher level. They focus on the facts, principles, and concepts underlying the biological field and include critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of living organisms from the cellular level through functioning entities within the biosphere. Laboratory experimentation is an essential component.

03058 Botany

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

03059 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. They may also include lethal alleles, epistasis and hypostasis, and polygenic inheritance.

03060 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

Courses provide an understanding of animals, the niche they occupy in their environment, 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

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 Forensics—Biology Emphasis

Courses provide an understanding of the scientific principles involved in criminal investigations, including the forensic techniques and processes necessary to collect, identify and analyze biological evidence. Topics of study typically include, but are not limited to blood types, DNA and genetics, decomposition and physiological systems of the body as well as crime scene documentation.

03099 Biology—Other (*Insert local course description*)

C. Chemistry

03101 Chemistry

Courses involve the composition, properties and reactions of substances. They typically explore the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas, equations and nuclear reactions are also studied.

03102 Chemistry—Advanced Studies

Courses usually follow a comprehensive initial study of chemistry and cover chemical properties and interactions in more detail. Topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory and nuclear chemistry.

03103 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

Courses usually follow completion of a calculus course and cover chemical kinetics, quantum mechanics, molecular structure, molecular spectroscopy and statistical mechanics.

03105 Conceptual Chemistry

Courses are practical, non-quantitative chemistry courses designed for students who desire an understanding of chemical concepts and applications.

03106 AP Chemistry

Courses follow the curricula recommended by the College Board and are usually taken after high school chemistry and second-year algebra. Topics may include atomic theory and structure; chemical bonding; nuclear chemistry; states of matter; and reactions, including stoichiometry, equilibrium, kinetics and thermodynamics. Laboratories are equivalent to college courses.

03107 IB Chemistry

Courses prepare students to take the IB Chemistry exams at either the Subsidiary or Higher level. They promote understanding of the principles underlying the field of chemistry and include critical analysis, evaluation, prediction; generation of scientific information; communication of scientific ideas; and the impact of chemistry upon society. Course content varies.

03108 Forensics—Chemistry Emphasis

Courses provide an understanding of the scientific principles involved in criminal investigations, including the forensic techniques and processes necessary to collect, identify and analyze chemical evidence. Topics of study typically include, but are not limited to, the composition of substances, toxicology and hair and fiber analysis as well as crime scene documentation.

03149 Chemistry—Other

(Insert local course description)

D. Physics**03151 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

Courses are usually taken after a comprehensive initial study of physics and provide instruction in laws of conservation, thermodynamics, and kinetics; wave and particle phenomena; electromagnetic fields; and fluid dynamics.

03153 Principles of Technology

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

03155 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 mechanics, electricity and magnetism, modern physics, waves and optics, and kinetic theory and thermodynamics.

03156 AP Physics C

Courses are 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 courses primarily focus on mechanics and electricity/magnetism, with approximately equal emphasis on these two areas. AP Physics C courses are more intensive and analytical than AP Physics B courses and require the use of calculus to solve the problems posed.

03157 IB Physics

Courses prepare students to take the IB Physics exams at either the Subsidiary or Higher level. They promote understanding of the principles underlying the field of physics and include critical analysis, prediction, and application of scientific information and hypotheses; communication of scientific ideas; and examination of issues of ethical, philosophical, and political importance. Course content varies. Laboratory experimentation is essential.

03159 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

Courses prepare students to take the International Baccalaureate Physical Science exams at either the Subsidiary or Higher level. They integrate 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. Courses also promote critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and examination of 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.

03161 Conceptual Physics

Courses introduce the use of chemicals, characteristic properties of materials, and simple mechanics to describe the world and nonliving matter. They emphasize precise measurements and descriptive analysis of experimental results. Topics include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

03162 Forensics—Physics Emphasis

Courses provide an understanding of the scientific principles involved in criminal investigations, including the forensic techniques and processes necessary to collect, identify and analyze physical evidence. Topics of study typically include, but are not limited to, blood spatter, trauma direction, ballistics and tool marking as well as crime scene documentation.

03199 Physics—Other

(Insert local course description)

E. Integrated/Other**03201 Integrated Science**

Course content varies but draws upon the principles of several scientific specialties—earth science, physical science, biology, chemistry, and physics—and organize the material into multiple thematic units. Units may be developed around themes such as systems, models, energy, patterns, or change and constancy. These courses use appropriate aspects from each science specialty to investigate applications of the theme.

03202 Unified Science

Courses combine or integrate more than one branch of science into a cohesive course of study. Typically, scientific concepts appropriate to the course of study are explored, as are the principles underlying the scientific method and experimentation techniques.

03204 Forensics—Integrated Study

Courses provide an understanding of the scientific principles involved in criminal investigations, including the forensic techniques and processes necessary to collect, identify and analyze biological, chemical and physical evidence. Topics of study typically include, but are not limited to fingerprinting, blood types, DNA and genetics, toxicology, decomposition and physiological systems of the body, hair and fiber analysis, blood spatter and trauma direction, ballistics and tool markings as well as crime scene documentation.

03206 IB Design Technology

Courses prepare students to take the IB Design Technology exams at either the Subsidiary or Higher level. They 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 a project.

03207 AP Environmental Science

Courses are designed by the College Board to provide students with the principles, concepts, and methodologies required to understand the natural world, identify and analyze environmental problems, 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 Systems

Courses prepare students to take the IB Environmental Systems exam at the Standard level by providing them with the knowledge, methods and techniques to understand the functioning of natural systems, 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.

03209 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 (atmosphere, pressures, winds and jet streams) and astronomical concepts (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.

03213 Field Studies—Science

Courses provide students with the opportunity to live and/or work in an area that has significance, including, but not limited to, biology, geology, or an environmental nature. While topics of study vary considerably and may be of an interdisciplinary nature, students typically work with local experts and may be involved in observation, research, preservation, restoration or improvement projects.

03214 Seminar/Project—Science

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in science. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

03215 English as a Second Language (ESL)—Transition Science

Courses are designed for English Language Learners and may include an overview of scientific areas, including earth and physical science, biology, chemistry, and physics or focus on particular areas. They may also include preparation for state science assessments. These courses provide a transition from ESL to mainstream high school science courses and are taught by a science teacher and an ESL teacher or one teacher with dual certification in science and ESL.

03216 Bilingual Science

Courses are taught in the student's native language and may include an overview of or integrated approach to the scientific areas, including earth and physical science, biology, chemistry, and physics or focus on a particular area or areas. They may also include preparation for state science assessments.

03994 Biology/Life Science—Proficiency Development

Courses focus on remediation of students' knowledge and skills in science to improve their performance on state science examinations.

03995 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 Credit Recovery—Science

Courses are designed to enable students to recover credits required for graduation in the science curriculum area.

03997 Life and Physical Sciences—Independent Study

Courses, often conducted with instructors as mentors, enable students to explore topics of interest related to science. These courses may serve as an opportunity for students to expand their expertise, to explore a topic in detail, or to develop advanced skills.

Subject Area 04: Social Sciences & History

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. Classification of social study courses require close reading of descriptions, not just titles as local course titles often do not correspond to classification titles in the national model used to create the MCCC. For example, some local civics courses include both economics and U.S. government. Those courses should be classified as *04160 Principles of Democracy* as the classification *04161 Civics* does not include the study of economics.
- B. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combination of topics that are not specified in other MCCC classifications listed within the category.
- C. Some local courses combine two MCCC course classifications or topics and no MCCC course exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- D. Local IB or AP **Preparation** courses **should not** be classified under the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course classification that best describes the content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses in the local course title or description or call for additional requirements beyond simple pre-requisites.
- E. Local IB History course titles may include the specific area of the world studied for example, *IB History of the Americas* or *IB History of Africa*. However, they all fit under the one MCCC course classification of *04054 IB History*.

- F. The two English as a Second Language (ESL) social studies classifications in this Subject Area are:
1. *04984 English as a Second Language (ESL)—Transition Social Studies.*
 2. *04985 Bilingual Social Studies*
- Additional ESL course classifications are listed in **23 Academic and Career Development/Category F. English Language Development.**
- G. Literature and social studies paired course classifications that offer credit for language arts and social studies (typically in two class periods) are listed in **01 English Language and Literature.** One course is *01055 American Literature/Social Studies Combination* the other is *01057 World or British Literature/Social Studies Combination.*
- H. Religious studies classifications are listed in **07 Religious Education and Theology.**
- I. Local justice and the criminal court system courses are most accurately classified as *04165 Legal System.* *04162 Law Studies* includes both criminal and civil law, including topics such as torts, contracts and property law.
- J. The distinctions among these classifications: 1) *04064 Contemporary World Issues,* 2) *04106 Contemporary U.S. Issues,* 3) *04155 International Relations,* and 4) *14156 United States and World Affairs* are slight. A close reading of the descriptions is necessary to make an accurate classification of local course offerings.
- K. Local community service and community/organization leadership courses that enable students to participate in and examine social issues should be classified as *04981 Community Service/Leadership.*

III. Social Sciences and History course categories

A. Geography	04(001) – 04(050)
B. World History	04(051) – 04(100)
C. U.S. History	04(101) – 04(150)
D. Government, Politics and Law	04(151) – 04(200)
E. Economics	04(201) – 04(250)
F. Social Sciences	04(251) – 04(300)
G. Humanities	04(301) – 04(350)
H. All Others	04(981) – 04(999)

A. Geography

04001 World Geography—Overview

Courses provide an overview of world geography, but may vary widely. 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

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

Courses prepare students to take the International Baccalaureate Geography exams at either the Subsidiary or Higher level, and 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 support student understanding of the relationships within society, the relationships between society and the natural environment, and how those relationships change over time.

04004 AP Human Geography

Courses follow the College Board's suggested curriculum and are designed to parallel college-level Human Geography courses. They introduce 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 as well as learn about the methods and tools geographers use in their practice.

04005 Human Geography

Courses examine the 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. They also learn about the methods and tools geographers use in their practice.

B. World History

04051 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. They may include limited geographical components.

04052 World History and Geography

Courses cover the objectives of world history overview courses while providing an overview of world geography and exploring geographical concepts.

04053 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

Courses prepare students to take the IB History exams at either the Subsidiary or Higher level. Students study political, military, economic, social, and cultural trends and explore the nature of historical documentation and methods used by historians. Courses survey 20th-century topics in an international context; provide a detailed regional study of a major area, such as Africa, Europe, the Americas, West and South Asia, East and Southeast Asia, or Australia; and enable students to undertake individual, in-depth study on a subject of interest.

04055 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

Courses follow the College Board’s suggested curriculum and parallel college-level European History courses. Courses examine European civilization from the High Renaissance period to the recent past. Students understand principal themes in modern European history, analyze historical evidence and express their understanding and analysis in writing.

04057 AP World History

Courses follow the College Board’s suggested curriculum and parallel college-level World History courses. They examine world history from 8000 BCE to the present with the goal of understanding the evolution of global processes and how different human societies have interacted. Courses highlight the nature of changes in an international context and explore their causes and continuity.

04058 Ancient Civilizations

Courses provide a survey of the evolution of society from the ancient Middle East through Greek and Roman civilizations. Typically, 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

Courses survey European civilization from the fall of Rome through the late Middle Ages.

04060 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

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. They may focus on the history of a particular region or may take an interdisciplinary approach to the contemporary issues affecting the region. They may emphasize one particular country (other than the United States), rather than a region or continent.

04062 World People Studies

Courses examine 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

Courses apply an interdisciplinary approach to the study of western cultural traditions, frequently using a chronological framework. 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

Courses examine political, economic, and social issues facing the world. They may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.

04065 Particular Topics in World History

Courses examine particular topics in world history other than those already described.

04066 IB Islamic History

Courses prepare students to take the IB History exams at either the Subsidiary or Higher level. Courses examine Islamic history and its contribution to the history of the world. Possible topics covered include political, social, economic, and intellectual aspects of Islamic history.

C. U.S. History**04101 U.S. History—Comprehensive**

Courses provide students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. They typically include a historical overview of political, military, scientific, and social developments. Content may include a history of the North American peoples before European settlement.

04102 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 American history before European settlement, while others begin at the formation of the new nation. They typically include a historical overview of political, military, scientific and social developments.

04103 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

Courses follow the College Board's suggested curriculum and parallel college-level U.S. History courses. They provide students with the analytical skills and factual knowledge necessary to address critically problems and issues in U.S. history. Students assess historical materials and weigh the evidence and interpretations presented in historical scholarship. Courses examine the discovery and settlement of the New World through the recent past.

04105 State-Specific Studies

Courses examine the history, politics, economics, society, and/or cultures of one state in the United States. They may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.

04106 Contemporary U.S. Issues

Courses examine the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. They may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

04107 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. They 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

Courses examine the history, politics, economics, and/or culture of gender in the U.S. They may focus on gender relations or take a comprehensive approach to contemporary issues of gender.

04109 Particular Topics in U.S. History

Courses examine a particular topic or a particular time periods in U.S. history or they may focus on the history of particular U.S. regions rather than provide an overview of the subject.

D. Government, Politics, and Law**04151 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. They may examine the structure and function of state and local governments and cover selected economic and legal topics.

04152 Particular Topics in U.S. Government

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 a topic(s) related to governmental structure, function and purposes, such as the Constitution, the Supreme Court, Congress or the Office of the President.

04153 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, power and action.

04154 Comparative Government

Courses examine the basic tenets of government, identifying 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

Courses provide an introduction to the relationships 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. Contemporary events may be included.

04156 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.

04157 AP U.S. Government and Politics

Courses follow the College Board's suggested curriculum and parallel college-level courses. They provide 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. They 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

Courses follow the College Board's suggested curriculum and parallel college-level courses. Students study the world's diverse political structures and practices. Courses encompass both specific countries and general concepts used to interpret the key political relationships found in national policies. 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.

04159 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 Principles of Democracy

Courses combine a study of the structure of national, state, and local U.S. government with an overview of the principles of market economics. Content may include contemporary U.S. issues. The purpose of these courses is to prepare students to perform effectively as informed citizens.

04161 Civics

Courses examine the structure and functions of U.S. 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. They do not typically delve into as much detail on constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.

04162 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

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

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.

04165 Legal System

Courses examine the U.S. criminal and civil justice systems, including civil and criminal law and the legal process, the structure and procedures of courts, and the role of legal or judicial agencies. Content may also include the history and foundation of U.S. law (the Constitution, statutes and precedents). Contemporary problems in the criminal justice system may be included.

04166 Particular Topics in Law

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

E. Economics**04201 Economics**

Courses provide an overview of economics with emphasis on the principles of microeconomics and the U.S. economic system. Topics may include principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

04202 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

Courses follow the College Board's suggested curriculum and parallel college-level microeconomics. They provide a thorough understanding of the principles of economics that apply to the functions of individual decision-makers (both consumers and producers). Courses may place primary emphasis on the nature and functions of product markets, while including a study of factor markets and the role of government in the economy.

04204 AP Macroeconomics

Courses follow the College Board's suggested curriculum and parallel college-level macroeconomics. They provide 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.

04205 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

Courses prepare students to take the IB Economics exams at either the Subsidiary or Higher level. They provide the basic tools of economic reasoning and teach students to use those tools to explain or interpret economic problems. Content includes resource allocation under various systems, national income analysis, international economics, and economic development and growth and may address income distribution.

04207 Particular Topics in Economics

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.

F. Social Sciences**04251 Anthropology**

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

04252 Particular Topics in Anthropology

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

04253 IB Social Anthropology

Courses prepare students to take the IB Social Anthropology exams at either the Subsidiary or Higher level. The course goal is to promote 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

Courses introduce students to the study of individual human behavior. 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

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

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

04257 IB Psychology

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

04258 Sociology

Courses introduce students to the study of human behavior in society. They 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

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

Courses typically provide an introduction to the disciplines in the social sciences, including anthropology, economics, geography, history, political science, psychology, and sociology. They emphasize the methodologies of and differences among the various disciplines.

04261 Social Science Research

Courses emphasize the methods of social science research, including statistics and experimental design.

04262 IB Organization Studies

Courses prepare students to take the IB Organization Studies exams at either the Subsidiary or Higher levels. Courses introduce the principles and practices of enterprises engaged in producing, distributing, and exchanging goods and services in a variety of economic frameworks. Topics explored include management styles and structures; decision-making methods; and methods for accounting, planning, and communication.

G. Humanities

04301 Humanities Survey

Courses provide an overview of the cultural heritage of selected western and eastern civilizations. Content includes, but is not limited to, the examination of selected examples of art, music, literature, architecture, technology, philosophy, and religion of the cultures studied. Courses may also cover the languages and political institutions of these cultures.

04302 Humanities

Courses examine student responses to human creative efforts and the world in particular historical periods and in particular cultures. Content includes exploration, analysis, synthesis, and various responses to cultural traditions. These courses may also examine relationships among painting, sculpture, architecture, and music.

04303 Issues of Western Humanities

Courses introduce the study of cultural heritage and provide an opportunity to explore fundamental humanity. Content typically includes definitions of the humanities in relation to history, literature, religion, philosophy, art, music, and architecture and study of Greece, Rome, and one or more contemporary settings. Students analyze and clarify their sense of themselves and their responsibilities to others; examine philosophies concerning moral responsibility for the future; and explore philosophies about human mortality.

04304 IB Theory of Knowledge

Courses are required for every IB degree candidate. They stimulate critical self-reflection of students' knowledge and experiences. Content generates questions regarding the bases of knowledge in the disciplines of mathematics, natural sciences, human sciences, and history, with an awareness of moral, political 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 experiences; to formulate rational arguments; and to evaluate the role of language in knowledge.

04305 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

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. Content typically includes examination of the major philosophers and their writings.

04307 Particular Topics in Philosophy

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

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

04309 IB Philosophy

Courses prepare students to take the IB Philosophy exams at either the Subsidiary or Higher levels. They 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

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.

H. All Others**04981 Community Service/Leadership**

Courses are designed to assist students in acquiring the knowledge and skills to be effective in working within and/or leading community or school projects and organizations. Courses often have a classroom component that examines various local social and cultural issues including, but not limited to, history, economics, geography and citizenship.

04982 Field Studies—Social Studies

Courses provide students with the opportunity to live and/or work in an area that has significance of, but not limited to, geographical, historical, or cultural nature. Topics may vary. Students typically work with local experts and are involved in observation, research, preservation, restoration or improvement projects.

04983 Seminar/Project—Social Sciences and History

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in the social studies. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication, interpersonal skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

04984 English as a Second Language (ESL)—Transition Social Studies

Courses are designed for English Language Learners and may include an overview of social studies areas—geography, history, economics, government and citizenship or focus on particular areas. These courses provide a transition from ESL to mainstream high school social courses and are taught by a social studies teacher and ESL teacher or by one teacher with dual certification in social studies and ESL.

04985 Bilingual Social Studies

Courses are taught in the student’s native language and may include an overview of or an integrated approach to the different social studies areas, including history, geography, government, citizenship, economics and the social sciences or focus on a particular area or areas.

04994 Social Sciences and History—Proficiency Development

Courses are designed to assist students in acquiring the skills necessary to pass local or state proficiency examinations related to history and/or other social sciences.

04995 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.

04996 Credit Recovery—Social Studies

Courses are designed to enable students to recover credits required for graduation in the social studies curriculum area.

04997 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. They provide students with an opportunity to expand their expertise, to explore a topic of interest, or to develop advanced skills.

04999 Social Sciences and History—Other

(Insert local course description)

Subject Area 05: Visual and Performing Arts

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade classifications even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

A. General 9-12 Information

1. Local IB or AP **Preparation** courses **should not** be classified under the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course classification that best describes the content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses in the local course title or description or call for additional requirements beyond simple pre-requisites.
2. Classify local film study (not production) courses in the visual and media arts area under *05151 Art Appreciation*. Classify film study courses in the speech and theater area under *05061 Film Study*. Classify film production courses in the visual and media arts under *05168 Media Art—Film/Video*. Other film production course classifications are in **11 Communication and Audio/Visual Technology**.

B. Music

1. Local courses such as the history of rock and roll and understanding Broadway musicals should be classified as *05116 Music History/Appreciation*, *05117 Music History* or *05118 Music Appreciation* depending upon course focus—both history and appreciation, history or appreciation.
2. Local bands, orchestras, and ensembles may have various grade level or instrumental configurations. All local courses, however, should be classified under the one orchestra classification, the four band classifications, or the one ensemble classification in the MCCC. Additional documentation information will differentiate among the various local bands, orchestras and ensembles.
3. Local chorus and vocal ensemble courses may have various grade levels and vocal configurations. All local courses, however, should be classified under one of the two MCCC classifications, chorus or ensemble. Additional documentation information will differentiate among the various local choruses and ensembles.

C. Visual Arts

1. Beginning courses that introduce or advanced courses that refine student skills in *several art forms* should be classified as *05154 Visual Art—Comprehensive*. Local courses that emphasize the elements and principles of design in a *variety of different art forms* should also be classified as *05154 Visual Art—Comprehensive*.
2. The most accurate classification for courses that combine visual design with technology and computer software is determined by the focus of the course. If the focus of the course is:
 - a. How the technology and the computer can assist in making art, it is best classified as *05169 Computer-Assisted Art*.
 - b. Art elements and principles of design to communicate a message, it is best classified as *05162 Visual Design*
3. Yearbook, newspaper, literary magazines (journalism or production) and photojournalism classifications are listed in **11 Communications & Audio/Visual Technology**. Appropriate classification depends upon the focus of the course.
4. Advanced courses in visual arts that require significant independent work, including those typically identified locally as studio classes are often appropriately classified as *05170 Art Portfolio*.
5. Floral design is listed in two courses, *18052 General Horticulture* and *18056 Particular Topics in Plant Systems* in **18 Agriculture, Food and Natural Resources**. If the course focuses on floral design specifically, the most accurate classification is *18056 Particular Topics in Plant Systems*. The decision to award art credit for these courses is a local decision.
6. Decorating with foods or food decoration, including cake decorating is most accurately classified as *16056 Culinary Art Specialty* in **16 Hospitality and Tourism**. The decision to award art credit for these courses is a local decision.

III. Visual & Performing Arts course categories

A. Dance	05(001) – 05(050)
B. Theater	05(051) – 05(100)
C. Music	05(101) – 05(150)
D. Visual Arts	05(151) – 05(200)
E. All Others	05(201) – 05(999)

A. Dance

05001 Dance Survey

Courses provide students with experience in several dance forms such as modern, jazz, ballet, tap and/or styles and genres such as African, hip-hop, swing and urban street dances. Introductory courses often explore commonalities and uniqueness of different dance forms.

05002 Dance Repertory

Courses provide the opportunity to study and perform excerpts or complete works from one or more choreographers' repertoires. These courses train students to capture the nuances and characteristics of selected works to more fully realize the choreographer's intent.

05003 Dance Technique

Courses provide in-depth training to improve students' techniques and styles in one or more dance forms. Improvisation may be a topic or a focus in these courses.

05004 Dance History and Appreciation

Courses expand students' knowledge of the purposes and history of dance as an art form. They develop students' dance vocabulary and ability to critique dance performances.

05005 Composition/Choreography

Courses develop students' knowledge of choreographic principles and provide practice in how to apply them to the process of composing formal or informal dance.

05006 Social Dance

Courses offer students the opportunity to learn a variety of recreational partner and/or group dances including but not limited to folk dancing, line dancing, clogging and traditional or modern dancing such as Fox Trot, Swing, Cha-Cha, and Salsa.

05007 IB Dance

Courses prepare students to take the IB Dance exam at either the Subsidiary or Higher level. These courses develop students' knowledge and understanding of dance through training in dance skills (performance and choreography); exposure to dance elements and principles; and formulation of an historic understanding and global awareness of dance forms and styles.

05008 Dance—Comprehensive

Courses provide students with experience in several dance forms, training to improve techniques and styles in one or more dance forms and opportunities to study and perform excerpts or complete works from one or more choreographers' repertoires. Composition and choreography, critique and analysis, and dance history and appreciation are also typically included.

05009 Seminar/Project—Dance

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in dance. They may include college and/or career exploration. Students often design a project based on their interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

05049 Dance –Other

(Insert local course description)

B. Theater**05051 Introduction to the Theater**

Courses provide an overview of the art, conventions and history of the theater. Courses may include experiential exercises and basic acting techniques, but emphasize learning about the theater rather than performance. Topics may include major dramatic literature and playwrights, the evolution of theater as a cultural tradition and critical appreciation.

05052 Theatre Arts

Courses focus on the study and performance of drama including musical theatre and comedy. These courses explore the role of theater in society; survey a wide range of scripted materials, such as plays, screenplays, teleplays and readers' theatre; introduce criticism and may include creation of original dramatic works. Students may work collaboratively on performances.

05053 Theatre—Comprehensive

Courses develop students' skills in one or more aspects of theatrical production. Introductory courses provide an overview of elements such as acting, set design, directing, playwriting and stage management. Advanced courses typically introduce additional theatrical traditions, expand and refine students' technique and increase their chances of participating in public productions. Career opportunities in theater may be included.

05055 Theatre—Acting/Performance

Courses develop students' skills in theatrical production, concentrating on acting and performance. Introductory courses explore fundamental techniques, while advanced courses focus on extending and refining technique, exploring different types of theatrical traditions and increasing students' chances of participating in public productions. Career opportunities in theater may be included.

05056 Theatre—Stagecraft

Courses develop students' skill in theatrical production, concentrating on lighting, costuming, sound, set construction, makeup, stage management and use of technology. Introductory courses explore basic concepts, while advanced courses concentrate on expanding and refining concepts, exploring different types of theatrical traditions and increasing students' chances of participating in public productions. Career opportunities in theater may be included.

05057 Directing

Courses develop students' skills in translating scripts into final productions. They support students in creating artistic visions through exposure to various theatrical techniques and traditions and provide students opportunities to direct the performances of others in scenes and/or full productions. Career opportunities in theater may be included.

05058 Playwriting/Screenwriting

Courses develop students' skills in creating scripts suitable for theater, film and/or television. They support students in developing a personal voice and style through examination of various playwrights and the techniques and traditions of each genre. Students typically write original scenes and/or full productions. Career opportunities in theater may be included.

05059 History and Literature of the Theater

Courses explore the structure, elements and style of dramatic compositions as well as how dramatic literature historically influenced theatrical production and acting styles. Contributors such as playwrights and directors as well as the architecture of the theater may be included.

05060 IB Theater

Courses prepare students to take the IB Theater exam at either the Subsidiary or Higher level. They develop students' knowledge and understanding of theater through training in theater skills such as acting/performing, stagecraft and directing; exposure to theater history and literature; and awareness of theatrical forms and styles.

05061 Film Study

Course content varies widely. Some courses explore the length and breadth of film as a dramatic medium. Others focus on selected genres of film, various styles of filmmaking, important directors and may include historical merit and artistic intent. Some courses may use film to further students' comparative consideration of cultural perspectives and/or historical connections. **Note:** This is not a film production classification.

05062 Seminar/Project—Theater

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in theater. They may include college and/or career exploration. Students often design a project based on their interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

05099 Theatre—Other

(Insert local course description)

C. Music

05101 General Band

Courses develop students' technique for playing brass, woodwind and percussion instruments and may include a variety of literature styles (concert, marching, modern and orchestral). General Band may be offered at various skill levels to accommodate student proficiency.

05102 Concert Band

Courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances. Courses may be offered at various skill levels to accommodate student proficiency.

05103 Marching Band

Courses develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances.

05104 Orchestra

Courses develop students' abilities to play brass, woodwind, percussion and string instruments, covering a variety of string and orchestral styles. Orchestra courses may be offered at various skill levels to accommodate student proficiency.

05105 Contemporary Ensemble

Courses develop students' techniques for playing instruments, focusing primarily on contemporary music styles such as traditional jazz, jazz improvisation, rock and/or creating and performing student compositions. Vocals may be included.

05106 Instrumental Ensemble

Courses develop students' technique for playing brass, woodwind, percussion, string and/or electronic instruments in small or chamber ensemble groups. They may include one or more ensemble literature styles as well as creating and performing student compositions.

05107 Piano/Keyboard

Courses may introduce students to the fundamentals of music and basic keyboard techniques such as scales, chords, melodic lines and harmonic structures, or they may include more advanced keyboard techniques.

05108 Guitar

Courses may introduce students to the fundamentals of music and guitar-playing techniques, such as strumming and chords, or they may include more advanced guitar-playing techniques.

05109 Individual Technique—Instrumental Music

Courses provide students with instruction in instrumental techniques. They are typically conducted either as individual or small group courses.

05110 Chorus

Courses develop students' vocal skills and techniques to sing a variety of choral literature styles in the context of a larger choral group for men's and/or women's voices and may include instrumental accompaniment.

05111 Vocal Ensembles

Courses develop vocal techniques and the ability to sing parts in smaller ensemble groups. Courses may include the development of solo singing ability, emphasize one or several ensemble literature styles and include instrumental accompaniment.

05112 Individual Technique—Vocal Music

Courses typically develop vocal techniques beyond the ability to sing in groups. They are typically conducted either as individual or small group courses.

05113 Music Theory

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

05114 AP Music Theory

Courses develop understanding of musical structure and composition and are equivalent of a first-year music theory college course. They extend 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

Courses prepare students to take the IB Music exam at either the Subsidiary or Higher level. They develop students' knowledge and understanding of music through training in musical skills such as listening, performing, and composing; exposure to music theory; and formulation of an historic and global awareness of musical forms and styles.

05116 Music History/Appreciation

Courses survey different musical styles and periods to develop students' enjoyment of music, understanding of musical elements and/or their artistic or technical judgment. These courses may also focus on developing an understanding of a particular style or period.

05117 Music History

Courses are similar in nature to Music History/Appreciation courses but focus specifically on the history of music.

05118 Music Appreciation

Courses are similar in nature to Music History/Appreciation but focus specifically on students' appreciation of music.

05119 Composition/Songwriting

Courses prepare students to express themselves through the creation of music. Conventional or nonconventional notation may be used. In addition to musical instruments and/or voice, students may also use technology for creating, recording and performing music.

05120 Music Theory/Music History

Courses are similar in nature to the individual courses Music Theory and Music History but combine the study of the fundamentals of music with the study of music history. These courses may also include other topics such as composition and analysis

05121 Combined Band and Chorus

Courses provide students with the opportunity to participate in both vocal and instrumental programs. These courses generally offer a comprehensive study of music fundamentals and performance skills and include the use of a wide selection of music literature.

05122 Music and Technology

Courses vary widely in the types of technology used in composing, performing and/or recording music. While these courses concentrate on instrumental and/or vocal music creation and performance, there is an additional focus on exploration and use of computers, software and equipment such as Garage Band, mixing boards, digital recording, multi-track recorders, light equipment, video cameras and electronic instruments. Students may create musical projects such original songs, music videos, websites and podcasts. Music theory, history and exploration of music technology careers may be included.

05123 Seminar/Project—Music

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in music. They may include college and/or career exploration. Students often design a project based on their interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

05149 Music—Other

(Insert local course description)

D. Visual and Media Arts**05151 Art Appreciation**

Courses introduce students to one or more forms of visual art and help them form a historical, cultural and/or political context by which they can examine and critique the art of various individuals and/or movements. These courses typically explore the place and significance of visual art in society. **Note:** This classification includes non-production courses that study film as an art form.

05152 Art History

Courses introduce students to significant works of visual 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

Courses are designed to parallel college-level visual arts courses and provide students the opportunity to examine architecture, sculpture, painting, and other art forms within their historical and cultural contexts. Students learn to identify different styles, techniques, and influences and to formulate and articulate their reactions to various kinds of artwork through the study of art of several centuries, although not necessarily in chronological order.

05154 Visual Art—Comprehensive

Courses develop students' knowledge and skill to explore multiple art forms and create individual works of art in these forms. Introductory courses focus on art elements and principles and design and typically include the language, materials, techniques and processes of the forms studied. Advanced courses typically deepen and refine students' understanding of art elements and principles of design and the creative process. Additional topics may include the study of major artists, movements and styles; consideration of cultures with rich histories in particular art forms; analysis and critique; application of technology; and career opportunities in the field.

Note: The focus of this comprehensive course classification is on visual art elements and principles of design applied to more than one art form. For classifications that focus on specific art forms and teach art elements and principles of design through those forms, use the course classifications below. These specific classifications may also include the additional topics cited in the comprehensive classification above.

05155 Drawing/Painting

Courses apply art elements and principles of design to the process of creating drawings and paintings. Courses typically include a variety of media such as pen-and-ink, pencil, chalk, watercolor, tempera, oils and acrylics, but some courses focus on only one or two media.

05156 Drawing

Courses apply art elements and principles of design to the process of creating drawings. Courses typically include a variety of media such as pen-and-ink, pencil and chalk, but some courses focus on only one or two media.

05157 Painting

Courses apply art elements and principles of design to the process of creating paintings. Courses typically include a variety of media such as watercolor, tempera, oils and acrylics, but some courses focus on only one or two media.

05158 Sculpture

Courses apply art elements and principles of design to the process of creating three-dimensional works often through subtractive, additive and/or assemblage techniques. Courses typically include a variety of media such as clay, ceramics, wood, metals and textiles, but some courses focus on only one or two media.

05159 Ceramics/Pottery

Courses apply art elements and principles of design to the process of creation using ceramics and clay. 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.

05161 Printmaking

Courses apply art elements and principles of visual design to the process of creation in a variety of traditional and digital printmaking media. The techniques and processes of each media are included, and students typically communicate meaning through realistic and/or abstract prints. Technology is incorporated as appropriate.

05162 Visual Design

Courses apply art elements and principles of design to the process of creation in a variety of design fields such as fashion, interior, industrial, graphic, architectural and stage/ set design as well as advertising and commercial art; or courses may focus on one or two fields. The techniques, processes and technology unique to each field studied are included.

05163 Calligraphy/Lettering

Courses apply art elements and principles of design to the process of creation in a variety of styles of inscribing letters. Courses typically include the techniques and processes of calligraphy and lettering, historical and contemporary roles and uses, and artists who practice these art forms.

05164 Textiles and Fibers

Courses apply art elements and principles of visual design to the process of creation in textiles and fibers. Courses may survey a wide range of art forms using textiles and/or fibers, or they may focus on one or two forms. The techniques and processes of the textile and/or fiber art forms studied are included.

05165 Folk Art

Courses apply art elements and principles of visual design to the process of creation in folk art. Courses may survey a wide range of folk art and the various purposes and cultures they represent, or they may focus on one or two types of folk art. The techniques and processes of the folk art studied are included.

05166 Jewelry

Courses apply art elements and principles of visual design to the process of creation in jewelry. These courses may survey various jewelry media, techniques and processes or focus on one or two media. Topics may include jewelry of diverse world cultures and the history of jewelry design.

05167 Media Art—Photography

Courses apply art elements and principles of visual design to the process of creation in photography. Students apply photographic media, techniques and processes, including technology to manipulate images. These courses may also examine major photographers, art movements and styles. Darkroom experience may be included.

05168 Media Art—Film/Video

Courses apply art elements and principles of visual design to the process of creation in film, television and/or video. Students experience the techniques and processes involved in the media studied. Topics may include production values and various styles of cinematography, study of professional cinematographers and video artists and their works, and the history of film, television and video production. Animation may be included as a topic or it may be the focus of a course in this classification.

05169 Computer-Assisted Art

Courses enable students to learn how the computer can be used to create or to assist in producing various forms of artwork. These courses support students in becoming more adept in both the art form and in the use of the computer.

05170 Art Portfolio

Courses support students in creating a body of work that demonstrates their technical skills, conceptual thinking and personal interests. Students tend to work independently with teachers acting as mentors. Peer group critiques often support students in achieving their artistic goals.

05171 AP Studio Art—Two-Dimensional

Courses focus on a variety of concepts and approaches in two-dimensional work, enabling students to demonstrate a range of abilities with different media, techniques and processes. Students may demonstrate achievement in the use of one or more media. Work is submitted via a portfolio to the College Board for evaluation.

05172 AP Studio Art—Three-Dimensional

Courses focus on a variety of concepts and approaches in three-dimensional work, enabling students to demonstrate a range of abilities with different media, techniques and processes. Students may demonstrate achievement in the use of one or more media. Work is submitted via a portfolio to the College Board for evaluation.

05173 IB Art/Design

Courses develop students' creative capacity, offer training in art criticism and support the creation of quality works of art. Students perform both studio and research work. The research component is designed to provide students the opportunity to investigate particular topics of interest in further detail. Students demonstrate their learning when they take either the Subsidiary or Higher Level exam at the end of these courses.

05174 IB Film

Courses develop students' textual analysis skills, understanding of film theory and history, and creative process in film production. Course aims include appreciating film as a complex art form and the knowledge, developing the ability to formulate stories and ideas in film terms, increasing practical and technical skills of production, building the skills of critical evaluation and increasing the knowledge of film-making traditions in more than one country. Students demonstrate their learning when they take either the Subsidiary or High Level exam at the end of these courses.

05175 Seminar/Project—Visual and Media Arts

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in visual arts. They may include college and/or career exploration. Students often design a project based on their interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

05199 Visual Arts—Other (*Insert local course description*)

E. All Other

05995 Fine and Performing Art—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.

Subject Area: 06 World Languages and Literature

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade classifications even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. Local IB or AP **Preparation** courses **should not** be classified as the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course classification that best describes the content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses in the local course title or description or call for additional requirements beyond simple pre-requisites.
- B. Hebrew is listed in *Category L. Semitic and Near/Middle Eastern*.

III. World Languages and Literature course categories

A. Introduction to World	06(001) – 06(050)
B. Romance	06(101) – 06(200)
C. Germanic	06(201) – 06(260)
D. Celtic	06(261) – 06(280)
E. Greek	06(281) – 06(300)
F. Classical	06(301) – 06(360)
G. East Asian	06(401) – 06(500)
H. Southeast Asian	06(501) – 06(600)
I. Balto-Slavic	06(601) – 06(660)
J. Turkic/Ural-Altaic	06(661) – 06(680)
K. Iranian/Persian	06(681) – 06(700)
L. Semitic and Near/Middle Eastern	06(701) – 06(760)
M. Non-Semitic African Languages	06(761) – 06(800)
N. American Sign	06(801) – 06(820)
O. Native American	06(821) – 06(850)
P. Indic	06(851) – 06(870)
Q. Malayo-Polynesian	06(871) – 06(890)
R. General	06(995) – 06(999)

A. Introduction to World Languages and Cultures

06001 Exploring World Languages and Cultures

Courses are designed for students who have little or no experience with foreign languages. They typically serve as a survey of languages to help students select a particular language to study. Content generally includes essential language structure including alphabets and basic vocabulary as well as information about where the languages are spoken and the cultures of those countries and people.

B. Romance Languages

06101 Spanish I

Courses introduce students to language and culture and emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand Spanish 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

Courses extend students' ability to understand and express themselves in Spanish and increase their vocabulary. Students engage in discourse for informative or social purposes, write text that shows understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students may explore customs, history, and art forms to deepen understanding of Spanish-speaking cultures.

06103 Spanish III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06104 Spanish IV

Courses focus on advancing students' skills and abilities to read, write, speak, and understand the language. Students maintain simple conversations with sufficient vocabulary and an acceptable accent, and they develop 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

Courses extend students' facility with the language so 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, including present, past, and future.

06106 Spanish for Native Speakers

Courses support, reinforce, and expand students' knowledge of their own language. Because students understand at least the rudiments and structure of the language and have a working vocabulary, to a greater or lesser degree, these courses often move faster than regular language courses and emphasize 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

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

06108 Spanish Conversation and Culture

Courses focus on developing language proficiency while providing students with an introduction to or greater understanding of the Spanish language and the culture(s) of Spanish-speaking people. These courses place greater emphasis on improving speaking and listening skills while de-emphasizing writing and reading the language.

06109 Spanish Literature and Culture (Immersion)

Courses focus on developing language proficiency including students' accuracy and fluency in oral and written communication. While literature is frequently emphasized, content may vary and include study of and/or research into film, music, theater, art and historical and contemporary cultural perspectives. These courses are taught entirely in Spanish.

06110 IB Language A (non-English)—Spanish

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06111 IB Language B—Spanish

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level and focus on improving students' accuracy and fluency in oral and written communication, usually in the students' "second" language. Subsidiary Level exam requires understanding native speakers; Higher Level exam requires fluent communication at native speed.

06112 AP Spanish Language

Courses parallel third-year college-level courses in Spanish Composition and Conversation and develop students' ability to understand others and express themselves 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.

06113 AP Spanish Literature

Courses parallel college-level Introduction to Hispanic Literature courses and examine representative works from the literatures of Spain and Spanish America, encompassing all genres. Courses build students' language proficiency so they are able to read and understand moderately difficult prose and express critical opinions and literary analyses in oral and written Spanish equivalent to having completed a third-year college-level Spanish Language course.

06121 French I

Courses introduce students to French language and culture. They emphasize basic grammar and syntax, simple vocabulary, and spoken accent so 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.

06122 French II

Courses extend students' ability to understand and express themselves and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text 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 to deepen understanding of French-speaking cultures.

06123 French III

Courses focus on students expressing 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, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06124 French IV

Courses focus students' skills and abilities to read, write, speak, and understand the French language. Students maintain simple conversations with sufficient vocabulary and an acceptable accent, and they develop 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

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, including present, past, and future.

06127 French Field Experience

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

06128 French Conversation and Culture

Courses focus on developing language proficiency while providing students with an introduction to or greater understanding of the French language and the culture(s) of French -speaking people. They place greater emphasis on improving speaking and listening skills while de-emphasizing writing and reading the language.

06129 French Literature and Culture (Immersion)

Courses focus on language proficiency including students' accuracy and fluency in oral and written communication. While literature is frequently emphasized, course content may vary and include study of and/or research into film, music, theater, art and historical and contemporary cultural perspectives. These courses are taught entirely in French.

06130 IB Language A (non-English)—French

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level and include 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06131 IB Language B—French

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level and focus on students' accuracy and fluency in oral and written communication typically in the students' "second" language. Subsidiary Level exams require understanding native speakers; Higher Level exams require fluent communication at native speed.

06132 AP French Language

Courses parallel third-year college-level courses in French Composition and Conversation and develop students' ability to understand others and express themselves accurately, coherently, and fluently. Students develop a vocabulary large enough to understand literary texts, magazine and newspaper articles, films and television productions.

06133 AP French Literature

Courses parallel college-level Introduction to French Literature courses at a third year level and examine representative works of French literature. Courses build students' French language proficiency so they are able to read and understand moderately difficult prose and express critical opinions and analyses in correct oral and written French. They focus on literary components such as character, theme, structure, imagery, style, and tone.

06199 Romance/Italic Language—Other

(Insert local course description)

C. Germanic Languages

06201 German I

Courses introduce students to German language and culture. They 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.

06202 German II

Courses extend students' ability to understand and express themselves while increasing their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows understanding of sentence construction and rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms to deepen understanding of German-speaking cultures.

06203 German III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06204 German IV

Courses focus on students' skills and abilities to read, write, speak, and understand the German language. Students maintain simple conversations with sufficient vocabulary and an acceptable accent, and they develop 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

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 including present, past and future.

06207 German Field Experience

Courses place students in an environment with native speakers, most typically in a setting where German is the main language spoken. Students strengthen their language skills including reading, writing, listening, and speaking while increasing their ability to interact naturally.

06208 German Conversation and Culture

Courses focus on language proficiency while providing students with an introduction to or greater understanding of the German language and the culture(s) of German-speaking people. These courses place greater emphasis on improving speaking and listening skills while de-emphasizing writing and reading the language.

06209 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

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level and include 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06211 IB Language B—German

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level and focus on improving students' accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary Level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06212 AP German Language

Courses are designed to parallel third-year college-level courses in German Language and develop students' ability to understand spoken German in various conversational situations, to express themselves 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.

06259 Germanic Language—Other

(Insert local course description)

D. Celtic Languages**06279 Celtic Language—Other**

(Insert local course description)

E. Greek Language**06299 Modern Greek—Other**

(Insert local course description)

F. Classical Languages**06301 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

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.

06303 Latin III

Courses build knowledge of the Latin language and culture, typically focusing on students expressing increasingly complex concepts in writing and comprehending and reacting to original Latin texts.

06304 Latin IV

Courses build knowledge of the Latin language and culture, typically focusing on students expressing increasingly complex concepts in writing and comprehending and reacting to original Latin texts.

06305 Latin V

Courses build knowledge of the Latin language and culture, typically focusing on students expressing increasingly complex concepts in writing and comprehending and reacting to original Latin texts.

06311 IB Classical Languages—Latin

Courses seek to strike a balance between the study of the classic Latin language itself and the civilization it reflects, particularly its culture, philosophies, and institutions. Content enables students to understand, translate, and appreciate a classical Latin text; relate literature to its historical or social background; recognize current relevance of ancient literature; and apply acquired knowledge to other subjects.

06313 AP Latin (Virgil, Catullus, and Horace)

Courses parallel advanced college-level courses in Latin studies 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

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

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.

06323 Classical Greek III

Courses build students' knowledge of classic Greek language and culture, typically focusing on students expressing increasingly complex concepts in writing and comprehending and reacting to original Greek texts.

06324 Classical Greek IV

Courses build students' knowledge of classic Greek language and culture, typically focusing on students expressing increasingly complex concepts in writing and comprehending and reacting to original Greek texts.

06325 Classical Greek V

Courses build students' knowledge of classic Greek language and culture, typically focusing on students expressing increasingly complex concepts in writing and comprehending and reacting to original Greek texts.

06331 IB Classical Languages—Greek

Courses strike a balance between the study of the classic Greek language itself and the civilization it reflects particularly its culture, philosophies, and institutions. Courses enable 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

(Insert local course title and description here)

G. East Asian Languages**06401 Chinese I**

Courses introduce Chinese language and culture. They 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. Culture is introduced through the art, literature, customs, and history of Chinese-speaking people.

06402 Chinese II

Courses extend students' ability to understand and express themselves in Chinese and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows understanding of sentence construction and phrasing, and comprehend the language when spoken slowly. Students usually explore customs, history, and art forms to deepen understanding of Chinese-speaking cultures.

06403 Chinese III

Courses focus on students expressing 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, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06404 Chinese IV

Courses advance students' skills and abilities to read, write, speak, and understand the Chinese language. Students maintain simple conversations with sufficient vocabulary and an acceptable accent, and they develop 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.

06405 Chinese V

Courses extend students' facility with the language so 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 including present, past and future.

06407 Chinese Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Chinese is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking and increase their ability to interact naturally.

06408 Chinese Conversation and Culture

Courses focus on language proficiency while providing students with an introduction to or a greater understanding of the Chinese language and the culture(s) of Chinese-speaking people. These courses place greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

06409 Chinese Literature and Culture (Immersion)

Courses focus on language proficiency, including students' accuracy and fluency in oral and written communication. While literature is frequently emphasized, course content may vary and include study of and/or research into film, music, theater, art and historical and contemporary cultural perspectives. These courses are taught entirely in Chinese.

06410 IB Language A (non-English)—Chinese

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level and include study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Courses improve students' accuracy and fluency in what is usually the students' native language.

06411 IB Language B—Chinese

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level and focus on improving students' accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06412 AP Chinese Language

Courses parallel third-year college-level courses in Chinese Language and develop students' ability to understand spoken Chinese in various conversational situations, express themselves accurately and fluently, and have a command of the structure of the Chinese language. Students will develop a vocabulary large enough to understand literature, magazine/newspaper articles, films and television productions.

06421 Japanese I

Courses introduce Japanese language and culture. They 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. Culture is introduced through the art, literature, customs, and history of the Japanese-speaking people.

06422 Japanese II

Courses extend students' ability to express themselves in Japanese and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore customs, history and art forms to deepen understanding of Japanese-speaking cultures.

06423 Japanese III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06424 Japanese IV

Courses focus on students' skills and abilities to read, write, speak, and understand the Japanese language. Students maintain simple conversations with sufficient vocabulary and an acceptable accent, and they develop 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

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, including present, past, and future.

06427 Japanese Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Japanese is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking and increase their ability to interact naturally.

06428 Japanese Conversation and Culture

Courses develop language proficiency while providing students with an introduction to or greater understanding of the language and the culture(s) of Japanese-speaking people. These courses place greater emphasis on improving speaking and listening skills while de-emphasizing writing and reading the language.

06429 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

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. Courses include 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06431 IB Language B—Japanese

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. These courses improve students' accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06499 East Asian Language—Other

(Insert local course description)

H. Southeast Asian Languages**06581 Hmong I**

Courses introduce the Hmong language and culture. They emphasize basic grammar and syntax, simple vocabulary, and the spoken accent. These courses enable students to read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.

06582 Hmong II

Courses extend students' ability to understand and express themselves in Hmong and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows 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 to deepen understanding of Hmong cultures.

06583 Hmong III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06584 Hmong IV

Courses advance students' skills and abilities to read, write, speak, and understand Hmong. Students maintain simple conversations with sufficient vocabulary and an acceptable accent, and they develop 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 Hmong 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, including present, past, and future.

06586 Hmong for Native Speakers

Courses support, reinforce, and expand students' knowledge of Hmong. Because students understand at least the rudiments and structure of the language and have a working vocabulary, to a greater or lesser degree, these courses often move faster than regular World Language courses and emphasize literary development through a study of literature and composition. Courses may also include the culture or history of the Hmong and introduce translation skills.

06587 Hmong Field Experience

Courses place students in an environment with native speakers, most typically in a setting where a Hmong is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking and increase their ability to interact naturally.

06588 Hmong Conversation and Culture

Courses develop language proficiency while providing students with an introduction to or a greater understanding of the Hmong language and the cultures. Courses place greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

06589 Hmong Literature

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

06590 IB Language A (non-English)—Hmong

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level and include 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06591 IB Language B—Hmong

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level and focus on improving students' accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06599 Southeast Asian/Austral-Asian Languages—Other

(Insert local course description)

I. Balto-Slavic Languages

06601 Russian I

Courses introduce Russian language and culture. They 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. Culture is introduced through the art, literature, customs, and history of the Russian-speaking people.

06602 Russian II

Courses extend students' ability to express themselves and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students explore the customs, history, and art forms to deepen understanding of the Russian-speaking culture(s).

06603 Russian III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06604 Russian IV

Courses advance students' abilities to read, write, speak, and understand the language. They maintain simple conversations with sufficient vocabulary and an acceptable accent, develop sufficient comprehension to understand speech at a normal pace, read uncomplicated but authentic prose, and write narratives, indicating a good understanding of grammar.

06605 Russian V

Courses extend students' facility with the language so 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, including present, past, and future.

06607 Russian Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Russian is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking while increasing their ability to interact naturally.

06608 Russian Conversation and Culture

Courses focus on developing language proficiency while providing students with an introduction to or a greater understanding of the language and the culture(s) of Russian-speaking people. These courses place greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

06609 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

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06611 IB Language B—Russian

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. These courses improve students' accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06659 Balto-Slavic Language—Other

(Insert local course description)

J. Turkic/Ural-Altai Languages**06679 Turkic/Ural-Altai Language—Other**

(Insert local course description)

K. Iranian/Persian Languages**06699 Iranian/Persian Language—Other**

(Insert local course description)

L. Semitic and Near/Middle Eastern Languages**06701 Hebrew I**

Courses introduce Hebrew language and culture. They 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. Culture is introduced through the art, literature, customs, and history of the Hebrew-speaking people.

06702 Hebrew II

Courses extend students' ability to understand and express themselves and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students explore the customs, history, and art forms to deepen their understanding of Hebrew-speaking culture(s).

06703 Hebrew III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06704 Hebrew IV

Courses advance students' abilities to read, write, speak, and understand the language. They maintain simple conversations with sufficient vocabulary and an acceptable accent, develop 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

Courses extend students' facility 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, including present, past, and future.

06707 Hebrew Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Hebrew is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking while increasing their ability to interact naturally.

06708 Hebrew Conversation and Culture

Courses focus on developing language proficiency while providing students with an introduction to or a greater understanding of the language and the culture(s) of Hebrew-speaking people. These courses place greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

06709 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

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06711 IB Language B—Hebrew

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. These courses focus on improving accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06712 IB Classical Languages—Hebrew

Courses strike a balance between the study of structure, meaning, and formulation of the language itself and the study of the culture, philosophies and institutions it reflects. 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

Courses introduce Arabic language and culture. They 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. Culture is introduced through the art, literature, customs, and history of Arabic-speaking people.

06722 Arabic II

Courses extend students' ability to express themselves in Arabic and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text 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 to deepen their understanding of Arabic culture(s).

06723 Arabic III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages and conversing easily within limited situations.

06724 Arabic IV

Courses advance students' abilities to read, write, speak, and understand the Arabic language. Students maintain simple conversations with sufficient vocabulary and an acceptable accent, develop sufficient comprehension to understand speech 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

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, including present, past, and future.

06727 Arabic Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Arabic is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking while increasing their ability to interact naturally.

06728 Arabic Conversation and Culture

Courses focus on language proficiency while providing students with an introduction to or a greater understanding of the language and the culture(s) of Arabic-speaking people. These courses place greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

06729 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

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06731 IB Language B—Arabic

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. They improve students' accuracy and fluency in oral and written communication, usually in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06732 IB Classical Languages—Arabic

Courses strike a balance between the study of the structure, meaning, and formulation of language itself and the study of the culture, philosophies, and institutions it reflects. 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

(Insert local course description)

M. Non-Semitic African Languages**06761 Swahili I**

Courses introduce Swahili language and culture. They 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. Culture is introduced through the art, literature, customs, and history of Swahili-speaking people.

06762 Swahili II

Courses extend students' ability to express themselves in Swahili and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows 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 to deepen their understanding of Swahili-speaking culture(s).

06763 Swahili III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages and conversing easily within limited situations.

06764 Swahili IV

Courses advance students' 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

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, including present, past, and future.

06766 Swahili for Native Speakers

Courses support, reinforce, and expand students' knowledge of their own language. Because students understand at least the rudiments and structure of the language and have a working vocabulary, to a greater or lesser degree, these courses often move faster than regular world language courses and emphasize literature and composition. They may also incorporate more culture or history than regular world language courses and introduce translation skills.

06767 Swahili Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Swahili is the main language spoken. Students strengthen their language skills and increase their ability to interact naturally.

06768 Swahili Conversation and Culture

Courses provide 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

Courses place an emphasis on reading, understanding, and reacting in writing to literature written in Swahili.

06770 IB Language A (non-English)—Swahili

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06771 IB Language B—Swahili

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. They focus on students' accuracy and fluency in oral and written communication usually in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06781 Somali I

Courses introduce the Somali language and culture. They 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. Culture is introduced through the art, literature, customs and history of Somali-speaking people.

06782 Somali II

Courses extend students' ability to express themselves and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows 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 to deepen their understanding of Somali-speaking culture(s).

06783 Somali III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06784 Somali IV

Courses advance students' abilities to read, write, speak and understand the language. Students maintain simple conversations with sufficient vocabulary and acceptable accent, develop 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 strong vocabulary.

06785 Somali 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, including present, past, and future.

06786 Somali Native Speaker

Courses support, reinforce, and expand students' knowledge of their own language. Because students understand at least the rudiments and structure of the language and have a working vocabulary, to a greater or lesser degree, these courses often move faster than regular world language courses and emphasize literature and composition. They may also incorporate more culture or history than regular world language courses and introduce translation skills.

06787 Somali Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Somali is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking while increasing their ability to interact naturally.

06788 Somali Conversation and Culture

Courses focus on developing language proficiency while providing students with an introduction to or a greater understanding of the Somali language and culture(s). They place greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

06789 Somali Literature

Courses emphasize reading, understanding, and reacting in writing to literature written in Somali.

06790 IB Language A (non-English)—Somali

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06791 IB Language B—Somali

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. These courses improve students' accuracy and fluency in oral and written communication, usually the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06799 African (non-Semitic) Language—Other

Insert local course description)

N. American Sign Language**06801 American Sign Language I**

Courses introduce students to American Sign Language. They 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

Courses extend students' ability to express themselves in American Sign Language and increase 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.

06803 American Sign Language III

Courses focus on students expressing increasingly complex concepts while showing some spontaneity. Comprehension goals 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

Courses advance students' skills and abilities to sign and understand the language so that they can maintain simple conversations with sufficient vocabulary at an acceptable pace with sufficient comprehension skills to understand the language when signed at a normal pace.

06805 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

(Insert local course description)

O. Native American Languages**06821 Dakota/Lakota I**

Courses introduce the Dakota/Lakota language and culture. They 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. Culture is introduced through the art, literature, customs and history of Dakota/Lakota-speaking people.

06822 Dakota/Lakota II

Courses extend students' ability to express themselves in the language and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows 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 to deepen their understanding of the Dakota/Lakota-speaking culture(s).

06823 Dakota/Lakota III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06824 Dakota/Lakota IV

Courses advance students' abilities to read, write, speak, and understand the language. They maintain simple conversations with sufficient vocabulary and an acceptable accent, develop 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 Dakota/Lakota V

Courses extend students' facility with the language so 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, including present, past, and future.

06827 Dakota/Lakota Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Dakota/Lakota is the main language spoken. Students strengthen their language skills, including reading, writing, listening, and speaking while increasing their ability to interact naturally.

06828 Dakota/Lakota Conversation and Culture

Courses focus on developing language proficiency while providing students with an introduction to or a greater understanding of the language and the culture(s) of the people. These courses place greater emphasis on speaking and listening skills while deemphasizing writing and reading the language.

06829 Dakota/Lakota Literature

Courses emphasize reading, understanding, and reacting in writing to literature written in Dakota/Lakota.

06830 IB Language A (non-English)—Dakota/Lakota

Courses prepare students to take the IB Language A exams at either the Subsidiary or Higher level. 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06831 IB Language B—Dakota/Lakota

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. They focus on improving students' accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06832 Ojibwe I

Courses introduce the Ojibwe language and culture. They 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. Culture is introduced through the art, literature, customs and history of Ojibwe-speaking people.

06833 Ojibwe II

Courses extend students' ability to express themselves and increase their vocabulary. Typically, students engage in discourse for informative or social purposes, write text that shows 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 to deepen their understanding of the Ojibwe-speaking culture(s).

06834 Ojibwe III

Courses focus on students expressing increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals may include attaining more facility and faster understanding when listening to the language spoken at normal rates, paraphrasing or summarizing written passages, and conversing easily within limited situations.

06835 Ojibwe IV

Courses advance students' abilities to read, write, speak and understand the language. Students maintain simple conversations with sufficient vocabulary and acceptable accent, develop sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose and write text that indicates good understanding of grammar and vocabulary.

06836 Ojibwe 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, including present, past, and future.

06838 Ojibwe Field Experience

Courses place students in an environment with native speakers, most typically in a setting where Ojibwe is the main language spoken. Students strengthen their language skills including reading, writing, listening, and speaking while increasing their ability to interact naturally.

06839 Ojibwe Conversation and Culture

Courses focus on developing language proficiency while providing students with an introduction to or a greater understanding of the language and the culture(s) of the people. Content places emphasis on speaking and listening skills while deemphasizing writing and reading the language.

06840 Ojibwe Literature

Courses place emphasis on reading, understanding, and reacting in writing to literature written in Ojibwe.

06841 IB Language A (non-English)—Ojibwe

Courses prepare students to take the IB 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. Courses improve students' accuracy and fluency in what is usually the students' native language.

06842 IB Language B—Ojibwe

Courses prepare students to take the IB Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication typically in the students' "second" language. The Subsidiary level exam requires understanding native speakers; the Higher Level exam requires fluent communication at native speed.

06849 American Indian Language—Other

(Insert local course title and description here)

P. Indic Languages**06869 Indic Language—Other**

(Insert local course description)

Q. Malayo-Polynesian Languages**06889 Malayo-Polynesian Language—Other**

(Insert local course description)

R. General**06995 World Language and Literature—Aide**

World 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.

06996 Seminar/Project—World Languages

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in world languages. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

06997 World Language and Literature—Independent Study

Courses, often conducted with instructors as mentors, enable students to explore world language-related topics of interest. These courses may serve as an opportunity for students to expand their expertise, to explore a topic in detail, or to develop advanced skills.

06999 World Language and Literature—Other

(Insert local course description)

Subject Area Code 07: Religious Education and Theology

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

III. Religious Education and Theology course categories

- A. General Religious Studies 07(001) – 07(050)
- B. Specialized Courses 07(051) – 07(100)
- C. Others 07(995) – 07(999)

A. General Religious Studies

07001 Religious Foundations

Courses include instruction in the history, tenets, and organization of a religion 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 and the church calendar.

07002 Comparative Religions

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. 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

Courses are similar to Comparative Religion and 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.

07004 Western Religions

Courses are similar to Comparative Religion and 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, and Mennonites; and Native Indian belief systems, among others.

07005 Scriptures

Courses emphasize understanding and interpreting the sacred writings of a faith, such as the Bible, Torah, Koran, and Book of Mormon. Courses are designed so that students may comprehend the theological, doctrinal, and ethical messages contained within religious scriptures.

07006 Old Testament

Courses emphasize understanding and interpreting the sacred writings of the Old Testament and may focus on one or several books. Courses typically focus on themes, theological concepts, and portrayal of ethical messages, and may include critique and commentary.

07007 New Testament

Courses emphasize understanding and interpreting the sacred writings of the New Testament and may focus on one or several religious books. Courses typically focus on themes, theological concepts, and portrayal of ethical messages, and may include critique and commentary.

07008 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 Religious Ethics and Morality

Courses introduce or examine the tenets of a particular faith and 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.

07010 Justice, Peace, and Faith

Courses examine the scriptural foundations for justice, typically with a historical overview of a faith's social teaching. These courses include topics such 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.

07011 Faith and Lifestyle

Courses focus on the development of young adults, approached from the perspective of a faith. In these courses, the religion's values and traditions provide an underpinning for examining such topics as identity, independence, sexuality, employment, and leisure. Typically, these courses include discussions about adult roles—single life, marriage, religious life, and ordained ministry.

B. Specialized Courses

07051 Christology

Courses concern the work and life of Jesus Christ and the literature related to him. Content is typically based on Christian scriptures, leading to an examination of the message of Jesus Christ and applying His message to daily life.

07052 Religious Figures

Courses offer the opportunity to examine the lives and messages of one or more people central to a religious faith, such as a prophet, apostle, or philosopher. In addition to a historical study of the person (s), these courses typically emphasize how these individuals influence a religious group.

07053 Liturgy and Prayer

Courses vary widely, usually depending upon the religion, but generally seek to inform students about the meaning and message of public and private worship. Content typically includes an examination or exploration of common rituals, spoken or sung prayers, and observed sacraments.

07055 Ministry

Courses introduce 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 by assisting in hospitals and convalescent homes, crisis centers and soup kitchens.

C. Others

07995 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.

07996 Seminar/Project—Religious Education and Theology

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in religious education and theology. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

07997 Religious Education and Theology—Independent Study

Courses, often conducted with members of the clergy or religious leaders as mentors, enable students to explore interests related to religion. These courses may serve as an opportunity for students to expand their expertise, to explore a topic in detail, or to develop advanced skills.

07999 Religious Education and Theology—Other

(Insert local course description.)

Subject Area 08: Physical, Health and Safety Education

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. Dance course classifications are listed in **05 Visual and Performing Arts**.
- B. Course classifications that focus on health care careers and the health care industry are listed in **14 Health Care Sciences**.
- C. Local lifeguard training courses, which may include American Red Cross certification, are most appropriately classified under *08010 Aquatic/Water Sports*.

III. Physical, Health and Safety Education course categories

- | | |
|-----------------------|-------------------|
| A. Physical Education | 08(001) – 08(050) |
| B. Health Education | 08(051) – 08(100) |
| C. Drivers' Education | 08(151) – 08(200) |
| D. All Others | 08(201) – 08(999) |

A. Physical Education

08001 Physical Education

Courses provide knowledge, experience and 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.

08002 Team Sports

Courses provide knowledge, experience and opportunity to develop skills in more than one sport, such as volleyball, basketball, soccer or other team sports.

08003 Individual/Dual Sports

Courses provide knowledge, experience and opportunity to develop skills in more than one sport, such as tennis, golf, badminton, jogging/running, racquetball or other individual or dual sports.

08004 Recreation Sports

Courses provide knowledge, experience and opportunity to develop skills in more than one activity such as, croquet, Frisbee, wall climbing, bocce ball, fishing, hiking, cycling or other recreational sport or outdoor pursuit.

08005 Fitness/Conditioning Activities

Courses emphasize conditioning activities that help develop muscular strength, flexibility and cardiovascular fitness.

08006 Corps Movement

Courses emphasize physical conditioning, fundamentals of movement, group precision and public performance for members of teams, such as flag corps, rifle corps or cheerleading squads.

08007 Adapted Physical Education

Courses provide physical education activities, such as sports, fitness and conditioning adapted for students with special needs.

08008 Gymnastics

Courses develop knowledge and skills in gymnastics and tumbling. Floor gymnastics may include equipment such as balance beam, uneven bars, parallel bars and rings. Courses may include other components such as conditioning.

08009 Weight Training

Courses develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include anatomy and conditioning.

08010 Aquatic/Water Sports

Courses focus on swimming and competitive strokes, such as freestyle, breaststroke and butterfly or may involve team 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

Courses develop the knowledge and skills related to singles or doubles tennis, including shots such as serves, forehand strokes, backhand strokes and lobs as well as scoring and strategy.

08012 Self-defense

Courses develop knowledge, skills and abilities to defend against attack, usually incorporating traditional self-defense methods. Courses may also include techniques from martial arts.

08013 Specific Sports Activities

Courses develop knowledge and skills in a single sport or activity, such as basketball, volleyball, track and field, or equestrian events other than those listed within this section.

08014 Physical Education Equivalent

Courses award physical education credit for other at-school activities, such as marching band or cheerleading.

08015 Off-Campus Sports

Courses award physical education credit for off-campus sports activities such as swimming or weight training courses taken at a community center.

08016 Lifetime Fitness Education

Courses emphasize knowledge and skills needed for a lifetime of physical fitness. Content may include related topics such as nutrition, stress management and consumer issues. Students may develop and implement a personal fitness plan. *The focus of this course is physical fitness.*

08017 Sports Physiology

Courses 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.

08018 Physical Education Leadership

Courses provide knowledge of the field of physical education, health and/or recreation as a profession. Courses typically offer experiences in activities such as, but not limited to, coaching, officiating and recreational leadership. They may include safety and first aid components, often incorporate fitness components and typically require active participation.

08019 Seminar/Project—Physical Education

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in physical education. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

08049 Physical Education—Other

(Insert local course description)

B. Health Education**08051 Health Education**

Courses vary widely, but typically include personal health issues such as nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention and first aid. Courses may also include consumer health concerns and issues around environmental health, personal development and community resources.

08052 Health and Fitness

Courses combine the topics of Health Education courses, including nutrition, stress management, substance abuse prevention, disease prevention and first aid with an active fitness component, typically including aerobic activity and fitness circuits. They stress the importance of life-long wellness habits. *This course has a dual focus on health issues and physical fitness.*

08053 Community Health

Courses cover not only personal health topics, such as nutrition, stress management, substance abuse prevention, disease prevention and first aid but also general health issues. Additional topics may include, but are not limited to, available community resources, fundamentals of the nation's health care system, contemporary world health issues and health career options.

08054 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. They include strategies to prepare students for their possible roles as caretakers.

08055 Safety and First Aid

Courses provide instruction in first aid techniques, cardiopulmonary resuscitation (CPR), relief of obstructed airways, and general safety procedures. They may include an overview of community agencies and hotlines providing emergency care, information for first aid and CPR certification.

08056 Health for Parenting Teens

Courses are designed for pregnant teens and/or parents. Topics include a range of health and parenting issues, typically including prenatal and postnatal care, the well-being of young parents, child development, stress management and parental/adult roles. The courses may also involve, but are not limited to, academic assistance, career exploration and financial management.

08057 Health and Life Management

Courses focus on personal health topics, such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention and first aid but may also include aspects of consumer education, such as money management and evaluation of consumer information and advertising. Course objectives include helping students develop coping skills and strategies for maximum health, including decision-making, communication and interpersonal relationships.

08058 Substance Abuse Prevention

Courses focus specifically on the health risks of drugs, alcohol and tobacco. They provide information on the negative consequences of these substances and teach coping strategies to resist the influences, such as peers and media images that may entice them to use them. Exploration of available community resources may also be included.

08059 Bilingual Health Education

Courses are taught in the student's native language, expanding health education knowledge and concepts.

08060 English as a Second Language (ESL)—Transitional Health Education

Courses are designed for English Language Learners and may include an overview of health education areas or focus on particular areas. These courses provide a transition from ESL to mainstream high schools health courses and are taught by a health education teacher and an ESL teacher or by one teacher with dual certification in health education and ESL.

08061 Credit Recovery—Health Education

Courses are designed to enable students to recover credits required for graduation in the health curriculum.

08062 Seminar/Project—Health and Safety Education

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in health or safety education. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

08099 Health Education—Other

(Insert local course description)

C. Drivers' Education**08151 Drivers' Education—Classroom Only**

Courses provide knowledge to become safe drivers. Topics include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and physical and mental factors affecting the driver's capability, including alcohol and other drugs.

08152 Drivers' Education—Classroom and Laboratory

Courses provide knowledge and experience to become safe drivers. Topics 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. Instruction in driving a vehicle is an essential component of these courses.

08199 Drivers' Education—Other

(Insert local course description)

D. All Others**08995 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.

Subject Area 09: Military Science

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classifications.*

III. Military Science course categories

A. General	09(001) – 09(050)
B. Army	09(051) – 09(100)
C. Navy	09(101) – 09(150)
D. Air Force	09(151) – 09(200)
E. Marine Corps	09(201) – 09(250)
F. Others	09(995) – 09(999)

A. General

09001 Introduction to Junior ROTC

Courses introduce 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. 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 Junior ROTC—unspecified branches

Courses provide instruction in the history, organization, role, objectives and achievements of the U.S. Armed Forces. Students develop personal fitness, strong character and leadership qualities. Courses explore career opportunities provided by the Armed Services and typically include military customs, courtesies, rank, drill and ceremonies while emphasizing citizenship and scholarship. Content typically includes subjects related to particular branches being studied, such as map-reading, nautical skills, aerospace technology or communication technologies as well as more general subjects, including international law, national defense, celestial navigation and geopolitical strategy.

09003 ROTC Drill

Courses provide opportunity to improve student 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. Students typically participate in ceremonies and competitions.

09004 Military Leadership

Courses focus solely on increasing students' leadership skills, particularly as they relate to military operations, customs and hierarchies. These courses are typically the final course within a program series and a part of specific ROTC programs described below. This course number should be used when specific course descriptions below do not appropriately classify the local course. Skills taught in these courses include supervision, motivation, evaluation and setting an example.

B. Army

09051 Army Junior ROTC I

Courses include organization and functions of the U.S. Army, leadership skills, and life skills education. Content includes the history of the Army, including its structure, operations, and customs; maps and navigation; first aid, personal hygiene, and field sanitation; and substance abuse prevention. They introduce principles of leadership and citizenship.

09052 Army Junior ROTC II

Courses build upon ROTC I and may include ongoing instruction in leadership and citizenship; drill and ceremonies; organizational structure; command relationships and responsibilities; campaigns and leaders; map reading; weapon safety and marksmanship; and survival training.

09053 Army Junior ROTC III

Courses build upon prior Army courses, giving more emphasis to leadership development. They include planning, problem-solving, motivation, and performance appraisal as well as management skills, regarding time, personnel, and resources. Topics introduced in earlier courses may be studied at a more advanced level.

09054 Army Junior ROTC IV

Courses focus on practical leadership by assigning students to command and staff positions in which they present instruction to lower Army classes and continue to study and review staff functions and actions, staff-commander relationships, and leadership principles

C. Navy

09101 Naval Junior ROTC I

Courses emphasize citizenship and leadership development, as well as maritime heritage, sea power, and naval operations and customs. These courses introduce 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

Courses build upon the content ROTC I and include leadership principles and discipline, citizenship, naval opportunities and career planning, naval ships and weaponry, seamanship, meteorology and weather and survival training. Students learn teamwork and naval history.

09103 Naval Junior ROTC III

Courses build upon prior courses and include 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 and technologies. Students continue to learn teamwork, naval history, and military principles.

09104 Naval Junior 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.

D. Air Force**09151 Air Force Junior ROTC I**

Courses include both aerospace studies and leadership/life skills education. They include leadership/life skills, heritage and development of the Air Force, including its structure, operations and customs. 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

Courses include both aerospace studies and leadership/life skills. They include leadership/life skills, 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

Courses include both aerospace studies and leadership/life skills with applications 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

Courses include both aerospace studies and leadership/life skills. They concentrate on leadership, management principles, career opportunities and may include relationships between the nations of the world. Aerospace topics include advanced aerodynamics and aeronautics.

E. Marine Corps

09201 Marine Corps Junior ROTC I

Courses introduce the Marine Corps Junior ROTC program, emphasizing personal growth and responsibility along with general military subjects. Content includes physical training; health education, including hygiene, first aid, nutrition, and substance abuse prevention; and communication skills. They introduce the Marine Corps code of conduct; drill and ceremony; military uniforms, and customs; military history; and the structure and chain of command.

09202 Marine Corps Junior ROTC II

Courses build upon ROTC I and emphasize personal growth and responsibility, leadership, and citizenship along with military subjects, including mission, organization, and history of the Marine Corps; geography, maps, and navigation; drill and ceremony; and military justice. Students learn leadership skills, such as authority, responsibility, and accountability and citizenship topics including U.S. government structures, documents, and symbols.

09203 Marine Corps Junior ROTC III

Courses build upon prior courses and include leadership practice, including training, inspection and evaluation; public service career opportunities; and citizenship responsibilities. Topics include personal skills such as financial planning, saving and investing, and evaluating credit and insurance terms. Students advance their navigation skills and may study firearm use, safety and marksmanship.

09204 Marine Corps Junior ROTC IV

Courses focus on leadership, written and verbal communication, personal growth and public service. They emphasize drill and ceremony, physical fitness, marksmanship, land navigation, and military history at more advanced levels than in previous courses.

F. Other

09994 Seminar/Project—Military Science

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in military science. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication, interpersonal skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

09995 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, often conducted with instructors/armed services personnel as mentors, enable students to explore topics of interest related to military science. These courses may serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

09999 Military Science—Other

(Insert local course description)

Subject Area 10: Computer Information Sciences

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combination of topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. Local IB or AP **Preparation** courses **should not** be classified as the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course classification that best describes the content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses in the local course title or description or call for additional requirements beyond simple pre-requisites.
- D. There are distinctions among software and keyboarding courses in **12 Business and Marketing** and **10 Computer and Information Sciences**. If the local course focus of learning is:
 - 1. Keyboarding skills and technique, classify as *12005 Keyboarding*.
 - 2. Software programs while improving keyboarding skills, classify as *12006 Word Processing*.
 - 3. Software programs but does not include keyboarding skills, classify as *10004 Computer Applications*.
 - 4. Software programs *specifically for business*, classify as *10005 Business Computer Applications*.
- E. Courses that introduce students to hardware and software components, including assembly, configuration and maintenance while preparing them for industry examination and certification are best classified as *10254 IT Essentials: PC Hardware and Software*.

III. Computer Information Sciences course categories

A. Computer Literacy	10(001) – 10(050)
B. Management Information Systems	10(051) – 10(100)
C. Networking Systems	10(101) – 10(150)
D. Computer Science/Programming	10(151) – 10(200)
E. Media Technology	10(201) – 10(250)
F. Information Support and Services	10(251) – 10(300)
G. All Others	10(990) – 10(999)

A. Computer Literacy

10001 Introduction to Computers

Courses introduce computers and peripheral devices, the functions and uses of computers, the language used in the computer industry, and computer applications. They typically explore legal and ethical issues associated with computer use, as well as how computers influence modern society. Students may also be required to perform some computer operations. Careers related to computer hardware and software are often investigated.

10002 Computing Systems

Courses offer a broad exploration of computer use in a variety of fields. They have a range of content, but typically include the introduction of robotics and control systems, computer-assisted design (CAD), computer-aided manufacturing systems and other computer technologies as they relate to industry applications. (Note: This comprehensive course is not duplicated in *21 Engineering and Technology*.)

10003 Computer and Information Technology

Courses focus on the operation and use of computer and information technology, emphasizing their role in communicating effectively, conducting research efficiently and increasing productivity. They include legal and ethical issues involved with computer technology use.

10004 Computer Applications

Courses support students in acquiring 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 cover the use of electronic mail and desktop publishing.

10005 Business Computer Applications

Courses support students in acquiring 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 range of applications, including, but not limited to, word-processing, spreadsheet, graphics, and database programs, and they may cover topics such as electronic mail, desktop publishing, and telecommunications.

10006 Telecommunications

Courses address global communications and the equipment and systems needed to communicate successfully in a global environment. Topics include data communication protocol and systems, government regulations of the communications industry and the use of cost-effective tools to transmit messages and data. They may include e-mail, internet or ecommerce systems, LAN, WAN, voice transmission, cell phone technology and traditional teleconferencing.

10007 IB Information Technology in a Global Society

Courses prepare students to take the International Baccalaureate Information Technology exams and explore the interaction among information, technology and society. Course content supports students in developing a systematic, problem-solving approach to processing and analyzing information using a range of information tools. Students also discuss and evaluate how modern information technology affects individuals, relationships among people, and institutions and societies.

10008 Particular Topics in Computer Literacy

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.

B. Management Information Systems

10051 Information Management

Courses provide the knowledge and skills to develop and implement a plan for an information system that meets the needs of business. Students develop an understanding of information system theory, skills in administering and managing information systems, and the ability to analyze and design information systems.

10052 Database Management and Data Warehousing

Courses provide the skills necessary to design databases to meet user needs. They typically address how to enter, retrieve and manipulate data into useful information. Advanced topics include implementing applications for common transactions and the utility of mining data.

10053 Database Applications

Courses provide an understanding of database development, modeling, design, and normalization. Topics such as SELECT statements, data definition, manipulation, control languages, records, and tables may be included. Students may use Oracle Web DB, SQL, PL/SQL, SPSS, and SAS and may prepare for certification.

10054 Data Systems/Processing

Courses introduce the uses and operation of computer hardware and software and programming languages used in business applications. Students typically use BASIC, COBOL, and/or RPL languages as they write flowcharts or computer programs and may learn data-processing skills.

10055 Particular Topics in Management Information Systems

Courses examine particular topics in management information systems other than those already described.

C. Network Systems**10101 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, and radio waves. They emphasize the capabilities of networks, network technology itself or both, including electronic mail, public networks, and electronic bulletin boards and/or network software, hardware and peripherals involved in setting up and maintaining a computer network.

10102 Networking Systems

Courses provide the opportunity to work with hubs, switches, and routers. Students develop an understanding of local area network (LAN), wide area network (WAN), wireless connectivity, and Internet-based communications with a strong emphasis on network function, design, and installation practices. Study of design, installation, maintenance, and management of network systems may prepare for network certification, such as NET+.

10103 Area Network Design and Protocols

Courses address the role of computers in a network system, the Open Systems Interconnection (OSI) model, structured wiring systems, simple local area network (LAN) and wide area network (WAN) designs.

10104 Router Basics

Courses address router components, start-up, and configuration using CISCO routers, switches, and the Internetwork Operation System (IOS). They also include topics such as TCP/IP protocol, IP addressing, subnet masks, and network trouble-shooting.

10105 NetWare Routing

Courses introduce Virtual LANs (VLAN) and switched internetworking, comparing traditional shared local area network (LAN) configurations with switched LAN configurations, and may include the benefits of using a switched VLAN architecture. They also may include routing protocols like RIP, IGRP, Novell IPX, and Access Control Lists (ACLs).

10106 Wide Area Telecommunications and Networking

Courses provide the knowledge and skills to enable students to design Wide Area Networks (WANs) using ISDN, Frame-Relay, and PPP. They include knowledge and skills in network management and maintenance and develop expertise in trouble-shooting and assessing the adequacy of network configuration to meet changing conditions.

10107 Wireless Networks

Courses focus on design, planning, implementation, operation, and trouble-shooting of wireless computer networks. They typically include a comprehensive overview of best practices in technology, security, and design, emphasizing 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

Courses teach design and implementation of security measures in order to reduce the risk of data vulnerability and loss. Content typically includes 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

Courses provide a study of multi-user, multi-tasking network operating systems. Students learn the characteristics of network operating systems, such as Linux, Windows, NT, and XP and explore a variety of topics including installation procedures, security issues, back-up procedures, and remote access.

10110 Microsoft Certified Professional (MCP)

Courses provide the knowledge and skills necessary to be a network administrator in the latest Windows server-networking environment. Topics include installing, configuring, and trouble-shooting the Windows server. Students 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

Courses examine particular topics in networking systems other than those already described.

D. Computer Science/Programming

10151 Business Programming

Courses provide experience in using previously written software packages as well as designing and writing programs. 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, such as Visual Basic (VB), C++, Java, BASIC, COBOL, and/or RPL.

10152 Computer Programming

Courses provide knowledge and skills necessary to construct 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. Students learn to structure, create, document, and debug computer programs. Advanced courses emphasize design, style, clarity, and efficiency. Students may apply skills they learn to applications such as modeling, data management, graphics, and text processing.

10153 Visual Basic Programming

Courses provide opportunity to gain expertise in programs using the Visual Basic (VB) language. They emphasize how to structure and document programs and how to use problem-solving techniques. Topics include the use of text boxes, scroll bars, menus, buttons and Windows applications. More advanced topics may include mathematical and business functions and graphics.

10154 C++ Programming

Courses provide an opportunity to gain expertise in programs using the C++ language. They emphasize how to write logically structured programs, include appropriate documentation and use problem-solving techniques. More advanced topics may include multi-dimensional arrays, functions and records.

10155 Java Programming

Courses provide the opportunity to gain expertise in programs using the Java language. They emphasize how to structure and document computer programs, using problem-solving techniques. Topics include syntax, I/O classes, string manipulation and recursion.

10156 Computer Programming—Other Language

Courses provide the opportunity to gain expertise in programs using languages other than those specified, such as Pascal, FORTRAN, or emerging languages. They emphasize 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

Courses follow the College Board's suggested curriculum and mirror college-level computer science courses. They provide the logical, mathematical and problem-solving skills needed to design structured, well-documented computer programs that provide solutions to real-world problems. Courses cover such topics as programming methodology, features and procedures; algorithms; data structures; computer systems and programmer responsibilities.

10158 AP Computer Science AB

Courses follow the College Board's suggested curriculum and mirror college-level computer science courses. These courses, in addition to covering topics included in AP Computer Science A, provide a more formal and extensive study of program design, algorithms, data structures, and execution costs.

10159 IB Computing Studies

Courses prepare students to take the International Baccalaureate Computing Studies exam at either the Subsidiary or Higher level, emphasizing problem analysis, efficient use of data structures and manipulation procedures and logical decision-making. They include applications and effects of the computer on modern society as well as the limitations of computer technology.

10160 Particular Topics in Computer Programming

Courses examine particular topics in computer programming other than those already described.

E. Media Technology

10201 Web Page Design

Courses teach how to design web sites by introducing students 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. They may include security and privacy issues, copyright infringement, trademarks, and 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

Courses provide the opportunity to explore the capability of the computer to produce visual imagery and apply graphic techniques to various fields, such as advertising, TV/video and architecture. They may include modeling, simulation, animation and image retouching.

10203 Interactive Media

Courses provide the knowledge and skills to create, design and produce interactive media products and services. They may emphasize the development of digitally generated and/or computer-enhanced media. Topics may include 3D animation, graphic media, web development, and virtual reality. Courses may prepare students for industry certification.

10204 Animation

Courses provide the knowledge and skills to design, create and produce animation. Areas of study may include traditional, stop motion, computer and/or other techniques and approaches. Courses may include a survey of animation techniques and approaches or focus on a single approach.

10205 Particular Topics in Media Technology

Courses examine particular topics in internet design and applications other than those already described.

F. Information Support and Services

10251 Computer Technology

Courses introduce the features, functions and design of computer hardware, as well as providing instruction in the maintenance and repair of computer components and peripheral devices.

10252 Computer Maintenance

Courses 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

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

Courses provide study of computer hardware and operating systems. 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. Courses introduce students to networking and often prepare them for industry certification such as A+.

10255 CISCO—The Panduit Network Infrastructure Essentials (PNIE)

Courses provide the knowledge to create network infrastructure solutions. They 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

Courses examine particular topics in computer support, maintenance and repair other than those already described.

G. All Others

10990 Computer Information Sciences—Work Experience Classroom

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

10991 Computer Information Sciences—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. May include participation in student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other computer information science courses.

10992 Computer Information Sciences—Apprenticeship

Courses provide students with supervised workplace training in computer and/or information sciences. Goals are typically set cooperatively by the student, school coordinator, and mentor/employer (although students are not necessarily paid). Students' work is evaluated by a school coordinator and the mentor/employer. These courses are accompanied by a classroom component (see *10990 Work Experience Classroom* above).

10994 Seminar/Project—Computer Information Sciences

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in computer information sciences. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

10995 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

Courses, often conducted with instructors as mentors, enable students to explore computer-related topics of interest. These courses may serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

10998 Computer and Information Sciences—Work-Based Learning

Courses provide students with work experience in computer and/or information sciences. Goals are typically set cooperatively by the student, school coordinator and employer (although students are not necessarily paid). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *10990 Work Experience Classroom* above).

10999 Computer and Information Sciences—Other

(Insert local course description)

Subject Area 11: Communication and Audio/Visual Technology

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when the local course focuses on a topic or a combination of topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination. If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. Computer programming classifications are listed **10 *Computer and Information Sciences***
- D. The comprehensive production classification that covers various mediums is *11051 Audio/Visual Production*. If the local production course focuses on a particular medium, please use a specific, production classification if one exists. There is no specific radio production classification, however, so classify radio courses under *11051 Audio/Visual Production*.
- E. Film **study** classifications (as opposed to film production courses in this Subject Area) are listed in **01 *English Language and Literature*** and **05 *Visual and Performing Arts***.
- F. Digital imaging courses, depending on the focus of instruction, may be classified under various MCCC course classification descriptions. Consider these courses:
 - 1. *11054 Photo Imaging*
 - 2. *11151 Digital Media Technology*
 - 3. *11153 Digital Media Design and Production*

III. Communication & Audio/Visual Technology course categories

A. Communication	11(001) – 11(050)
B. Audio and Video Technology and Film	11(051) – 11(100)
C. Journalism and Broadcasting	11(101) – 11(150)
D. Printing Technology and Production	11(151) – 11(200)
E. All Others	11(990) – 11(999)

A. Communication

11001 Introduction to Communication

Courses support students in understanding and evaluating role of media in society. Content typically includes investigation and evaluation of visual images, printed materials and audio segments as tools of information, entertainment, and propaganda; and recognition of various techniques for delivery of a particular message. Courses may focus on a particular medium and creation of a media product may be included as well as consideration of career opportunities.

11002 Communication Technology

Courses support students in effectively communicating 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. (**Note:** The focus of this course description makes it most applicable to industrial technology courses.)

11003 Particular Topics in Communication

Courses examine specific topics in communication other than those already described.

B. Audio and Video Technology and Film

11051 Audio/Visual Production

Courses provide 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, and production principles are typical topics. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, the power of the medium, photography, transmission and technology may be included as well as career investigation.

11052 Commercial Photography

Courses provide instruction in the use of cameras and laboratory film processing techniques. Topics 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

Courses prepare students to develop and print still or motion picture film. Topics include controlling resultant prints; touching up negatives; and finishing, coloring, restoring, and copying prints.

11054 Photo Imaging

Courses provide the opportunity to communicate ideas and information via digital, film, still and video photography. Topics covered typically include composition, layout, lighting and supplies. Advanced courses may include instruction in specialized camera and equipment maintenance, application to commercial and industrial need and photography business operations.

11055 Video

Courses explore video communications, incorporating both the technical and artistic aspects of video media. Topics include use of video equipment and techniques, and students typically create a video presentation. Advanced topics may include creating various forms of film media including silent film; sport and music video; and self-portrait video.

11056 Particular Topics in Audio/Video Technology and Film

Courses examine specific topics in audio and video technology and film other than those already described.

C. Journalism and Broadcasting**11101 Journalism**

Courses (typically involving school newspaper, yearbook, or literary magazine production) emphasize writing style and technique as well as production values and organization. They introduce 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 may be included.

11102 Photojournalism

Courses explore 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, these courses provide students with opportunity to improve their photo composition and film development skills, and to apply their art to journalistic endeavors.

11103 Broadcasting Technology

Courses provide the knowledge and skills to produce television broadcast programs. Typically, students prepare and produce short programs while learning the technical aspects of the operation, evaluating programming and assessing audience reaction and impact.

11104 Publication Production

Courses involve the production aspects of the school yearbook, newspaper, literary magazine and/or other printed publications. Students typically gain experience in design, layout and production of one or more publications. Courses may include printing of publications but there is no journalism instruction component in this course classification.

11105 Particular Topics in Journalism and Broadcasting

Courses examine specific topics in journalism and broadcasting other than those already described.

11106 Journalism—Print and Broadcast

Courses provide the knowledge and skills necessary to work in both print publications and television broadcast productions. Students gain experience in several components or focus on a single aspect of print publication and/or aspect of broadcasting.

D. Printing Technology and Production**11151 Digital Media Technology**

Courses provide the skills necessary to support and enhance student learning about digital media technology. Topics include internet research, copyright laws, web-publishing, use of digital imagery, electronic forums, newsgroups, mailing lists, presentation tools and project planning.

11152 Desktop Publishing

Courses integrate the knowledge and skills 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

Courses teach the fundamentals of graphic design and production and provide the opportunity to apply these principles to printed media, digital presentation media and interactive media.

11154 Commercial Graphic Design

Courses teach the use of artistic techniques to communicate ideas and information to business and customer audiences via illustration and other forms of digital or printed media. Topics 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

Courses apply artistic and computer techniques to the interpretation of technical and commercial concepts. Topics 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

Courses explore the tools, materials and processes involved in mass production of photography and printing. Types of printing may include intaglio, relief, planographic, screen processes printing, silk screening, serigraphy processes and thermograph. Additional topics may include camera use, composition, imposition, presswork, and computer-aided publishing.

11157 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

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

Courses examine specific topics in printing production, such as bookbinding or silkscreen printmaking, other than those already described.

E. All Others**11990 Communication and Audio/Visual Technology—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

11991 Communication and Audio/Visual Technology—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities, and may include participation in student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other communication and audio/visual technology courses.

11992 Communication and Audio/Visual Technology—Apprenticeship

Courses provide students with supervised workplace training in communication and audio/visual technology. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by a school coordinator and the mentor/employer. These courses are accompanied by a classroom component (see *11990 Work Experience Classroom* above).

11995 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.

11996 Seminar/Project—Communication and Audio/Visual Technology

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in communication and audio/visual technology. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

11997 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. They serve as an opportunity for students to expand their expertise, explore a topic in detail or develop advanced skills.

11998 Communication and Audio/Video Technology—Work-Based Learning

Courses provide students with work experience in a field related to communication or audio/visual technology. Goals are typically set cooperatively by the student, school coordinator, and employer (although students are not necessarily paid). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *11990 Work Experience Classroom* above).

11999 Communication and Audio/Video Technology—Other

(Insert local course description)

Subject Area 12: Business and Marketing

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when the local course focuses on a topic or combination of topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC classifications or topics and no MCCC course exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. Local IB or AP **Preparation** courses **should not** be classified under the official IB or AP courses listed in the MCCC. They should be classified under the MCCC course description that best describes the content and documented as **E** (enriched or honors) if they are identified as honors or advanced courses in the local course title or description or call for additional requirements beyond simple pre-requisites.
- D. Computer programming courses are listed in **10 Computer and Information Sciences/Category D. Computer Science/Programming**.
- E. Career exploration courses in administration and marketing should be classified according to the specific career exploration course in those categories. If there is no specific career exploration course for a category, classify as *12994 Business and Marketing Career Exploration*.
- F. Photography and photo imaging courses are listed in **05 Visual and Performing Arts/Category D. Visual Arts** and in **11 Communication and Audio/Visual Technology**.

- G. Local courses that introduce students to computer hardware and software components including assembly, configuration and maintenance are best classified as *10254 IT Essentials: PC Hardware and Software*. These courses may also prepare students for industry certification.
- H. Courses that include managing a school or model store are probably best classified as *12052 Business Management*.
- I. The specific course classification *10201 Web Page Design* is listed in **10 Computer and Information Sciences**.
- J. The specific course classification *11152 Desktop Publishing* is listed in **11 Communication & Audio/Visual Technology**.
- K. There are distinctions among software and keyboarding courses in **12 Business and Marketing** and **10 Computer and Information Sciences**. If the learning focus of the local course is:
 1. Keyboarding skills and technique, classify as *12005 Keyboarding*.
 2. Software programs while improving keyboarding skills, classify as *12006 Word Processing*.
 3. Software programs but does not include keyboarding skills, classify as *10004 Computer Applications*.
 4. Software programs *specifically for business*, classify as *10005 Business Computer Applications*.

III. Business and Marketing course categories

- A. Administration 12(001) – 12(050)
- B. Management 12(051) – 12(100)
- C. Finance 12(101) – 12(150)
- D. Marketing 12(151) – 12(200)
- E. Sales 12(201) – 12(250)
- F. All Others 12(990) – 12(999)

A. Administration

12001 Business /Office Career Exploration

Courses explore occupational opportunities in accounting, administration, data processing, management and secretarial fields. Emphasis is on responsibilities, qualifications, work environment and career paths. Courses may also include keyboard exposure, and/or hands-on experience within various occupational areas.

12002 Office Procedures—Comprehensive

Courses provide opportunities to understand the responsibilities and duties common of most office personnel. Topics include 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.

12003 Office and Administrative Technologies

Courses provide instruction and experience in developing technical, problem-solving, and decision-making skills essential for office and/or administrative occupations. Emphasis is on integrating and applying knowledge and skills to realistic office and administrative situations utilizing current and relevant technology.

12004 Office Services

Courses introduce and refine clerical and receptionist skills. Topics include filing, telephone, and keyboarding skills; reprographic machinery and procedures; and communications skills.

12005 Keyboarding

Courses introduce the keyboard, basic machine operation and proper keystroke technique. Focus is on developing speed and accuracy and producing increasingly complex documents. Courses support students in developing document production and problem-solving skills.

12006 Word Processing

Courses introduce automated document production using one or more software packages. They include keyboarding techniques with a focus on speed and accuracy and a parallel focus on the use of software to create, edit, format, and manipulate documents, capitalizing on the word processing software programs. File management and other skills may be included.

12007 Recordkeeping

Courses develop knowledge and skills related to the principles and procedures in recording personal and small business financial transactions. Topics may include personal banking, budgeting, and income tax calculations as well as cashier and clerk procedures, inventory control for small businesses, database management, merchandising, and payroll.

12008 Particular Topics in Administration

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

Courses support an understanding and appreciation for effective communication in business environments. Topics include speaking, listening, thinking, responding, reading, writing, communicating nonverbally, and utilizing technology. Communication may be practiced through problem-based projects and real-world application.

B. Management

12051 Introductory Business

Courses survey business topics. They introduce concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually include a brief overview of the American economic system and corporate organization, and may explore opportunities in secretarial, accounting, management, and related fields.

12052 Business Management

Courses explore management opportunities and human relations. They develop skills in the planning, staffing, financing, and controlling functions within a business and may explore the macro-level of the business world, including business structure; finance; and interconnections among industry, government and the global economy. Emphasis is on problem-based, real-world applications of business concepts and use of accounting concepts to formulate, analyze, and evaluate business decisions and may include business simulations. This classification includes school or model stores.

12053 Entrepreneurship

Courses offer the knowledge and skills necessary to own and operate a business. Topics from several fields typically form the 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. Courses may include business simulations.

12054 Business Law

Courses emphasize legal concepts that are relevant to business. Topics include contracts, buying/renting property, installment buying, insurance, buyer/seller relationships, negotiable instruments, employment, taxes, insurance, commercial papers, legal organizational structures, and consumer liabilities.

12055 Business Principles and Management

Courses provide an understanding of the American business system, its organizations and its management. They examine the leadership and management styles of successful business organizations, large or small.

12056 International Business and Marketing

Courses examine business management and administration in a global economy. Topics include export sales, trade controls, foreign operations and related problems, monetary issues, international business and policy with applications in specific countries or markets.

12057 Human Resources and Labor Relations

Courses analyze functions of conflict resolution and collective bargaining. Topics include the history of the labor movement within the United States, the relationships between management and labor, including how organized labor currently operates.

12058 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

Courses prepare students to take the IB Business and Management exam at either the Subsidiary or Higher level. These courses promote problem-solving, selecting and interpreting data, applying appropriate analytical tools, and recommending solutions based on quantitative and qualitative implications. They also equip students with knowledge and understanding of business terminology, concepts and principles.

C. Finance**12101 Banking and Finance**

Courses provide an overview of the American monetary and banking system, including financial institutions and their services and products. Content may include government regulations; checking, savings, and money market accounts; loans; investments and negotiable instruments.

12102 Banking

Courses are similar to Banking and Finance courses but focus specifically on banking. They may examine and apply the methods used for measuring the financial performance of banks as well as examining specialized brokerage products, current issues and future trends in banking.

12103 Finance

Courses are similar to Banking and Finance courses, but focus specifically on finance, including how businesses raise, distribute and use financial resources while managing risk. Content may include financial decisions, such as borrowing, selling equity or stock, lending or investing.

12104 Accounting

Courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. 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

Courses focus on why societies develop economic systems and identify basic features of different economic systems. They often 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. Aspects of personal finance may be included.

12106 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.

12107 Investing

Courses emphasize the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stocks, bonds, and mutual funds. Topics include reviewing annual reports, predicting growth rates and analyzing trends. Stock market simulations may be used.

12108 Personal Finance Management

Courses examine personal/family resource management. Topics may include, but are not limited to, earning a living, budgeting, saving and investing, buying goods and services, using credit and protecting against risk. They may include financial problem solving and decision-making.

12109 Business Math

Courses reinforce math skills in a variety of business applications and emphasize speed and accuracy in computation. Topics may include arithmetic, measurement, statistics, ratio and proportion, exponents, formulas, and simple equations. Applications might include wages, hourly rates, payroll deductions, sales, receipts, accounts payable and receivable, financial reports, discounts and interest.

D. Marketing**12151 Marketing Career Exploration**

Courses explore careers in marketing, sales, or small business operation, including opportunities in retail, wholesale, advertising, and other occupational fields using marketing principles.

12152 Marketing—Comprehensive

Courses focus on the flow of goods and services from the producer to the consumer. Topics may include 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 may be included.

12153 Marketing—Fashion

Courses are similar to Marketing—Comprehensive courses but focus on the fashion industry. Topics may also include fashion cycles, fashion history, design, style, and coordination.

12154 Marketing—Real Estate

Courses are similar to Marketing—Comprehensive courses but focus on real estate. Topics may also include financing, investment, ownership rights, ethics, and other real estate principles.

12155 Marketing—Transportation

Courses are similar to Marketing—Comprehensive courses but focus on transportation. Topics also 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

Courses are similar to Marketing—Comprehensive courses but focus on the food and beverage industry. Topics also include the characteristics and functions unique to the food and beverage service industry.

12157 Marketing—Insurance

Courses are similar to Marketing—Comprehensive courses but focus on the sale or underwriting of accident, health, life, marine, automobile and causality insurance.

12158 Marketing—Floristry

Courses Marketing—Comprehensive courses but focus on floristry. Topics also include the unique characteristics and functions of retail and wholesale floral operations.

12159 Marketing—Hospitality/Tourism

Courses are similar to Marketing—Comprehensive courses but focus on hospitality and tourism. Topics include the unique characteristics and functions of travel services and hotel/motel operations.

12160 Marketing—Merchandising

Courses provide practical backgrounds in retailing, with emphasis on merchandising, promotion/display, selling and career planning. Content may also include fundamental principles of human relations.

12161 Retail Marketing

Courses topics include 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

Courses include the principles and functions of marketing and conducting business on the internet. Topics include 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

Courses introduce and refine marketing and management skills applied to amateur or professional sports or sporting events, entertainment or entertainment events, and the sales or rental of supplies and equipment.

12164 Principles of Marketing

Courses examine the flow of goods and services from the producer to the consumer. Content ranges considerably but general marketing principles such as purchasing, distribution and sales are often included, and a major emphasis is on market identification; product planning, packaging, and pricing; and business management.

12165 Principles of Advertising

Courses examine the concepts underlying the promotion of products. Topics included vary considerably, but typically include advertising psychology, study of various media, advertising planning and budgeting, and advertising layout and design principles. An overview of commercial art and packaging may be included.

12166 Marketing Management

Courses are similar to Marketing—Comprehensive courses but focus on business management and entrepreneurship, providing exposure to common techniques and problems of management.

12167 Marketing—Other Specialization

Courses are similar to Marketing—Comprehensive courses but focus on particular industry not specified above. Courses address specific topics related to the particular industry.

E. Sales**12201 Cashier/Checker Operations**

Courses provide the knowledge and skills to operate a cash register and to handle numerous transactions. Topics 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

Courses provide the knowledge and opportunity to develop in-depth sales competencies. Content typically includes types of selling, steps in a sale, sales strategies as well as interpersonal skills and techniques.

F. All Others**12990 Business and Marketing—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the work place.

12991 Business and Marketing—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations such as DECA and Business Professionals of America. Or, all of these activities may be embedded in other business and marketing courses.

12992 Business and Marketing—Apprenticeship

Courses provide students with supervised workplace training in business and marketing. Goals are typically set cooperatively by the student, school coordinator, and mentor/employer (although students are not necessarily paid). Students' work is evaluated by a school coordinator and the mentor/employer. These courses are accompanied by a classroom component (see *12990 Work Experience Classroom* above).

12994 Business and Marketing Career Exploration

Courses provide an overview of the opportunities in business and marketing careers or focus on one specific area. Emphasis is placed on responsibilities, qualifications, work environment and career paths. They may include hands-on experience within the occupational areas.

12995 Seminar/Project—Business and Marketing

Courses vary widely, but typically offer opportunities to investigate areas of interest in business and marketing. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

12996 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

Courses, often conducted with instructors or professionals as mentors, enable students to explore business or marketing-related topics of interest. These courses may serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

12998 Business and Marketing—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *12990 Work Experience Classroom* above).

12999 Business and Marketing—Other

(Insert local course description)

Subject Area: 13 Manufacturing

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when the local course focuses on a topic or combination of topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. The general industrial arts course classification that exposes students to a variety of tools and machines and develops the skills to use them in a variety of applications, such as drawing and planning, electricity, graphic arts, woodworking, leatherworking, metalworking, plastics and power technology is *13003 Industrial Arts*.
- D. The creation of a super-mileage car may be classified under various MCCC classifications depending on the focus of the local course. Use the focus of the local course to determine the most appropriate classification.
- E. Both *13 Manufacturing* and *17 Architecture and Construction* claim wood processing/woodworking. The course *13054 Wood Processing/Production* in *13 Manufacturing* includes processing of wood and wood products, but *17006 Woodworking* and *17007 Cabinetmaking* in *17 Architecture and Construction* are the more traditional individual, project-based courses.

III. Manufacturing course categories

A. Manufacturing Technology	13(001) – 13(050)
B. Processing/Production	13(051) – 13(100)
C. Production Systems	13(101) – 13(200)
D. Metalwork	13(201) – 13(300)
E. Repair	13(301) – 13(400)
F. All Others	13(990) – 13(999)

A. Manufacturing Technology

13001 Exploration of Manufacturing Occupations

Course examine career opportunities in the processing and production of goods. Topics vary and may include systems pertinent to the manufacturing process, properties of various raw materials, and the methods used to transform materials into consumer products. Entrepreneurship, labor laws and customer service may be included.

13002 Manufacturing—Comprehensive

Courses introduce various methods of processing and transforming materials. Techniques include casting, forming, separating, assembling, and finishing. 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

Courses explore tools and machines in manufacturing-related occupations and enable students to develop the skills in using these tools in various applications. Topics include drawing and planning, electricity, graphic arts, woodworking, leatherwork, metalwork, plastics and power technology. These courses typically include general safety and career exploration as well.

B. Processing/Production

13052 Materials and Processes

Courses explore tools, machines, and processes that are encountered in manufacturing-related occupations. They stress the analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials.

13053 Metal and Wood Processing/Production

Courses examine 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

Courses are similar to Metal and Wood Processing/Production but focus on woods and composites made from woods.

13055 Metal Processing/Production

Courses are similar to Metal and Wood Processing/Production but focus on metals and metal alloys.

13056 Plastics Processing/Production

Courses are similar to Metal and Wood Processing/Production but focus on plastics and composites.

13057 Ceramic Processing/Production

Courses are similar to Metal and Wood Processing/Production but focus on ceramics and heat-resistant composites.

13058 Particular Topics in Processing and Production

Courses examine specific topics in processing and production, such as substance analysis, other than those already described.

C. Production Systems**13101 Production Systems**

Courses provide knowledge and skills related to manufacturing technologies from conception through production. Topics vary widely but typically include analyzing markets, designing and developing prototypes, planning a marketing or sales strategy, managing a production plan and manufacturing useful products. They may explore the evolution and impact of technology on society's social, cultural, and economic systems and institutions.

13102 Electro-Mechanical Systems

Courses provide instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain 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.

13103 Product Development

Courses provide opportunity to focus on one or more areas of industrial technology, creatively pursue new knowledge or solve a technological problem, by designing and building prototypes and working models.

D. Metalwork

13201 Metalwork Occupations

Courses provide 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.

13202 Metalworking

Courses introduce the qualities and applications of various metals and the tools used to manipulate and form metal into products. Focus is on the development of planning, layout and measurement skills; experience in cutting, bending, forging, casting, and/or welding metal; and completing projects according to blueprints or other specifications. Polishing and finishing metals may be included.

13203 Machining

Courses provide opportunity to create metal parts using various machine tools and equipment. Content includes 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 Particular Topics in Machining

Courses examine specific topics related to machining, emphasizing a particular type of machine, tool, or procedure, or concentrating on a particular application of machining techniques.

13205 Sheet Metal

Courses develop the skills and knowledge necessary to layout, fabricate, assemble, install, maintain, and repair items and structures created from sheet metal components. Skills in blueprint reading, welding, and finishing and polishing metals as well as safe operation of tools may be included.

13206 Particular Topics in Sheet Metal

Courses provide knowledge and skills in particular aspects of sheet metal. Examples include individual courses in radial line development and triangulation fabrication.

13207 Welding

Courses provide the knowledge of the properties, uses, and applications of various metals; support development of skills in various processes used to join and cut metals, such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes; and offer experience in identifying, selecting, and rating appropriate techniques. These courses often include instruction in interpreting blueprints or other types of specifications.

13208 Particular Topics in Welding

Courses provide students with 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

Courses provide students with knowledge and skills in particular aspects of metalwork, such as foundry work or metallurgy not otherwise described.

E. Repair

13301 Appliance Repair

Courses provide the knowledge and experience to repair, install, service, and inspect appliances such as stoves, refrigerators, washers, dryers, air conditioners, and water heaters. Topics include understanding of the mechanics and working systems of these appliances, skills to read blueprints and specifications, and proficiency in using related tools and products.

13302 Equipment Maintenance and Repair

Courses develop skills to adjust, replace and repair machine parts as well as repair tools, equipment and machines. They include a general overview or focus machinery or equipment related to a particular industry. Topics may include electric, hydraulic, or mechanic systems; control devices, valves, and gates; or supplemental equipment such as fans, hoses, and pipes.

F. All Others

13990 Manufacturing—Work Experience Classroom

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

13991 Manufacturing—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other manufacturing courses.

13992 Manufacturing—Apprenticeship

Courses provide students with supervised workplace training in manufacturing. Goals are typically set cooperatively by the student, school coordinator, and mentor/employer (although students are not necessarily paid). Students' work is evaluated by a school coordinator and the mentor/employer. These courses are accompanied by a classroom component (see *13990 Work Experience Classroom* above).

13995 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.

13996 Seminar/Project—Manufacturing

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in manufacturing. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include (but are not limited to) improvement of research, presentation and communication, interpersonal skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

13997 Manufacturing—Independent Study

Courses, often conducted with instructors as mentors, enable students to explore topics of interest related to manufacturing. These courses may serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

13998 Manufacturing—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *13990 Work Experience Classroom* above).

13999 Manufacturing—Other

(Insert local course description)

Subject Area: 14 Health Care Sciences

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This subject area has the course classification *Particular Topics* in one or more categories. Use this classification when the local course focuses on a topic or combined topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC classifications or topics and no MCCC classification exists for that particular combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that particular topic. If all topics are of equal focus, use the “Other” classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. Only official Project-Lead-The-Way (PLTW) sites may use the PLTW classifications. Local courses that follow PLTW curriculum but are not offered through an official site may not be classified under designated PLTW classifications. Classify them under other MCCC classifications that describe the local course content, including classifications such as *14258 Particular Topics in Health Sciences*.

III. Health Care Science course categories

- A. Comprehensive 14(001) – 14(050)
- B. Therapeutic Services 14(051) – 14(100)
- C. Diagnostic Services 14(101) – 14(150)
- D. Health Information 14(151) – 14(200)
- E. Support Services 14(201) – 14(250)
- F. Health Sciences 14(251) – 14(300)
- G. All Others 14(990) – 14(999)

A. Comprehensive

14001 Exploration of Health Care Occupations

Courses explore career opportunities in the health care industry, such as nursing, therapy, dental care, administrative services and lab technology. They provide information and knowledge in the industry as a whole and experiences in several of these occupational clusters.

14002 Health Care Occupations—Comprehensive

Courses provide an orientation to the health care industry and help refine students' health care-related knowledge and skills. Topics include 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.

B. Therapeutic Services

14051 Nursing

Courses place focus on the particular knowledge and skills required of nurses and/or nursing assistants and aides including general health care topics, such as patient care, anatomy and physiology, medical terminology, hygiene and disease prevention, first aid and CPR, and laboratory procedures. Topics may include normal growth and development; bathing, feeding, dressing, and transporting patients; basic pharmacology; doctor, nurse, and patient relationships and roles; medical and professional ethics and legal responsibilities; death and dying; and care of various kinds of patients, such as the chronically ill, children, and new mothers.

14052 Nursing—LPN

Courses are similar to the nursing courses above, but the focus is preparation for the state's practical nurse licensing examination. They offer the knowledge and experience needed to provide care for patients of all ages, in various stages of sickness or health, and with a variety of disease conditions. Additional topics may include community health, nutrition, drug therapy and administration and mental illness.

14053 Home Health Care

Courses teach the practices and procedures to care for patients in their homes and typically includes patient care, comfort and safety; anatomy and physiology; disease and infection prevention; nutrition and meal preparation; human relations; and first aid and CPR. Topics may also include therapy strategies and household management.

14054 Dental Science

Courses explore the tools, terminology, and procedures necessary for a career in the dental industry. Content includes dental anatomy and terminology; 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

Courses focus on the knowledge and skills needed in medical emergencies. Topics 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. Courses may also include legal and ethical responsibilities in dealing with medical emergencies.

14056 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

Courses explore the tools, terminology, and procedures necessary for optometric or optic field careers. Topics include physics of light and refraction; 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

Courses provide the knowledge and skills to prepare, assemble, and/or fit corrective lenses prescribed by a physician or optometrist. Topics include layout and marking, cutting and chipping, edging and beveling, inspection, alignment, dispensing, and selection of eyewear.

14059 Gerontology

Courses provide knowledge and understanding of the processes of adult development and aging. Topics include the study of the biological, economic, psychological, social, and health/fitness aspects of the aging process.

14060 Physical Therapy

Courses provide knowledge and skills to work with patients who need to achieve and maintain functional rehabilitation and to prevent malfunction or deformity. Topics 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

Courses provide knowledge and skills to work with patients who have breathing or other cardiopulmonary difficulties or disorders. Topics include identifying deficiencies and abnormalities of the cardiopulmonary system as well as understanding various methods of therapies and use of special equipment.

14062 Care of Athletes

Courses provide knowledge and skills to understand and perform therapeutic tasks designated by an athletic or fitness trainer. Topics include taping and bandaging, proper use of protective padding, treatment modalities, anatomy and physiology, and medical terminology. Measuring cardio-respiratory endurance, muscular strength and endurance, flexibility, body composition, and blood pressure may be included. Advanced topics include injury assessment, phases of healing, and use of exercise and equipment to help in the reconditioning of injured athletes.

14063 Particular Topics in Therapeutic Services

Courses examine particular topics in medical therapeutic services, such as job shadowing and basic clinical skills practice, other than those already described.

C. Diagnostic Services

14101 Dental Laboratory Technology

Courses examine the principals, tools, terminology, and procedures for a career in a dental laboratory. They are similar to Dental Science course, but emphasize making mouth guards, taking impressions, creating various types of dental molds and models, and fabricating prostheses and dental appliances.

14102 Medical Lab Technology

Courses provide knowledge and skills for employment in health care-related 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. Venipuncture, EKG, and CPR procedures may also be included.

14103 EKG Technology

Courses develop 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. General health care as well as basic anatomy and physiology, patient care, first aid and CPR, identification and use of medical equipment and medical terminology may be included.

14104 Phlebotomy

Courses provide knowledge, skills, and experiences related to drawing blood. Topics include infection control, sterilization practices, medical/hospital procedures and environments and diagnostic procedures.

14105 Particular Topics in Diagnostic Services

Courses examine particular topics in diagnostic services other than those already described.

D. Health Information

14151 Medical/Clerical Assisting

Courses combine the medical and clerical fields. They develop skills in 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

Courses emphasize the knowledge and skills to assist a pharmacist or pharmacy technician. Topics include medical terminology, keeping and maintaining records, labeling medications, computer patient billing, stock inventory, and supply ordering. They also emphasize pharmaceutical classification, drug interactions, and interpersonal/communication skills.

14153 Medical Office Procedures

Courses develop clerical knowledge, skills, and procedures in the medical field. They include topics such as medical transcription, medical insurance, financial accounting, scheduling and patient record keeping. Medical terminology and routine medical procedures are often included.

14154 Medical Terminology

Courses support students in identifying medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations as well as developing both oral and written skills to communicate within the health care professions.

14155 Particular Topics in Health Information

Courses examine particular topics in health information other than those already described.

E. Support Services

14201 Central Service Technology

Courses provide knowledge and skills related to the procurement, handling, storage, and distribution of sterile goods and equipment. Topics usually include quality assurance, infection control and isolation techniques, medical terminology and processes, decontamination and sterilization, microbiology, and chemistry.

14202 Health Support Services

Courses provide knowledge and skills to support patients' primary health care, such as counseling, health education, disease management and risk reduction. Support services are broadly defined and topics may include general health care, anatomy and physiology, medical terminology, first aid and CPR procedures, and ethical and legal responsibilities.

14203 Health Unit Coordination

Courses provide instruction and experiences in non-patient care activities in health care facilities. Topics include medical terminology, transcription, and general reception duties and responsibilities; recordkeeping; and stocking medical and office supplies and equipment.

14204 Particular Topics in Health Support Services

Courses examine particular topics in health support services other than those described.

F. Health Sciences

14251 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

Courses involve the study of the bioprocesses of organisms, cells, and/or their components and use of 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

Courses examine how living animals are 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 included as students examine the effects of drugs and their mechanisms of action.

14254 PLTW—Principles of the Biomedical Sciences™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They examine human medicine concepts and introduce research processes and bioinformatics. Topics include investigation of the human body systems and various health conditions such as heart disease, diabetes, sickle-cell disease and infectious diseases. Courses provide an overview of the biomedical sciences and lay the scientific foundation for success in subsequent biomedical sciences course work.

14255 PLTW—Human Body Systems™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They examine the processes, structures, and interactions of the human body systems and how they work together to maintain internal balance and good health. They typically offer students the opportunity to work on real world medical cases and solve medical mysteries.

14256 PLTW—Medical Interventions™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They support investigation of a variety of interventions that prevent, diagnose and treat disease in the lives of a fictitious family. The interventions are tracked across generations of the family and provide a look at the past, present and future of biomedical science.

14257 PLTW—Biomedical Innovations™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They provide knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for 21st Century health challenges. They may work with a professional health mentor or advisor.

14258 Particular Topics in Health Sciences

Courses examine particular topics in health sciences other than those already described.

G. All Others**14990 Health Care Sciences—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

14991 Health Care Sciences—Student Leadership

Courses develop students' personal and professional leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations such as Health Occupations Students of America (HOSA). Or, all of these activities maybe embedded in other health service courses.

14992 Health Care Sciences—Apprenticeship

Courses provide students with supervised workplace training in health care sciences. Goals are typically set cooperatively by the student, school coordinator, and mentor/employer (although students are not necessarily paid). Students' work is evaluated by a school coordinator and the mentor/employer. These courses are accompanied by a classroom component (see *14990 Work Experience Classroom* above).

14995 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.

14996 Seminar/Project—Health Care Sciences

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in health care sciences. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior or exit projects required for graduation.

14997 Health Care Sciences—Independent Study

Courses, often conducted with instructors or health care professionals as mentors, enable students to explore healthcare-related topics of interest. These courses provide students with an opportunity to expand their expertise, to explore a topic in detail, or to develop advanced skills.

14998 Health Care Sciences—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *14990 Work Experience Classroom* above).

14999 Health Care Sciences—Other

(Insert local course description)

Subject Area: 15 Public, Protective and Government Services

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combination topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If topics are of equal focus, classify the local combination under the “Other” classification at the end of the Subject Area and provide a brief description of the local course content.

III. Public, Protective and Government Services course categories

- A. Public Service Careers 15(001) – 15(050)
- B. Law Enforcement 15(051) – 15(100)
- C. Security and Protection 15(101) – 15(150)
- D. Fire Management 15(151) – 15(200)
- E. Government Service 15(201) – 15(250)
- F. All Others 15(990) – 15(999)

A. Public Service Careers

15001 Exploration of Public Service Careers

Courses examine the responsibilities, requirements and career opportunities within public service. 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 explored.

B. Law Enforcement

15051 Criminal Justice

Courses support students in understanding and applying the principles and procedures essential to the U.S. criminal justice system. They explore the principles and structure of the justice system and the law. Topics include investigation, search and arrest, and laboratory, forensic and trial procedures. CPR and first aid skills, personal defense tactics and crime prevention techniques may be included.

15052 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

Courses examine specific topics related to law enforcement rather than provide a general study of the field.

C. Security and Protection

15101 Public Safety

Courses introduce public safety and extend students' knowledge and skills pertaining to the safety and security of homes, workplaces and the community. Topics include all or a subset of policing, law enforcement, emergency services, private security and corrections.

15102 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.

15103 Particular Topics in Security

Courses examine specific topics related to security and protective services, rather than provide a general study.

D. Fire Management

15151 Fire Science

Courses introduce the field of fire prevention and control through examination of chemical, physical, and engineering principles factors involved in fires. Topics include the combustion chemistry, structural design and meteorological factors that influence fire and safety procedures.

15152 Fire Fighting

Courses offer practice in fire prevention and control under controlled conditions. Topics include the organization, rules, requirements, and regulations of fire departments; practice with tools and techniques used to control or extinguish fires; and the behavior of fires. Emergency medical procedures and fire investigation techniques may also be included.

15153 Particular Topics in Fire Management

Courses examine specific topics related to fire management, such as hazardous materials handling not otherwise described or provided in the general study of the field.

E. Government Service

15201 Public Administration

Courses provide an overview of the structure, roles, and duties of public governments and agencies. They examine 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 departments within local and state governments. Particular topics, such as tax base and structure, legislative process, selection of public servants and resource management may be included.

15202 Community Protection

Courses provide information concerning the personnel and agencies charged with protection of homes, cities, states, and the nation. Topics include civil defense and disaster preparedness; crime prevention; pollution control; fire prevention and control; legal and social systems and principles; and public health. Topics may be explored from the viewpoint of a citizen using services or of that of a person interested in pursuing a public service career.

15203 Public Policy

Courses provide the opportunity to design, propose, and analyze programs and policies implemented by government agencies. Activities 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.

F. All Others

15990 Public, Protective and Government Service—Work Experience Classroom

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

15991 Public, Protective and Government Service—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other public, protective and government services courses.

15992 Public, Protective and Government Service—Apprenticeship

Courses provide students with supervised workplace training in public, protective and government service. Goals are typically set cooperatively by the student, school coordinator, and mentor/employer (although students are not necessarily paid). Students' work is evaluated by a school coordinator and the mentor/employer. These courses are accompanied by a classroom component (see *15990 Work Experience Classroom* above).

15995 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.

15996 Seminar/Project—Public, Protective and Government Service

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in public, protective and government service. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication, interpersonal skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

15997 Public, Protective and Government Service—Independent Study

Courses, often conducted with instructors or service professionals as mentors, enable students to explore topics of interest related to public, protective and government service. These courses serve as an opportunity for students to expand their expertise, explore a topic in detail or develop advanced skills.

15998 Public, Protective and Government Service—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *15990 Work Experience Classroom* above).

15999 Public, Protective and Government Service—Other

(Insert local course description)

Subject Area: 16 Hospitality and Tourism

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combination topics that is not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” classification at the end of the subject area to classify the local combination and provide a brief description of local course content.

III. Hospitality and Tourism course categories

- | | |
|--|-------------------|
| A. Comprehensive | 16(001) – 16(050) |
| B. Restaurant, Food and Beverage Service | 16(051) – 16(100) |
| C. Lodging | 16(101) – 16(150) |
| D. Travel and Tourism | 16(151) – 16(200) |
| E. Recreation, Amusement and Attractions | 16(201) – 16(250) |
| F. All Others | 16(990) – 16(999) |

A. Comprehensive

16001 Exploration of Hospitality Careers

Courses explore career opportunities in the hospitality fields, such as food service, lodging, tourism and recreation. They survey a range of topics and serve to introduce students to the field of hospitality and provide an opportunity to identify a focus for continued study.

16002 Hospitality Business/Management—Comprehensive

Courses provide knowledge and skills related to the issues and concepts of managing businesses in the hospitality industry. Topics may include, but are not limited to, guest relations, operations, services, staffing, facilities, finance, and leadership and management styles.

B. Restaurant, Food and Beverage Services

16051 Exploration of Restaurant, Food, and Beverage Services

Courses provide an overview of the restaurant, food, and beverage service industry. Topics include industry terminology, the history of restaurant, food, and beverage services, introduction to marketing, and various careers in the industry.

16052 Restaurant, Food, and Beverage Services—Comprehensive

Courses provide knowledge and skills related to commercial and institutional food service establishments. Topics range widely, but usually include sanitation and safety procedures, nutrition and dietary guidelines, food preparation, quantity food production, meal planning and presentation. They may include both “back-of-the-house” and “front-of-the-house” experiences, such as reservation systems, customer service and restaurant/business management.

16053 Food Service

Courses provide instruction regarding nutrition, principles of healthy eating, and the preparation of food. Topics include 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 careers in the food service industry.

16054 Nutrition and Food Preparation

Courses provide knowledge and skills about food preparation and/or production, with emphasis on nutrition, balanced diets, and satisfying special dietary needs. Topics may include assessing nutrient content, the science of food and nutrition, physiology and utilization of nutrients. Content may also cover additives, contaminants, food-borne illnesses, food technology and careers in the food industry.

16055 Restaurant Management and Operations

Courses provide knowledge and skills related to commercial and institutional food service establishments with an emphasis on management. Topics include guest service and relationships, planning, resource management and other topics related to managing and operating restaurants.

16056 Culinary Art Specialty

Courses provide instruction in a particular type of cooking or culinary style. Examples include baking, creating and decorating wedding cakes and Middle Eastern cuisine. They emphasize skills specific to the type of culinary art studied.

16057 Particular Topics in Restaurant, Food, and Beverage Services

Courses examine specific topics, such as catering, rather than provide a general study of the industry or of specific topics previously described.

C. Lodging

16101 Exploration of Lodging Careers

Courses provide an overview of the lodging industry. Topics include lodging terminology, history of lodging, introduction to marketing and various careers in the lodging industry.

16102 Lodging—Comprehensive

Courses introduce the lodging industry and refine students' related knowledge and skills. Topics include property management, guest psychology and relationships, lodging operations, food and beverage services and other topics related to lodging support services.

16103 Institutional Maintenance

Courses develop knowledge and skills required for service work. Topics include housekeeping and laundry services, care and cleaning of facilities, safety and sanitation procedures, business responsibilities and ongoing maintenance. Career opportunities may be included.

16104 Particular Topics in Lodging

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 previously described.

D. Travel and Tourism

16151 Introduction to Travel and Tourism

Courses provide an overview of the travel and tourism industry. Topics include terminology, history of travel, introduction to marketing, and careers available in travel and tourism.

16152 Travel and Tourism—Comprehensive

Courses develop the knowledge and skills to work in the travel industry, such as sales techniques, marketing principles and entrepreneurial skills. Additional skills 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

Courses develop the knowledge and skills necessary to work in the travel industry, with a focus on travel outside of the United States. Topics include geography; customs, cultures, and tourist destinations in other countries; and special documentation needed for international travel.

16154 Eco-tourism

Courses develop the knowledge and skills to work in the travel industry, with emphasis on conservation and environmental issues. Topics may include recreational opportunities related to on- and off-site attractions and environmental and ecological principles.

16155 Particular Topics in Travel and Tourism

Courses examine specific topics such as the airline reservation and ticketing system rather than provide a general study of the industry or of specific topics previously described.

E. Recreation, Amusement and Attractions**16201 Exploration of Recreation, Amusement, and Attractions**

Courses provide an overview of the recreation industry. Topics include industry terminology; history of recreation, amusement, and attractions; marketing; and various careers in the industry.

16202 Recreation, Amusement, and Attractions—Comprehensive

Courses develop the attitudes, skills, and knowledge needed for employment in theme parks, attractions and outdoor recreation facilities, exhibitions, and event planning. Topics 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

Courses examine specific topics, such as local opportunities rather than provide a general study of the industry.

F. All Others**16990 Hospitality and Tourism—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

16991 Hospitality and Tourism—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in recognized career and technology education student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other hospitality and tourism courses.

16992 Hospitality and Tourism—Apprenticeship

Courses provide students with supervised workplace training in hospitality and tourism. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *16990 Work Experience Classroom* above).

16995 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.

16996 Seminar/Project—Hospitality and Tourism

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in hospitality and tourism. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication, interpersonal skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

16997 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. These courses may serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

16998 Hospitality and Tourism—Work-Based Learning

Courses provide work experience in fields related to hospitality and tourism. Goals are typically set cooperatively by the student, school coordinator, and employer (although students are not necessarily paid). Students' work is supervised and evaluated by the school coordinator and employer. These courses are accompanied by a classroom component (see *16990 Work Experience Classroom* above).

16999 Hospitality and Tourism—Other

(Insert local course description here)

Subject Area: 17 Architecture and Construction

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combine topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. Both **13 Manufacturing** and **17 Architecture and Construction** claim wood processing/woodworking. **13 Manufacturing** lists the classification *13054 Wood Processing/Production*, which includes processing of wood and wood products, and **17 Architecture and Construction** lists two classifications, *17006 Woodworking* and *17007 Cabinetmaking*, which describe the more traditional individual, project-based courses.
- D. The general industrial arts classification that exposes students to tools and machines and develops skills to use them in a variety of applications, such as drawing and planning, electricity, graphic arts, woodworking, leatherworking, metalworking, plastics or power technology is *13003 Industrial Arts*.

III. Architecture and Construction course categories

- | | |
|---|-------------------|
| A. Construction—General | 17(001) – 17(050) |
| B. Air Conditioning, Heating and Plumbing | 17(051) – 17(100) |
| C. Electricity/Electronics | 17(101) – 17(150) |
| D. All Others | 17(990) – 17(999) |

A. Construction-General

17001 Construction Careers Exploration

Courses explore opportunities available in construction-related trades, such as carpentry, masonry, air conditioning/refrigeration and plumbing. Students learn 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 the field.

17002 Construction—Comprehensive

Courses develop basic knowledge and skills required for construction of commercial, residential, and institutional structures. They provide experiences and information regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing and concrete masonry. Activities include reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and maintenance.

17003 Carpentry

Courses provide information about building wooden structures. Topics include understanding wood grades and construction methods; developing skills such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting doorjambes; and hanging doors. Courses may include skills for rough construction, finish work or both. Students learn to read blueprints, draft, use tools and machines safely, erect buildings, perform finish work and limited cabinetwork. Career exploration, good work habits and employability skills may be included.

17004 Framing Carpentry

Courses are similar to general carpentry courses, but place a special emphasis on construction methods applicable to floor, wall, roof, and/or stair framing. Insulation installation and painting may be included.

17005 Particular Topics in Carpentry

Courses cover specific aspects of building construction or carpentry not previously described in general courses.

17006 Woodworking

Courses introduce various woods and offer experience in using selected woodworking tools safely. Students design and construct one or more projects and may prepare a bill of materials. Advanced work may focus on learning terminology, developing skills to use power tools safely and becoming familiar with various kinds of wood-finishing materials.

17007 Cabinetmaking

Courses provide experience in constructing cases, cabinets, counters and interior woodwork. Topics include various types of furniture construction and appropriate applications, use of machines and power tools for cutting and shaping wood. Courses include different methods of joining, including use of mechanical fasteners. Advanced topics may include plastic laminate installation and spray finish applications.

17008 Masonry

Courses develop skills to construct interior and exterior walls, columns, doorways, window openings, fireplaces, chimneys, and foundations from brick and concrete block. Topics include mixing and spreading cement and mortar, reading blueprints and plans, and estimating materials needed for a project. How to layout buildings on footings and how to establish grades using a surveying transit may be included.

17009 Building Maintenance

Courses develop skills to maintain commercial, industrial, and residential buildings and homes. Topics include basic maintenance and repair of air conditioning, heating, plumbing, electrical, and other mechanical systems. 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 may be included.

17010 Home Maintenance

Courses provide knowledge and skills related to devices and systems found in the home. 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

Courses provide knowledge and skills to finish exterior or interior surfaces by applying protective coating materials such as paint, lacquer, wallpaper, plaster, or stucco. 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

Courses provide knowledge and skills to upholster furniture. Topics include installing, repairing, 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.

17013 Furniture

Courses provide knowledge and skills to design, construct and finish furniture. Content may also include marketing and sales.

B. Air Conditioning, Heating and Plumbing**17051 Air Conditioning**

Courses develop knowledge and skills to the design, installation, and repair of residential and commercial air conditioning systems. They emphasize the theory and design of electrical, electronic, mechanical, and pneumatic control systems. They may focus on procedures used in troubleshooting, servicing, and installing components of air conditioning systems.

17052 Refrigeration

Courses examine the theories and equipment, as well as develop the skills needed to design, install, and repair commercial and residential refrigeration systems. Topics include the theory of thermodynamics, measurement of pressures and temperatures, components and common accessories of refrigeration systems, and repair and safety procedures.

17053 Heating

Courses offer 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

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

Courses provide students with the knowledge of basic principles of these systems and the skills to identify and safely use tools/equipment used in the trade.

17056 Heating, Ventilation and Air Conditioning

Courses synthesize basic and advanced principles in heating, ventilation and air conditioning. Topics include air filtration methods, humidity control, and the installation and maintenance of heat pumps, furnaces and air conditioners. Climate control systems; electrical wiring; systems design; sizing, fabricating, and installing ductwork; installing and maintaining climate control systems and safety may be included.

17057 Particular Topics in HVACR

Courses offer specialized training in aspects or topics of heating, ventilation, air conditioning and refrigeration systems not previously described. Topics may include, but are not limited to, electrical components, diagrams and blueprints, welding and soldering techniques.

17058 Plumbing

Courses provide instruction in installing waste and vent systems, water and gas pipes, trim, and fixtures. Skills include cutting various types of pipe such as steel and plastic and using various joining methods such as cement and seat method.

17059 Plumbing and Heating

Courses address the installation, assembly, maintenance, and repair of piping, plumbing, heating equipment, and water and drainage systems. Topics include the computation of heat losses and BTU requirements and blueprint reading. Experience with electric, gas, and oil furnaces; vacuum pumps; air compressors; and mechanical and pneumatic testing equipment may be included.

C. Electricity/Electronics

17101 Exploration of Electricity/Electronics

Courses offer instruction in the theory of electricity and in the terminology, skills, and safety procedures involving electricity and electronics. Topics include, but are not limited to, Ohm's law, electrical equipment and wire systems. Career exploration may be included.

17102 Electricity—Comprehensive

Courses survey the theory, terminology, equipment, and practical experience for careers in the electrical field. They typically include AC and DC circuitry, safety, and the National Electrical Code. Course often develop skills in building circuits; wiring residential, commercial, and/or industrial buildings; installing lighting, power circuits, and cables and estimating job costs. Career exploration may be included.

17103 Residential Wiring

Courses are similar to Electricity—Comprehensive courses but apply the knowledge and skills to the residential electrical systems. Topics may include outlets, cable installation, telephone systems, and the installation of lighting fixtures. Maintenance and repair are often included.

17104 Industrial Electricity

Courses are similar to Electricity—Comprehensive courses but apply the knowledge and skills to industrial electrical systems. Topics include installation of transformers and control devices, emergency generator systems and other industrial applications.

17105 Particular Topics in Electricity

Courses provide students with specialized knowledge and support skill development in particular topics concerning the nature, behavior and application of electrical current.

17106 Electronics—Comprehensive

Courses survey the theory, terminology, equipment, and provide practical experience in the electronic field. Topics typically include the theory of electricity and AC, DC, analog, and integrated circuitry as well as solid state and digital devices, amplifiers, and semiconductors. Courses may support skill development in the repair, maintenance, and building of electronic equipment such as radios, television sets and industrial equipment.

17107 Particular Topics in Electronics

Courses offer specialized training in topics related to electronics such as diodes, transistors, digital techniques, solid-state devices, analog circuits, and microprocessors or other topics not previously described.

17108 Electricity/Electronics—General

Courses teach fundamental concepts of electricity and electronics, including safety procedures, and may introduce 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

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 not previously described.

17110 Analog and Digital Circuits

Courses compare analog and digital circuits and systems. Topics include binary and continuously variable currents and signals (typically in the context of voltage), waveforms, signal loss and distortion, modulation, and signal processing. Sound waves and liquids may be included.

17111 Analog Circuits

Courses emphasize currents and voltages that have continuously variable signals and concentrate on signal modulation, transmission and reception, signal loss and distortion, and waveforms. Courses may include conversion techniques.

17112 Digital Circuits

Courses emphasize currents and voltages that have binary states and focus on transmission and reception of binary data, signal loss, processing circuitry and conversion techniques.

D. All Others

17990 Architecture and Construction—Work Experience Classroom

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

17991 Architecture and Construction—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in recognized career and technology education student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other architecture and construction courses.

17992 Architecture and Construction—Apprenticeship

Courses provide students with supervised workplace training in architecture and construction. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *17990 Work Experience Classroom* above).

17995 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.

17996 Seminar/Project—Architecture and Construction

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in architecture and construction. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

17997 Architecture and Construction—Independent study

Courses, often conducted with instructors or professionals as mentors, enable students to explore architecture and construction-related topics of interest. These courses serve as an opportunity for students to expand their expertise, explore a topic in detail or develop advanced skills.

17998 Architecture and Construction—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *17990 Work Experience Classroom* above).

17999 Architecture and Construction—Other

(Insert local course description)

Subject Area 18: Agriculture, Food and Natural Resources

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combine topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. Local courses that focus on-the-job learning in the food service industry are most appropriately classified under *16098 Restaurant, Food, and Beverage Services—Work-Based Learning* in **16 Hospitality and Tourism**.

III. Agriculture, Food and Natural Resources course categories

A. Comprehensive	18(001) – 18(050)
B. Plant Systems	18(051) – 18(100)
C. Animal Systems	18(101) – 18(150)
D. Agribusiness	18(201) – 18(250)
E. Agriculture Production/Processing	18(301) – 18(350)
F. Agriculture Mechanics and Construction	18(401) – 18(450)
G. Natural Resources	18(501) – 18(550)
H. All Others	18(990) – 18(999)

A. Comprehensive

18001 Introduction to Agriculture and Natural Resources

Courses survey a range of topics, exploring varied careers in agriculture and natural resources. They provide students an opportunity to identify an area for continued study. They often focus on developing communication skills, business principles and leadership skills.

18002 Agriculture—Comprehensive

Courses include a range of 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 careers available in the industry. Topics such as chemical and soil science, ecology, agricultural marketing and veterinary science may be included.

18003 Agriculture and Natural Resources—Comprehensive

Courses are similar to Agriculture—Comprehensive but also include natural resource topics, such as environmental science and conservation; ecology and forestry.

B. Plant Systems

18051 Plant Production/Science

Courses provide knowledge about the propagation of plants for food and fiber. Topics include soil science, irrigation, pest and weed control, food and fiber processing, and farm operations. General knowledge and skills needed to produce all types of crops or a particular area of plant production may be emphasized.

18052 General Horticulture

Courses explore the art and science of growing plants, shrubs, trees, flowers, fruits, and vegetables. Topics include greenhouse and nursery operations, soils and media mixtures, fruit and vegetable production, turf/golf course management, interior and exterior landscaping, irrigation systems, weed and pest control and floral design.

18053 Ornamental Horticulture

Courses explore the care and propagation of plants, flowers, trees and shrubs, but focus on those used for decorative and aesthetic purposes. Courses usually concentrate on nurseries, greenhouses and/or the floristry industry.

18054 Turf and Landscape Management

Courses explore plant science, soil and media mixtures, plant identification, optimal environments and landscape design. They emphasize applying knowledge and skill to the design, establishment, and maintenance of lawns, parks, open space, and similar environments.

18055 Soil Science

Courses explore soil properties, including soil chemistry, biology, fertility, mineralogy and hydrology. Topics include soil conservation, irrigation and management.

18056 Particular Topics in Plant Systems

Courses examine specific topics, such as floral design, hydroponics or landscaping, rather than provide a general study of plant systems or horticulture.

C. Animal Systems

18101 Animal Production/Science

Courses explore the care and management of domestic and farm animals. They may include animal nutrition, health, behavior, selection, reproduction, anatomy and physiology, facilities, product processing and marketing. Study may emphasize general care and maintenance of livestock or focus on a particular species, such as swine, cattle, horses, fowl or sheep.

18102 Small Animal Care

Courses focus on the care and management of small animals. Topics include animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training and grooming. Kennel operations and sales may also be included.

18103 Large Animal Care

Courses focus on the care and management of large animals. Topics include animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training and grooming. Product processing and marketing may also be included.

18104 Equine Science

Courses focus on the care and management of horses. Topics include animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming.

18105 Veterinary Science

Courses focus on the causes, diagnosis, and treatment of animal diseases and injuries, typically emphasizing domestic and farm animals. Topics include anatomy and physiology, nutrition, behavior and reproduction, but may also include other areas of study as appropriate.

18106 Particular Topics in Animal Systems

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.

D. Agribusiness

18201 Agribusiness Management

Courses examine management of agribusiness and entrepreneurial ventures. Topics include economic principles, risk management, finance, business law, marketing and promotion, insurance and resource management. Business plans, employee/employer relations, commodities, building leadership skills and career opportunities may be included.

18202 Agricultural Entrepreneurship

Courses focus on the skills necessary for entrepreneurial ventures in agricultural. Topics include setting goals, assessing and solving problems, evaluating financial progress and success, business planning, information management and evaluation, and recordkeeping.

18204 Particular Topics in Agribusiness

Courses examine specific topics related to agribusiness, such as international agriculture, land surveying or commodities, rather than provide a general study of agribusiness principles.

E. Agricultural Production/Processing

18301 Agricultural Production

Courses combine animal and plant production, providing comprehensive coverage of the production functions. Topics include care and management of farm animals, crop production and harvesting, plant and animal insect and disease control, efficient resource and farm management.

18302 Agricultural Processing

Courses develop knowledge and skills needed to bring animal and plant products to market. Topics include care and maintenance of animals or plants, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Courses may present an overview or specialize in particular types of products.

18303 Plant Processing

Courses develop knowledge and skills needed to bring plant products to market. Topics include plant production, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Courses may present an overview or specialize in specific plant products.

18304 Animal Processing

Courses develop knowledge and skills needed to bring animal products to market. Topics include animal care and maintenance, quality selection, product preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Courses may present an overview or specialize in particular products, such as meat, leather, wool, or dairy products.

18305 Food Product Processing

Courses develop knowledge and skills needed to produce and manufacture food products. Topics include quality selection and preservation, equipment care and sanitation, government regulations, marketing, consumer trends, and product research and development.

18306 Aquaculture

Courses develop knowledge and skills needed for producing fish, plants and other species living in an aquatic environment. Topics include the selection, propagation, harvesting and marketing of those species. Aquatic and marine biology, ecosystems, water quality and management, and business practices may be included.

18307 Agriculture and Society

Courses survey the importance of, impact on and relationships between agricultural endeavors and society. They 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. Technological advances such as genetic engineering may also be discussed.

18308 Agricultural Biotechnology

Courses apply biological principles and understanding to plant and animal science in order to produce or refine agricultural products. 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. The ethics of biotechnology is often included.

18309 Particular Topics in Agricultural Production/Processing

Courses examine specific topics related to producing and processing agricultural products not previously described or rather than provide a general study of production or processing.

F. Agricultural Mechanics and Construction**18401 Agriculture Mechanics/Equipment/Structures**

Courses develop skills and knowledge applicable to the tools and equipment used in the agricultural industry, such as engine mechanics, power systems, welding, and carpentry. Topics include, but are not limited to, 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

Courses explore 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 including alternative sources of energy.

18403 Agriculture Structures

Courses develop the skills and knowledge applicable to the construction, maintenance and repair of structures, such as animal enclosures, irrigation systems and storage facilities. Topics include design, planning, and construction. Skills associated with surveying, carpentry, plumbing, concrete and electrical systems in addition to the safe use of tools are often included.

18404 Agriculture Welding

Courses provide welding skills and knowledge applicable to the tools and equipment used in agricultural. Topics include 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

Courses examine specific topics related to agriculture, such as specific vehicles or structures not previously described or rather than provide a general study of mechanics and construction.

G. Natural Resources

18501 Wildlife Management

Courses explore conservation and outdoor recreation topics. They emphasize understanding the importance of maintaining land and ecological systems that enable wildlife to thrive. They focus on how humans and animals may both use the same land or how to gain economic benefits from the land while not degrading its natural resources or depleting plant or animal populations.

18502 Forestry

Courses provide information and experience necessary for the cultivation, management and care of forests or timberlands. Topics include 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 recreational use of forests.

18503 Forestry Harvesting

Courses examine 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.

18504 Natural Resources Management

Courses combine ecology and conservation with planning for preservation of land, water, wildlife and forests. Topics may include, but are not limited to, hunting or fishing preserves, forest production and management, wildlife preservation and human outdoor recreation.

18505 Particular Topics in Natural Resources

Courses focus on topics not previously described, such as urban forestry, taxidermy or hunter education not previously described rather than provide a general study of natural resources.

H. All Others

18990 Agriculture, Food and Natural Resources—Work Experience Classroom

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

18991 Agriculture, Food and Natural Resources—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations such as the National FFA Organization. Or, all of these activities may be embedded in other agriculture, food or natural resources courses.

18992 Agriculture, Food and Natural Resources—Apprenticeship

Courses provide students with supervised workplace training in agriculture, food or natural resources. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *18990 Work Experience Classroom* above).

18995 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.

18996 Seminar/Project—Agriculture, Food and Natural Resources

Courses vary widely, but typically offer students the opportunity to investigate areas of interest agriculture, food or natural resources. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

18997 Agriculture, Food and Natural Resources—Independent Study/Supervised Agriculture Experience

Courses, often conducted with instructors or professionals as mentors, enable students to explore topics of interest related to agriculture, food or natural resources. These courses serve as an opportunity for students to expand their expertise, explore a topic in detail or develop advanced skills.

18998 Agriculture, Food and Natural Resources—Work-Based Learning

Courses provide students with work experience in a field related to agriculture, food or natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *18990 Work Experience Classroom* above).

18999 Agriculture, Food and Natural Resources—Other
(*Insert local course description*)

Subject Area: 19 Human Services

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combine topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one topic in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.

III. Human Services course categories

- A. Career Exploration 19(001) – 19(050)
- B. Child and Elder Care 19(051) – 19(100)
- C. Cosmetology 19(101) – 19(150)
- D. Education 19(151) – 19(200)
- E. Apparel and Furnishing 19(201) – 19(250)
- F. All Others 19(990) – 19(999)

A. Career Exploration

19001 Human Services Career Exploration

Courses explore career opportunities pertaining human service. Topics 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 explored.

B. Child and Elder Care

19051 Child Care

Courses provide knowledge about the physical, mental, emotional, and social growth and development from birth through childhood. Topics include the fundamentals of working with infants, toddlers, and older children; providing healthy environments; evaluating childcare settings; and the practices, regulations and opportunities in the industry. Courses often provide students with practical experience in a childcare center. Advanced topics may include learning theories; development of activities; operation of a childcare center; recognition of childhood diseases, abuse, and neglect; and first aid/emergency training.

19052 Child Development

Courses provide knowledge about the physical, mental, emotional, and social growth and development from conception to pre-school age, emphasizing application of knowledge in childcare settings. Topics include appropriate care of infants, toddlers and young children.

19053 Elder Care

Courses emphasize the care of older people. Topics include the biological, physiological, social, and psychological needs and concerns of the elderly in addition to dealing with the aging process, death and dying in a realistic manner. Courses may explore career opportunities and include work and personal habits appropriate to the field.

19054 Care Giving Service

Courses emphasize care of persons needing assistance to care for themselves. Topics include biological, physiological, social, and psychological needs of young children, the elderly, and/or the disabled. Content may include planning daily routines; appropriate environments and activities; growth and aging processes; and managing a center or working in others' homes.

19055 Particular Topics in Child and Elder Care

Courses examine specific topics related to child and elder care not previously described, such as regulations of the industry or caring for people with special needs, rather than providing a general study of child and elder care.

C. Cosmetology

19101 Cosmetology—Licensing

Courses provide knowledge and develop skills applicable to hair, skin and nail care and prepare students for state licensing examinations. Courses are usually in a series with a specified number of instructional hours and require applied experience. Topics include human anatomy and skin conditions, chemistry and bacteriology, sanitation and sterilization, state laws and regulations, and shop management. Courses provide experiences in shampooing, cutting, styling, coloring, waving, and relaxing hair and providing facials and manicures.

19102 Barbering

Courses develop skills and provide experience to shave, style, and trim mustaches and beards and to shampoo, cut and style hair. Topics include hygiene, skin and scalp disease, and use of equipment. Courses may include topics similar to those in Cosmetology courses and prepare students for state licensing examinations.

19103 Hair Styling

Courses develop skills and provide experience in cutting, shampooing, and styling hair. Topics include hygiene, skin and scalp disease, and use of equipment. Experiences in bleaching, coloring, tinting, waving, and relaxing hair are typically included.

19104 Cosmetology—Non-licensing

Courses provide knowledge and skills applicable to hair, skin and nail care, but do not prepare students for state licensing examinations. Topics include human anatomy, sanitation and sterilization, and related chemistry and bacteriology. Shop management and state regulations may also be included.

19105 Cosmetology—Nail Specialization

Courses offer experience in providing manicures, pedicures and nail extension treatments. Topics include hygiene, entrepreneurship, human relations and other related subject issues.

19106 Cosmetology—Facial Specialization

Courses offer information and experience related to skin care, including facials, make-up application and facial massage. Topics include hygiene and sanitation, human anatomy and skin conditions, entrepreneurship, and/or human relations.

19107 Particular Topics in Cosmetology

Courses examine specific topics related to cosmetology not otherwise described, such as electrolysis, rather than providing a general study.

D. Education

19151 Teaching Profession

Courses introduce the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. Courses typically explore classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities.

19152 Educational Methodology

Courses prepare students to teach and guide others. Courses typically provide opportunities to develop teaching objectives, design lesson plans, and experience teaching in a controlled environment. Examination of and practice with teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management and evaluation techniques are often included.

19153 Early Childhood Education

Courses typically combine instruction in child development, care and education with experience in guiding the development of young children in an educational setting. Topics include planning and implementing developmentally appropriate activities for young children, basic health and safety practices, and legal requirements for teaching young children.

19154 Particular Topics in Education

Courses examine specific topics in education other than those previously described rather than providing a general study of the teaching profession.

E. Apparel and Furnishings

19201 Clothing and Textiles—Comprehensive

Courses introduce various aspects of the apparel and the textile industry. Topics include commercial application of design principles, production processes and maintenance techniques. 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 industry.

19202 Clothing/Textile Maintenance

Courses provide knowledge and skills to clean, care for, and maintain clothing and textiles. 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 cleaning agents.

19203 Apparel Construction

Courses provide knowledge and skill to construct, alter, and repair clothing and textile products. Topics may include taking measurements, creating and preparing patterns and various sewing techniques. Customer service, fashion design principles and business management may be included. Courses may focus on particular textile or garment rather than present an overview.

19204 Apparel and Textile Services

Courses examine services that concern the care and maintenance of apparel, textiles, and furnishing. Topics may include upholstery, dry cleaning, commercial sewing and tailoring.

19205 Home Furnishing

Courses provide knowledge about home furnishing and decorating. Topics include design principles, personal style and needs, and decision-making. Additional topics may include color, texture, furniture styles and arrangement, lighting, window treatments, floor and wall coverings, and home improvement/modification. Architectural style and design as well as an overview of housing problems or issues may be included.

19206 Home Furnishings Production

Courses support students in planning, selecting, and constructing upholstery, slipcovers, window drapes and treatments, and other accessories such as pillows and quilts. Courses may emphasize a specific area such as upholstery exclusively. Content typically includes proper use of equipment, interior decorating principles and career opportunities.

19207 Particular Topics in Apparel and Furnishings

Courses examine specific topics in apparel and furnishings other than those previously described, such as tailoring or shoe repair, rather than providing a general study.

19208 Fashion Design

Courses provide knowledge of the fashion industry with an emphasis on topics such as, but limited to, the history of fashion, elements and principles of design, drawing fashion figures and garments, fibers and finishes, apparel and accessories, and fashion and consumers. Careers opportunities in fashion design are generally included.

F. All Others**19990 Human Services—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

19991 Human Services—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations, such as Health Occupations Students of America (HOSA) and SkillsUSA. Or, all of these activities may be embedded in other human services courses.

19992 Human Services—Apprenticeship

Courses provide students with supervised workplace training in human services. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *19990 Work Experience Classroom* above).

19995 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.

19996 Seminar/Project—Human Services

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in human services. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

19997 Human Services—Independent Study

Courses, often conducted with instructors or professionals as mentors, enable students to explore topics of interest related to providing human services. These courses serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

19998 Human Services—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *19990 Work Experience Classroom* above).

19999 Human Services—Other

(Insert local course description)

Subject Area 20: Transportation, Distribution and Logistics

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses focus on a topic or combine topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one topic in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. There are six aerospace/aviation course classifications. They include classifications that explore:
 1. Relationships among meteorology, astronomy, and flight across and around the earth as well as into outer space, listed as *03209 Aerospace* in **03 Life and Physical Science**.
 2. Airplane operation including navigation, flight control, ground and airport operations and services, and Federal Aviation Agency regulations, listed as *20053 Aviation* in this Subject Area.
 3. The world of aeronautics, flight and engineering, including aerodynamics and aerodynamics testing, flight systems and systems engineering, listed as *21013 PLTW—Aerospace Engineering™* in **21 Engineering and Technology**. (*This is a Project-Lead-The-Way (PLTW) course classification and can only be used by official PLTW sites.*)
 4. Technology systems used in the aerospace industry and interrelationships, including satellite communications systems and space station construction techniques, listed as *21055 Aerospace Technology* in **21 Engineering and Technology**.
 5. The repair and installation of aircraft engines, listed as *20113 Aircraft Power Plant* and the structure and mechanics of aircraft frames, listed as *20114 Aircraft Airframe*. Both are listed in this Subject Area.

III. Transportation, Distribution and Logistics course categories

A. Transportation Technology	20(001) – 20(050)
B. Operation	20(051) – 20(100)
C. Mechanics	20(101) – 20(150)
D. Distribution and Logistics	20(151) – 20(200)
E. All Others	20(990) – 20(999)

A. Transportation Technology

20001 Exploration of Transportation Careers

Courses introduce careers that involve transportation, including the planning, management, and movement of people, materials and products. Topics vary depending on career focus and may explore issues such as vehicular operation, maintenance and repair; operating or managing holding or warehouse facilities; and transporting goods or products.

B. Operation

20051 Truck and Bus Driving

Courses instruct students in the proper and safe handling and operation of trucks and buses. Topics include strategies for driving in hazardous conditions, observing laws and regulations, loading cargo or passengers, documenting cargo loads and expectations of driving careers.

20052 Heavy Equipment Operation

Courses enable students to safely operate the heavy equipment used for mining, construction, and utility industries. Typically, topics include light maintenance principles and techniques.

20053 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. Topics usually include 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

Courses typically include operation and maintenance of marine vehicles, marine navigation and emergency procedures, as well as other skills for work or life at sea such as loading and unloading or cooking. Topics may include docking and undocking a vessel, engine maintenance, commercial fishing, firefighting aboard ship and CPR.

C. Mechanics and Repair

20101 Energy/Power

Courses focus on one or several aspects of energy and power in transportation and work. 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. Topics include 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

Courses focus on understanding the principles of mechanics including aircraft, auto, diesel, and marine as well as how energy is converted, transmitted, and controlled. Topics include maintaining and servicing machines, engines and devices while emphasizing energy sources, electricity and power transmission. Career opportunities within the field may also be included.

20103 Introduction to Automobiles

Courses focus on personal mechanical knowledge and skills but may also include exploring careers in automotive technologies. Courses examine various mechanical systems in automobiles and provide basic experience in maintenance tasks.

20104 Automotive Mechanics—Comprehensive

Courses emphasize the diagnosis and repair of automobile (and/or non-diesel truck) engines and support systems such as brakes, cooling, drive trains, electrical/electronics components, emission, fuel, ignition, steering, suspension and transmissions. Topics often include understanding and using repair manuals and safety guides as well as employability skills, including shop management and entrepreneurship. Course may prepare students for certification through programs such as the National Institute for Automotive Service Excellency (ASE) and the National Automotive Technicians Education Foundation (NATEF).

20105 Particular Topics in Automotive Mechanics

Courses provide instruction in a particular system, such as transmissions, brakes, fuel, exhaust, or electrical not previously described rather than providing an overview of auto (and/or non-diesel truck) mechanics.

20106 Automotive Service

Courses emphasize preventative auto (and/or non-diesel truck) maintenance and troubleshooting. Content 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. Public relations, sales techniques, and service station management may be included.

20107 Diesel Mechanics—Comprehensive

Courses provide knowledge and skills to maintain and repair diesel engines and related systems. Topics 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. Safety and employability skills may be included.

20108 Particular Topics in Diesel Mechanics

Courses cover specific topics relevant to the maintenance and repair of diesel engines. One topic or several related topics may be included in specific detail in this type of course.

20109 Small Vehicle Mechanics

Courses develop knowledge and skill to repair and maintain engines in small vehicles such as motorcycles, all-terrain vehicles, snowmobiles, and mopeds. Topics include maintaining frames and suspension, wheels and brakes, and drive trains; servicing fuel, exhaust, and electrical systems; performing tune-ups; and maintaining and repairing engines. Safety and employability skills may be included.

20110 Small Engine Mechanics

Courses develop knowledge and skill to service and recondition small engines, typically emphasizing two- and four-cycles. Topics include lubrication, ignition, fuel, power transfer, cooling, exhaust, and starting systems; troubleshooting and repairing speed controls; and reading and interpreting service manuals and parts catalogs. Applications may include, but are not limited to, lawn mowers, tractors, tillers and power tools.

20111 Marine Mechanics

Courses include 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

Courses include the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems of heavy equipment used in mining, construction, and utility industries.

20113 Aircraft Power Plant

Courses provide the information necessary to troubleshoot, test, repair, and install aircraft engines. Content usually includes engine ignition, electrical, lubrication, cooling, exhaust, and fuel systems as well as aircraft instrumentation and safety features.

20114 Aircraft Airframe

Courses provide information and instruction related to the structure and mechanics of aircraft, including hydraulic, pneumatic, instrumental, fuel, electrical, cabin atmosphere, and landing gear systems. Courses may also cover aircraft metals and coverings and related welding skills.

20115 Automotive Detailing and Reconditioning

Courses provide knowledge and skills related to repairing, refinishing and detailing automobiles. Topics include painting and refinishing, plastics and adhesives, damage analysis and repair. Safety and employability may be included.

20116 Automotive Body Repair and Refinishing—Comprehensive

Courses provide knowledge and skills in repairing and refinishing of damaged or used cars. Topics include 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

Courses provide instruction in topics relevant to repairing and refinishing automobile bodies and surfaces not previously described. One topic or several closely related topics may be the focus.

20118 Boat Repair/Refinishing

Courses provide information about and develop skills to repair and refinish boat mechanics, structures and surfaces. Topics include marine terminology, including how to describe types of marine manufacturing and preparing new and existing wood, fiberglass and metal surfaces for painting or refinishing. Courses often cover safety and employability skills.

D. Distribution and Logistics**20151 Distribution—Comprehensive**

Courses provide knowledge and skills of safe and efficient delivery of commodities. Topics typically include the comparative advantages of various forms of transportation, distribution networks, processes for tracking large shipments of material and packaging.

20152 Warehouse Operations

Courses examine the principles and processes of receiving, loading and unloading, tracking and storing of large quantities of materials. Topics typically include logistical implications for moving materials by several different modes of transportation as well as safety and security.

E. All Others**20990 Transportation, Distribution and Logistics—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

20991 Transportation, Distribution and Logistics—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other transportation, distribution and logistics courses.

20992 Transportation, Distribution and Logistics—Apprenticeship

Courses provide students with supervised workplace training in transportation, distribution and logistics. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *20990 Work Experience Classroom* above).

20995 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.

20996 Seminar/Project—Transportation, Distribution and Logistics

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in transportation, distribution or logistics. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

20997 Transportation, Distribution and Logistics—Independent Study

Courses, often conducted with instructors as mentors, enable students to explore topics of interest related to the field. These courses serve as an opportunity for students to expand their expertise, explore a topic in detail or develop advanced skills.

20998 Transportation, Distribution and Logistics—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *20990 Work Experience Classroom* above).

20999 Transportation, Distribution and Logistics—Other

(Insert local course description)

Subject Area: 21 Engineering and Technology

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. This Subject Area has the course classification *Particular Topics* in one or more categories. Use this classification when local courses contains focus on a topic or combine topics that are not specified in other MCCC classifications listed within the category.
- B. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that local combination (and there is no *Particular Topics* in the category). If one topic in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- C. While drafting is an entire category in this Subject Area, one classification *11002 Communication Technology* listed in **11 Communication and Audio/Visual Technology**, includes drafting, graphic arts, scale and multi-view drawings among other topics. It is a more comprehensive use of technology to communicate than the drafting course classifications listed in this Subject Area.
- D. Only official Project-Lead-The-Way (PLTW) sites may use the eight official PLTW engineering/technology classifications. Local courses that follow the PLTW curriculum but are not offered through an official site may not be classified under these classifications. Use other MCCC classifications that describe the local course content, including course classifications such as *21015 Particular Topics in Engineering*.
- E. There are six aerospace/aviation course classifications. They include courses that explore:
 1. Relationships among meteorology, astronomy, and flight across and around the earth as well as into outer space, listed as *03209 Aerospace* in **03 Life and Physical Science**.
 2. Airplane operation including navigation, flight control, ground and airport operations and services, and Federal Aviation Agency regulations, listed as *20053 Aviation* in this Subject Area.

3. The world of aeronautics, flight and engineering, including aerodynamics and aerodynamics testing, flight systems and systems engineering, listed as 21013 *PLTW—Aerospace Engineering™* in **21 Engineering and Technology**. (*This is a Project-Lead-The-Way (PLTW) classification and can only be used by official PLTW sites.*)
4. Technology systems used in the aerospace industry and interrelationships, including satellite communications systems and space station construction techniques, listed as 21055 *Aerospace Technology* in **21 Engineering and Technology**.
5. The repair and installation of aircraft engines, listed as 20113 *Aircraft Power Plant* and the structure and mechanics of aircraft frames, listed as 20114 *Aircraft Airframe*. Both classifications are listed in this Subject Area.

III. Engineering and Technology course categories

A. Engineering	21(001) – 21(050)
B. Technology	21(051) – 21(100)
C. Drafting	21(101) – 21(150)
D. All Others	21(990) – 21(999)

A. Engineering

21001 Pre-Engineering Technology

Courses integrate technology-oriented applications of mathematics and science into pre-engineering activities for students. Topics may include material sciences, technology processes, enterprises and career opportunities.

21002 Engineering Applications

Courses provide an overview of the practical uses of engineering applications. Topics usually include hydraulics, pneumatics, computer interfacing, robotics, computer-aided design, computer numerical control and electronics.

21003 Engineering Technology

Courses provide 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 include the nature and use of technology and design processes.

21004 PLTW—Principles of Engineering™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They provide an understanding of the engineering/technology field. Students typically explore how engineers use technology systems and manufacturing processes to solve problems as well as arrive at an appreciation of the social and political consequences of technological change.

21005 Engineering—Comprehensive

Courses introduce major engineering concepts such as modeling, systems, design, optimization, technology-society interaction and ethics. Topics include applied engineering graphic systems, communicating technical information, engineering design principles, material science, research and development processes, and manufacturing techniques and systems. Courses often address opportunities and challenges in various branches of engineering.

21006 PLTW—Introduction to Engineering Design™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They offer experience in solving problems by applying a design development process. Students often use solid modeling, computer design software to develop, analyze, and test product solutions models.

21007 PLTW—Engineering Design and Development™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They provide the opportunity for students 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 PLTW—Digital Electronics™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They 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

Courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics may include mechanics, electrical and motor controls, pneumatics, computer basics and programmable logic controllers.

21010 PLTW—Computer Integrated Manufacturing™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They 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. Topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.

21011 Civil Engineering

Courses explore 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 PLTW—Civil Engineering and Architecture™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They provide an overview of the fields of civil engineering and architecture while emphasizing the interrelationship of both. Students typically use software to address real world problems and to communicate the solutions they develop. Topics typically include the roles of civil engineers and architects, project-planning, site-planning, building design, project documentation and presentation.

21013 PLTW—Aerospace Engineering™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They introduce students to the world of aeronautics, flight and engineering. Topics include the history of flight, aerodynamics and aerodynamics testing, flight systems, astronautics, space life systems, aerospace materials and systems engineering.

21014 PLTW—Biotechnical Engineering™

Courses adhere to the PLTW curriculum and are offered at an official PLTW site. They enable students to develop and expand their knowledge and skills in biology, physics, technology and mathematics. Content draws upon diverse fields such as biomedical engineering, bio-molecular genetics, bioprocess engineering, agricultural biology, or environmental engineering. Students 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

Courses examine specific topics in engineering other than those already described.

B. Technology

21051 Technological Literacy

Courses explore the communication, transportation, energy, production, biotechnology, and integrated technology systems and processes that affect their lives. The focus is to support students in understanding technological systems, their applications and uses.

21052 Technological Processes

Courses provide students 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 examine case studies, explore simulations, or design and build prototypes and working models.

21053 Emerging Technologies

Courses focus on examining and understanding new and emerging technologies. Topics vary but typically include lasers, fiber optics, electronics, robotics, computer technologies, CAD/CAM, communication modalities and transportation technologies.

21054 Technology Innovation and Assessment

Courses focus understanding how criteria, constraints, and processes affect engineering design solutions and provide the skills to assess technological solutions. Topics include brainstorming, visualizing, modeling, simulating, constructing, testing and refining designs.

21055 Aerospace Technology

Courses introduce 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.

21056 Particular Topics in Technology Applications

Courses examine specific topics in technology applications other than those already described.

C. Drafting**21101 Drafting Careers Exploration**

Courses introduce basic skills, the field in general and occupations within the field. They also provide students with the opportunity to identify a focus for continued study.

21102 Drafting—General

Courses, usually offered in a sequence, introduce drawing illustrations to represent and/or analyze design specifications. They develop knowledge and skill to perform freehand sketching, lettering, geometric construction, and multi-view projections and to produce various types of drawings. Computer-aided drafting (CAD) systems (if available) are typically introduced.

21103 Drafting—Architectural

Courses refine the craft of drawing illustrations to represent and/or analyze design specifications. They develop general drafting skills and focus on interior and exterior residential and/or light commercial design, site orientation, floor and electrical plans, and presentation drawings. In addition, students may prepare scale models.

21104 Drafting—Civil/Structural

Courses refine the drawing of illustrations to represent and/or analyze design specifications. The courses help students develop general drafting skills and focus on skills needed for typography and survey work.

21105 Drafting—Electrical/Electronic

Courses refine the drawing of illustrations to represent and/or analyze design specifications. They help students develop general drafting skills and focus on skills needed for electrical and electronic schematics.

21106 Drafting—Technical/Mechanical

Courses refine the drawing of illustrations to represent and/or analyze design specifications. They help students develop general drafting skills and focus on sectioning, auxiliary views, revolutions, and surface development. Students typically learn basic machining and fabrication processes as they draw schematic diagrams featuring cams, gears, linkages, levers and pulleys.

21107 CAD Design and Software

Courses are frequently offered as an intermediate step to or a concurrent course with more advanced drafting courses and introduce students to the computer-aided drafting systems.

21108 Blueprint Reading

Courses focus on 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.

D. All Others**21990 Engineering and Technology—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

21991 Engineering and Technology—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations, such as SkillsUSA. Or, all of these activities may be embedded in other engineering and technology courses.

21992 Engineering and Technology—Apprenticeship

Courses provide students with supervised workplace training in engineering and technology. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *21990 Work Experience Classroom* above).

21995 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.

21996 Seminar/Project—Engineering and Technology

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in engineering and technology. They may include college and/or career exploration and planning. Students often design a project based on their areas of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

21997 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. These courses may serve as an opportunity for students to expand their expertise, explore a topic in detail, or develop advanced skills.

21998 Engineering and Technology—Work-Based Learning

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). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see *21990 Work Experience Classroom* above).

21999 Engineering and Technology—Other

(Insert local course description)

Subject Area: 22 Family and Consumer Science

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. Some local courses combine two MCCC course classifications or topics and no MCCC classification exists for that particular combination. If one of the topics in the local course receives the majority of the instructional and assessment focus, classify the local course under the MCCC number for that topic. If all topics are of equal focus, use the “Other” course classification at the end of the subject area to classify the local combination and provide a brief description of local course content.
- B. Additional clothing construction and home furnishing courses are included in **19 Human Services/Category E: *Apparel and Furnishing***.
- C. Food preparation courses that focus on a specialty such as baking or an ethnic food can be accurately matched to *22051 Food and Nutrition* as the classification description does allow for an emphasis on specific types of food preparation OR nutrition.
- D. Courses in food preparation, the food industry and food service including careers in the industry are also listed in **16 Hospitality and Tourism**.
- E. There are three child psychology/development course classifications each with a slightly different emphasis depending on the focus of the course. They include *19051 Child Care* and *19052 Child Development* in **19 Human Services** and *22101 Child Development/Parenting* in this Subject Area.

III. Family and Consumer course categories

- A. Comprehensive 22(001) – 22(050)
- B. Food and Nutrition 22(051) – 22(100)
- C. Children, Family and Personal 22(101) – 22(150)
- D. Clothing and Décor 22(151) – 22(200)
- E. All Others 22(990) – 22(999)

A. Comprehensive

22001 Family and Consumer Science—Comprehensive

Courses are inclusive of the knowledge and skills that are useful for efficient and productive home management. 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.

22002 Family and Consumer Science Career Exploration

Courses introduce careers that involve efficient and productive home management. Topics vary depending on the careers being explored but may include exploration in foods and nutrition; clothing; child development and care; housing design, decoration, and maintenance; consumer decisions and personal financial management; and interpersonal relationships.

22003 Family and Consumer Science Youth Service

Courses engage students in family and consumer related community or school service projects. These courses typically use service experience as a learning opportunity to improve students' problem-solving, decision-making and communication skills.

B. Food and Nutrition

22051 Food and Nutrition

Courses provide instruction in how to plan and prepare food, experience in the proper use of equipment and utensils and understanding of food's role in society, including nutritional requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on general or specific types of food preparation. Although career opportunities in the food industry may be presented, that is not the emphasis of these courses.

22052 Food Science

Courses offer opportunities to study the composition, structure and properties of foods, including 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.

C. Children, Family and Personal

22101 Child Development/Parenting

Courses provide knowledge about the physical, mental, emotional, and social growth and development of children from conception to pre-school age. They also help students understand how parents and caregivers should respond to the various stages of childhood. Topics include 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.

22102 Family Living/Interpersonal Relationships

Courses focus on building and maintaining healthy interpersonal relationships. Course emphasis is on family relationships, but may include relationships to other members of society. Topics may include, but are not limited to, interpersonal communication, social/dating practices, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, and the various stages of life. Individual self-development, personal awareness and preparation for responsibilities as a family member and wage earner may be included.

22103 Life Skills

Courses provide information about becoming productive adults. Topics may include goal-setting, decision-making, problem-solving and setting priorities; money and time management; relationships; and the development of the self. Insurance, taxation, and consumer protection may be addressed. Practical exercises in selecting and furnishing housing, meeting transportation needs, preparing food, and selecting clothing are often included.

22104 Personal Awareness/Teen Issues

Courses emphasize issues important to teens such as, but not limited to, friendships, jobs, sexuality, chemical use, divorce and/or blended families and may support students in examining and identifying alternative behaviors and coping techniques. They typically include goal-setting, decision-making, problem-solving, and managing time, energy, and stress and often allow students to explore various career and lifestyle choices.

22105 Personal Development

Courses are similar to Interpersonal Relationships/Family Living courses but focus on the individual and emphasize strengthening communication skills, self-esteem, recognizing and resisting negative peer pressure, and developing coping skills for dealing with change in one's self and others. These courses may also have a substance-abuse prevention component.

22106 Consumer Economics

Courses provide understanding of resource management, including goals, choices and actions as well as policies that support consumer rights and responsibilities. Topics may include earning a living, budgeting, savings and investing; using credit; spending patterns and budget planning; buying goods and services; and some basic consumer legal rights and issues.

D. Clothing and Decor**22151 Clothing/Sewing**

Courses provide knowledge of wearing apparel, sewing and fashion. They emphasize construction of garments and may include wardrobe planning, including selection, care and repair. Fashion design, fashion history, the social and psychological aspects of clothing, careers in the clothing industry and craft sewing may be included.

22152 Housing and Home Furnishings

Courses provide knowledge and skills in interior design and decoration for the individual or family home. Topics include design principles, personal needs and style, and decision-making. Color, texture, furniture styles and arrangement, accessories, lighting, window treatments, floor and wall coverings, and home improvements or modification may also be included. Courses emphasize personal rather than commercial use of décor principles.

22153 Needlework

Courses provide knowledge and skills in needlework, such as knitting, crocheting, counted cross-stitch, needlepoint and embroidery. Topics include design principles, elements of color and texture, personal needs and style, and decision-making. Courses emphasize use of home décor or fashion principles.

E. All Others**22990 Family and Consumer Science—Work Experience Classroom**

Courses accompany work experience programs (apprenticeships or work-based learning) and typically involve further study of the field and discussion of experiences in the workplace.

22991 Family and Consumer Science—Student Leadership

Courses develop students' personal and group leadership skills and typically focus on effective communication, decision-making, problem-solving and completion of group activities. Courses may include participation in student organizations, such as Family, Career and Community Leaders of America (FCCLA). Or, all of these activities may be embedded in other family and consumer science courses.

22992 Family and Consumer Science—Apprenticeship

Courses provide students with supervised workplace training in family and consumer science. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Students' work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *22990 Work Experience Classroom* above).

22995 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.

22996 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. These courses provide students with an opportunity to expand their expertise, explore a topic in detail, or develop advanced skills.

22997 Seminar/Project—Family and Consumer Science

Courses vary widely, but typically offer students the opportunity to investigate areas of interest in family and consumer science. They may include college and/or career exploration and planning. Students often design a project based on an area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit and other projects required for graduation.

22998 Family and Consumer Science—Work-Based Learning

Courses provide students with work experience in a field related to family and consumer science. Goals are typically set cooperatively by the student, teacher and employer (although students are not necessarily paid). Students' work is supervised and evaluated by a school coordinator and the employer. These courses are accompanied by a classroom component (see 22990 *Work Experience Classroom* above).

22999 Family and Consumer Science—Other

(Insert local course description)

Subject Area: 23 Academic and Career Development

I. Grade-level information

Minnesota Common Course Catalogue (MCCC) course classifications are written to describe all grades in the 9-12 span unless otherwise indicated in the title or description. Classify local courses according to these multi-grade descriptions even if local courses have grade restrictions.

II. Directions for making accurate classifications

PLEASE NOTE: *Always see complete descriptions for most accurate classification.*

- A. Special Education courses are listed in this Subject Area under **Category E. Support Services**, with the exception of adapted physical education, which is listed as 08007 *Adapted Physical Education* in **08 Physical, Health, and Safety Education**.
- B. Local Advancement Via Independent Determination (AVID) courses, not considered an advisory, are most appropriately classified as 23154 *College/Postsecondary Education Exploration*.
- C. Independent study courses that offer students the opportunity to work in an area of personal interest are best classified under a specific Subject Area course classification if possible. All Subject Areas have independent study classifications. Use 23997 *Nonspecific Subject Area—Independent Study* only when the local course is not related to a particular Subject Area or encompasses multiple Subject Areas.
- D. Seminar/project-based courses that offer students the opportunity to explore areas of personal interest are best classified under a specific Subject Area if possible. All Subject Areas have seminar/project classifications. Use 23009 *Seminar/Project—Nonspecific Subject Areas* only when the local course is not related to a specific Subject Area or encompasses multiple Subject Areas.
- E. Field study courses that offer students the opportunity live and/or work in area of science or social studies significance are best classified under 03213 *Field Studies—Science* or 04982 *Field Studies—Social Studies*. If local field studies courses do not fit under either the science or social studies subject areas, they may be classified under 23008 *Field Studies—Nonspecific Subject Area*.
- F. All Subject Areas have specific student aide classifications. Use Subject Area specific student aide classifications if possible rather than 23055 *Nonspecific Subject Area—Aide*.

- G. All career and technical education Subject Areas have specific apprenticeship and work-based learning course classifications. Use *23992 Diversified Subject Areas—Apprenticeship* and *23998 Diversified Subject Areas—Work-Based Learning* when the local course is not related to a specific Subject Area or encompasses multiple Subject Areas.
- H. All career and technical education Subject Areas have specific work experience program classroom courses. Use *23990 Diversified Subject Area—Work Experience Classroom* when the local course is not related to a specific Subject Area or encompasses multiple Subject Areas.

III. Academic and Career Development course categories

A. Academic Enrichment	23(001) – 23(050)
B. Staff Assistance	23(051) – 23(100)
C. School Organization/Leadership	23(101) – 23(150)
D. Postsecondary Exploration/Development	23(151) – 23(200)
E. Support Services/Special Education	23(201) – 23(400)
F. English Language Development	23(401) – 23(499)
G. All Others	23(990) – 23(999)

A. Academic Enrichment

23001 Standardized Test Preparation

Courses prepare students for national standardized tests such as the PSAT, SAT, and ACT. They assist in developing and expanding vocabulary, test-taking, and reasoning skills. Topics may include historical/geographic issues, composition, literary, mathematical and/or scientific concepts, logic, and rules. Problem-solving and test-taking strategies may be included.

23003 Study Skills

Courses support success in high school and/or postsecondary education. Topics may vary but typically include reading skills, such as scanning, note taking, and outlining; library, research and general organization skills; vocabulary building and test-taking skills. Organized, logical thinking and writing may be included.

23004 Dropout Prevention

Courses vary widely, but typically focus on students at risk of dropping out of or failing in school. Content may include study skills and individual tutorials; job preparation, readiness, application, and interview skills; communication skills; personal assessment and awareness activities; speaker presentations; and small group seminars.

23005 Tutorial

Courses provide assistance to students who need support to successfully complete coursework. Students may receive help in one or several subjects.

23006 Study Hall

Courses provide opportunity and time to complete classroom assignments or school projects. Students typically work on independently; however, they are supervised.

23007 Homeroom/Advisory

Courses vary widely depending on the philosophy, aims and methods of the school. They may provide opportunities, for example, to build small peer communities, focus on particular topics such as a common reading text, plan and execute enriched learning experiences or engage in community service projects. Courses also may enable students to accomplish school-related tasks such as planning schedules and registering for courses.

23008 Field Studies—Nonspecific Subject Area

Courses provide students with the opportunity and time to work and/or live in an area that has significance of an ecological, geographical, geological, historical, cultural or biological nature. Topics of study vary and are often encompass multiple disciplines. Students typically work with local experts and may be involved in observation, research, preservation, restoration or improvement projects.

23009 Seminar/Project— Nonspecific Subject Area

Courses vary widely. Topics of study are often cover multiple content areas and typically offer the student an opportunity to investigate areas of interest. Courses may include college and career exploration and planning. They often require students to design and complete a project and to work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation and communication skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other projects required for graduation.

B. Staff Assistance**23051 Office Aide**

Courses provide the opportunity to work in school offices, developing skills related to clerical office work. Duties may include typing, filing, record-keeping, receiving visitors, answering the telephone and duplicating. These courses emphasize appropriate work attitudes, human relations, and proper office procedures.

23052 Guidance Aide

Courses provide the opportunity to work in the school guidance office. Duties may include typing, filing, record-keeping, assisting students, answering the telephone and duplicating. Students may also act as guides to new students. These courses emphasize appropriate work attitudes, human relations, and proper office procedures.

23053 Library/AV Aide

Courses provide the opportunity to work in the school library or media/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 technology.

23054 Tutoring Practicum

Courses provide students with the opportunity to offer tutorial assistance to their peers or to work with younger (often elementary or middle school) students. After an initial training, students engage in tutoring and assisting others who need or request help.

23055 Nonspecific Subject Area—Aide

Courses offer 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: Use the course number for aides within the specific Subject Area if possible.

C. School and Community Organization/Leadership**23101 Nonspecific Subject Area Leadership**

Courses strengthen students' personal and group leadership skills. Typically, they develop particular leadership skills associated with a specific school or community organization and may involve extracurricular and co-curricular activities such as officers of organizations, student activities or student governing bodies. Content may address a variety of topics such as public speaking, effective communication, human relations and social skills, parliamentary law and procedures, organization and management, group dynamics and leadership strategies.

23102 School Orientation

Courses introduce the culture of a school so that students understand staff expectations and the school's structure and conventions. These courses may vary widely according to the nature of the local school.

23103 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 alternative or experimental schools.

23104 Community/School Service Learning

Courses provide the opportunity to volunteer time, energy, and talents to serve a community or school project or organization. These courses are often conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.

D. College and Career Exploration/Preparation**23151 Career Exploration**

Courses support students in identifying and evaluating personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. Content explores various sources of information on career and post-secondary options and may also assist students in developing a variety of skills including, but not limited to, investigation, presentation, job search and employability.

23152 Career 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. Consumer education and money management may be included.

23153 Occupation/Work Skills

Courses support students entering the workforce and focus on career exploration, job search and application, and the development of positive work attitudes and work-related skills. Employment may be a required component of these courses, and/or students may be required to enroll concurrently in a work experience course. These courses typically cover such topics as career planning and selection, money management, communication skills, interpersonal business relationships and behaviors, and personal responsibility.

23154 College/Postsecondary Education Exploration

Courses prepare students for college eligibility and success while exposing them to various sources of information on postsecondary education options. They often help students examine personal goals, priorities, aptitudes, and interests with the goal of supporting them in making informed decisions about college or postsecondary education choices. Topics of study may include organizational and study skills, critical thinking and discussion, research and investigatory skills, collaboration and communication skills with the aim of making postsecondary education attainable. This classification includes Advancement Via Individual Determination (AVID) programs of study.

E. Support Services/Special Education *(These courses are typically developed and offered to meet the Individual Education Plan (IEP) goals of students with special needs. Instruction and curriculum often varies widely based on student needs.)*

Note: The adapted physical education course classification number is 08007. The classification description is in **Subject Area 08: Physical, Health and Safety Education** and is not repeated in this Subject Area.

23201 English/Language Arts—Support Services

Courses typically include study of various types of literature while developing reading, writing, listening and speaking skills. As appropriate, these courses may include, but are not limited to, improving comprehension, identifying literary elements, analyzing, interpreting, and evaluating literature and improving writing skills, including using a process to write for different purposes. Courses may address state standards and include preparation for reading and writing tests.

23202 Reading—Support Services

Courses focus on development of reading skills. They may include, but are not limited to, improving reading comprehension and speed; decoding, breaking multi-syllable words into parts, identifying and sequencing main ideas and supporting details; finding facts, making inferences and drawing conclusions; paraphrasing and summarizing, interpreting and evaluating fiction and nonfiction texts while strengthening vocabulary. Courses may address state standards and include preparation for reading tests.

23203 Reading and Writing—Support Services

Courses focus on development of both reading and writing skills. Courses are similar to the reading course listed above but include the mechanics, elements and process of writing. They typically emphasize using specific strategies to accomplish reading or writing tasks within a given context. Courses may address state standards and include preparation for reading and writing tests.

23204 Writing—Support Services

Courses focus on developing the skills and practices necessary for producing writing for a variety of purposes and audiences. They may address various types of writing such as academic, technical, creative and business or place more emphasis on one type. Courses may address state standards and include preparation for writing tests.

23205 Language Arts/Social Studies Combination—Support Services

Courses integrate development of language arts skills such as reading, writing, listening and speaking with development of social studies knowledge and skills, which may include aspects of history, geography, government, citizenship, economics and/or culture, such as music and art.

23209 Particular Topics in Language Arts—Support Services

Courses address particular topics or academic content not described within the language arts course classification previously listed.

23210 Mathematics—Support Services

Courses focus on mastering math skills and concepts. These courses vary but often focus on life skills in mathematics. Topics may include, but are not limited to, review of basic math skills and concepts, money and banking, measurement, preparation for algebra and/or geometry, consumer math and use of calculators. Courses may address state standards and include preparation for math tests.

23211 Algebra—Support Services

Courses focus on practical applications of algebraic concepts. They may include, but are not limited to, properties of real numbers, solving and graphing linear equations and inequalities, exponents and exponential functions, and polynomials and factoring. Courses may address state standards and include preparation for math tests.

23212 Geometry—Support Services

Courses focus on geometric concepts and may review algebraic concepts. They may include, but are not limited to, reasoning and proof, parallel and perpendicular lines, congruent triangles, quadrilaterals and circles, transformations, area and volume. Courses may address state standards and include preparation for math tests.

23213 Technical/Consumer Math—Support Services

Courses vary but typically include math skills and banking/money management. Problem-solving and practical application of mathematical knowledge and skills are emphasized. Skills work may include, but is not limited to, whole number operations, fractions and decimals. Courses may address state standards and include preparation for math tests.

23219 Particular Topics in Math—Support Services

Courses address particular topics or academic content not described within the math course classification previously listed.

23220 Science—Support Services

Courses introduce skills and concepts from disciplines within the science field and often apply science to everyday life. They may include topics from biology, chemistry, physics, earth and space sciences. Examples include environmental issues, forensics and marine exploration. Courses may address state standards and include preparation for science tests.

23221 Physical Science—Support Services

Courses develop skills and concepts associated with chemistry and/or physics. They typically focus on the interactions among physical systems encountered in everyday life. Courses address state standards and include preparation for science tests.

23222 Biology/Life Science—Support Services

Courses develop understanding of the interdependence among living things. Topics of study may include, but are not limited to, cell structures and functions, cellular process, genetics, classification and diversity, plant/animal life and the human body. Courses may address state standards and include preparation for science tests.

23223 Earth Science—Support Services

Courses examine the environment on earth and the earth's environment in space. Topics explored may include, but are not limited to, geography, meteorology, astronomy, geology, and oceanography. Courses may address state standards and include preparation for science tests.

23229 Particular Topics in Science—Support Services

Courses address particular topics or academic content not described within the science course classification previously listed.

23230 U.S. History—Support Services

Courses may provide an overview of U.S. history or examine selected events and historical periods. Content may be inclusive and address aspects of U.S. government, the legal system, economics and politics.

23231 World History—Support Services

Courses may provide an overview of world history or examine selected events and historical periods. Course content may be inclusive and address aspects of government, legal systems, economics and politics.

23232 Civics/Government—Support Services

Courses typically examine the U.S. Government, constitutional law and the rights and responsibilities of U.S. citizens. Topics may include the U.S. constitution and its amendments, structure of the government and political system, and how citizens interact with the government. Government policies and processes are typically included.

23233 Geography/Human Geography—Support Services

Courses may examine various regions of the world or emphasize a particular area such as the United States. They focus on geographical features and may include, but are not limited to, topics such as population, natural resources, politics, culture, current issues and the impact of the physical environment on people.

23234 Global Studies—Support Services

Courses typically focus on geography and current events in selected regions of the world. Topics may include, but are not limited to, political, economic, social and culture issues.

23235 Economics—Support Services

Courses typically provide an overview of economics, including different economies and economic systems. Topics may include, but are not limited to, nature and functions of markets, price determination, roles and functions of consumers and producers, income distribution, role and function of government in economics, and economic growth and development.

23239 Particular Topics in Social Studies—Support Services

Courses address particular topics or academic content not described within the social studies course classifications previously listed.

23240 Health—Support Services

Courses develop the knowledge and skills to make health-promoting decisions. Content may address physical, mental and emotional wellness, including, for example, sexuality and reproduction, drug and alcohol use, nutrition, safety and emergency care concepts. Responsible decision-making and problem-solving strategies may be included.

23249 Particular Topics in Health—Support Services

Courses address a particular topic or content in health education.

23250 Visual and Media Art—Support Services

Courses typically introduce or reinforce the elements and principles of design. They may include exploration in various or selected visual or media art forms such as drawing, painting, sculpture, crafts, photography and video/film production. Courses may include art appreciation and the study of various styles and historical periods.

23251 Music—Support Services

Courses typically introduce or reinforce the elements and principles of music and may include music appreciation, history and production. Courses may include a study of a variety of styles and periods or emphasize selected styles and periods.

23259 Particular Topics in the Arts—Support Services

Courses address art forms such as theater or dance or particular topics in music or visual arts not described within the course classifications previously listed.

23260 Academic Credit—Support Services

Courses offer students the opportunity to earn credits necessary to meet graduation or IEP requirements in academic areas such as English, math, science and social studies.

23269 Particular Topics in Academic Content Areas—Support Services

Courses address particular topics or academic content areas not described within the course classifications previously listed.

23270 Study Skills—Support Services

Courses offer instructional support to successfully complete course work in content area classes. They typically include strategies for organizing and managing materials and time; effective study habits, test preparation and project completion. Stress management and work on IEP goals may be included.

23271 Quiet Study—Support Services

Courses offer a quiet study/assignment completion period. Individualized assistance by peer tutors, volunteers or staff may be available. Students may also use the time to work on IEP goals.

23272 Direct Support—Support Services

Courses focus on direct support and/or instruction, often from the case manager, to address specific IEP goals. Courses may include support for success in other areas of study, including academic, social and functional skills. Topics vary but may include managing materials, use of a planner, taking notes, effective study habits, project completion and test-taking.

23279 Particular Topics in Study Skills—Support Services

Courses address particular topics or study skills not described within the course classifications previously listed.

23280 Transition Strategies—Support Services

Courses emphasize the transition to postsecondary education/employment and include community participation, recreation and leisure activities, home and daily living. These courses provide strategies and experiences in functional living skills with the goal of readying students to live as independently as possible. Instruction varies with the students and their needs.

23281 Teen Relationships/Family Living—Support Services

Courses vary widely. They often address issues pertaining to communication, self-awareness and advocacy, relationships and family life. Topics may include, but are not limited to, peer pressure, self-esteem, stress, family roles and responsibilities, friendships and dating. Some courses may address child development and responsible parenting. Instruction varies with the students and their needs.

23282 Social Skills—Support Services

Courses emphasize interpersonal skills, typically including developing and maintaining relationships in school, work and community environments. Topics may include, but are not limited to, self-control, self-expression, obeying rules, decision-making, problem-solving, reading body language and non-verbal cues, appropriate situational behavior and interacting with others. Instruction varies with the students and their needs.

23283 Living Skills—Support Services

Courses provide skills and strategies necessary for living within the setting most appropriate to student needs. Topics may include, but are not limited to, interactions with others, budgeting, domestic skills, accessing available resources, emergency skills and disability awareness and disclosure. Some courses include securing and maintaining employment. Instruction varies with the students and their needs.

23289 Particular Topics in Social/Living Skills—Support Services

Courses address particular topics or social or living skills not described within the course classifications previously listed.

23290 Career Planning—Support Services

Courses explore career options and build job-seeking skills. Topics may include, but are not limited to, analyzing personal interests, skills and aptitudes as well as the basics of finding and keeping a job. Activities, such as working within a group; writing resumes, filling out job applications and interviewing; practice in reading paychecks, understanding benefits, taxes and insurance; and on-the-job practices and behaviors, including work safety and dealing with conflict in the workplace may be included. Instruction varies with the students and their needs.

23291 Job Skills—Support Services

Courses may include selected topics and skills included in career planning courses but add developing job skills, such as, but not limited to, developing a work portfolio, networking, keyboarding, phone etiquette, customer service or related office skills. *(Not a Career and Technical Education work experience program classification; see courses 23390 and 23398 for Career and Technical Education program classifications.)*

23292 Career Exploration/Applied Job Skills—Support Services

Course may include selected topics and activities included in career planning courses but also include learning essential job skills by working at tasks in the school/district setting or at non-paid jobs within the community under the guidance of a job coach or teacher/supervisor. *(Not a Career and Technical Education work experience program classification; see courses 23390 and 23398 for Career and Technical Education program classifications.)*

23293 Keyboarding—Support Services

Courses introduce or reinforce keyboard skills and basic computer operation. They may also include using one or more software programs to create, edit, format and manipulate documents as well as other computer skills.

23294 Communication/Technology—Support Services

Courses introduce or develop technology skills to communicate ideas through visual images, printed material and audio segments. Course may explore various audiences and purposes including, but not limited to, business, information and entertainment. They may also focus on a particular purpose, audience and/or medium.

23299 Particular Topics in Career/Occupational Skills—Support Services

Courses address particular topics or study skills in the career/occupation area not described within the course classifications previously listed.

23300 Recreation/Leisure—Support Services

Courses explore various recreation and leisure activities and experiences and typically focus on the impact of physical activity on health. Instruction varies with student interests and needs.

23301 Community Exploration/Personal Mobility—Support Services

Courses address issues surrounding the use of public transportation; accessing community resources, such as stores, banks, post offices and library; use of community-based recreation and leisure activities, such as parks, museums and community events as well as personal safety in the community.

23302 Daily Living—Support Services

Courses address the knowledge and skills necessary for daily living in a domestic setting. They may include an overview or selected topics in personal hygiene, finding and maintaining a home, buying and preparing healthy and economic meals, and money management skills.

23309 Particular Topics in Daily/Community Living—Support Services

Courses address particular topics in daily and community living, including leisure and recreation not described within the course classifications previously listed.

23310 Communication Instruction—Support Services

Courses are taught by a speech pathologist and individualized to meet student's needs. Focus is on understanding and using language to improve communication skills, including oral expression, listening comprehension, reading and writing. Topics may include vocabulary building, eye contact, giving and following directions, and conversation skills.

23311 Developmental Support—Support Services

Courses are customized according to each student's needs, emphasizing an increase in skill or control of physical and/or cognitive function. Examples of support may include refinement of gross and fine motor skills, development of visual perception or skills, and improvement in eye-hand coordination.

23319 Particular Topics in Development Support—Support Services

Courses address particular topics in developmental support not described within the course classifications previously listed.

23320 Integrated Program—Support Services

Courses are typically self-contained classrooms with an emphasis on providing instruction and support for students to be successful in multiple content areas, including academic subjects, career exploration, life and social skills. Supplemental sessions for areas such as arts, physical education and development of occupational skills outside the self-contained program may be included.

23321 Individualized Program—Support Services

Courses are typically highly structured, self-contained, individualized training programs in areas such as social, behavioral, occupational and person care skill development. Programs are designed to meet the individual needs, abilities and IEP goals of the student.

23329 Particular Programs—Support Services

Courses address particular programs of an integrated or individualized nature not described within the course classifications previously listed.

23330 Credit Recovery—Support Services

Courses are designed to enable students to recover required or elective credits in the support services curriculum area to meet IEP and/or graduation requirements.

23331 Elective Credit—Support Services

Courses address general or particular electives not previously listed to enable students to meet IEP goals and/or graduation requirements.

23332 Homeroom/Advisory—Support Services

Course activities vary widely. They may provide opportunities to build small peer communities or focus on activities or experiences such as reading a common text or engaging in service projects.

23390 Work Experience Classroom—Support Services

Courses are the classroom portion of Career and Technical Education work experience programs (for on the job portions, see *23298 Work-Based Learning—Support Services* below) and typically involve further study of the field and discussion of experiences in the workplace. *Use this course classification for both age 14 and 15 year old student WE/CEP programs and 16 to 20 + year old student programs.*

23395 Work Release—Support Services

Courses provide students with release time to work for pay. Typically there is no classroom component to the work experience or supervision relationship between the school and the worksite. Students are simply released to work.

23396 Seminar/Project—Support Services

Courses vary widely, but typically offer students the opportunity to investigate areas of interest. They often include postsecondary education and/or career exploration and planning. Students typically design a project based on their area of interest and may work with a mentor. Course objectives may include, but are not limited to, improvement of research and presentation skills as well as problem-solving and critical thinking. Courses may be offered as support for IEP goals and/or graduation requirements.

23397 Independent Study—Support Services

Courses are often conducted with instructors as mentors and allow students to explore topics of interest. These courses serve as an opportunity for students to expand expertise, develop skills or explore a topic in detail.

23398 Work-Based Learning—Support Services

Courses are the on the job portion of Career and Technical Education programs and provide students with work experience in the local school/district environment or the larger community. Goals are typically set by students, case manager/school coordinator and employer (although students are not necessarily paid). Students are supervised and evaluated by a school coordinator and the employer. These courses have a classroom component (see *23293 Work Experience Classroom—Support Services* above). *Use this course classification for both age 14 and 15 year old students in WE/CEP programs and 16 to 20 + year old student programs*

23399 Support Services—Other

(Insert local course description)

F. English Language Development

23401 ESL Communication

Courses typically introduce or develop English language usage. Introductory level courses often begin with listening and speaking activities and introduce reading and writing as student proficiency allows. The focus of all levels of these courses is on communication skills essential for success in higher level ESL and/or subject area courses. Emphasis of instruction varies based on student language proficiency. Orientation to customs and cultures of diverse populations in the United States may be included.

23402 ESL Content Area Orientation

Courses introduce English language learners to core subject areas of the high school curriculum, such as math, science, social studies, health and art. Students acquire language skills in speaking, listening, reading and writing by studying basic concepts in the subject areas.

23403 ESL English/Language Arts—Comprehensive

Courses support development of language arts skills proficiency. Typically, students read a variety of fiction and non-fiction selections, write a variety of compositions and continue to develop listening and speaking skills. Emphasis of instruction varies based on student language proficiency and may include preparing students for reading and writing proficiency assessments.

23404 ESL Listening and Speaking

Courses develop English language skills with extensive listening and speaking activities. Emphasis of instruction varies based on student language proficiency. Students generally initiate, respond to and sustain verbal interactions on a variety of topics before progressing to more detailed oral information with fewer contextual clues on unfamiliar topics. These courses may include development of reading and writing skills.

23405 ESL Reading/Literature

Courses develop English language proficiency while focusing on reading/literature, which may include vocabulary building, comprehension, and literary concepts such as theme, character, setting, conflict and figurative language. Emphasis of instruction varies based on student language proficiency and may include preparing students for reading proficiency assessments. Content typically includes a variety of fiction and non-fiction texts and may include development of writing and speaking skills.

23406 ESL Writing/Composition

Courses develop English language proficiency while focusing on writing skills, including composition skills such as paragraph development, sentence construction, mechanics, grammar and use of the writing process. Writing assignments may include, but are not limited to, personal essay and response to literature and media. Emphasis of instruction varies based on student language proficiency and may include preparing students for writing proficiency assessments.

23407 ESL Reading and Writing

Courses focus on developing English language proficiency in both reading and writing as described in courses listed above. Emphasis of instruction varies based on student language proficiency and may include preparing student for reading and writing proficiency assessment.

23408 ESL Vocabulary/Language Skills

Courses focus on developing vocabulary and language skills to enhance communication competencies in speaking, listening, reading and/or writing. Instruction may include, but is not limited to, building grammar, mechanical and usage skills in verbal and written contexts. Orientation to customs and cultures of diverse populations in the United States may be included.

23421 ESL Math

Courses typically introduce or develop mathematical skills, vocabulary and concepts while expanding language skills through a variety of mathematical exercises. Topics of study may include, but are not limited to, computation, measurement, calculator skills, estimation and reading/interpreting graphs, or advanced areas of study such as pre-algebra/ algebra and geometry concepts. Some courses focus on one or more math topics of study rather than provide a general overview of mathematics.

23422 ESL Computer/Technology Skills

Courses typically introduce or develop computer/technology use skills. Areas of study may include computers and peripheral devices; the language, functions and uses of computers and technology; and computer hardware and software. Courses typically introduce or develop keyboarding skills, machine operation and the use of software programs.

23430 ESL Science

Courses typically introduce or develop scientific thinking, vocabulary and concepts while expanding language skills through a variety of scientific exercises and activities. Topics of study may include, but are not limited to, basic biological concepts, explorations in forensic science, environmental science, biochemistry and the physical sciences. Some courses focus on one or more science topics of study rather than provide a general overview of science.

23440 ESL Economics

Courses typically introduce or develop economic thinking, vocabulary and concepts while expanding language skills through a variety of economic-related experiences and activities. Topics of study may include, but are not limited to, economic systems, economic growth and development, the functions of consumers and producers, resource allocation, and the role of government in different economies.

23441 ESL Geography

Courses typically introduce and develop geographic thinking, vocabulary and concepts while expanding language skills through a variety of geography-related experiences and activities. Topics of study may include, but are not limited to, the ways humans understand, use and alter the earth's surface; spatial concepts and landscape analysis; and the methods and tools geographers use in their practice.

23442 ESL History

Courses typically introduce and develop historical thinking, vocabulary and concepts while expanding language skills through a variety of history-related experiences and activities. Topics of study may include, but are not limited to, the political, social, religious, cultural, military and scientific developments of human society. Courses may provide an overview or focus on particular times, people and places.

23443 ESL Civics/Government

Courses typically introduce and develop the thinking, vocabulary and concepts of citizenship while expanding language skills through a variety of experiences and activities. Topics of study may include, but are not limited to, the U.S. constitution and its amendments, structures of the government and political systems, how citizens interact with the government and the rights and responsibilities of citizenship.

23450 ESL Health

Courses typically introduce or develop health concepts and vocabulary while expanding language skills through a variety of health-related experiences and activities. Topics of study may include, but are not limited to, nutrition, stress management, drug/alcohol abuse prevention, disease prevention and first aid. Courses may focus on topics in health rather than provide a general overview of health related issues.

23460 ESL Art

Courses typically introduce or develop visual art or music concepts, principles and vocabulary while expanding language skills through a variety of visual art or music-related experiences and activities. Areas of study may include, but are not limited to, visual art or music history, styles and periods; visual art or music making; and visual art or music analysis and criticism.

23470 ESL Study/Support

Courses support student success in mainstream classes such as math, science, and social studies. They may also support continued development of language skills.

23471 ESL State Assessment Support

Courses provide practice for students who need support in preparing for state assessments in core content areas, typically including reading, writing, math and science.

23472 ESL Job Skills

Courses explore career options and build job-seeking skills. Topics may include analyzing personal interests, skills and aptitudes as well as finding and keeping a job. Activities, such as writing resumes, filling out job applications, interviewing and on-the-job practices are often addressed. Courses may include job skills, such as keyboarding, phone etiquette, customer service and related skills.

23473 ESL Peer Tutor Support

Courses enable ELL students to receive support with language issues and classroom assignments from volunteer peer tutors.

23480 ESL Seminar/Project

Courses vary widely, but typically offer students the opportunity to investigate areas of interest. They often include postsecondary education and/or career exploration and planning. Students typically design and implement a project and may work with a mentor. Course objectives may include, but are not limited to, improvement of research, presentation, and presentation skills as well as problem-solving and critical thinking. Courses may be offered as support for senior exit or other project required for graduation.

23481 ESL Independent Study

Courses are often conducted with instructors as mentors or as an apprenticeship that allows students to explore particular topics of interest within a particular field. These courses may serve as an opportunity for students to expand expertise, develop skills or explore a topic in detail.

23499 ESL—Other

(Insert local course description)

G. All Others**23990 Diversified Subject Areas—Work Experience Classroom**

Courses accompany Career and Technical Education work experience programs (apprenticeships or work-based learning; see *23992 Diversified Subject Areas—Apprenticeship* and *23998 Diversified Subject Areas—Work-Based Learning* below) and typically involve further study of the diversified fields represented and discussion of experiences in the various workplaces.

23991 Disadvantaged Youth—Work Experience Classroom

Courses accompany Career and Technical Education disadvantaged youth, work-based learning programs (See *23993 Disadvantaged Youth—Work-Based Learning* below) and typically involve further study of the occupational fields represented and discussion of experience in the various workplaces. *Use this classification for both 14 and 15 year old student programs and 16 to 20 + year old student programs*

23992 Diversified Subject Areas—Apprenticeship

Courses are part of Career and Technical Education work experience programs that provide students with supervised workplace training in a variety of areas. Goals are typically set cooperatively by the student, school coordinator and mentor/employer (although students are not necessarily paid). Student work is evaluated by the school coordinator and mentor/employer. These courses are accompanied by a classroom component (see *23990 Diversified Subject Areas—Work Experience Classroom* above).

23993 Disadvantaged Youth—Work-Based Learning

Courses are part of Career and Technical Education work experience programs that provide disadvantaged students with work experience in a variety of fields. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). Students are supervised and evaluated by a school coordinator and the employer. These courses have a classroom component (see *23991 Disadvantaged Youth—Work Experience Classroom* above). *Use this course classification for both 14 and 15 year old student programs and 16 to 20 + year old student programs*

23994 Credit Recovery—Nonspecific Subject Area

Courses are designed to enable students to recover credits in curriculum areas not previously specified. English/language arts, math, science, social studies and health/physical education list specific credit recovery course classifications.

23995 Homebound

Courses are offered to students unable to physically attend school. This is typically short-term instruction by a licensed teacher to enable a student to maintain class standing and return to the regular classroom when able.

23996 Work Release

Courses provide students with release time to work for pay. There is no classroom component to the work experience or supervision relationship between the school and the worksite. Students are simply released to work.

23997 Nonspecific Subject Areas—Independent Study

Courses, often conducted with instructors or career professionals as mentors, enable students to explore topics of interest. These courses may provide students with an opportunity to expand their expertise in a particular area, explore a topic in detail, or develop advanced skills.

23998 Diversified Subject Areas—Work-Based Learning

Courses are part of Career and Technical Education work experience programs that provide students with work experience in a variety of fields. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). Students are supervised and evaluated by a school coordinator and the employer. These courses have a classroom component (see *23990 Diversified Subject Areas—Work Experience Classroom* above).

23999 Nonspecific Subject Area—Other

(Insert local course description)