



# **T**erms of **E**mployment, **A**ccreditation, and **M**aster **S**chedule

## **Current Listing of All Montana K-12 Course Codes and Descriptions**

### **Reference Manual for Business & Marketing Education**

Updated September 29, 2017



# Terms of Employment, Accreditation, and Master Schedule

## Montana K-12 Course Codes and Descriptions

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# Terms of Employment, Accreditation, and Master Schedule

## Montana K-12 Course Codes and Descriptions

### Notes for Business Education-Related Courses

All Middle School/Junior High courses must be coded using the Prior to Secondary Course section (pp 1-22); do not use codes for Secondary Courses

Course without Endorsement identified can be taught by any area of endorsement

- If courses within one of the Business Education-related subject areas and taught by a Business Education Endorsed Teacher (12S BUS, 12S MAR, 12S CIS) course will count for CTE credit
- For Example—12005 Keyboarding and 12006 Word Processing (p 55)
- Technology for Classroom & Personal Use (K-8 Code 73001, 9-12 Code 23001) should only be used for computer applications-related courses taught by teachers without a Business Education endorsement (12S BUS)

Career Development/Career Exploration/College & Career Readiness Course Coding

- To ensure these courses are properly reported for Montana State CTE/VoEd Funding, courses should be coded using one of the following options
- 12001 Business/Office Career Exploration (Grades 9-12 only)
- 12151 Marketing Career Exploration (Grades 9-12 only)
- 62001 Business/Office Career Exploration (Grades K-8 only)
- 62151 Marketing Career Exploration (Grades K-8 only)

Annual/Yearbook/School Publications Course Coding—including School Paper

- Courses coded using one of the Printing Technology & Production codes (p 53)
- 11152 Desktop Publishing
- 11153 Digital Media Design and Production
- 11154 Commercial Graphic Design
- 11155 Graphic Technology
- 11156 Photography and Printing Technology (Preferred Code)

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Refer to Marketing Course Codes, Names & Descriptions for the following .....56-58

- Hospitality & Tourism
- Restaurant, Food & Beverage Services
- Lodging
- Travel and Tourism
- Recreation, Amusement and Attractions

Hospitality and Tourism Cluster Courses on pages 62-64 are reserved exclusively for Family & Consumer Sciences courses

# Terms of Employment, Accreditation, and Master Schedule

## Montana K-12 Course Codes and Descriptions

### New Montana Teacher Licensure Endorsement Codes

As of April 15, 2013. The Office of Public Instruction's Educator Licensure Division began working in a new system. One element of the new system is a redesign of the licensure endorsement codes, and eventually mapping those endorsement codes to a common course numbering system aligned with these endorsement codes. We hope this provides more transparency to both the Licensure and Accreditation Division work as we continue on the path of data.

License history will still show the endorsement codes in effect prior to April 15, 2013.

The columns in this report are "sortable". To view the endorsements by order of the new code, click on "Code". To view an alphabetical listing of the endorsement descriptions, click on "Description".

Code	Description	Grades	Code	Description	Grades
00E DNC	PSC Dance	K-8	05S ART	Art 5-12	5-12
00E EC	Early Childhood PK-3	K-8	05S DRA	Drama	5-12
00E ECE	PSC Early Childhood	K-8	05S MUS	Music 5-12	5-12
00E ELE	Elementary	K-8	05S THR	Theater	5-12
00E GNT	PSC Gifted and Talented	K-8	06A ARA	Arabic K-12	K-12
00E MS	Middle Grades 4th-8th	K-8	06A CHI	Mandarin Chinese K-12	K-12
01S ENG	English, Language and Literature	5-12	06A ESL	English as a second language K-12	K-12
01S JOU	Journalism	5-12	06A FRE	French K-12	K-12
01S SPE	Speech Communications	5-12	06A GER	German K-12	K-12
02S MAT	Mathematics	5-12	06A IRI	Irish K-12	K-12
03S BF	Science (Broadfield)	5-12	06A ITA	Italian K-12	K-12
03S BIO	Biology	5-12	06A LAT	Latin K-12	K-12
03S CHE	Chemistry	5-12	06A RUS	Russian K-12	K-12
03S EAR	Earth Science	5-12	06A SPA	Spanish K-12	K-12
03S ENV	Environmental Education	5-12	06E ESL	English as a second language K-8	K-8
03S PHY	Physics	5-12	06E FRE	French K-8	K-8
03S PSC	Physical Science	5-12	06E GER	German K-8	K-8
04A NAS	Native American Studies	K-12	06E IRI	Irish K-8	K-8
04E NAS	Native American Studies	K-8	06E ITA	Italian K-8	K-8
04S ANT	Anthropology	5-12	06E LAT	Latin K-8	K-8
04S BF	Social Studies (Broadfield)	5-12	06E RUS	Russian K-8	K-8
04S ECO	Economics	5-12	06E SPA	Spanish K-8	K-8
04S GEO	Geography	5-12	06S ESL	English as a second language 5-12	5-12
04S HIS	History	5-12	06S FRE	French 5-12	5-12
04S HUM	Humanities	5-12	06S GER	German 5-12	5-12
04S NAS	Native American Studies	5-12	06S IRI	Irish 5-12	5-12
04S PHI	Philosophy	5-12	06S ITA	Italian 5-12	5-12
04S POL	Political Science	5-12	06S LAT	Latin 5-12	5-12
04S PSY	Psychology	5-12	06S RUS	Russian 5-12	5-12
04S SOC	Sociology	5-12	06S SPA	Spanish 5-12	5-12
05A ART	Art K-12	K-12	06Z ASB	Assiniboine	K-12
05A MUS	Music K-12	K-12	06Z BLA	Blackfeet	K-12
05E ART	Art K-8	K-8	06Z CHE	Cheyenne	K-12
05E MUS	Music K-8	K-8	06Z CHI	Chippewa	K-12

Code .....	Description .....	Grades	Code .....	Description .....	Grades
06Z CRE .....	Cree .....	K-12	20S ATB .....	Auto Body .....	5-12
06Z CRO .....	Crow .....	K-12	20S ATT .....	Automotive Technology .....	5-12
06Z DAK .....	Dakota .....	K-12	20S AV .....	Aviation .....	5-12
06Z GV .....	Gros Ventre .....	K-12	20S DM .....	Diesel Mechanics .....	5-12
06Z KOO .....	Kootenai .....	K-12	20S HEM .....	Heavy Equipment Mechanic .....	5-12
06Z SAL .....	Salish .....	K-12	20S HEO .....	Heavy Equipment Operator .....	5-12
08A HE .....	Health Enhancement K-12 .....	K-12	20S HYD .....	Hydraulics .....	5-12
08A HEA .....	Health K-12 .....	K-12	20S SE .....	Small Engines .....	5-12
08E HE .....	Health Enhancement K-8 .....	K-8	21S ENG .....	Engineering .....	5-12
08E HEA .....	Health K-8 .....	K-8	23S CA .....	Culinary Arts .....	5-12
08E PEd .....	Physical Education-Elementary .....	K-8	23S FCS .....	Family and Consumer Sciences .....	5-12
08A Ped .....	Physical Education .....	P-12	30A ART .....	Supervisor K-12 Art .....	K-12
08H PEd .....	Physical Education P-12 .....	P-12	30A CUR .....	Supervisor K-12 Curriculum .....	K-12
08S HE .....	Health Enhancement 5-12 .....	5-12	30A HPE .....	Supervisor K-12 Health & Physical Education ..	K-12
08S HEA .....	Health 5-12 .....	5-12	30A LIB .....	Supervisor K-12 Library .....	K-12
08S HSI .....	Health Sciences Informatics .....	5-12	30A MUS .....	Supervisor K-12 Music .....	K-12
08S HSS .....	Health Professions - Support Services .....	5-12	30A PRI .....	Principal K-12 .....	K-12
08S PEd .....	Physical Education-Secondary .....	5-12	30A REA .....	Supervisor K-12 Reading .....	K-12
10S CIS .....	Computer and Information Sciences .....	5-12	30A SCO .....	Supervisor K-12 School Counseling .....	K-12
11S BRO .....	Broadcasting .....	5-12	30A SPE .....	Spec Education Supervisor PK-12 .....	PK-12
11S GRA .....	Graphic Arts .....	5-12	30A SUP .....	Superintendent K-12 .....	K-12
11S PHO .....	Photography .....	5-12	30E ELE .....	Supervisor K-8 Elementary .....	K-8
11S STC .....	Stagecraft .....	5-12	30E PRI .....	Principal K-8 .....	K-8
11S THA .....	Theater Arts .....	5-12	30E SUP .....	Supervisor K-8 .....	K-8
11S VID .....	Videography .....	5-12	30S BSS .....	Supervisor 5-12 Social Studies .....	5-12
11S VIS .....	Visual Communications .....	5-12	30S CTE .....	Supervisor 5-12 CTE .....	5-12
12S BUS .....	Business Education (Broadfield) 5-12 .....	5-12	30S DRA .....	Supervisor 5-12 Drama .....	5-12
12S CIS .....	Computer Information Systems .....	5-12	30S ENG .....	Supervisor 5-12 English .....	5-12
12S CS .....	Computer & Information Sciences 5-12 .....	5-12	30S HIS .....	Supervisor 5-12 History .....	5-12
12S MAR .....	Marketing Education 5-12 .....	5-12	30S MAT .....	Supervisor 5-12 Math .....	5-12
12S OFF .....	Office Occupations .....	5-12	30S PRI .....	Principal 5-12 .....	5-12
13S IA .....	Industrial Arts .....	5-12	31A C01 .....	School Counselor 1 K-12 .....	K-12
13S IM .....	Industrial Mechanics .....	5-12	31A C06 .....	School Counselor 6 K-12 .....	K-12
13S ITE .....	Industrial Technology Education .....	5-12	31A LIB .....	Library K-12 .....	K-12
13S MCH .....	Machining .....	5-12	31A PSY .....	School Psychologist .....	K-12
13S MET .....	Metals .....	5-12	31A REA .....	Reading K-12 .....	K-12
13S WLD .....	Welding .....	5-12	31A TNE .....	PSC Technology in Education .....	K-12
14S HPB .....	Health Professions - Biotechnology .....	5-12	31A TRE .....	Traffic Education .....	K-12
14S HPI .....	Health Professions - Informatics .....	5-12	31E C01 .....	School Counselor 1 K-8 .....	K-8
14S HPS .....	Health Professions - Support Services .....	5-12	31E LIB .....	Library K-8 .....	K-8
14S HPT .....	Health Professions -Therapeutics .....	5-12	31E REA .....	Reading K-8 .....	K-8
17S BM .....	Building Maintenance .....	5-12	31S C01 .....	School Counselor 1 5-12 .....	5-12
17S BT .....	Building Trades .....	5-12	31S LIB .....	Library 5-12 .....	5-12
17S CAB .....	Cabinet Making .....	5-12	31S REA .....	Reading 5-12 .....	5-12
17S CAR .....	Carpentry .....	5-12	32A SPE .....	Special Education PK-12 .....	PK-12
17S DRF .....	Drafting .....	5-12	32E SPE .....	Special Education PK-8 .....	PK-12
17S ELC .....	Electronics .....	5-12	32S SPE .....	Special Education 5-12 .....	PK-12
17S MAS .....	Masonry .....	5-12	33S DCABLE .....	Dual Credit Only-Applied Business Leadership ..	5-12
17S PAI .....	Residential and Commercial Painting .....	5-12	33S DCACC .....	Dual Credit Accounting .....	5-12
17S WOO .....	Woodworking .....	5-12	33S DCANT .....	Dual Credit Anthropology .....	5-12
18S AB .....	Agriculture Business .....	5-12	33S DCBUS .....	Dual Credit Business Communications ..	5-12
18S AG .....	Agriculture (Class 1 or 2) .....	5-12	33S DCCJ .....	Dual Credit Only-Criminal Justice .....	5-12
18S AH .....	Horticulture .....	5-12	33S DCHLTH .....	Dual Credit Only-Health .....	5-12
18S AM .....	Agriculture Mechanics .....	5-12	33S DCHUM .....	Dual Credit Human Services .....	5-12
18S FO .....	Forestry .....	5-12	33S DCINT .....	Dual Credit Interpersonal Communications ..	5-12
18S LP .....	Livestock Production .....	5-12	33S DCMED .....	Dual Credit Medical Ethics .....	5-12
18S NR .....	Natural Resources .....	5-12	33S DCSCU .....	Dual Credit College Success .....	5-12
18S PS .....	Plant Science .....	5-12	OTHER .....	Other - No Endorsement in Conversion	



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>01 - English Language and Literature</b>				
<b>Comprehensive Language Arts</b>				
	51008 **	English as a Second Language	00E ELE, 01S ENG, 06A ESL, 06E ESL, 06S ESL, 00E MS, 00E EC	English as a Second Language (ESL) courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to "regular" English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States.
05	51033 **	Language Arts (grade 5)	00E ELE, 01S ENG, 00E MS	Language Arts (grade 5) courses include the four aspects of language use: reading, writing, speaking, and listening. These courses may extend students' skills in composition, writing for particular purposes or audiences, distinguishing meaning and literary functions in texts, and fluency in reading. Specific content depends upon state standards for grade 5.
06	51034 **	Language Arts (grade 6)	00E ELE, 01S ENG, 00E MS	Language Arts (grade 6) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. These courses may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 6.
07	51035 **	Language Arts (grade 7)	00E ELE, 01S ENG, 00E MS	Language Arts (grade 7) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. Beyond emphasizing different uses for language, these courses may also include using language (particularly written text) to construct meaning and connections. Specific content depends upon state standards for grade 7.
08	51036 **	Language Arts (grade 8)	00E ELE, 01S ENG, 00E MS	Language Arts (grade 8) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses use various genres of literature to improve reading skills, and they link writing exercises for different purposes to those reading selections. Specific content depends upon state standards for grade 8.
	51037 **	Language Arts	00E ELE, 01S ENG, 00E MS	Code 51037, representing Language Arts courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Language Arts, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated in this course code.
<b>Literature/Reading</b>				
05	51045 **	Reading (grade 5)	00E ELE, 01S ENG, 31A REA, 31E REA, 31S REA, 00E MS	Reading (grade 5) courses focus on reading skills and may extend students' skills in distinguishing meaning and literary functions in texts, and fluency in reading. Specific content depends upon state standards for grade 5.
06	51046 **	Reading (grade 6)	00E ELE, 01S ENG, 31A REA, 31E REA, 31S REA, 00E MS	Reading (grade 6) courses build upon students' prior knowledge and skill in reading and may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 6.
07	51047 **	Reading (grade 7)	00E ELE, 01S ENG, 31A REA, 31E REA, 31S REA, 00E MS	Reading (grade 7) courses build upon students' prior knowledge and skill in reading and may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 7.
08	51048 **	Reading (grade 8)	00E ELE, 01S ENG, 31A REA, 31E REA, 31S REA, 00E MS	Reading (grade 8) courses build upon students' prior knowledge and skill in reading. Typically, these courses use various genres of literature to improve reading skills, and link exercises for different purposes to those reading selections. Specific content depends upon state standards for grade 8.
	51049 **	Reading	01S ENG, 31A REA, 31E REA, 31S REA, 00E EC, 00E ELE, 00E MS	Code 51049, representing Reading courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Reading, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>01 - English Language and Literature</b>				
<b>Literature/Reading</b>				
	51053 **	Literature	01S ENG, 00E MS, 00E ELE	Literature courses offer the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are often required. Literature courses may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people.
	51066	Strategic Reading	00E ELE, 01S ENG, 31A REA, 32A SPE, 31E REA, 31S REA, 32E SPE, 32S SPE, 00E MS	Strategic Reading courses are intended to improve a student's vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note-taking or for understanding and evaluating the important points of a text.
	51067	Assisted Reading	00E ELE, 01S ENG, 31A REA, 32A SPE, 31E REA, 31S REA, 32E SPE, 32S SPE, 00E MS	Assisted Reading courses offer students the opportunity to focus on their reading skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension up to the desired level or to develop strategies to read more efficiently.
	51068 **	Corrective Reading	00E ELE, 01S ENG, 31A REA, 32A SPE, 31E REA, 31S REA, 32E SPE, 32S SPE, 00E MS	Corrective Reading courses offer diagnostic and remedial activities designed to correct reading difficulties and habits that interfere with students' progress in developing reading skills and understandings. Activities are chosen to increase or improve students' reading comprehension, reading technique, and general literacy skills.
<b>Composition/Writing</b>				
	51104 **	Creative Writing	00E ELE, 01S ENG, 00E EC, 00E MS	Creative Writing courses offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft. Although most creative writing classes cover several expressive forms, others concentrate exclusively on one particular form (such as poetry or playwriting).
05	51135 **	Writing (grade 5)	00E ELE, 01S ENG, 00E MS	Writing (grade 5) courses focus on writing skills and may extend students' skills in writing for particular purposes or audiences, distinguishing meaning and literary functions in texts, and fluency in writing. Specific content depends upon state standards for grade 5.
06	51136 **	Writing (grade 6)	00E ELE, 01S ENG, 00E MS	Writing (grade 6) courses build upon students' prior knowledge and skill in writing and may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 6.
07	51137 **	Writing (grade 7)	00E ELE, 01S ENG, 00E MS	Writing (grade 7) courses build upon students' prior knowledge and skill in writing and may emphasize the use of language for different effects and to construct meaning and connections. Specific content depends upon state standards for grade 7.
08	51138 **	Writing (grade 8)	00E ELE, 01S ENG, 00E MS	Writing (grade 8) courses build upon students' prior knowledge and skill in writing. Typically, these courses use writing exercises to expand students' understanding of the different purposes of written communication. Specific content depends upon state standards for grade 8.
	51139 **	Writing	00E ELE, 01S ENG, 00E MS	Code 51139, representing Writing courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Writing, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
<b>Speech and Communication</b>				
	51151	Public Speaking	00E MS, 01S SPE, 01S ENG, 00E ELE	Public Speaking courses enable students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small- and large-group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>02 - Mathematics</b>				
<b>Foundation Mathematics</b>				
	52002 **	General Math	00E ELE, 02S MAT, 00E EC, 00E MS	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, solving and graphing simple equations and inequalities.
05	52035 **	Mathematics (grade 5)	00E ELE, 02S MAT, 00E MS	Mathematics (grade 5) courses typically emphasize number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. Course content may include activities that help students increase operational fluency, make connections between abstract symbols and concrete events or concepts, or present their mathematical reasoning. Specific content depends upon state standards for grade 5.
06	52036 **	Mathematics (grade 6)	00E ELE, 02S MAT, 00E MS	Mathematics (grade 6) courses typically emphasize skills in numerical operations (including basic operations and their proper order); measurement; patterns; simple functions; geometry; and concepts of data analysis, including statistics and probability. Specific content depends upon state standards for grade 6.
07	52037 **	Mathematics (grade 7)	00E ELE, 02S MAT, 00E MS	Mathematics (grade 7) courses typically emphasize proficiency in skills involving numbers and operations; measurement; patterns; functions; algebraic formulas; geometry; and concepts of data analysis, including statistics and probability. Specific content depends upon state standards for grade 7.
08	52038 **	Mathematics (grade 8)	00E ELE, 02S MAT, 00E MS	Mathematics (grade 8) courses typically emphasize proficiency in skills involving numbers and operations, measurement, patterns, simple functions, algebra, geometry, statistics, and probability. Specific content depends upon state standards for grade 8.
	52039 **	Mathematics	00E ELE, 02S MAT, 00E MS	Code 52039, representing Mathematics courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Mathematics, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
<b>Pure Mathematics</b>				
	52051 **	Pre-Algebra	00E ELE, 02S MAT, 00E MS	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.
	52052 **	Algebra I	00E ELE, 02S MAT, 00E MS	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.
	52072 **	Geometry	00E ELE, 02S MAT, 00E MS	Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.
	52132 **	IB Mathematics, Middle Years Program	00E ELE, 02S MAT, 00E MS	International Baccalaureate (IB) Mathematics, Middle Years Program courses are built on a framework of five branches of mathematics: number, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics. The program encourages students to develop an understanding of mathematical reasoning and processes, the ability to apply mathematics and evaluate the significance of results, the ability to develop strategies for problems in which solutions are not obvious, and the acquisition of mathematical intuition.
<b>Applied Mathematics</b>				
	52157 **	Consumer Math	00E ELE, 02S MAT, 12S BUS, 00E MS	Consumer Math courses reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>03 - Life and Physical Sciences</b>				
<b>Earth Science</b>				
	53008 **	Earth/Space Science	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Earth/Space Science covers basic principles of earth and space science. These may include plate tectonics, rocks and the rock cycle, weather, ocean currents, movements of the Earth, moon, and planets, components of the galaxy and universe, or other topics consistent with state academic standards for earth and space science.
<b>Biology</b>				
	53051 **	Biology	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.
<b>Chemistry</b>				
	53101 **	Chemistry	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.
<b>Physics</b>				
	53151 **	Physics	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	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.
	53158 **	Life Science	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Life Science courses cover the basic principles of life and life processes. These topics may include cells, species, ecosystems, reproduction, genetics, or other topics consistent with state academic standards for life science.
	53159 **	Physical Science (prior-to-secondary)	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Physical Science (prior-to-secondary) courses cover basic principles of physical science, such as matter, energy, force, and motion. Topics may include conservation of energy and matter, the atomic model, the periodic table, electricity, or other topics consistent with state academic standards for physical science.
<b>Integrated/Other</b>				
	53201 **	Integrated Science	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	The specific content of Integrated Science courses varies, but they draw upon the principles of several scientific specialties—earth science, physical science, biology, chemistry, and physics—and organize the material around thematic units. Common themes covered include systems, models, energy, patterns, change, and constancy. These courses use appropriate aspects from each specialty to investigate applications of the theme.
	53202 **	Unified Science	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Unified Science courses combine more than one branch of science into a cohesive study or may integrate science with another discipline. General scientific concepts are explored, as are the principles underlying the scientific method and experimentation techniques.
	53203 **	IB Sciences, Middle Years Program	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	International Baccalaureate (IB) Sciences, Middle Years Program courses provide to students a body of knowledge and an understanding of the scientific approach to problem solving. It may be organized as biology, chemistry, and physics, or as an integrated sciences course. The course requires students to formulate hypotheses, design and carry out experiments to test them, and evaluate results.
05	53235 **	Science (grade 5)	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Science (grade 5) courses build on the study of various systems. They may include identification and description of cycles, comparisons of forms of matter and energy, forces, or content consistent with state academic standards. Students may make comparisons and interpret and analyze information. Specific content depends upon state standards for grade 5.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>03 - Life and Physical Sciences</b>				
<b>Integrated/Other</b>				
06	53236 **	Science (grade 6)	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Science (grade 6) courses typically include subject matter from several strands of science, including earth/space sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 6.
07	53237 **	Science (grade 7)	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Science (grade 7) courses build on previous years of scientific inquiry and typically include subject matter from several strands of science, including earth sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 7.
08	53238 **	Science (grade 8)	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E MS	Science (grade 8) courses typically include subject matter from several strands of science, including earth sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 8.
	53239 **	Science	00E ELE, 03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC, 00E EC, 00E MS	Code 53239, representing Science courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Science, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>Geography</b>				
	54001 **	World Geography	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 04A NAS, 04E NAS, 00E MS	World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.
	54003 **	U.S. Geography	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 00E ELE, 04E NAS, 00E MS, 04A NAS	U.S. Geography courses provide an overview of the geography of the United States. Topics typically include the physical environment, the political landscape, the relationship between people and the land, and economic production and development.
<b>World History</b>				
	54051 **	World History—Overview	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 04A NAS, 04E NAS, 00E MS	World History—Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History—Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.
	54061 **	World Area Studies	04S BF, 04S HIS, 04S GEO, 00E MS, 00E ELE	World Area Studies courses examine the history, politics, economics, society, and/or culture of one or more regions of the world, such as Africa, Latin America, the former Soviet Union, Far East Asia, and the Middle East. These courses may focus primarily on the history of a particular region or may take an interdisciplinary approach to the contemporary issues affecting the region. Furthermore, these courses may emphasize one particular country (other than the United States), rather than emphasizing a region or continent.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>World History</b>				
	54062 **	World People Studies	04S BF, 04S ECO, 04S GEO, 04S HIS, 00E ELE, 00E MS	World People Studies courses allow students to study various types of subgroups that have something in common such as religion, gender, or culture. Similar in style to World Area Studies, but focusing on a group of people rather than on a specific region, these courses examine a subgroup's history, politics, economics, and/or culture.
	54063 **	Western Civilization	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04A NAS, 04E NAS, 00E MS	Western Civilization courses apply an interdisciplinary approach to the study of western cultural traditions, frequently using a chronological framework. Course content typically includes a survey of the major developments in and contributors to art and architecture, literature, religion and philosophy, and culture. These courses may also cover intellectual and political movements.
	54064 **	Contemporary World Issues	04S BF, 04S HIS, 04S ECO, 04S POL, 00E MS, 00E ELE	Contemporary World Issues courses enable students to study political, economic, and social issues facing the world. These courses may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.
<b>U.S. History</b>				
	54101 **	U.S. History—Comprehensive	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04A NAS, 04E NAS, 00E MS	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. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.
	54105 **	State-Specific Studies	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04A NAS, 04E NAS, 00E MS	State-Specific Studies courses examine the history, politics, economics, society, and/or cultures of one state in the United States. This course may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.
	54106 **	Contemporary U.S. Issues	04S BF, 04S HIS, 04S ECO, 04S POL, 00E MS, 00E ELE	Contemporary U.S. Issues courses study the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.
<b>Government, Politics, and Law</b>				
	54151 **	U.S. Government—Comprehensive	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04A NAS, 04E NAS, 00E MS	U.S. Government—Comprehensive courses provide an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. These courses may examine the structure and function of state and local governments and may cover certain economic and legal topics.
	54161 **	Civics	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04A NAS, 04E NAS, 00E MS	Civics courses examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.
	54171 **	IB Humanities, Middle Years Program	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 00E ELE, 04A NAS, 04E NAS, 00E MS	International Baccalaureate (IB) Humanities, Middle Years Program courses aim to develop the understanding and application of concepts (time, place and space, change, systems and global awareness) and skills (technical, analytical, problem solving, and investigative). Content may include topics such as geography, history, economics, politics, civics, sociology, anthropology, and psychology.
<b>General Social Studies</b>				
05	54435 **	Social Studies (grade 5)	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 00E MS	Social Studies (grade 5) courses continue to develop skills in history, geography, civics and government, and economics. These courses may be more discipline-specific (dividing up state history, U.S. history, geography, government, and so on). Specific content depends upon state standards for grade 5.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>General Social Studies</b>				
06	54436 **	Social Studies (grade 6)	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 00E MS	Social Studies (grade 6) courses provide a greater understanding of social studies disciplines, including history, geography, civics and government, and economics. These courses often focus on the history, culture, and government of various specific world societies. Typically, students develop skills used in the social studies disciplines. Specific content depends upon state standards for grade 6.
07	54437 **	Social Studies (grade 7)	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 00E MS	Social Studies (grade 7) courses provide continued development of understanding and skills in the social studies disciplines: history, geography, civics and government, and economics. Specific content depends upon state standards for grade 7.
08	54438 **	Social Studies (grade 8)	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 00E MS	Social Studies (grade 8) courses provide continued development of understanding and skills in the social studies disciplines: history, geography, civics and government, and economics. Typically, these courses focus on single disciplines at a time (e.g., state-specific history and government, U.S. history, world history, or civics) to develop discipline-related skills. Specific content depends upon state standards for grade 8.
	54439 **	Social Studies	00E ELE, 04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S NAS, 04S POL, 04S PSY, 04S SOC, 00E EC, 00E MS	Code 54439, representing Social Studies courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Social Studies, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Dance</b>				
05	55035	Dance (grade 5)	00E ELE, 08A HEA, 08E HE, 08S HE, 08S HEA, 08A HE, 08E HEA, 00E MS, 00E MS, 00E MS	Dance (grade 5) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 5.
06	55036	Dance (grade 6)	00E ELE, 08A HEA, 08E HE, 08S HE, 08S HEA, 08A HE, 08E HEA	Dance (grade 6) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 6.
07	55037	Dance (grade 7)	00E ELE, 08A HE, 08A HEA, 08E HE, 08E HEA, 08S HE, 08S HEA, 00E MS	Dance (grade 7) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 7.
08	55038	Dance (grade 8)	00E ELE, 08A HE, 08A HEA, 08E HE, 08E HEA, 08S HE, 08S HEA, 00E MS	Dance (grade 8) courses typically provide activities that foster creative expression, communication through artistic endeavor, appreciation of culture and heritage, and evaluative and critical thinking using the art of dance. Activities may include those that enable students to develop their technique, learn different styles of dance, appreciate the culture and history of dance forms, and strengthen the ability to discern and critique. Specific course content conforms to any existing state standards for grade 8.
	55039	Dance	00E ELE, 08A HEA, 08E HE, 08S HE, 08S HEA, 08A HE, 08E HEA	Code 55039, representing Dance courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Dance, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Drama</b>				
	55051	Introduction to the Theater	00E ELE, 05S DRA, 11S THA, 00E MS	Introduction to the Theater courses provide an overview of the art, conventions, and history of the theater. Although the courses sometimes include experiential exercises, they emphasize learning about the theater rather than performance. Students learn about one or more of the following topics: basic techniques in acting, major developments in dramatic literature, major playwrights, the formation of theater as a cultural tradition, and critical appreciation of the art.
05	55075	Drama (grade 5)	00E ELE, 05S DRA, 01S ENG, 11S THA	Drama (grade 5) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 5.
06	55076	Drama (grade 6)	00E ELE, 05S DRA, 11S THA, 01S ENG, 00E MS	Drama (grade 6) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, and strengthen their critical abilities. Specific course content conforms to any existing state standards for grade 6.
07	55077	Drama (grade 7)	00E ELE, 05S DRA, 11S THA, 01S ENG, 00E MS	Drama (grade 7) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. As appropriate, students may focus on acting techniques and traditions, other aspects of drama (staging, lighting, costuming), or both. Specific course content conforms to any existing state standards for grade 7.
08	55078	Drama (grade 8)	00E ELE, 05S DRA, 11S THA, 01S ENG, 00E MS	Drama (grade 8) courses enable students to express themselves through dramatic play and storytelling. Course content typically includes the use of movement, language, character, plot, and spectacle to portray imaginary or real experiences. As appropriate, students may focus on acting techniques and traditions, other aspects of drama (staging, lighting, costuming), or both. Specific course content conforms to any existing state standards for grade 8.
	55079	Drama	00E ELE, 01S ENG, 05S DRA, 11S THA, 00E MS	Code 55079, representing Drama courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Drama, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
<b>Music</b>				
	55101	General Band	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of nonspecified band literature styles (concert, marching, orchestral, and modern styles).
	55102	Concert Band	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Courses in Concert Band are designed to promote students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances.
	55103	Marching Band	00E ELE, 05A MUS, 05E MUS, 05S MUS	Courses in Marching Band are intended to develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances.
	55104	Orchestra	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Orchestra courses are designed to develop students' abilities to play brass, woodwind, percussion, and string instruments, covering a variety of string and orchestral literature styles.
	55106	Instrumental Ensembles	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Instrumental Ensemble courses are intended to develop students' technique for playing brass, woodwind, percussion, and/or string instruments in small ensemble groups. Instrumental Ensemble courses cover one or more instrumental ensemble or band literature styles.
	55110	Chorus	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts.
	55111	Vocal Ensembles	05A MUS, 05E MUS, 05S MUS, 00E ELE, 00E MS	Vocal Ensemble courses are intended to develop vocal techniques and the ability to sing parts in small ensemble or madrigal groups. Course goals may include the development of solo singing ability and may emphasize one or several ensemble literature styles.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Music</b>				
	55118	Music Appreciation	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Similar in nature to Music History/Appreciation courses, Music Appreciation courses focus specifically on students' appreciation of music. They are designed to help students explore the world of music and to develop an understanding of the importance of music in their lives.
K	55130	Music (kindergarten)	00E ELE, 05A MUS, 05E MUS, 00E EC	Music (kindergarten) courses provide developmentally appropriate activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Specific course content conforms to any existing state standards for kindergarten.
01	55131	Music (grade 1)	00E ELE, 05A MUS, 05E MUS, 00E EC	Music (grade 1) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 1.
02	55132	Music (grade 2)	00E ELE, 05A MUS, 05E MUS, 00E EC	Music (grade 2) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and to incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 2.
03	55133	Music (grade 3)	00E ELE, 05A MUS, 05E MUS, 00E EC	Music (grade 3) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 3.
04	55134	Music (grade 4)	00E ELE, 05A MUS, 05E MUS, 00E MS	Music (grade 4) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 4.
05	55135	Music (grade 5)	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Music (grade 5) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 5.
06	55136	Music (grade 6)	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Music (grade 6) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 6.
07	55137	Music (grade 7)	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Music (grade 7) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 7.
08	55138	Music (grade 8)	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E MS	Music (grade 8) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 8.
	55139	Music	00E ELE, 05A MUS, 05E MUS, 05S MUS, 00E EC, 00E MS	Code 55139, representing Music courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Music, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Visual Arts</b>				
	55151 **	Art Appreciation	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Art Appreciation courses introduce students to the many forms of art and help them form an aesthetic framework through which they can judge and critique art of various ages and cultures. These courses also explore the place and significance of art in our society.
	55152 **	Art History	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Art History courses introduce students to significant works of art, artists, and artistic movements that have shaped the art world and have influenced or reflected periods of history. These courses often emphasize the evolution of art forms, techniques, symbols, and themes.
	55154 **	Creative Art—Comprehensive	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Creative Art—Comprehensive courses provide students with the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.
	55155 **	Creative Art—Drawing/Painting	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Creative Art—Drawing/Painting courses cover the same topics as Creative Art—Comprehensive courses, but focus on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.
	55156 **	Creative Art—Drawing	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Creative Art—Drawing courses cover the same topics as Creative Art—Drawing/Painting, but focus on drawing. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, and so on), but some courses may focus on only one medium.
	55157 **	Creative Art—Painting	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Creative Art—Painting courses cover the same topics as Creative Art—Drawing/Painting, but focus on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.
	55158 **	Creative Art—Sculpture	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Creative Art—Sculpture courses cover the same topics as Creative Art—Comprehensive courses, but focus on creating three-dimensional works. Students typically work with several media (such as clay, ceramics, wood, metals, textiles, and so on), but some courses may focus on only one medium.
	55159 **	Ceramics/Pottery	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Ceramics/Pottery courses cover the same topics as Creative Art—Comprehensive courses, but focus on creating three-dimensional works out of clay and ceramic material. Particular attention is paid to the characteristics of the raw materials, their transformation under heat, and the various methods used to create and finish objects.
	55165	Crafts	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Crafts courses teach the same lessons as Creative Art—Comprehensive courses, but do so with a focus on crafts. These courses may survey a wide range of crafts, or they may focus on only one type of craft; possibilities include calligraphy, quilting, silk-screening, cake-decorating, tole-painting, maskmaking, knitting, crocheting, paper-making, and so on.
	55167	Photography	00E ELE, 05A ART, 05E ART, 05S ART, 11S PHO, 00E MS	Photography courses expose students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.
K	55180 **	Art (kindergarten)	00E ELE, 05A ART, 05E ART, 00E EC	Art (kindergarten) courses provide to students developmentally appropriate activities to foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for kindergarten.
01	55181 **	Art (grade 1)	00E ELE, 05A ART, 05E ART, 00E EC	Art (grade 1) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, and strengthen their critical abilities. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for grade 1.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Visual Arts</b>				
02	55182 **	Art (grade 2)	00E ELE, 05A ART, 05E ART, 00E EC	Art (grade 2) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, and strengthen their critical abilities. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for grade 2.
03	55183 **	Art (grade 3)	00E ELE, 05A ART, 05E ART, 00E EC	Art (grade 3) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, and strengthen their critical abilities. Although the art form typically involves visual arts (drawing, painting, sculpture, crafts, and the like), students may also explore other forms of art such as dance, music, and theater. Specific course content conforms to any existing state standards for grade 3.
04	55184 **	Art (grade 4)	00E ELE, 05A ART, 05E ART, 00E MS	Art (grade 4) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 4.
05	55185 **	Art (grade 5)	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Art (grade 5) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 5.
06	55186 **	Art (grade 6)	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Art (grade 6) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 6.
07	55187 **	Art (grade 7)	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Art (grade 7) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 7.
08	55188 **	Art (grade 8)	00E ELE, 05A ART, 05E ART, 05S ART, 00E MS	Art (grade 8) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for grade 8.
	55189 **	Art	00E ELE, 05A ART, 05E ART, 05S ART, 00E EC, 00E MS	Code 55189, representing Art courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do..."), or when the content descriptions above (Art, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
<b>All Others</b>				
	55202 **	IB Arts, Middle Years Program	00E ELE, 05A ART, 05E ART, 00E GNT, 05S ART, 00E MS	International Baccalaureate (IB) Arts, Middle Years Program courses include visual and performing arts and organize learning around the creative cycle. These courses bring students into contact with art forms and aesthetic values of several cultures and help students master artistic techniques.

\*\* This course is considered a Core Course



Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>All Others</b>				
K	56030 **	Foreign Language (kindergarten)	00E ELE, 06A ARA, 06A CHI, 06A FRE, 06A GER, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06A SPA, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 00E EC	Foreign Language (kindergarten) courses engage students in developmentally appropriate activities to acquire the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Course content typically includes some introduction to other cultures. Specific content depends upon state standards for kindergarten.
01	56031 **	Foreign Language (grade 1)	00E ELE, 06A ARA, 06A CHI, 06A FRE, 06A GER, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06A SPA, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 00E EC	Foreign Language (grade 1) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. These courses may emphasize recognition of written words, vocabulary, speech patterns, and grammar. Cultural aspects (major events, foods, art, and so on) of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 1.
02	56032 **	Foreign Language (grade 2)	00E ELE, 06A ARA, 06A CHI, 06A FRE, 06A GER, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06A SPA, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 00E EC	Foreign Language (grade 2) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. These courses may emphasize recognition of written words, vocabulary, speech patterns, and grammar so that students become more independent communicators. Cultural aspects (major events, foods, art, and so on) of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 2.
03	56033 **	Foreign Language (grade 3)	00E ELE, 06A ARA, 06A CHI, 06A FRE, 06A GER, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06A SPA, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 00E EC	Foreign Language (grade 3) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. These courses may emphasize recognition of written words, vocabulary, speech patterns, and grammar so that students become more independent communicators. Cultural aspects (major events, foods, art, and so on) of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 3.
04	56034 **	Foreign Language (grade 4)	00E ELE, 06A ARA, 06A CHI, 06A FRE, 06A GER, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06A SPA, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 00E MS	Foreign Language (grade 4) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Cultural and/or historical aspects of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 4.
05	56035 **	Foreign Language (grade 5)	00E ELE, 06A FRE, 06A GER, 06A SPA, 06S FRE, 06S GER, 06S SPA, 06A ARA, 06A CHI, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 06S IRI, 06S ITA, 06S LAT, 06S RUS, 00E MS	Foreign Language (grade 5) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Cultural and/or historical aspects of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 5.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

#### 06 - Foreign Language and Literature

##### All Others

06	56036 **	Foreign Language (grade 6)	00E ELE, 06A FRE, 06A GER, 06A SPA, 06S FRE, 06S GER, 06S SPA, 06A ARA, 06A CHI, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 06S IRI, 06S ITA, 06S LAT, 06S RUS, 00E MS	Foreign Language (grade 6) courses engage students in language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Cultural and/or historical aspects of the people(s) speaking the language(s) being studied are typically included as topics of study. Specific content depends upon state standards for grade 6.
07	56037 **	Foreign Language (grade 7)	00E ELE, 06A FRE, 06A GER, 06A SPA, 06S FRE, 06S GER, 06S SPA, 06A ARA, 06A CHI, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 06S IRI, 06S ITA, 06S LAT, 06S RUS, 00E MS	Foreign Language (grade 7) courses emphasize the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Grammar and syntax, vocabulary, and applicable accents typically are studied so that students have the knowledge and ability to express themselves and understand others. Students usually explore the customs, history, and art forms of the people(s) whose language is being studied. Specific content depends upon state standards for grade 7.
08	56038 **	Foreign Language (grade 8)	00E ELE, 06A FRE, 06A GER, 06A SPA, 06S FRE, 06S GER, 06S SPA, 06A ARA, 06A CHI, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 06S IRI, 06S ITA, 06S LAT, 06S RUS, 00E MS	Foreign Language (grade 8) courses emphasize the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Grammar and syntax, vocabulary, and applicable accents typically are studied so that students have the knowledge and ability to express themselves and understand others. Students usually explore the customs, history, and art forms of the people(s) whose language is being studied. Specific content depends upon state standards for grade 8.
	56039 **	Foreign Language	00E ELE, 06A FRE, 06A GER, 06A SPA, 06S FRE, 06S GER, 06S SPA, 06A ARA, 06A CHI, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06E FRE, 06E GER, 06E IRI, 06E ITA, 06E LAT, 06E RUS, 06E SPA, 06S IRI, 06S ITA, 06S LAT, 06S RUS, 00E MS, 00E EC	Code 56039, representing Foreign Language courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by 3rd grade, students should know and be able to do..."), or when the content descriptions above (Foreign Language, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

##### Romance Languages

	56100 **	Spanish	00E ELE, 06A SPA, 06E SPA, 06S SPA, 00E MS	Spanish courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Spanish language and students' knowledge of Spanish-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).
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\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

#### 06 - Foreign Language and Literature

##### Romance Languages

	56101 **	IB Language B (Spanish), Middle Years Program	00E ELE, 06A SPA, 06E SPA, 06S SPA, 00E MS	International Baccalaureate (IB) Language B (Spanish), Middle Years Program courses enable students to gain competence in modern Spanish; these courses also encourage respect for and understanding of other languages and cultures.
	56120 **	French	00E ELE, 06A FRE, 06E FRE, 06S FRE, 00E MS	French courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the French language and students' knowledge of French-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s).
	56121 **	IB Language B (French), Middle Years Program	00E ELE, 06A FRE, 06E FRE, 06S FRE, 00E MS	International Baccalaureate (IB) Language B (French), Middle Years Program courses enable students to gain competence in modern French and encourage respect for and understanding of other languages and cultures.

##### Germanic Languages

	56200 **	German	00E ELE, 06A GER, 06E GER, 06S GER, 00E MS	German courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the German language and students' knowledge of German-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of German-speaking people to deepen their understanding of the culture(s).
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##### Classical Languages

	56300 **	Latin	00E ELE, 06A LAT, 06E LAT, 06S LAT, 00E MS	Latin courses introduce and then extend students' skills in reading and writing Latin language and students' knowledge of Roman life and culture. Initial courses emphasize structures, forms, grammar and syntax, and vocabulary, so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand original Latin texts), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Rome to deepen their understanding of the culture(s).
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##### East Asian Languages

	56400 **	Chinese	00E ELE, 06A CHI, 06E CHI, 00E MS	Chinese courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Chinese language and students' knowledge of Chinese-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Chinese-speaking people to deepen their understanding of the culture(s).
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##### American Sign Language

	56800	American Sign Language		American Sign Language courses introduce and then extend students' ability to communicate with deaf persons through finger spelling, signed words, and gestures. Initial courses emphasize vocabulary and physical expression so that students have an understanding of the language and its rules and conventions. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others), seeking to enable students to express more complex concepts, and to do so more easily. Course topics may include the culture of and issues facing deaf people.
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\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

#### 06 - Foreign Language and Literature

##### American Indian Languages

	56820 **	American Indian Language	06Z ASB, 06Z BLA, 06Z CHE, 06Z CHI, 06Z CRE, 06Z CRO, 06Z DAK, 06Z GV, 06Z KOO, 06Z SAL	American Indian Language courses introduce and then extend students' skills in speaking, reading, writing, and comprehending an American Indian language (e.g., Navajo, Cherokee, and kree) and students' knowledge of Native American cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Native American people to deepen their understanding of the culture(s).
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Grade	Code	Course Name	Endorsements	Description
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#### 08 - Physical, Health, and Safety Education

##### Physical Education

	58001	Physical Education	00E ELE, 08A HE, 08E HE, 08S HE, 00E MS, 08A PEd, 00E EC, 08A HPE, 08E HPE, 08S HPE, 08E PEd, 08S PEd	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.
	58005	Fitness/Conditioning Activities	00E ELE, 08A HE, 08E HE, 08S HE, 00E MS, 08A HPE, 08E HPE, 08S HPE, 08A PEd, 08E PEd, 08S PEd	Fitness/Conditioning Activities courses emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness.
	58007	Adapted Physical Education	00E ELE, 08A HE, 08E HE, 08S HE, 00E MS, 32E SPE, 32S SPE, 08A HPE, 08E HPE, 08S HPE, 08A PEd, 08E PEd, 08S PEd, 32A SPE	These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.
	58018	Structured Recess		Structured recess is a planned and actively supervised break from regular instruction during the school day. All Students on the school grounds engage in organized "play" or games that emphasize turn taking, helpfulness, rule following, and emotional control. Structured recess must be supervised either by a licensed teacher who is the teacher of record, or an instructional paraprofessional who is a co-teacher under the direction of a licensed teacher.
K	58030	Physical Education (kindergarten)	00E ELE, 08A HE, 08E HE, 00E EC, 08A PEd, 08A HPE, 08E HPE, 08E PEd	Physical Education (kindergarten) courses emphasize fundamental movement skills, body awareness and control, safety, and the enjoyment of physical activity. Specific content depends upon state standards for kindergarten.
01	58031	Physical Education (grade 1)	00E ELE, 08A HE, 08E HE, 08A PEd, 00E EC, 08E PEd, 08A HPE, 08E HPE	Physical Education (grade 1) courses typically emphasize knowledge and skills that lead to health, enjoyment, and social development through physical activity. Course content may include activities that strengthen gross and fine motor skills, body awareness, safety, and the relationship between physical activity and health. Specific content depends upon state standards for grade 1.
02	58032	Physical Education (grade 2)	00E ELE, 08A HE, 08E HE, 00E EC, 08A PEd, 08E PEd, 08A HPE, 08E HPE	Physical Education (grade 2) courses typically emphasize knowledge and skills that lead to health, enjoyment, and social development through physical activity. Course content may include activities that strengthen gross and fine motor skills, body awareness, safety, and the relationship between physical activity and health. Specific content depends upon state standards for grade 2.
03	58033	Physical Education (grade 3)	00E ELE, 08A HE, 08E HE, 08A PEd, 00E EC, 08E PEd, 08A HPE, 08E HPE	Physical Education (grade 3) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Locomotor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 3.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>08 - Physical, Health, and Safety Education</b>				
<b>Physical Education</b>				
04	58034	Physical Education (grade 4)	00E ELE, 08A HE, 08E HE, 00E MS, 08A PEd, 08E PEd, 08E HPE, 08A HPE	Physical Education (grade 4) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Locomotor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 4.
05	58035	Physical Education (grade 5)	00E ELE, 08A HE, 08E HE, 08S HE, 00E MS, 08A PEd, 08E HPE, 08S HPE, 08S PEd, 08A HPE, 08E PEd	Physical Education (grade 5) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Locomotor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 5.
06	58036	Physical Education (grade 6)	00E ELE, 08A HE, 08E HE, 08S HE, 00E MS, 08A PEd, 08E PEd, 08S PEd, 08A HPE, 08E HPE, 08S HPE	Physical Education (grade 6) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 6.
07	58037	Physical Education (grade 7)	00E ELE, 08A HE, 08E HE, 08S HE, 00E MS, 08A PEd, 08A HPE, 08E HPE, 08E PEd, 08S HPE, 08S PEd	Physical Education (grade 7) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 7.
08	58038	Physical Education (grade 8)	00E ELE, 08A HE, 08E HE, 08S HE, 00E MS, 08A PEd, 08E PEd, 08A HPE, 08E HPE, 08S HPE	Physical Education (grade 8) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 8.
	58051	Health Education	00E ELE, 08A HE, 08A HEA, 08E HEA, 08S HE, 08S HEA, 08E HE, 00E MS, 08A HPE, 08E HPE, 08S HPE	Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.
	58052	Health and Fitness	00E ELE, 08A HE, 08A HEA, 08E HEA, 08S HEA, 00E MS, 08S HE, 08E HE, 08A HPE, 08E HPE, 08S HPE	Health and Fitness courses combine the topics of Health Education courses (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.
	58058	Substance Abuse Prevention	00E ELE, 08A HEA, 08E HEA, 08S HEA, 08A HE, 08E HE, 08S HE, 00E MS, 08A HPE, 08E HPE, 08S HPE	Substance Abuse Prevention courses focus specifically on the health risks of drugs, alcohol, and tobacco. These courses provide information on the negative consequences of these products and teach students coping strategies to resist the influences (such as peers and media images) that may entice them to use these substances. Students may also explore the community resources available to them.
Grade	Code	Course Name	Endorsements	Description
<b>010 - Computer and Information Sciences</b>				
<b>Computer Literacy</b>				
	60001	Introduction to Computers	00E ELE, 10S CIS, 12S BUS, 12S CIS, 12S CS, 00E MS	Introduction to Computer courses introduce students to computers and peripheral devices, the functions and uses of computers, the language used in the computer industry, possible applications of computers, and occupations related to computer hardware and software. These courses 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.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>010 - Computer and Information Sciences</b>				
<b>Computer Literacy</b>				
	60002	Computing Systems	00E ELE, 10S CIS, 12S BUS, 12S CIS, 12S CS, 00E MS	Computing Systems courses offer a broad exploration of the use of computers in a variety of fields. These courses have a considerable range of content, but typically include the introduction of robotics and control systems, computer-assisted design, computer-aided manufacturing systems, and other computer technologies as they relate to industry applications.
	60003	Computer and Information Technology	00E ELE, 10S CIS, 12S BUS, 12S CIS, 12S CS, 00E MS	Computer and Information Technology courses teach students to operate and use computer and information technology, emphasizing their role as tools to communicate more effectively, conduct research more efficiently, and increase productivity. Course content includes the legal and ethical issues involved with computer technology and use.
	60004	Computer Applications	00E ELE, 10S CIS, 12S BUS, 12S CIS, 12S CS, 00E MS	In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.
	60010	Computer Literacy		Computer Literacy courses provide to students the knowledge and ability to use computers and technology efficiently. Typically, course content includes exposure to word-processing, spreadsheet, and presentation applications, but also may include the various uses of computers in modern society. Specific course content aligns with state standards to promote students' technological literacy.
<b>Media Technology</b>				
	60201	Web Page Design	05A ART, 05S ART, 10S CIS, 12S BUS, 12S CIS, 12S CS, 00E ELE, 05E ART, 00E MS	Web Page Design courses teach students how to design web sites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages—such as Extensible Hypertext Markup, JavaScript, Dynamic HTML, and Document Object Model—to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.
	60202	Computer Graphics	05A ART, 05S ART, 10S CIS, 11S GRA, 12S CS, 00E ELE, 05E ART, 12S BUS, 12S CIS, 13S IA, 13S ITE, 00E MS	Computer Graphics courses provide students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.
Grade	Code	Course Name	Endorsements	Description
<b>011 - Communications and Audio/Visual Technology</b>				
<b>Communication</b>				
	61001	Introduction to Communication	12S CS, 12S BUS, 12S MAR, 00E ELE, 00E MS, 10S CIS, 12S CIS	Introduction to Communication courses enable students to understand and critically evaluate the role of media in society. Course content typically includes investigation of visual images, printed material, and audio segments as tools of information, entertainment, and propaganda; improvement of presentation and evaluative skills in relation to mass media; recognition of various techniques for delivery of a particular message; and, in some cases, creation of a media product. The course may concentrate on a particular medium.
	61002	Communication Technology	12S CS, 12S BUS, 12S MAR, 00E ELE, 00E MS, 12S CIS, 10S CIS	Communication Technology courses enable students to effectively communicate ideas and information through experiences dealing with drafting, design, electronic communication, graphic arts, printing process, photography, telecommunications, and computers. Additional topics covered in the course include information storage and retrieval. Drafting equipment may be used to make scale drawings, including multi-view drawing, photographs, and poster mock-ups.
<b>Audio and Video Technology and Film</b>				
	61051	Audio/Visual Production	01S ENG, 05A ART, 05E ART, 05S ART, 10S CIS, 11S VID, 11S VIS, 12S BUS, 12S CS, 00E ELE, 12S CIS, 13S IA, 13S ITE, 00E MS	Audio/Visual Production courses provide students with the knowledge and skills necessary for television, video, film, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within production courses. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be included.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>011 - Communications and Audio/Visual Technology</b>				
<b>Audio and Video Technology and Film</b>				
	61054	Photo Imaging	00E ELE, 05A ART, 05E ART, 05S ART, 11S PHO, 12S CS, 10S CIS, 12S BUS, 12S CIS, 13S IA, 13S ITE, 00E MS	Photo Imaging courses provide students with the opportunity to effectively communicate ideas and information via digital, film, still and video photography. Topics covered typically include composition, layout, lighting and supplies. More advanced courses may include instruction in specialized camera and equipment maintenance, application to commercial and industrial need and photography business operations.
	61055	Video	05A ART, 05E ART, 05S ART, 11S VID, 11S VIS, 12S CS, 00E ELE, 10S CIS, 12S BUS, 12S CIS, 13S IA, 13S ITE, 00E MS	Video courses enable students to explore video communications, incorporating both the technical and artistic aspects of video media. Topics covered in the course include the use of video equipment and techniques, and students typically create a video presentation. Advanced course topics may include creating various forms of film media including silent film; sport and music video; and self portrait video.

### Journalism and Broadcasting

	61101	Journalism	00E ELE, 01S ENG, 01S JOU, 05A ART, 05E ART, 05S ART, 12S BUS, 00E MS	Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography and photojournalism skills may be included.
	61102	Photojournalism	01S JOU, 05A ART, 05E ART, 05S ART, 11S PHO, 12S BUS, 00E ELE, 01S ENG, 00E MS	Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to improve their photo composition and film development skills, and to apply their art to journalistic endeavors.
	61104	Publication Production	00E ELE, 01S ENG, 01S JOU, 05A ART, 05E ART, 05S ART, 12S BUS, 12S CS, 01S ENG, 10S CIS, 12S CIS, 00E MS	Publication Production courses provide students with the knowledge and skills necessary to produce the school newspaper, yearbook, literary magazine, or other printed publication. Students may gain experience in several components (writing, editing, layout, production, and so on) or may focus on a single aspect while producing the publication.

### Printing Technology and Production

	61151	Digital Media Technology	00E ELE, 01S JOU, 05A ART, 05E ART, 05S ART, 12S BUS, 12S CS, 10S CIS, 12S CIS, 00E MS	These courses are designed to give students the skills necessary to support and enhance their learning about digital medial technology. Topics covered in the course may include internet research, copyright laws, web-publishing, use of digital imagery, electronic forums, newsgroups, mailing lists, presentation tools, and project planning.
	61152	Desktop Publishing	01S JOU, 05A ART, 05E ART, 05S ART, 11S GRA, 12S BUS, 12S CS, 00E ELE, 10S CIS, 12S CIS, 00E MS	Desktop Publishing courses integrate the knowledge and skills learning in word processing with the concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.

Grade	Code	Course Name	Endorsements	Description
<b>012 - Business and marketing</b>				
<b>Administration</b>				
	62001	Business/Office Career Exploration	00E ELE, 12S BUS, 12S OFF, 01S ENG	Business/Office Career Exploration courses expose students to the occupational opportunities available in the accounting, administration, data processing, management, and secretarial fields. Emphasis is placed on responsibilities, qualifications, work environment, and career paths. These courses may also include consumer education topics, keyboard exposure, and/or hands-on experience within the various occupational areas.
	62005	Keyboarding		Keyboarding courses provide students with an introduction to the keyboard (letters, numbers, and symbols), basic machine operation, and proper keystroke technique. As students progress, they improve their speed and accuracy and produce increasingly complex documents. Such courses help students develop keyboard proficiency, document production skills, and problem-solving skills.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>012 - Business and marketing</b>				
<b>Administration</b>				
	62006	Word Processing		Word Processing courses introduce students to automated document production using one or more software packages. These courses may introduce keyboarding techniques or may require prior experience; in either case, speed and accuracy are emphasized. A parallel focus is placed on the use of software commands and functions to create, edit, format, and manipulate documents, capitalizing on the power offered by word processing software programs. These courses may also cover file and disk management and other computer-related skills.

### Finance

	62101	Banking and Finance	12S BUS, 00E MS, 00E ELE	Banking and Finance courses provide students with an overview of the American monetary and banking system as well as types of financial institutions and the services and products that they offer. Course content may include government regulations; checking, savings, and money market accounts; loans; investments; and negotiable instruments.
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### Marketing

	62151	Marketing Career Exploration	12S BUS, 12S MAR, 00E MS, 00E ELE	Geared for students with an interest in marketing, sales, or small business operation, Marketing Career Exploration courses expose students to the opportunities available in retail, wholesale, advertising, and other occupational fields using marketing principles.
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Grade	Code	Course Name	Endorsements	Description
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### 013 - Manufacturing

<b>Manufacturing Technology</b>				
	63003	Industrial Arts	13S IA, 13S ITE, 00E ELE, 00E MS	Industrial Arts courses expose students to the tools and machines that they may encounter in manufacturing-related occupations and enable them to develop the skills they need to use these tools in various applications. Course topics typically include (but are not limited to) drawing and planning, electricity, graphic arts, woodwork, leatherwork, metalwork, plastics, and power technology. These courses typically cover general safety and career exploration as well.

Grade	Code	Course Name	Endorsements	Description
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### 014 - Health Care Sciences

<b>Comprehensive</b>				
	64001	Exploration of Health Care Occupations	00E ELE, 03S BF, 03S BIO, 08A HE, 08S HE, 08S HEA, 14S HPT, 08A HEA, 08E HE, 14S HPB, 14S HPT, 00E MS	Exploration of Health Care Occupations courses expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, dental care, administrative services, and lab technology). These courses provide experiences in several of these occupational clusters, along with information and knowledge related to the health care industry as a whole.
	64002	Health Care Occupations—Comprehensive	00E ELE, 08A HE, 14S HPT, 08A HEA, 08E HE, 08S HE, 08S HEA, 14S HPB, 14S HPT, 00E MS	Health Care Occupations—Comprehensive courses provide students with an orientation to the health care industry and help refine their health care-related knowledge and skills. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.

<b>All Others</b>				
	67001	Construction Careers Exploration	00E ELE, 13S ITE, 17S BT, 13S IA, 00E MS, 17S CAR, 17S WOO	Construction Career Exploration courses expose students to the opportunities available in construction-related trades, such as carpentry, masonry, air conditioning/refrigeration, plumbing, and so on. Students learn about the processes involved in construction projects and may engage in a variety of small projects. These courses emphasize responsibilities, qualifications, work environment, rewards, and career paths within construction-related fields.
	67002	Construction—Comprehensive	00E ELE, 13S IA, 13S ITE, 17S BT, 00E MS, 17S CAR, 17S WOO	Construction—Comprehensive courses provide the basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>014 - Health Care Sciences</b>				
<b>All Others</b>				
	68001	Introduction to Agriculture and Natural Resources	18S AG, 00E ELE, 00E MS, 18S AB, 18S AM, 18S FO, 18S LP, 18S NR, 18S PS, 18S AH	Introduction to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing an opportunity for student to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.
	68002	Agriculture—Comprehensive	18S AG, 00E ELE, 00E MS, 18S FO, 18S LP, 18S NR, 18S PS, 18S AB, 18S AH, 18S AM	Agriculture—Comprehensive courses cover a wide range of agricultural topics, including plant and animal science, production, and processing; agricultural mechanics, including tool and machine operation and repair; construction and repair of farm structures; business operations and management; and the careers available in the agricultural industry. Courses may also include topics such as chemical and soil science, ecology, agricultural marketing, and veterinary science.
	68003	Agriculture and Natural Resources—Comprehensive	18S AB, 18S AG, 00E ELE, 00E MS, 18S FO, 18S AH, 18S LP, 18S NR, 18S PS, 18S AM	Agriculture and Natural Resources—Comprehensive courses cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; agricultural construction; business operations and management; and the careers available in the agricultural/natural resources industry. Courses may also include topics such as chemical and soil science, forestry, agricultural marketing, and veterinary science.
Grade	Code	Course Name	Endorsements	Description
<b>021 - Engineering and Technology</b>				
<b>Engineering</b>				
	71009	Robotics		Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.
<b>Technology</b>				
	71051	Technological Literacy	12S BUS, 12S CIS, 12S CS, 13S IA, 13S ITE, 00E ELE, 10S CIS, 00E MS	Technological Literacy courses expose students to the communication, transportation, energy, production, biotechnology, and integrated technology systems and processes that affect their lives. The study of these processes enables students to better understand technological systems and their applications and uses.
<b>Drafting</b>				
	71102	Drafting—General	00E ELE, 13S IA, 13S ITE, 17S BT, 17S DRF, 00E MS	Drafting—General courses, usually offered as a sequence of courses, introduce students to the technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting—General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.
<b>All Others</b>				
	72004	Dropout Prevention Program		Dropout Prevention Program courses vary widely, but typically are targeted at students who have been identified as being at risk of dropping out of or failing in school. Course content may include study skills and individual tutorials; career exploration or job readiness skills; communication skills; personal assessment and awareness activities; speaker presentations; and small-group seminars.
	72005	Tutorial		Tutorial courses provide the assistance students need to successfully complete their coursework. Students may receive help in one or several subjects.
	72006	Study Hall		Study Hall courses provide the opportunity and time for students to complete classroom assignments or school projects. Students typically work on their own, without the help of a tutor; however, they are supervised and usually remain in the classroom.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>022 - Miscellaneous</b>				
<b>Academic Enrichment</b>				
	72003	Study Skills		Study Skills courses prepare students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note-taking; vocabulary skills; and test-taking skills. The courses may also include exercises designed to generate organized, logical thinking and writing.
<b>School Organization/Leadership</b>				
	72104	Community Service		Community Service courses provide students with the opportunity to volunteer their time, energy, and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.
<b>Career Exploration/Development</b>				
	72151	Career Exploration		Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.
<b>Family and Consumer Sciences</b>				
	72201	Family and Consumer Science—Comprehensive	23S FCS, 00E ELE	Family and Consumer Science—Comprehensive courses are inclusive studies of knowledge and skills that are useful for the efficient and productive management of the home. Course topics typically include foods and nutrition; clothing; child development and care; housing design, decoration, and maintenance; consumer decisions and personal financial management; and interpersonal relationships.
	72202	Food and Nutrition	23S FCS, 00E ELE, 00E MS	Food and Nutrition courses provide an understanding of food's role in society, instruction in how to plan and prepare meals, experience in the proper use of equipment and utensils, and background on the nutritional needs and requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on specific types of food preparation. Although these courses may present career opportunities in the food service industry, their emphasis is not career related.
	72205	Clothing/Sewing	23S FCS, 00E ELE, 00E MS	Clothing/Sewing courses introduce students to and expand their knowledge of various aspects of wearing apparel, sewing, and fashion. These courses typically include wardrobe planning; selection, care, and repair of various materials; and construction of one or more garments. They may also include related topics, such as fashion design, fashion history, the social and psychological aspects of clothing, careers in the clothing industry, and craft sewing.
	72206	Life Skills	00E ELE, 23S FCS, 00E MS	Life Skills courses provide information about a wide range of subjects to assist students in becoming wise consumers and productive adults. These courses often emphasize such topics as goal setting, decisionmaking, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.
	72210	Consumer Economics/Personal Finance	23S FCS, 00E ELE, 12S BUS, 00E MS	Consumer Economics/Personal Finance courses provide an understanding of the concepts and principles involved in managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also provide an overview of the American economy.
<b>All Others</b>				
	72995	Miscellaneous—Aide		Miscellaneous—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula or to assist other staff members in fulfilling their duties. Students may provide tutorial or instructional assistance to other students. Note: if the particular subject area is known, use the code associated with the Aide course within that subject area.
	73001	Technology for Classroom and Personal Use		In Technology for Classroom and Personal Use courses students acquire knowledge of and experience in the proper, efficient and safe use of a variety of digital tools, i.e., computer, iPad, Smart Board and other emerging technologies to gather, organize and present data. Students learn the basic use of word processing, spreadsheet and digital presentation tools for classroom and personal use. Technology for Classroom and Personal Use courses address the K-12 Content Standards for Technology. Such courses may be taught by teachers with any endorsement at the proper level. Technology for Classroom and Personal Use are NOT approved Career and Technical Education (CTE) courses.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Prior to Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>022 - Miscellaneous</b>				
<b>All Others</b>				
PK	73028	Early Childhood Education	00E EC	Code 73028 represents Early Childhood Education courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for early childhood education.
PK	73029	Pre-kindergarten	00E EC, 32A SPE, 32E SPE	Code 73029 represents Pre-kindergarten courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for pre-kindergarten.
K	73030 **	Kindergarten	00E ELE, 00E EC	Code 73030 represents kindergarten courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for kindergarten.
01	73031 **	Grade 1	00E ELE, 00E EC	Code 73031 represents Grade 1 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 1.
02	73032 **	Grade 2	00E ELE, 00E EC	Code 73032 represents Grade 2 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 2.
03	73033 **	Grade 3	00E ELE, 00E EC	Code 73033 represents Grade 3 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 3.
04	73034 **	Grade 4	00E ELE, 00E MS	Code 73034 represents Grade 4 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 4.
05	73035 **	Grade 5	00E ELE, 00E MS	Code 73035 represents Grade 5 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 5.
06	73036 **	Grade 6	00E ELE, 00E MS	Code 73036 represents Grade 6 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 6.
07	73037 **	Grade 7	00E ELE, 00E MS	Code 73037 represents Grade 7 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 7.
08	73038 **	Grade 8	00E ELE, 00E MS	Code 73038 represents Grade 8 courses that are not differentiated by subject area—that is, instances in which students are enrolled in a grade-specified course and are taught various subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course content depends upon state standards for grade 8.
	73039 **	Prior-to-Secondary Education	00E ELE, 00E EC, 00E MS	Code 73039, representing prior-to-secondary education courses that are not grade-differentiated, should be used when a state or locality does not differentiate courses by either grade level or subject area or when standards apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do...") and a multiplicity of subject-area content.
<b>Support Services</b>				
	73040	Self-Contained Classroom (special education)	32A SPE, 32E SPE, 32S SPE	Self-Contained Classroom (special education)

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>01 - English Language and Literature</b>				
<b>Comprehensive Language Arts</b>				
09	01001 **	English/Language Arts I (9th grade)	01S ENG	English/Language Arts I (9th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.
10	01002 **	English/Language Arts II (10th grade)	01S ENG	English/Language Arts II (10th grade) courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.
11	01003 **	English/Language Arts III (11th grade)	01S ENG	English/Language Arts III (11th grade) courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.
12	01004 **	English/Language Arts IV (12th grade)	01S ENG	English/Language Arts IV (12th grade) courses blend composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or more major research papers.
	01005 **	AP English Language and Composition	01S ENG	Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Language and Composition courses expose students to prose written in a variety of periods, disciplines, and rhetorical contexts. These courses emphasize the interaction of authorial purpose, intended audience, and the subject at hand, and through them, students learn to develop stylistic flexibility as they write compositions covering a variety of subjects that are intended for various purposes.
	01006 **	AP English Literature and Composition	01S ENG	Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Literature and Composition courses enable students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing).
	01007 **	IB Language A (English)	01S ENG	IB Language A (English) courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors and written analyses of this literature in addition to other oral and written assignments. All course content is designed to improve students' accuracy and fluency in the English language.
	01008 **	English as a Second Language	01S ENG, 06A ESL, 06S ESL, 00E EC	English as a Second Language (ESL) courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to "regular" English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States.
<b>Literature/Reading</b>				
	01051 **	English/Literature (freshmen and sophomores)	01S ENG	English/Literature (freshmen and sophomores) courses are designed for freshmen and/or sophomores and typically introduce them to two or more genres of literature (novel, short story, poetry, and so on). Exploration of each genre's literary elements; determination of theme and intent; and examination of vocabulary and semantics are often included in the course content. Writing assignments are required as an additional method to improve understanding and comprehension.
	01052 **	English/Literature (juniors and seniors)	01S ENG	English/Literature (juniors and seniors) courses are designed for juniors and/or seniors and emphasize comprehension, discernment, and critical-thinking skills in the reading of texts and literature. These courses introduce and explore more advanced literary techniques (irony, satire, humor, connotation, tone, rhythm, symbolism, and so on) through two or more literary genres, with the aim of creating sophisticated readers. Writing assignments are required as an additional method to develop and improve critical-thinking and analytic skills.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>01 - English Language and Literature</b>				
<b>Literature/Reading</b>				
	01053 **	Literature	01S ENG	Literature courses offer the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are often required. Literature courses may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people.
	01055 **	American Literature/History	01S ENG	American Literature/History courses integrate the study of American literature with an overview of U.S. history. These courses may also include other aspects of American culture, such as art or music. A two-year sequence or two-period per day class may be required to cover the same objectives as would be covered separately in U.S. History Overview and American Literature.
	01058 **	World Literature	01S ENG	World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01060 **	Literature of an Author	01S ENG	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on a particular author and his or her work. Students determine the underlying assumptions and values within the selected works; compare techniques, styles, and themes of the author; and reflect upon the time period in which the author lived. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01061 **	Literature of a Genre	01S ENG	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on one or several genres, such as poetry, essay, biography, short story, drama, and so on. Students determine the underlying assumptions and values within the selected works and also examine the structure, techniques, and intentions of the genre being studied. Oral discussion is an integral part of these genre-oriented courses, and written compositions are often required.
	01062 **	Literature of a Period	01S ENG	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on the literature written during or reflecting a particular time period (such as the French Revolution, the 1960s, or the 20th century). Students determine the underlying assumptions and values within the selected works, reflect upon the influence of societal events and social attitudes, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01063 **	Literature of a Place	01S ENG	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on a particular geographic region. Students determine the underlying assumptions and values within the selected works; study how the literature reflects the land, society, and history of the region; and may study the influence of this literature on others. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01064 **	Literature of a People	01S ENG	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), but use literature written by authors who share a particular characteristic such as religion, culture, or gender. Students determine the underlying assumptions and values within the selected works, reflect upon the influence of a common characteristic, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01065 **	Literature of a Theme	01S ENG	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), but use selected literature to explore a particular theme as expressed from several points of view. Such themes might include The American Dream, Society and Self, Exploration, War and Peace, and the like.
	01066	Strategic Reading	01S ENG, 31A REA, 32A SPE, 31S REA, 32E SPE, 32S SPE, 00E EC	Strategic Reading courses are intended to improve a student's vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note-taking or for understanding and evaluating the important points of a text.
	01067	Assisted Reading	01S ENG, 31A REA, 32A SPE, 31S REA, 32E SPE, 32S SPE	Assisted Reading courses offer students the opportunity to focus on their reading skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension up to the desired level or to develop strategies to read more efficiently.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>01 - English Language and Literature</b>				
<b>Literature/Reading</b>				
	01068 **	Corrective Reading	01S ENG, 31A REA, 32A SPE, 31S REA, 32E SPE, 32S SPE	Corrective Reading courses offer diagnostic and remedial activities designed to correct reading difficulties and habits that interfere with students' progress in developing reading skills and understandings. Activities are chosen to increase or improve students' reading comprehension, reading technique, and general literacy skills.
<b>Composition/Writing</b>				
	01101 **	English/Composition (freshmen and sophomores)	01S ENG	English/Composition (freshmen and sophomores) courses are designed for freshmen and/or sophomores and build upon previous writing skills. These courses seek to develop the writing processes and practices necessary for producing successful high school compositions. Students typically learn to write persuasive, critical, and creative multi-paragraph essays and compositions. While emphasizing composition, these courses may also incorporate some literature study to expose students to exemplary illustrations of various forms of writing.
	01102 **	English/Composition (juniors and seniors)	01S ENG	English/Composition (juniors and seniors) courses are designed for juniors and/or seniors and build upon previous writing skills. Reinforcing the logic and critical-thinking skills that accompany good writing, these courses—which emphasize word choice, usage, and writing mechanics—provide continued and advanced instruction in writing for a variety of purposes and audiences. English/Composition (juniors and seniors) courses may emphasize college or business preparation; literature study may be offered as an additional component in which students analyze examples of several genres.
	01104 **	Creative Writing	01S ENG	Creative Writing courses offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft. Although most creative writing classes cover several expressive forms, others concentrate exclusively on one particular form (such as poetry or playwriting).
	01105 **	Research/Technical Writing	01S ENG	Research/Technical Writing classes prepare students to write research papers and/or technical reports. These classes emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style.
<b>Speech and Communication</b>				
	01151	Public Speaking	01S SPE, 01S ENG	Public Speaking courses enable students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.
	01152	Forensic Speech—Inclusive	01S ENG, 01S SPE	Forensic Speech—Inclusive courses offer students the opportunity to learn how to use oral skills effectively in formal and informal situations. Students learn such skills as logic and reasoning, the organization of thought and supporting materials, and effective presentation of one's voice and body. Often linked to an extracurricular program, these courses introduce students to numerous public speaking situations, and they learn the methods, aims, and styles of a variety of events (e.g., formal debate, Lincoln-Douglas debate, expository speaking, radio broadcast, oral interpretation, and dramatic interpretation). Participation in competition is encouraged, but not always required.
	01153	Forensic Speech—Debate	01S ENG, 01S SPE	Forensic Speech—Debate courses offer students the opportunity to learn how to use oral skills in formal and informal situations. In these courses, students are able to develop such skills as logic and reasoning, research and analysis, organization of thought and supporting materials, argumentative style and skill, and effective presentation of one's voice and body. Often linked to an extracurricular program, these courses introduce students to the methods, aims, and styles used in various kinds of debates (formal debate or Lincoln-Douglas). Participation in competition is encouraged, but not always required.
	01156	Applied English and Communications	01S ENG, 32A SPE	Applied English and Communications courses teach students communication skills—reading, writing, listening, speaking—concentrating on “real-world” applications. These courses usually emphasize the practical application of communication as a business tool—using technical reports and manuals, business letters, resumes, and applications as examples—rather than emphasize language arts skills as applied to scholarly and literary materials.
<b>Linguistics</b>				
	01201	English Morphology and Grammar	01S ENG	English Morphology and Grammar courses involve the study of the English language—its roots and derivations, structure and sentence patterns, dialects, writing and spelling systems, and uses as a communication tool.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>01 - English Language and Literature</b>				
<b>All Others</b>				
	01995	English Language and Literature—Aide	01S ENG	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.
<b>02 - Mathematics</b>				
<b>Foundation Mathematics</b>				
	02002 **	General Math	02S MAT	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, solving and graphing simple equations and inequalities.
<b>Pure Mathematics</b>				
	02051 **	Pre-Algebra	02S MAT	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	02S MAT	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	02S MAT	The first part in a multi-part sequence of Algebra I. This course generally covers the same topics as the first semester of Algebra I, including the study of properties of rational numbers (i.e., number theory), ratio, proportion, and estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first degree equations and inequalities.
	02054 **	Algebra I—Part 2	02S MAT	The second part in a multi-part sequence of Algebra I. This course generally covers the same topics as the second semester of Algebra I, including the study of properties of the real number system and operations, evaluating rational algebraic expressions, solving and graphing first degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratics.
	02055 **	Transition Algebra	02S MAT	Transition Algebra courses review and extend algebra and geometry concepts for students who have already taken Algebra I and Geometry. Transition Algebra courses include a review of such topics as properties and operations of real numbers; evaluation of rational algebraic expressions; solutions and graphs of first degree equations and inequalities; translation of word problems into equations; operations with and factoring of polynomials; simple quadratics; properties of plane and solid figures; rules of congruence and similarity; coordinate geometry including lines, segments, and circles in the coordinate plane; and angle measurement in triangles including trigonometric ratios.
	02056 **	Algebra II	02S MAT	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	02S MAT	Algebra III courses review and extend algebraic concepts for students who have already taken Algebra II. Course topics include (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. The courses may introduce topics in discrete math, elementary probability and statistics; matrices and determinants; and sequences and series.
	02061 **	Integrated Math—multi-year equivalent	02S MAT	Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. The multi-period sequence of Integrated Math replaces the traditional Algebra I, Geometry, Algebra II sequence of courses, and usually covers the following topics during a three- or four-year sequence: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>02 - Mathematics</b>				
<b>Pure Mathematics</b>				
	02072 **	Geometry	02S MAT	Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.
	02102 **	Discrete Mathematics	02S MAT	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	02S MAT	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	02S MAT	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.
	02106 **	Trigonometry/Algebra	02S MAT	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.
	02110 **	Pre-Calculus	02S MAT	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.
	02112 **	Linear Programming	02S MAT	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.
	02121 **	Calculus	02S MAT	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).
	02124 **	AP Calculus AB	02S MAT	Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. These courses 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 antiderivatives and the definite integral).
	02125 **	AP Calculus BC	02S MAT	Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus BC courses provide students with an intuitive understanding of the concepts of calculus and experience with its methods and applications, and also require additional knowledge of the theoretical tools of calculus. These courses assume a thorough knowledge of elementary functions, and cover all of the calculus topics in AP Calculus AB as well as 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.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>02 - Mathematics</b>				
<b>Pure Mathematics</b>				
	02131 **	IB Mathematical Studies	02S MAT	IB Mathematical Studies courses prepare students to take the International Baccalaureate Mathematical Studies exam at the Subsidiary or Higher level. Intended to provide students with the skills to cope with the mathematical demands of a technological society, course topics include linear, quadratic, and exponential functions, solutions, and graphs; skills in computation, estimation, and development of algorithms; data analysis, including collection, calculation, and presentation of statistics; set operations and logic; business techniques, including progressions and linear programming; and geometry and trigonometry.
	02132 **	IB Mathematics	02S MAT	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	02S MAT	IB Mathematics and Computing—SL courses prepare students to take the International Baccalaureate Mathematics and Computing exam at the Subsidiary level. Designed to give students a working knowledge of a high level programming language and sound mathematical training, course topics include operations and properties of number sets; trigonometric functions, equations, and graphs; algebra and coordinate geometry, including simultaneous linear equations, binomial theorem, and polynomial and quadratic functions and equations; calculus; vectors and matrices; and numerical analysis. The courses also contain components on computer problem solving and programming; topics regarding computer hardware, software, modes of operation, and data types and structures.
	02134 **	IB Further Mathematics—SL	02S MAT	IB Further Mathematics—SL courses prepare students to take the International Baccalaureate Further Mathematics at the Subsidiary level. Designed to advance students knowledge of IB mathematics—HL, course topics include geometry; statistics and probability; sets, relations and groups; series and differential equations; and discrete mathematics.
<b>Applied Mathematics</b>				
	02151 **	General Applied Math	02S MAT	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.
	02153	Technical Math	02S MAT, 12S BUS	Technical Math courses extend students' proficiency in mathematics, and often apply these skills to technical and/or industrial situations and problems. Technical Math topics may include but are not limited to rational numbers, systems of measurements, tolerances, numerical languages, geometry, algebra, statistics, and using tables, graphs, charts, and other data displays. Technology is integrated as appropriate.
	02154	Business Math	02S MAT, 12S BUS	Business Math courses reinforce general math skills, emphasize speed and accuracy in computations, and use these skills in a variety of business applications. Business Math courses reinforce general math topics (e.g., arithmetic, measurement, statistics, ratio and proportion, exponents, formulas, and simple equations) by applying these skills to business problems and situations; applications might include wages, hourly rates, payroll deductions, sales, receipts, accounts payable and receivable, financial reports, discounts, and interest.
	02156	Computer Math with Algebra	02S MAT, 12S BUS	Intended for students who have attained the objectives of Algebra I, Computer Math—Algebra I level courses include a study of computer systems and programming, and use the computer to solve math problems.
	02157	Consumer Math	02S MAT, 12S BUS	Consumer Math courses reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.
<b>Probability and Statistics</b>				
	02201 **	Probability and Statistics	02S MAT	Probability and Statistics courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>02 - Mathematics</b>				
<b>Probability and Statistics</b>				
	02203 **	AP Statistics	02S MAT	Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.
<b>Other Mathematics</b>				
	02995	Mathematics—Aide	02S MAT	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.
Grade	Code	Course Name	Endorsements	Description
<b>03 - Life and Physical Sciences</b>				
<b>Earth Science</b>				
	03001 **	Earth Science	03S BF, 03S BIO, 03S EAR, 03S PHY	Earth Science courses offer insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography.
	03002 **	Geology	03S BF, 03S BIO, 03S EAR, 03S PHY	Geology courses provide an in-depth study of the forces that formed and continue to affect the earth's surface. Earthquakes, volcanoes, and erosion are examples of topics that are presented.
	03003 **	Environmental Science	03S BF, 03S BIO, 03S CHE, 03S PHY, 03S PSC	Environmental Science courses examine the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources.
	03004 **	Astronomy	03S BF, 03S BIO, 03S EAR, 03S PHY	Astronomy courses offer students the opportunity to study the solar system, stars, galaxies, and interstellar bodies. These courses usually introduce and use astronomic instruments and typically explore theories regarding the origin and evolution of the universe, space, and time.
	03005 **	Marine Science	03S BF, 03S BIO, 03S EAR, 03S PHY	Courses in Marine Science focus on the content, features, and possibilities of the earth's oceans. They explore marine organisms, conditions, and ecology and sometimes cover marine mining, farming, and exploration.
	03006 **	Meteorology	03S BF, 03S BIO, 03S EAR, 03S PHY	Meteorology courses examine the properties of the earth's atmosphere. Topics usually include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes and weather forecasting.
	03008 **	Earth and Space Science	03S BF, 03S BIO, 03S EAR, 03S PHY	Earth and Space Science courses introduce students to the study of the earth from a local and global perspective. In these courses, students typically learn about time zones, latitude and longitude, atmosphere, weather, climate, matter, and energy transfer. Advanced topics often include the study of the use of remote sensing, computer visualization, and computer modeling to enable earth scientists to understand earth as a complex and changing planet.
<b>Biology</b>				
	03051 **	Biology	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC	Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.
	03052 **	Biology—Advanced Studies	03S BF, 03S BIO, 03S EAR, 03S PHY	Usually taken after a comprehensive initial study of biology, Biology—Advanced Studies courses cover biological systems in more detail. Topics that may be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms.
	03053 **	Anatomy and Physiology	03S BF, 03S BIO, 03S EAR, 03S PHY, 14S HPB, 14S HPT	Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.
	03054 **	Anatomy	03S BF, 03S BIO, 03S EAR, 03S PHY, 14S HPB, 14S HPT	Anatomy courses present an in-depth study of the human body and biological system. Students study such topics as anatomical terminology, cells, and tissues and typically explore functional systems such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>03 - Life and Physical Sciences</b>				
<b>Biology</b>				
	03055 **	Physiology	03S BF, 03S BIO, 03S EAR, 03S PHY, 14S HPB, 14S HPT	Physiology courses examine all major systems, tissues, and muscle groups in the human body to help students understand how these systems interact and their role in maintaining homeostasis. These courses may also cover such topics as cell structure and function, metabolism, and the human life cycle.
	03056 **	AP Biology	03S BF, 03S BIO, 03S EAR, 03S PHY	Adhering to the curricula recommended by the College Board and designed to parallel college-level introductory biology courses, AP Biology courses stress basic facts and their synthesis into major biological concepts and themes. These courses cover three general areas: molecules and cells (including biological chemistry and energy transformation); genetics and evolution; and organisms and populations (i.e., taxonomy, plants, animals, and ecology). AP Biology courses include college-level laboratory experiments.
	03057 **	IB Biology	03S BF, 03S BIO, 03S EAR, 03S PHY	IB Biology courses prepare students to take the International Baccalaureate Biology exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of living organisms from the cellular level through functioning entities within the biosphere. Laboratory experimentation is an essential component of these courses.
	03058 **	Botany	03S BF, 03S BIO, 03S EAR, 03S PHY	Botany courses provide students with an understanding of plants, their life cycles, and their evolutionary relationships.
	03060 **	Microbiology	03S BF, 03S BIO, 03S EAR, 03S PHY	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	03S BF, 03S BIO, 03S EAR, 03S PHY	Zoology courses provide students with an understanding of animals, the niche they occupy in their environment or habitat, their life cycles, and their evolutionary relationships to other organisms. These courses should also help students develop an awareness and understanding of biotic communities.
	03062 **	Conceptual Biology	03S BF, 03S BIO, 03S EAR, 03S PHY	These courses provide students with a basic understanding of living things. Topics covered may include ecology and environmental problems such as overpopulation and pollution as well as cells, types of organisms, evolutionary behavior, and inheritance.
<b>Chemistry</b>				
	03101 **	Chemistry	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC	Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.
	03102 **	Chemistry—Advanced Studies	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	Usually taken after a comprehensive initial study of chemistry, Chemistry—Advanced Studies courses cover chemical properties and interactions in more detail. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry.
	03103 **	Organic Chemistry	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	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	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	Usually taken after completing a calculus course, Physical Chemistry courses cover chemical kinetics, quantum mechanics, molecular structure, molecular spectroscopy, and statistical mechanics.
	03105 **	Conceptual Chemistry	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	Conceptual Chemistry courses are practical, nonquantitative chemistry courses designed for students who desire an understanding of chemical concepts and applications.
	03106 **	AP Chemistry	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	Following the curricula recommended by the College Board, AP Chemistry courses usually follow high school chemistry and second-year algebra. Topics covered may include atomic theory and structure; chemical bonding; nuclear chemistry; states of matter; and reactions (stoichiometry, equilibrium, kinetics, and thermodynamics). AP Chemistry laboratories are equivalent to those of typical college courses.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>03 - Life and Physical Sciences</b>				
<b>Chemistry</b>				
	03107 **	IB Chemistry	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	IB Chemistry courses prepare students to take the International Baccalaureate Chemistry exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Chemistry promotes understanding of the facts, patterns, and principles underlying the field of chemistry; critical analysis, evaluation, prediction, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of chemistry and scientific advances in chemistry upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the materials of the environment, their properties, and their interaction. Laboratory experimentation is an essential part of these courses.
<b>Physics</b>				
	03151 **	Physics	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC	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	03S BF, 03S BIO, 03S EAR, 03S PHY, 03S PSC	Usually taken after a comprehensive initial study of physics, Physics—Advanced Studies courses provide instruction in laws of conservation, thermodynamics, and kinetics; wave and particle phenomena; electromagnetic fields; and fluid dynamics.
	03155 **	AP Physics B	03S BF, 03S BIO, 03S EAR, 03S PHY, 03S PSC	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	03S BF, 03S BIO, 03S EAR, 03S PHY, 03S PSC	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 1) mechanics and 2) electricity and 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	03S BF, 03S BIO, 03S EAR, 03S PHY, 03S PSC	IB Physics courses prepare students to take the International Baccalaureate Physics exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Physics promotes understanding of the facts, patterns, and principles underlying the field of physics; critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of scientific advances in physics upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the fundamental laws of nature and the interaction between concepts of matter, fields, waves, and energy. Laboratory experimentation is essential; calculus may be used in some courses.
	03159 **	Physical Science	03S BF, 03S BIO, 03S CHE, 03S PHY, 03S PSC	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	03S BF, 03S BIO, 03S CHE, 03S PHY, 03S PSC	IB Physical Science courses prepare students to take the International Baccalaureate Physical Science exams at either the Subsidiary or Higher level. These courses integrate the study of physics and chemistry, showing how the physical and chemical properties of materials can be explained and predicted in terms of atomic, molecular, and crystal structures and forces. In keeping with the general aim of IB Experimental Sciences courses, IB Physical Science courses promote critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of science and scientific advances upon both society and issues of ethical, philosophical, and political importance. Students are required to develop and pursue an individual, experimental project, which is evaluated as part of the IB exam.
	03161 **	Conceptual Physics	03S BF, 03S BIO, 03S EAR, 03S PHY, 03S PSC	Conceptual Physics courses introduce students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>03 - Life and Physical Sciences</b>				
<b>Integrated/Other</b>				
	03201 **	Integrated Science	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC	The specific content of Integrated Science courses varies, but they draw upon the principles of several scientific specialties—earth science, physical science, biology, chemistry, and physics—and organize the material around thematic units. Common themes covered include systems, models, energy, patterns, change, and constancy. These courses use appropriate aspects from each specialty to investigate applications of the theme.
	03202 **	Unified Science	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S ENV, 03S PHY, 03S PSC	Unified Science courses combine more than one branch of science into a cohesive study or may integrate science with another discipline. General scientific concepts are explored, as are the principles underlying the scientific method and experimentation techniques.
	03203 **	Applied Biology/Chemistry	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	Applied Biology/Chemistry courses integrate biology and chemistry into a unified domain of study and present the resulting body of knowledge in the context of work, home, society, and the environment, emphasizing field and laboratory activities. Topics include natural resources, water, air and other gases, nutrition, disease and wellness, plant growth and reproduction, life processes, microorganisms, synthetic materials, waste and waste management, and the community of life.
	03206 **	IB Design Technology	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PHY, 03S PSC	IB Design Technology courses prepare students to take the International Baccalaureate Design Technology exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Design Technology courses promote understanding and use of the scientific method to solve problems using scientific information and production techniques. Practical/investigative work centers on the properties of materials, mechanisms, control circuits, and production techniques as they apply to constructing an artifact or developing skills and ideas useful in carrying out such a project.
	03207 **	AP Environmental Science	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	AP Environmental Science courses are designed by the College Board to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems (both natural and human made), evaluate the relative risks associated with the problems, and examine alternative solutions for resolving and/or preventing them. Topics covered include science as a process, ecological processes and energy conversions, earth as an interconnected system, the impact of humans on natural systems, cultural and societal contexts of environmental problems, and the development of practices that will ensure sustainable systems.
	03208 **	IB Environmental Science	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PSC	IB Environmental Systems courses prepare students to take the International Baccalaureate Environmental Systems exam at the Standard level by providing them with the knowledge, methods, and techniques to understand the nature and functioning of natural systems, the relationships that affect environmental equilibrium, and human impact on the biosphere. Topics also include ecosystem integrity and sustainability, students' own relationships to the environment, and the nature of internationalism in resolving major environmental issues.
	03209 **	Aerospace	03S BF, 03S BIO, 03S CHE, 03S PHY, 03S PSC	Aerospace courses explore the connection between meteorology, astronomy, and flight across and around the earth as well as into outer space. In addition to principles of meteorology (e.g., atmosphere, pressures, winds and jet streams) and astronomical concepts (e.g., solar system, stars, and interplanetary bodies), course topics typically include the history of aviation, principles of aeronautical decision-making, airplane systems, aerodynamics, and flight theory.
	03210 **	Science, Technology and Society	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PHY, 03S PSC	Science, Technology, and Society courses encourage students to explore and understand the ways in which science and technology shape culture, values, and institutions and how such factors, in turn, shape science and technology. Topics covered may include how science and technology enter society and how they change as a result of social processes.
	03212 **	Scientific Research and Design	03S BF, 03S BIO, 03S CHE, 03S EAR, 03S PHY, 03S PSC	In Scientific Research and Design courses, students conceive of, design, and complete a project using scientific inquiry and experimentation methodologies. Emphasis is typically placed on safety issues, research protocols, controlling or manipulating variables, data analysis, and a coherent display of the project and its outcome(s).
	03995	Life and Physical Sciences—Aide	03S BF, 03S BIO, 03S PHY, 03S CHE, 03S EAR, 03S ENV, 03S PSC	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.
	03998 **	Life and Physical Sciences—Workplace Experience	03S BF, 03S BIO, 03S CHE, 03S PHY, 03S PSC	Life and Physical Sciences—Workplace Experience courses provide work experience in a field related to life and/or physical science. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>Geography</b>				
	04001 **	World Geography	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S POL, 04S PSY, 04S SOC, 04A NAS	World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.
	04003 **	IB Geography	04S BF, 04S GEO, 04S HIS, 04S POL	IB Geography courses prepare students to take the International Baccalaureate Geography exams at either the Subsidiary or Higher level, and individual courses vary to reflect the different emphases of the exams (either human or physical geography and case study or fieldwork instruction). In general, however, IB Geography courses aim to help students understand the relationships within society, the relationships between society and the natural environment, and how those relationships change over time.
12	04004 **	AP Human Geography	04S BF, 04S GEO, 04S HIS, 04S HUM, 04S POL	Following the College Board's suggested curriculum designed to parallel college-level Human Geography courses, AP Human Geography introduces students to the systematic study of patterns and processes that have shaped the ways in which humans understand, use, and alter the earth's surface. Students use spatial concepts and landscape analysis to examine human social organization and its environmental consequences and also learn about the methods and tools geographers use in their science and practice.
<b>World History</b>				
	04051 **	World History—Overview	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S POL, 04S PSY, 04S SOC, 04A NAS	World History—Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History—Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.
	04052 **	World History and Geography	04S BF, 04S GEO, 04S HIS	In addition to covering the objectives of World History—Overview courses, World History and Geography courses provide an overview of world geography. These courses are often developed in response to increased national concern regarding the importance of geography, and they explore geographical concepts.
	04053 **	Modern World History	04S BF, 04S ECO, 04S GEO, 04S HIS	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	04S BF, 04S ECO, 04S GEO, 04S HIS	IB History courses prepare students to take the International Baccalaureate History exams at either the Subsidiary or Higher level. In these courses, students study political, military, economic, social, and cultural trends and explore the nature of historical documentation and the methods used by historians. IB History courses survey 20th-century topics in an international context; provide a detailed regional study of a major area (Africa, Europe, the Americas, West and South Asia, East and Southeast Asia, or Australia); and enable students to undertake individual study on a subject of interest in greater detail and depth.
	04056 **	AP European History	04S BF, 04S ECO, 04S GEO, 04S HIS	Following the College Board's suggested curriculum designed to parallel college-level European History courses, AP European History courses examine European civilization from the High Renaissance period to the recent past and also expose students to the factual narrative. In addition, these courses help students develop an understanding of some of the principal themes in modern European history and the abilities to analyze historical evidence and to express that understanding and analysis in writing.
	04057 **	AP World History	04S BF, 04S ECO, 04S GEO, 04S HIS	Following the College Board's suggested curriculum designed to parallel college-level World History courses, AP World History courses examine world history from 8000 BCE to the present with the aim of helping students develop a greater understanding of the evolution of global processes and contracts and how different human societies have interacted. These courses highlight the nature of changes in an international context and explore their causes and continuity.
	04061 **	World Area Studies	04S BF, 04S HIS, 04S GEO	World Area Studies courses examine the history, politics, economics, society, and/or culture of one or more regions of the world, such as Africa, Latin America, the former Soviet Union, Far East Asia, and the Middle East. These courses may focus primarily on the history of a particular region or may take an interdisciplinary approach to the contemporary issues affecting the region. Furthermore, these courses may emphasize one particular country (other than the United States), rather than emphasizing a region or continent.
	04062 **	World People Studies	04S BF, 04S ECO, 04S GEO, 04S HIS	World People Studies courses allow students to study various types of subgroups that have something in common such as religion, gender, or culture. Similar in style to World Area Studies, but focusing on a group of people rather than on a specific region, these courses examine a subgroup's history, politics, economics, and/or culture.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>World History</b>				
	04063 **	Western Civilization	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S POL	Western Civilization courses apply an interdisciplinary approach to the study of western cultural traditions, frequently using a chronological framework. Course content typically includes a survey of the major developments in and contributors to art and architecture, literature, religion and philosophy, and culture. These courses may also cover intellectual and political movements.
	04064 **	Contemporary World Issues	04S BF, 04S HIS, 04S ECO, 04S POL	Contemporary World Issues courses enable students to study political, economic, and social issues facing the world. These courses may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.
	04066 **	IB Islamic History	04S BF, 04S ECO, 04S GEO, 04S HIS	IB Islamic History courses prepare students to take the International Baccalaureate History exams at either the Subsidiary or Higher level. These courses are designed to provide students with the means to acquire a deep and open understanding of Islamic history and to grasp its contribution to the history of the world. Possible topics covered include political, social, economic, and intellectual aspects of Islamic history.
<b>U.S. History</b>				
	04101 **	U.S. History—Comprehensive	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S POL	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. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.
	04102 **	Early U.S. History	04S BF, 04S ECO, 04S GEO, 04S HIS	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 may begin at the formation of the new nation. These courses typically include a historical overview of political, military, scientific, and social developments.
	04103 **	Modern U.S. History	04S BF, 04S ECO, 04S GEO, 04S HIS	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	04S BF, 04S ECO, 04S GEO, 04S HIS	Following the College Board's suggested curriculum designed to parallel college-level U.S. History courses, AP U.S. History courses provide students with the analytical skills and factual knowledge necessary to address critically problems and materials in U.S. history. Students learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The course examines the discovery and settlement of the New World through the recent past.
	04105 **	State-Specific Studies	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S POL	State-Specific Studies courses examine the history, politics, economics, society, and/or cultures of one state in the United States. This course may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.
	04106 **	Contemporary U.S. Issues	04S BF, 04S HIS, 04S ECO, 04S POL	Contemporary U.S. Issues courses study the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.
	04108 **	U.S. Gender Studies	04S BF, 04S ECO, 04S GEO, 04S HIS	U.S. Gender Studies courses examine the history, politics, economics, and/or culture of gender in U.S. society. These courses may focus primarily on gender relations or may take a more comprehensive approach to studying the contemporary issues related to gender.
<b>Government, Politics, and Law</b>				
	04151 **	U.S. Government—Comprehensive	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S POL	U.S. Government—Comprehensive courses provide an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. These courses may examine the structure and function of state and local governments and may cover certain economic and legal topics.
	04153 **	Political Science	04S BF, 04S POL	Political Science courses approach the study of politics from a theoretical perspective, including an examination of the role of government and the nature of political behavior, political power, and political action.
	04155 **	International Relations	04S BF, 04S ECO, 04S GEO, 04S HIS	International Relations courses provide students with an introduction to the relationships that exist among nations, including an examination of the modern state; the foreign policies of nations; the dynamics of nationalism, ideology, and culture; and the role of international organizations. The courses may also emphasize contemporary events.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>Government, Politics, and Law</b>				
	04156 **	United States and World Affairs	04S BF, 04S ECO, 04S GEO, 04S HIS	United States and World Affairs courses provide a study of global interrelationships. Topics covered may include geographic, political, economic, and social issues of a particular country or region, with an emphasis on how these issues influence (or are influenced by) the way in which the United States relates to other countries in an interdependent world context.
	04157 **	AP U.S. Government and Politics	04S BF, 04S POL	Following the College Board's suggested curriculum designed to parallel college-level U.S. Government and Politics courses, these courses provide students with an analytical perspective on government and politics in the United States, involving both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. The courses generally cover the constitutional underpinnings of the U.S. government, political beliefs and behaviors, political parties and interest groups, the institutions and policy process of national government, and civil rights and liberties.
	04158 **	AP Comparative Government and Politics	04S BF, 04S POL	Following the College Board's suggested curriculum designed to parallel college-level Comparative Government and Politics courses, these courses offer students an understanding of the world's diverse political structures and practices. The courses encompass the study of both specific countries and general concepts used to interpret the key political relationships found in virtually all national policies. Course content generally includes sources of public authority and political power, the relationship between states and society, the relationships between the political and institutional frameworks of citizens and states, political change, and comparative methods.
	04159 **	AP Government	04S BF, 04S HIS, 04S POL	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.
	04161 **	Civics	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S HUM, 04S POL	Civics courses examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.
	04162 **	Law Studies	04S BF, 04S POL, 12S BUS, 04S ECO	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	04S BF, 04S POL, 12S BUS, 04S ECO	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	12S BUS, 04S BF, 04S ECO	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.
<b>Economics</b>				
	04201 **	Economics	04S BF, 04S ECO, 12S BUS	Economics courses provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.
	04202 **	Comparative Economics	04S BF, 04S ECO, 12S BUS	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.
	04205 **	AP Economics	04S BF, 04S ECO, 12S BUS	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	04S BF, 04S ECO, 12S BUS	IB Economics courses prepare students to take the International Baccalaureate Economics exams at either the Subsidiary or Higher level. The courses provide students with the basic tools of economic reasoning and teach them to use those tools to explain or interpret economic problems. Course content includes resource allocation under various systems, national income analysis, international economics, and economic development and growth and may also cover income distribution.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>Social Sciences</b>				
	04251	Anthropology	04S BF	Anthropology courses introduce students to the study of human evolution with regard to the origin, distribution, physical attributes, environment, and culture of human beings. These courses provide an overview of anthropology, including but not limited to both physical and cultural anthropology.
	04253	IB Social Anthropology	04S BF, 04S BF	IB Social Anthropology courses prepare students to take the International Baccalaureate Social Anthropology exams at either the Subsidiary or Higher level. The courses aim to promote students' awareness of underlying patterns and causes of social relationships and systems, preconceptions and assumptions within the social environment, and the use of ethnographic data in creating models, drawing inferences, and making comparisons.
	04254	Psychology	04S BF, 04S PSY	Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.
	04256	AP Psychology	04S BF, 04S PSY	Following the College Board's suggested curriculum designed to parallel a college-level psychology course, AP Psychology courses introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals, expose students to each major subfield within psychology, and enable students to examine the methods that psychologists use in their science and practice.
	04257	IB Psychology	04S BF, 04S PSY	IB Psychology courses prepare students to take the International Baccalaureate Psychology exams at either the Subsidiary or Higher level. Course content includes developmental and social psychology, cognition and learning, and personality subject areas, which are approached from biological/physiological, behavioral, and humanistic points of view. These courses may include a study of research design and statistics and involve practical work in psychological research.
	04258	Sociology	04S BF, 04S SOC	Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.
	04260	Social Science	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S PSY, 04S SOC	Social Science courses provide students with an introduction to the various disciplines in the social sciences, including anthropology, economics, geography, history, political science, psychology, and sociology. Typically, these courses emphasize the methodologies of the social sciences and the differences among the various disciplines.
	04262	IB Organization Studies	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S PSY, 04S SOC	IB Organization Studies courses prepare students to take the International Baccalaureate Organization Studies exams at either the Subsidiary or Higher levels. These IB courses provide a broad introduction to the principles and practices of enterprises engaged in producing, distributing, and exchanging goods and services in a variety of economic frameworks. A sample of topics explored within these courses include management styles and structures; decision-making methods; and methods for accounting, planning, and communication.
<b>Humanities</b>				
	04301	Humanities Survey	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S PSY, 04S SOC, 04S HUM	Humanities Survey courses provide an overview of major expressions of the cultural heritage of selected western and eastern civilizations. Content typically includes (but is not limited to) the examination of selected examples of art, music, literature, architecture, technology, philosophy, and religion of the cultures studied. These courses may also cover the languages and political institutions of these cultures.
	04302	Humanities	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S PSY, 04S SOC, 04S HUM	Humanities courses examine and evoke student responses to human creative efforts and the world in particular historical periods and in particular cultures. Course content includes exploration, analysis, synthesis, and various responses to cultural traditions, including viewing, listening, speaking, reading, writing, performing, and creating. The courses may also examine relationships among painting, sculpture, architecture, and music.
	04304	IB Theory of knowledge	04S BF, 04S HUM, 01S ENG, 02S MAT, 03S BF, 03S BIO, 03S CHE, 03S ENV, 03S PHY, 03S PSC, 04S ECO, 04S GEO, 04S HIS, 04S PSY, 04S POL, 03S EAR, 04S SOC	Obligatory for every International Baccalaureate degree candidate, IB Theory of knowledge courses aim to stimulate critical self-reflection of students' knowledge and experiences. Course content generates questions regarding the bases of knowledge and their verification in the disciplines of mathematics, natural sciences, human sciences, and history, with an awareness of moral, political, and aesthetic judgments and biases. Students learn to appreciate the strengths and limitations of various kinds of knowledge; to relate studied subjects to one another, general knowledge, and living experiences; to formulate rational arguments; and to evaluate the role of language in knowledge and as a way to convey knowledge.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>04 - Social Sciences and History</b>				
<b>Humanities</b>				
	04305 **	Social Studies	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S PSY, 04S SOC	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	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S PSY, 04S SOC	Philosophy courses introduce students to the discipline of philosophy as a way to analyze the principles underlying conduct, thought, knowledge, and the nature of the universe. Course content typically includes examination of the major philosophers and their writings.
	04309	IB Philosophy	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S PSY, 04S SOC	IB Philosophy courses prepare students to take the International Baccalaureate Philosophy exams at either the Subsidiary or Higher levels. These courses challenge students to reflect upon and question the bases of knowledge and experience, to develop a personal mode of thought, to formulate rational arguments, and to use language to examine several conceptual themes in a thoughtful, philosophical manner.
<b>All Others</b>				
	04995	Social Sciences and History—Aide	04S BF, 04S ECO, 04S GEO, 04S HIS, 04S POL, 04S SOC, 04S HUM, 04S PHI, 04S PSY	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.
Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Drama</b>				
	05051	Introduction to the Theater	05S DRA, 11S THA	Introduction to the Theater courses provide an overview of the art, conventions, and history of the theater. Although the courses sometimes include experiential exercises, they emphasize learning about the theater rather than performance. Students learn about one or more of the following topics: basic techniques in acting, major developments in dramatic literature, major playwrights, the formation of theater as a cultural tradition, and critical appreciation of the art.
	05053	Drama—Comprehensive	01S ENG, 05S DRA, 11S THA, 01S SPE	Drama—Comprehensive courses are intended to help develop students' experience and skill in one or more aspects of theatrical production. Initial courses are usually introductory in nature, providing an overview of the features of drama such as acting, set design, stage management, and so on. The more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.
	05055	Drama—Acting/Performance	01S ENG, 01S SPE, 05S DRA, 11S THA	Drama—Acting/Performance courses are intended to promote students' experience and skill development in one or more aspects of theatrical production, but they concentrate on acting and performance skills. Initial courses are usually introductory in nature, while the more advanced courses focus on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions.
	05056	Drama—Stagecraft	01S ENG, 01S SPE, 05S DRA, 11S THA	Drama—Stagecraft courses are intended to help students develop experience and skill in one or more aspects of theatrical production, but concentrate on stagecraft (such as lighting, costuming, set construction, makeup, stage management, and so on). Initial courses are usually introductory in nature, while more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.
<b>Music</b>				
	05101	General Band	05A MUS, 05S MUS	General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of nonspecified band literature styles (concert, marching, orchestral, and modern styles).
	05102	Concert Band	05A MUS, 05S MUS	Courses in Concert Band are designed to promote students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances.
	05103	Marching Band	05A MUS, 05S MUS, 00E MS	Courses in Marching Band are intended to develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Music</b>				
	05104	Orchestra	05A MUS, 05S MUS	Orchestra courses are designed to develop students' abilities to play brass, woodwind, percussion, and string instruments, covering a variety of string and orchestral literature styles.
	05106	Instrumental Ensembles	05A MUS, 05S MUS	Instrumental Ensemble courses are intended to develop students' technique for playing brass, woodwind, percussion, and/or string instruments in small ensemble groups. Instrumental Ensemble courses cover one or more instrumental ensemble or band literature styles.
	05107	Piano	05A MUS, 05S MUS	Piano courses introduce students to the fundamentals of music and basic keyboard techniques such as scales, chords, and melodic lines. These courses may also include more advanced keyboard techniques.
	05108	Guitar	05A MUS, 05S MUS	Guitar courses introduce students to the fundamentals of music and guitar-playing techniques, such as strumming and chords. These courses may also include more advanced guitar-playing techniques.
	05109	Individual Technique—Instrumental Music	05A MUS, 05S MUS	Individual Technique—Instrumental Music courses provide individuals with instruction in instrumental techniques. These courses may be conducted on either an individual or small group basis.
	05110	Chorus	05A MUS, 05S MUS	Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts.
	05111	Vocal Ensembles	05A MUS, 05S MUS	Vocal Ensemble courses are intended to develop vocal techniques and the ability to sing parts in small ensemble or madrigal groups. Course goals may include the development of solo singing ability and may emphasize one or several ensemble literature styles.
	05112	Individual Technique—Vocal Music	05A MUS, 05S MUS	Individual Technique—Vocal Music courses provide instruction in and encourage the development of vocal techniques (including aural development) other than the ability to sing in groups. These courses may be conducted on either an individual or small group basis.
	05113	Music Theory	05A MUS, 05S MUS	Music Theory courses provide students with an understanding of the fundamentals of music and include one or more of the following topics: composition, arrangement, analysis, aural development, and sight reading.
	05114	AP Music Theory	05A MUS, 05S MUS	AP Music Theory courses are designed to be the equivalent of a first-year music theory college course as specified by the College Board. AP Music Theory develops students' understanding of musical structure and compositional procedures. Usually intended for students who already possess performance-level skills, AP Music Theory courses extend and build upon students' knowledge of intervals, scales, chords, metric/rhythmic patterns, and the ways they interact in a composition. Musical notation, analysis, composition, and aural skills are important components of the course.
	05115	IB Music	05A MUS, 05S MUS	IB Music courses prepare students to take the International Baccalaureate Music exam at either the Subsidiary or Higher level. IB Music courses develop students' knowledge and understanding of music through training in musical skills (listening, performing, and composing); exposure to music theory; and formulation of an historic and global awareness of musical forms and styles. Historical, theoretical, and practical studies are suggested by the IB Curriculum Board.
	05117	Music History	05A MUS, 05S MUS	Similar in nature to Music History/Appreciation courses, Music History courses focus specifically on the history of music.
	05118	Music Appreciation	05A MUS, 05S MUS	Similar in nature to Music History/Appreciation courses, Music Appreciation courses focus specifically on students' appreciation of music. They are designed to help students explore the world of music and to develop an understanding of the importance of music in their lives.
	05119	Composition/Songwriting	05A MUS, 05S MUS	Composition/Songwriting courses prepare students to express themselves through creating music. These courses may use conventional or nonconventional notation and may include harmonization in addition to melody writing. Along with musical instruments, students may also use computers for creating music.
	05148	Music—Workplace Experience	05A MUS, 05S MUS	Music—Workplace Experience courses provide students with work experience in a field related to music. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Visual Arts</b>				
	05151 **	Art Appreciation	05A ART, 05S ART	Art Appreciation courses introduce students to the many forms of art and help them form an aesthetic framework through which they can judge and critique art of various ages and cultures. These courses also explore the place and significance of art in our society.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Visual Arts</b>				
	05152 **	Art History	05A ART, 05S ART	Art History courses introduce students to significant works of art, artists, and artistic movements that have shaped the art world and have influenced or reflected periods of history. These courses often emphasize the evolution of art forms, techniques, symbols, and themes.
	05153 **	AP Art—History of Art	05A ART, 05S ART	Designed to parallel college-level Art History courses, AP Art—History of Art courses provide the opportunity for students to critically examine architecture, sculpture, painting, and other art forms within their historical and cultural contexts. In covering the art of several centuries (not necessarily in chronological order), students learn to identify different styles, techniques, and influences and to formulate and articulate their reactions to various kinds of artwork.
	05154 **	Creative Art—Comprehensive	05A ART, 05S ART	Creative Art—Comprehensive courses provide students with the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.
	05155 **	Creative Art—Drawing/Painting	05A ART, 05S ART	Creative Art—Drawing/Painting courses cover the same topics as Creative Art—Comprehensive courses, but focus on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.
	05156 **	Creative Art—Drawing	05A ART, 05S ART	Creative Art—Drawing courses cover the same topics as Creative Art—Drawing/Painting, but focus on drawing. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, and so on), but some courses may focus on only one medium.
	05157 **	Creative Art—Painting	05A ART, 05S ART	Creative Art—Painting courses cover the same topics as Creative Art—Drawing/Painting, but focus on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.
	05158 **	Creative Art—Sculpture	05A ART, 05S ART	Creative Art—Sculpture courses cover the same topics as Creative Art—Comprehensive courses, but focus on creating three-dimensional works. Students typically work with several media (such as clay, ceramics, wood, metals, textiles, and so on), but some courses may focus on only one medium.
	05159 **	Ceramics/Pottery	05A ART, 05S ART	Ceramics/Pottery courses cover the same topics as Creative Art—Comprehensive courses, but focus on creating three-dimensional works out of clay and ceramic material. Particular attention is paid to the characteristics of the raw materials, their transformation under heat, and the various methods used to create and finish objects.
	05160	Printmaking/Graphics	05A ART, 05S ART	Printmaking/Graphics courses cover the same topics as Creative Art—Comprehensive courses, but focus on design principles, printmaking, and graphic design.
	05161	Printmaking	05A ART, 05S ART	Printmaking courses introduce students to a variety of printmaking techniques using processes such as relief printing (monoprint, collagraph block); intaglio (etching and engraving); and perigraphy (silkscreen films, stencils, block-out). These courses emphasize design elements and principles and introduce art criticism as applied to fine art prints. Lessons may also include the historical development of printmaking in Western and non-Western cultures.
	05162	Graphic Design	05A ART, 05S ART, 11S GRA, 12S BUS, 12S MAR	Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.
	05163	Advertising Design	05A ART, 05S ART, 12S BUS, 11S GRA, 12S MAR	Advertising Design courses relate and apply creative expression and design principles to the field of advertising and commercial art. The courses offer practical experiences in generating original ideas, executing layouts, and preparing artwork for reproduction. Advertising Design courses may also provide a historical and contemporary view of art as students learn to critique work.
	05164	Fibers and Textile Design	05A ART, 05S ART, 23S FCS	Formerly known as Textiles, Fibers and Textile Design courses emphasize applying the elements of art and principles of design in creating textile and fiber works using fiber and fiber-related media, techniques, and processes. These courses may help students understand the suitability of design to materials and the artist's intent in creating textile works of art. They may also include the study of the history of fiber and textile art and provide instruction in the critique process.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>05 - Fine and Performing Arts</b>				
<b>Visual Arts</b>				
	05165	Crafts	05A ART, 05S ART	Crafts courses teach the same lessons as Creative Art—Comprehensive courses, but do so with a focus on crafts. These courses may survey a wide range of crafts, or they may focus on only one type of craft; possibilities include calligraphy, quilting, silk-screening, cake-decorating, tole-painting, maskmaking, knitting, crocheting, paper-making, and so on.
	05166	Jewelry	05A ART, 05S ART	Jewelry courses apply art and design principles to the creation of jewelry. Typically, students explore using various media, such as ceramic, papier-mache, glass, plastic, copper-enamelled, brass, and silver. Course topics include exposure to jewelry of diverse world cultures and the history of jewelry design. Some Jewelry courses may concentrate on metalwork processes such as brazing, soldering, casting, welding, riveting, and finishing as they relate to the creation of jewelry.
	05167	Photography	05A ART, 05S ART, 11S PHO	Photography courses expose students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.
	05169	Computer-Assisted Art	05A ART, 05S ART, 11S GRA	Computer-Assisted Art courses enable students to discover and explore how the computer can be used to create or to assist in producing various forms of artwork. Computer-Assisted Art courses provide the opportunity to become more adept in both the art form and in the use of the computer.
	05170 **	Art Portfolio	05A ART, 05S ART	Art Portfolio courses offer students the opportunity to create a professional body of work that reflects their personal style and talent. Students are often encouraged to display their work publicly.
	05171 **	AP Studio Art—General Portfolio	05A ART, 05S ART	Designed for students with a serious interest in art, AP Studio Art—General Portfolio courses enable students to refine their skills and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses typically emphasize quality of work, attention to and exploration of a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive aspects of the student's art. AP Studio Art—General Portfolio evaluations require submission of artwork exemplifying talent in drawing, color organization, design, and sculpture.
	05172 **	AP Studio Art—Drawing Portfolio	05A ART, 05S ART	Designed for students with a serious interest in art, AP Studio Art—Drawing Portfolio courses enable students to refine their skill and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses typically emphasize quality of work, attention to and exploration of a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive aspects of drawing. In these courses, students explore representation, abstraction, and experimentation with a variety of drawing materials.
	05173 **	IB Art/Design	05A ART, 05S ART	IB Art/Design courses prepare students to take the International Baccalaureate Art/Design exams at either the Subsidiary or Higher level. IB Art/Design courses help develop students' aesthetic and creative faculties, offer training in awareness and criticism of art, and enable students to create quality works of art of their own. Students perform both studio and research work; the research component is designed to investigate particular topics or concepts of interest in further detail.
<b>All Others</b>				
	05995	Fine and Performing Art—Aide	05A ART, 05A MUS, 05S ART, 05S MUS	Fine and Performing Arts—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	05998	Fine and Performing Art—Workplace Experience	05A ART, 05A MUS, 05S ART, 05S MUS	Fine and Performing Art—Workplace Experience courses provide students with work experience in a field related to the fine and performing arts. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>Romance Languages</b>				
	06101 **	Spanish I	06A SPA, 06S SPA	Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.
	06102 **	Spanish II	06A SPA, 06S SPA	Spanish II courses build upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).
	06103 **	Spanish III	06A SPA, 06S SPA	Spanish III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06104 **	Spanish IV	06A SPA, 06S SPA	Spanish IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06110 **	IB Language A (non-English)—Spanish	06A SPA, 06S SPA	IB Language A (non-English)—Spanish courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06111 **	IB Language B—Spanish	06A SPA, 06S SPA	IB Language B—Spanish courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
	06112 **	AP Spanish Language	06A SPA, 06S SPA	Designed by the College Board to parallel third-year college-level courses in Spanish Composition and Conversation, AP Spanish Language courses build upon prior knowledge and develop students' ability to understand others and express themselves (in Spanish) accurately, coherently, and fluently in both formal and informal situations. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.
	06113 **	AP Spanish Literature	06A SPA, 06S SPA	Designed by the College Board to parallel college-level Introduction to Hispanic Literature courses, AP Spanish Literature courses cover representative works from the literatures of Spain and Spanish America, encompassing all genres. The courses build students' Spanish language proficiency so that they are able to read and understand moderately difficult prose and express critical opinions and literary analyses in oral and written Spanish (an ability equivalent to having completed a third-year college-level Spanish Language course).
	06121 **	French I	06A FRE, 06S FRE	Designed to introduce students to French language and culture, French I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. French culture is introduced through the art, literature, customs, and history of the French-speaking people.
	06122 **	French II	06A FRE, 06S FRE	French II courses build upon skills developed in French I, extending students' ability to understand and express themselves in French and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s).
	06123 **	French III	06A FRE, 06S FRE	French III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>Romance Languages</b>				
	06124 **	French IV	06A FRE, 06S FRE	French IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the French language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06130 **	IB Language A (non-English)—French	06A FRE, 06S FRE	IB Language A (non-English)—French courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06131 **	IB Language B—French	06A FRE, 06S FRE	IB Language B—French courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
	06132 **	AP French Language	06A FRE, 06S FRE	Designed to parallel third-year college-level courses in French Composition and Conversation, AP French Language courses build upon prior knowledge and develop students' ability to understand others and express themselves (in French) accurately, coherently, and fluently. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.
	06133 **	AP French Literature	06A FRE, 06S FRE	Designed to parallel college-level Introduction to French Literature courses (offered at a thirdyear level), AP French Literature courses cover representative works of French literature and build students' French language proficiency so that they are able to read and understand moderately difficult prose and express critical opinions and analyses in correct oral and written French. The study of literary components (such as character, theme, structure, imagery, style, tone, and so on) is an important focus of AP French Literature.
	06141 **	Italian I	06A ITA, 06S ITA	Designed to introduce students to Italian language and culture, Italian I emphasizes basic grammar and syntax, simple vocabulary and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Italian culture is introduced through the art, literature, customs, and history of the Italian-speaking people.
	06142 **	Italian II	06A ITA, 06S ITA	Italian II courses build upon skills developed in Italian I, extending students' ability to understand and express themselves in Italian and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Italian-speaking people to deepen their understanding of the culture(s).
	06143 **	Italian III	06A ITA, 06S ITA	Italian III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06144 **	Italian IV	06A ITA, 06S ITA	Italian IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Italian language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06150 **	IB Language A (non-English)—Italian	06A ITA, 06S ITA	IB Language A (non-English)—Italian courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06151 **	IB Language B—Italian	06A ITA, 06S ITA	IB Language B—Italian courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>Germanic Languages</b>				
	06201 **	German I	06A GER, 06S GER	Designed to introduce students to German language and culture, German I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. German culture is introduced through the art, literature, customs, and history of the German-speaking people.
	06202 **	German II	06A GER, 06S GER	German II courses build upon skills developed in German I, extending students' ability to understand and express themselves in German and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of German-speaking people to deepen their understanding of the culture(s).
	06203 **	German III	06A GER, 06S GER	German III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06204 **	German IV	06A GER, 06S GER	German IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the German language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06210 **	IB Language A (non-English)—German	06A GER, 06S GER	IB Language A (non-English)—German courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06211 **	IB Language B—German	06A GER, 06S GER	IB Language B—German courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
	06212 **	AP German Language	06A GER, 06S GER	Designed to parallel third-year college-level courses in German Language, AP German Language courses build upon prior knowledge and develop students' ability to understand spoken German in various conversational situations, to express themselves (in German) accurately and fluently, and to have a command of the structure of the German language. Students will develop a vocabulary large enough to understand literature, magazine/newspaper articles, films and television productions, and so on.
<b>Celtic Languages</b>				
	06261 **	Celtic Language I	06A IRI, 06S IRI	Designed to introduce students to a Celtic language (e.g., Gaelic or Welsh) and culture, Celtic Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Celtic culture is introduced through the art, literature, customs, and history of Celtic people.
	06262 **	Celtic Language II	06S IRI, 06A IRI	Celtic Language II courses build upon skills developed in Celtic Language I, extending students' ability to understand and express themselves in a Celtic language (e.g., Gaelic or Welsh) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Celtic people to deepen their understanding of the culture(s).
	06263 **	Celtic Language III	06S IRI, 06A IRI	Celtic Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06264 **	Celtic Language IV	06S IRI, 06A IRI	Celtic Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Celtic Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>Classical Languages</b>				
	06301 **	Latin I	06A LAT, 06S LAT	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	06A LAT, 06S LAT	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	06A LAT, 06S LAT	Latin III courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.
	06304 **	Latin IV	06A LAT, 06S LAT	Latin IV courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.
	06311 **	IB Classical Languages—Latin	06A LAT, 06S LAT	Latin V courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.
	06313 **	AP Latin (Virgil, Catullus and Horace)	06A LAT, 06S LAT	Designed to parallel advanced college-level courses in Latin studies, AP Latin courses build upon and increase knowledge of Latin, enabling students to read the language with comprehension, to accurately translate Latin into English, and to appreciate the stylistic literary techniques used by the authors. AP Latin courses also include study of the political, social, and cultural background of the literary works and their authors, as well as their influence on later literature.
<b>East Asian Languages</b>				
	06401 **	Chinese I	06A CHI	Designed to introduce students to Chinese language and culture, Chinese I courses emphasize basic syntax, simple vocabulary, written characters, and spoken tones so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Chinese culture is introduced through the art, literature, customs, and history of Chinese-speaking people.
	06402 **	Chinese II	06A CHI	Chinese II courses build upon skills developed in Chinese I, extending students' ability to understand and express themselves in Chinese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and phrasing, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Chinese-speaking people to deepen their understanding of the culture(s).
	06403 **	Chinese III	06A CHI	Chinese III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06404 **	Chinese IV	06A CHI	Chinese IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Chinese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of language rules and a strong vocabulary.
	06410 **	IB Language A (non-English)—Chinese	06A CHI	IB Language A (non-English)—Chinese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06411 **	IB Language B—Chinese	06A CHI	IB Language B—Chinese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>East Asian Languages</b>				
	06421 **	Japanese I	06A JAP, 06S JAP	Designed to introduce students to Japanese language and culture, Japanese I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Japanese culture is introduced through the art, literature, customs, and history of the Japanese-speaking people.
	06422 **	Japanese II	06A JAP, 06S JAP	Japanese II courses build upon skills developed in Japanese I, extending students' ability to understand and express themselves in Japanese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Japanese-speaking people to deepen their understanding of the culture(s).
	06423 **	Japanese III	06A JAP, 06S JAP	Japanese III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06424 **	Japanese IV	06A JAP, 06S JAP	Japanese IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Japanese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06430 **	IB Language A (non-English)—Japanese	06A JAP, 06S JAP	IB Language A (non-English)—Japanese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06431 **	IB Language B—Japanese	06A JAP, 06S JAP	IB Language B—Japanese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
<b>Balto-Slavic Languages</b>				
	06601 **	Russian I	06A RUS, 06S RUS	Designed to introduce students to Russian language and culture, Russian I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Russian culture is introduced through the art, literature, customs, and history of the Russian-speaking people.
	06602 **	Russian II	06A RUS, 06S RUS	Russian II courses build upon skills developed in Russian I, extending students' ability to understand and express themselves in Russian and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Russian-speaking people to deepen their understanding of the culture(s).
	06603 **	Russian III	06A RUS, 06S RUS	Russian III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06604 **	Russian IV	06A RUS, 06S RUS	Russian IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Russian language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06610 **	IB Language A (non-English)—Russian	06A RUS, 06S RUS	IB Language A (non-English)—Russian courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>Balto-Slavic Languages</b>				
	06611 **	IB Language—Russian	06A RUS, 06S RUS	IB Language B—Russian courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
<b>American Sign Language</b>				
	06801	American Sign Language I		Designed to introduce students to American Sign Language, American Sign Language I courses enable students to communicate with deaf persons through finger spelling, signed words, and gestures. Course topics may include the culture of and issues facing deaf people.
	06802	American Sign Language II		American Sign Language II courses build upon skills developed in American Sign Language I, extending students' ability to understand and express themselves in American Sign Language and increasing their vocabulary and speed. Typically, students learn how to engage in discourse for informative or social purposes and to comprehend the language when signed slowly.
	06803	American Sign Language III		American Sign Language III courses focus on having students express increasingly complex concepts while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when viewing the language signed at normal rates and conversing easily within limited situations.
	06804	American Sign Language IV		American Sign Language IV courses focus on advancing students' skills and abilities to sign and understand the language so that they can maintain simple conversations with sufficient vocabulary and in an acceptable pace and have sufficient comprehension skills to understand the language when signed at a normal pace.
<b>American Indian Languages</b>				
	06821 **	American Indian Language I	06Z ASB, 06Z BLA, 06Z CHE, 06Z CHI, 06Z CRE, 06Z CRO, 06Z DAK, 06Z GV, 06Z KOO, 06Z SAL	Designed to introduce students to a American Indian language not otherwise described (e.g., Navajo, Cherokee, and kree) and culture, American Indian Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.
	06822 **	American Indian Language II	06Z ASB, 06Z BLA, 06Z CHE, 06Z CHI, 06Z CRE, 06Z CRO, 06Z DAK, 06Z GV, 06Z KOO, 06Z SAL	American Indian Language II courses build upon skills developed in American Indian Language I, extending students' ability to understand and express themselves in a American Indian language not otherwise described (e.g., Navajo, Cherokee, and kree) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).
	06823 **	American Indian Language III	06Z ASB, 06Z BLA, 06Z CHE, 06Z CHI, 06Z CRE, 06Z CRO, 06Z DAK, 06Z GV, 06Z KOO, 06Z SAL	American Indian Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06824 **	American Indian Language IV	06Z ASB, 06Z BLA, 06Z CHE, 06Z CHI, 06Z CRE, 06Z CRO, 06Z DAK, 06Z GV, 06Z KOO, 06Z SAL	American Indian Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the American Indian Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06829 **	American Indian Literature	06Z ASB, 06Z BLA, 06Z CHE, 06Z CHI, 06Z CRE, 06Z CRO, 06Z DAK, 06Z GV, 06Z KOO, 06Z SAL	American Indian Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in a American Indian language not otherwise described (e.g., Navajo, Cherokee, and kree).

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>06 - Foreign Language and Literature</b>				
<b>Semitic and Near/Middle Eastern Languages</b>				
	06937	Arabic I	06A ARA	Designed to introduce students to Arabic language and culture, Arabic I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Arabic culture is introduced through the art, literature, customs, and history of the Arabic-speaking people.
<b>General</b>				
	06995	Foreign Language and Literature—Aide	06A ARA, 06A CHI, 06A FRE, 06A GER, 06A IRI, 06A ITA, 06A LAT, 06A RUS, 06A SPA, 06S FRE, 06S GER, 06S IRI, 06S ITA, 06S LAT, 06S RUS, 06S SPA, 06Z ASB, 06Z BLA, 06Z CHE, 06Z CHI, 06Z CRE, 06Z CRO, 06Z DAK, 06Z GV, 06Z KOO, 06Z SAL	Foreign Language and Literature—Aide courses offer students the opportunity to assist instructors in preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
Grade	Code	Course Name	Endorsements	Description
<b>08 - Physical, Health, and Safety Education</b>				
<b>Physical Education</b>				
	08001	Physical Education	08A HE, 08S HE, 08A PEd, 08S PEd, 08A HPE, 08S HPE	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.
	08005	Fitness/Conditioning Activities	08A HE, 08S HE, 08A PEd, 08S PEd, 08A HPE, 08S HPE	Fitness/Conditioning Activities courses emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness.
	08007	Adapted Physical Education	08A HE, 08S HE, 32A SPE, 32S SPE, 08A PEd, 08S PEd, 08A HPE, 08S HPE	These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.
	08009	Weight Training		Weight Training courses help students develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning.
	08011	Tennis	08A HE, 08S HE, 08A PEd, 08S PEd, 08A HPE, 08S HPE	Tennis courses help students develop knowledge, skills, and abilities related to the sport of singles or doubles tennis, including shots (such as serves, forehand strokes, backhand strokes, and lobs), scoring, and strategy.
<b>Health Education</b>				
	08051	Health Education	08A HE, 08A HEA, 08S HE, 08S HEA, 08A HPE, 08S HPE	Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.
	08054	Special Needs Health Education	08A HE, 08A HEA, 08S HE, 08S HEA, 08A HPE, 08S HPE, 32A SPE, 32S SPE	Special Needs Health Education courses focus on the health requirements of individuals with special needs and emphasize meeting those needs within the home setting. These courses provide information regarding the elderly and individuals with disabilities, handicaps, and/or debilitating illnesses, along with strategies to prepare students for their possible roles as caretakers.
	08055	Safety and First Aid	08A HE, 08A HEA, 08S HE, 08S HEA, 08A HPE, 08S HPE	Safety and First Aid courses provide specialized instruction in first aid techniques, cardiopulmonary resuscitation (CPR), relief of obstructed airways, and general safety procedures and behaviors. These courses may include such topics as an overview of community agencies and hotlines providing emergency care and information and opportunities for first aid and CPR certification.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>08 - Physical, Health, and Safety Education</b>				
<b>Health Education</b>				
	08056	Health for Parenting Teens	08A HE, 08A HEA, 08S HE, 08S HEA, 08A HPE, 08S HPE, 23S FCS	Designed for pregnant teens and/or parents, topics within Health for Parenting Teens courses cover a wide range of both health and parenting issues, typically including prenatal and postnatal care, health and well-being of young parents, child development, stress management, and parental/adult roles. The courses may also involve academic assistance, career exploration, financial management, and so on.
	08057	Health and Life Management	08A HE, 08A HEA, 08S HE, 08S HEA, 23S FCS, 08A HPE, 08S HPE	Health and Life Management courses focus as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies.
	08058	Substance Abuse Prevention	08A HE, 08A HEA, 08S HE, 08S HEA, 08A HPE, 08S HPE	Substance Abuse Prevention courses focus specifically on the health risks of drugs, alcohol and tobacco. These courses provide information on the negative consequences of these products and teach students coping strategies to resist the influences (such as peers and media images) that may entice them to use these substances. Students may also explore the community resources available to them.
<b>Drivers' Education</b>				
	08151	Drivers' Education—Classroom Only	31A TRE	Drivers' Education—Classroom Only courses provide students with the knowledge to become safe drivers on America's roadways. Topics in these courses include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs).
	08152	Drivers' Education—Classroom and Laboratory	31A TRE	Drivers' Education—Classroom and Laboratory courses provide students with the knowledge and experience to become safe drivers on America's roadways. Topics in these courses cover legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs). Experience in driving a vehicle is an essential component of these courses.
<b>All Others</b>				
	08995	Physical, Health, and Safety Education—Aide	08S HE, 08A HEA, 08A HE, 08S HEA, 08A HPE, 08S HPE, 08A PEd, 08S PEd	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.
Grade	Code	Course Name	Endorsements	Description
<b>09 - Military Science</b>				
<b>General</b>				
	09001	Introduction to Jr. ROTC	09S ROT	Introduction to Junior Reserve Officer Training Corps (ROTC) courses introduce students to the purposes and objectives of the Reserve Officer Training Corps program, which seeks to educate high school students in citizenship, promote community service, and instill responsibility. As part of that introduction, course topics typically include a brief history of the military branches in the United States and the basics of military drill, ceremony, and rank structure.
	09002	Military Jr. ROTC—unspecified branch	09S ROT	Although individual course sequences may vary, the primary objectives of Military Junior Reserve Officer Training Corps (ROTC) courses are to provide students with instruction in the history, organization, role, objectives, and achievements of a particular branch of the U.S. Armed Forces; help them develop personal fitness, strong character, and leadership qualities; and expose them to the career opportunities provided by the U.S. Armed Services. These courses typically cover such topics as military customs, courtesies, rank, drill, and ceremonies and also emphasize citizenship and scholarship. The course content typically includes subjects related to the particular branch being studied (such as map-reading, nautical skills, aerospace technology, or communication technologies), as well as more general subjects (international law, national defense, celestial navigation, and geopolitical strategy).
	09003	ROTC Drill	09S ROT	Reserve Officer Training Corps (ROTC) Drill courses provide students with an additional opportunity to improve their skills in military precision. These courses emphasize marching style and formations, firearm manipulation, body coordination and mechanics, and performing as a member of an orchestrated team. Class members typically participate in ceremonies and competitions.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>09 - Military Science</b>				
<b>General</b>				
	09004	Military Leadership	09S ROT	Military Leadership courses focus solely on increasing students' leadership skills, particularly as they relate to military operations, customs, and hierarchies. These courses are typically a regular part of the ROTC programs described below (typically the final course within a program series); this Military Leadership course code and title should be used when those descriptions do not apply. The principles and skills taught in these courses include supervision, motivation, evaluation, and setting an example, and their application typically include military drill and inspections, athletic events, and other school activities.
Grade	Code	Course Name	Endorsements	Description
<b>010 - Computer and Information Sciences</b>				
<b>Computer Literacy</b>				
	10001	Introduction to Computers	10S CIS, 12S BUS, 12S CIS, 12S CS	Introduction to Computer courses introduce students to computers and peripheral devices, the functions and uses of computers, the language used in the computer industry, possible applications of computers, and occupations related to computer hardware and software. These courses 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.
	10002	Computing Systems	10S CIS, 12S BUS, 12S CIS, 12S CS	Computing Systems courses offer a broad exploration of the use of computers in a variety of fields. These courses have a considerable range of content, but typically include the introduction of robotics and control systems, computer-assisted design, computer-aided manufacturing systems, and other computer technologies as they relate to industry applications.
	10003	Computer and Information Technology	10S CIS, 12S BUS, 12S CIS, 12S CS	Computer and Information Technology courses teach students to operate and use computer and information technology, emphasizing their role as tools to communicate more effectively, conduct research more efficiently, and increase productivity. Course content includes the legal and ethical issues involved with computer technology and use.
	10004	Computer Applications	10S CIS, 12S BUS, 12S CIS, 12S CS	In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.
	10005	Business Computer Applications	10S CIS, 12S BUS, 12S CIS, 12S CS	In Business Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages, particularly those used in the business world. Generally, these courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover topics such as electronic mail, desktop publishing, and telecommunications.
	10006	Telecommunications	10S CIS, 12S BUS, 12S CIS, 12S CS	Telecommunications courses address the growth in global communications and the emerging equipment and systems needed to successfully communicate in a global environment. These courses cover such topics as data communication protocol and systems, government regulations of the communications industry, and the use of cost-effective and productive tools to transmit messages and data. In these courses, students may learn about such communication systems as e-mail, internet or ecommerce, LAN, WAN, voice transmission, cell phone technology, and traditional teleconferencing.
	10007	IB Information Technology in a Global Society	10S CIS, 12S BUS, 12S CIS, 12S CS	IB Information Technology in a Global Society courses prepare students to take the International Baccalaureate Information Technology exams and examine the interaction among information, technology, and society. Course content is designed to help students develop a systematic, problemsolving approach to processing and analyzing information using a range of information tools. In these courses, students also discuss and evaluate how modern information technology affects individuals, relationships among people, and institutions and societies.
<b>Management Information Systems</b>				
	10051	Information Management	10S CIS, 12S BUS, 12S CIS, 12S CS	Information Management courses provide students with 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	10S CIS, 12S BUS, 12S CIS, 12S CS	Database Management and Data Warehousing courses provide students with the skills necessary to design databases to meet user needs. Courses typically address how to enter, retrieve, and manipulate data into useful information. More advanced topics may cover implementing interactive applications for common transactions and the utility of mining data.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>010 - Computer and Information Sciences</b>				
<b>Management Information Systems</b>				
	10053	Database Applications	10S CIS, 12S BUS, 12S CIS, 12S CS	Database Application courses provide students with an understanding of database development, modeling, design, and normalization. These courses typically cover such topics as SELECT statements, data definition, manipulation, control languages, records, and tables. In these courses, students may use Oracle WebDB, SQL, PL/SQL, SPSS, and SAS and may prepare for certification.
	10054	Data Systems/Processing	10S CIS, 12S BUS, 12S CIS, 12S CS	Data Systems/Processing courses introduce students to the uses and operation of computer hardware and software and to the programming languages used in business applications. Students typically use BASIC, COBOL, and/or RPL languages as they write flowcharts or computer programs and may also learn data-processing skills.
<b>Network Systems</b>				
	10101	Network Technology	10S CIS, 12S BUS, 12S CIS, 12S CS	Network Technology courses address the technology involved in the transmission of data between and among computers through data lines, telephone lines, or other transmission media (such as hard wiring, cable television networks, radio waves, and so on). These courses may emphasize the capabilities of networks, network technology itself, or both. Students typically learn about network capabilities—including electronic mail, public networks, and electronic bulletin boards—and network technology—including network software, hardware, and peripherals involved in setting up and maintaining a computer network.
	10102	Networking Systems	10S CIS, 12S BUS, 12S CIS, 12S CS	Networking Systems courses are designed to provide students with the opportunity to understand and work with hubs, switches, and routers. Students develop an understanding of LAN (local area network), WAN (wide area network), wireless connectivity, and Internet-based communications with a strong emphasis on network function, design, and installation practices. Students acquire skills in the design, installation, maintenance, and management of network systems that may help them obtain network certification.
	10103	Area Network Design and Protocols	10S CIS, 12S BUS, 12S CIS, 12S CS	Area Network Design and Protocols courses address the role of computers in a network system, the Open Systems Interconnection (OSI) model, structured wiring systems, and simple LAN (local area network) and WAN (wide area network) designs.
	10104	Router Basics	10S CIS, 12S BUS, 12S CIS, 12S CS	Router Basics courses teach students about router components, start-up, and configuration using CISCO routers, switches, and the IOS (Internetwork Operation System). These courses also cover such topics as TCP/IP protocol, IP addressing, subnet masks, and network trouble-shooting.
	10105	NetWare Routing	10S CIS, 12S BUS, 12S CIS, 12S CS	NetWare Routing courses introduce students to such topics as Virtual LANs (VLAN) and switched internetworking, comparing traditional shared local area network (LAN) configurations with switched LAN configurations, and they also discuss the benefits of using a switched VLAN architecture. These courses also may cover routing protocols like RIP, IGRP, Novell IPX, and Access Control Lists (ACLs).
	10106	Wide Area Telecommunications and Networking	10S CIS, 12S BUS, 12S CIS, 12S CS	Wide Area Telecommunications and Networking courses provide students with the knowledge and skills to enable them to design Wide Area Networks (WANs) using ISDN, Frame-Relay, and PPP. Students gain knowledge and skills in network management and maintenance and develop expertise in troubleshooting and assessing the adequacy of network configuration to meet changing conditions.
	10107	Wireless Networks	10S CIS, 12S BUS, 12S CIS, 12S CS	Wireless Networks courses focus on the design, planning, implementation, operation, and troubleshooting of wireless computer networks. These courses typically include a comprehensive overview of best practices in technology, security, and design, with particular emphasis on hands-on skills in (1) wireless LAN set-up and trouble-shooting; (2) 802.11a & 802.11b technologies, products, and solutions; (3) site surveys; (4) resilient WLAN design, installation, and configuration; (5) vendor interoperability strategies; and (6) wireless bridging.
	10108	Network Security	10S CIS, 12S BUS, 12S CIS, 12S CS	Network Security courses teach students how to design and implement security measures in order to reduce the risk of data vulnerability and loss. Course content usually includes typical security policies; firewall design, installation, and management; secure router design, configuration, and maintenance; and security-specific technologies, products, and solutions.
	10109	Essentials of Network Operating Systems	10S CIS, 12S BUS, 12S CIS, 12S CS	Essentials of Network Operating Systems courses provide a study of multi-user, multi-tasking network operating systems. In these courses, students learn the characteristics of the Linux, Windows 2000, NT, and XP network operating systems and explore a variety of topics including installation procedures, security issues, back-up procedures, and remote access.
	10110	Microsoft Certified Professional (MCP)	10S CIS, 12S BUS, 12S CIS, 12S CS	Microsoft Certified Professional courses provide students with the knowledge and skills necessary to be employed as a network administrator in the latest Windows server-networking environment. Topics include installing, configuring, and trouble-shooting the Windows server. These courses prepare students to set up network connections; manage security issues and shares; and develop policies. Students are typically encouraged to take the MCP exam.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>010 - Computer and Information Sciences</b>				
<b>Computer Science/Programming</b>				
	10151	Business Programming	10S CIS, 12S BUS, 12S CIS, 12S CS	Business Programming courses provide students with experience in using previously written software packages as well as designing and writing programs of their own. The word-processing, spreadsheet, graphics, and database exercises in these courses contain a business industry focus, and the original programs are written in languages typical of this industry (Visual Basic (VB), C++, Java, BASIC, COBOL, and/or RPL).
	10152	Computer Programming	02S MAT, 10S CIS, 12S BUS, 12S CIS, 12S CS	Computer Programming courses provide students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and COBOL, may be used instead. Initially, students learn to structure, create, document, and debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, and efficiency. Students may apply the skills they learn to relevant applications such as modeling, data management, graphics, and text-processing.
	10153	Visual Basic (VB) Programming	02S MAT, 10S CIS, 12S BUS, 12S CIS, 12S CS	Visual Basic (VB) Programming courses provide an opportunity for students to gain expertise in computer programs using the Visual Basic (VB) language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs and how to use problem-solving techniques. These courses cover such topics as the use of text boxes, scroll bars, menus, buttons, and Windows applications. More advanced topics may include mathematical and business functions and graphics.
	10154	C++ Programming	10S CIS, 12S BUS, 12S CIS, 12S CS	C++ Programming courses provide an opportunity for students to gain expertise in computer programs using the C++ language. As with more general computer programming courses, the emphasis is on 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	10S CIS, 12S BUS, 12S CIS, 12S CS	Java Programming courses provide students with the opportunity to gain expertise in computer programs using the Java language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. Topics covered in the course include syntax, I/O classes, string manipulation, and recursion.
	10156	Computer Programming—Other Language	10S CIS, 12S BUS, 12S CIS, 12S CS	Computer Programming—Other Language courses provide students with the opportunity to gain expertise in computer programs using languages other than those specified (such as Pascal, FORTRAN, or emerging languages). As with other computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. As students advance, they learn to capitalize on the features and strengths of the language being used.
	10157	AP Computer Science A	10S CIS, 12S BUS, 12S CIS, 12S CS	Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science A courses provide students with the logical, mathematical, and problem-solving skills needed to design structured, well-documented computer programs that provide solutions to real-world problems. These courses cover such topics as programming methodology, features, and procedures; algorithms; data structures; computer systems; and programmer responsibilities.
	10158	AP Computer Science AB	10S CIS, 12S BUS, 12S CIS, 12S CS	Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science AB 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	10S CIS, 12S BUS, 12S CIS, 12S CS	IB Computer Studies courses prepare students to take the International Baccalaureate Computing Studies exam at either the Subsidiary or Higher level. The courses emphasize problem analysis, efficient use of data structures and manipulation procedures, and logical decision-making. IB Computing Studies courses also cover the applications and effects of the computer on modern society as well as the limitations of computer technology.
<b>Media Technology</b>				
	10201	Web Page Design	10S CIS, 12S BUS, 12S CIS, 12S CS	Web Page Design courses teach students how to design web sites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages—such as Extensible Hypertext Markup, JavaScript, Dynamic HTML, and Document Object Model—to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>010 - Computer and Information Sciences</b>				
<b>Media Technology</b>				
	10202	Computer Graphics	10S CIS, 11S GRA, 12S CS, 12S BUS, 12S CIS, 13S IA, 13S ITE	Computer Graphics courses provide students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.
<b>Information Support and Services</b>				
	10251	Computer Technology	10S CIS, 12S BUS, 12S CIS, 12S CS	Computer Technology courses introduce students to the features, functions, and design of computer hardware and provide instruction in the maintenance and repair of computer components and peripheral devices.
	10252	Computer Maintenance	10S CIS, 12S BUS, 12S CIS, 12S CS	Computer Maintenance courses prepare students to apply basic electronic theory and principles in diagnosing and repairing personal computers and input/output devices. Topics may include operating, installing, maintaining, and repairing computers, network systems, digital control instruments, programmable controllers, and related robotics.
	10253	Information Support and Services	10S CIS, 12S BUS, 12S CIS, 12S CS	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	10S CIS, 12S BUS, 12S CIS, 12S CS	IT Essentials: PC Hardware and Software courses provide students with in-depth exposure to computer hardware and operating systems. Course topics include the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Students learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, these courses introduce students to networking and often prepare them for industry certification.
	10255	CISCO—The Panduit Network Infrastructure Essentials (PNIE)	10S CIS, 12S BUS, 12S CIS, 12S CS	CISCO—PNIE courses provide students with the knowledge to create innovative network infrastructure solutions. These courses offer students basic cable installer information and help them acquire the skills to build and use the physical layer of network infrastructure and develop a deeper understanding of networking devices.
<b>All Others</b>				
	10995	Computer and Information Sciences—Aide	10S CIS, 12S BUS, 12S CIS, 12S CS	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.
	10998	Computer and Information Sciences—Workplace Experience	10S CIS, 12S BUS, 12S CIS, 12S CS	Computer and Information Sciences—Workplace Experience courses provide students with work experience in fields related to computer and/or information sciences. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Grade	Code	Course Name	Endorsements	Description
<b>011 - Communications and Audio/Visual Technology</b>				
<b>Communication</b>				
	11001	Introduction to Communication	05A ART, 05S ART, 12S CS, 12S BUS, 12S MAR, 10S CIS, 12S CIS	Introduction to Communication courses enable students to understand and critically evaluate the role of media in society. Course content typically includes investigation of visual images, printed material, and audio segments as tools of information, entertainment, and propaganda; improvement of presentation and evaluative skills in relation to mass media; recognition of various techniques for delivery of a particular message; and, in some cases, creation of a media product. The course may concentrate on a particular medium.
	11002	Communication Technology	05A ART, 05S ART, 12S CS, 12S BUS, 12S MAR, 10S CIS, 12S CIS	Communication Technology courses enable students to effectively communicate ideas and information through experiences dealing with drafting, design, electronic communication, graphic arts, printing process, photography, telecommunications, and computers. Additional topics covered in the course include information storage and retrieval. Drafting equipment may be used to make scale drawings, including multi-view drawing, photographs, and poster mock-ups.
	11048	Communication—Workplace Experience	05A ART, 05S ART, 12S BUS, 12S CS, 12S MAR, 10S CIS, 12S CIS	Communication—Workplace Experience courses provide students with work experience in a field related to communication. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>011 - Communications and Audio/Visual Technology</b>				
<b>Audio and Video Technology and Film</b>				
	11051	Audio/Visual Production	01S ENG, 05A ART, 05S ART, 10S CIS, 11S VID, 11S VIS, 12S BUS, 12S CS, 12S CIS, 13S IA, 13S ITE	Audio/Visual Production courses provide students with the knowledge and skills necessary for television, video, film, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within production courses. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be included.
	11054	Photo Imaging	05A ART, 05S ART, 11S PHO, 12S CS, 10S CIS, 12S BUS, 12S CIS, 13S IA, 13S ITE	Photo Imaging courses provide students with the opportunity to effectively communicate ideas and information via digital, film, still and video photography. Topics covered typically include composition, layout, lighting and supplies. More advanced courses may include instruction in specialized camera and equipment maintenance, application to commercial and industrial need and photography business operations.
	11055	Video	05A ART, 05S ART, 11S VID, 11S VIS, 12S CS, 10S CIS, 12S BUS, 12S CIS, 13S IA, 13S ITE	Video courses enable students to explore video communications, incorporating both the technical and artistic aspects of video media. Topics covered in the course include the use of video equipment and techniques, and students typically create a video presentation. Advanced course topics may include creating various forms of film media including silent film; sport and music video; and self portrait video.
	11098	Audio/Video Technology and Film—Workplace Experience	05A ART, 05S ART, 10S CIS, 11S VID, 12S CS, 11S VIS, 12S BUS, 12S CIS, 13S IA, 13S ITE	Audio/Video Technology and Film—Workplace Experience courses provide students with work experience in a field related to audio/visual technology and/or film. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Journalism and Broadcasting</b>				
	11101	Journalism	01S ENG, 01S JOU	Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography and photojournalism skills may be included.
	11102	Photojournalism	01S JOU, 05A ART, 05S ART, 11S PHO, 12S BUS, 01S ENG	Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to improve their photo composition and film development skills, and to apply their art to journalistic endeavors.
	11104	Publication Production	01S ENG, 01S JOU, 05A ART, 05S ART, 12S BUS, 12S CS, 10S CIS, 12S CIS	Publication Production courses provide students with the knowledge and skills necessary to produce the school newspaper, yearbook, literary magazine, or other printed publication. Students may gain experience in several components (writing, editing, layout, production, and so on) or may focus on a single aspect while producing the publication.
	11148	Journalism and Broadcasting—Workplace Experience	01S JOU, 05A ART, 05S ART, 12S BUS, 12S CIS, 12S CS, 10S CIS	Journalism and Broadcasting—Workplace Experience courses provide students with work experience in a field related to journalism or broadcasting. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Printing Technology and Production</b>				
	11151	Digital Media Technology	01S JOU, 12S BUS, 12S CS, 12S MAR, 10S CIS, 12S CIS	These courses are designed to give students the skills necessary to support and enhance their learning about digital medial technology. Topics covered in the course may include internet research, copyright laws, web-publishing, use of digital imagery, electronic forums, newsgroups, mailing lists, presentation tools, and project planning.
	11152	Desktop Publishing	01S JOU, 11S GRA, 12S BUS, 12S CS, 12S MAR, 10S CIS, 12S CIS	Desktop Publishing courses integrate the knowledge and skills learning in word processing with the concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.
	11153	Digital Media Design and Production	11S GRA, 12S BUS, 12S CIS, 12S CS, 12S MAR, 13S ITE, 10S CIS, 13S IA	Digital Media Design and Production courses teach students the fundamentals of graphic design and production and provide students with the opportunity to apply these principles to printed media, digital presentation media, and interactive media.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>011 - Communications and Audio/Visual Technology</b>				
<b>Printing Technology and Production</b>				
	11154	Commercial Graphic Design	11S GRA, 12S BUS, 12S CIS, 12S CS, 12S MAR, 10S CIS, 13S IA, 13S ITE	Commercial Graphic Design courses teach students to use artistic techniques to effectively communicate ideas and information to business and customer audiences via illustration and other forms of digital or printed media. Topics covered may include concept design, layout, paste-up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning, painting, collage and computer graphics.
	11155	Graphic Technology	11S GRA, 12S BUS, 12S CIS, 12S CS, 12S MAR, 13S IA, 13S ITE, 10S CIS	Graphic Technology courses help students apply artistic and computer techniques to the interpretation of technical and commercial concepts. Topics covered may include computer assisted art and design, printmaking, concept sketching, technical drawing, color theory, imaging, studio techniques, still life modeling, and commercial art business operations. Advanced topics may include topographic arrangements of print and/or electronic graphic and textual products, printing and lithographic equipment and operations, digital imaging, print preparation, desktop publishing and web page design.
	11156	Photography and Printing Technology	12S BUS, 12S CIS, 12S CS, 12S MAR, 10S CIS, 11S GRA, 11S PHO, 13S IA, 13S ITE	Photography and Printing Technology courses expose students to the tools, materials and processes involved in mass production of photography and printing. Types of printing covered in the course may include intaglio, relief, planographic, screen processes printing, silk screening, serigraphy processes and thermograph. Additional topics may include the use of cameras, composition, imposition, presswork, and computer aided publishing.
	11157	Photoengraving	12S BUS, 12S CIS, 12S CS, 12S MAR, 10S CIS, 11S GRA, 11S PHO, 13S IA, 13S ITE	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	12S BUS, 12S CIS, 12S CS, 12S MAR, 10S CIS, 11S GRA, 11S PHO, 13S IA, 13S ITE	These courses expose students to the necessary skills for operating a print press. Topics covered in this course include how to prepare, operate and maintain printing processes.
	11198	Printing Technology—Workplace Experience	12S BUS, 12S CIS, 12S CS, 10S CIS, 11S GRA, 11S PHO, 12S MAR, 13S IA, 13S ITE	Printing Technology—Workplace Experience courses provide students with work experience in a field related to printing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

### All Others

Grade	Code	Course Name	Endorsements	Description
<b>012 - Business and marketing</b>				
<b>Administration</b>				
	12001	Business/Office Career Exploration	12S BUS, 12S OFF	Business/Office Career Exploration courses expose students to the occupational opportunities available in the accounting, administration, data processing, management, and secretarial fields. Emphasis is placed on responsibilities, qualifications, work environment, and career paths. These courses may also include consumer education topics, keyboard exposure, and/or hands-on experience within the various occupational areas.
	12002	Office Procedures—Comprehensive	12S BUS, 12S OFF	Office Procedures—Comprehensive courses provide students with numerous opportunities to explore and understand the responsibilities and duties common to most office personnel. These comprehensive courses cover such topics as communication skills, reception and transmission of information via data processing equipment, filing and record management, mail handling, scheduling meetings and conferences, creating itineraries, and word processing.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>012 - Business and marketing</b>				
<b>Administration</b>				
	12003	Office and Administrative Technologies	12S BUS, 12S OFF	Office and Administrative Technologies courses provide students with instruction and experience in developing technical, problem-solving, and decision-making skills essential for office and/or administrative occupations. Emphasis is placed on integrating and applying knowledge and skills to realistic office and administrative situations utilizing current and relevant technology.
	12004	Office Services	12S BUS, 12S OFF	Office Services courses introduce students to and help them refine clerical and receptionist skills. Course content typically covers filing, telephone, and keyboarding skills; reprographic machinery and procedures; communications skills; and so on.
	12005	Keyboarding		Keyboarding courses provide students with an introduction to the keyboard (letters, numbers, and symbols), basic machine operation, and proper keystroke technique. As students progress, they improve their speed and accuracy and produce increasingly complex documents. Such courses help students develop keyboard proficiency, document production skills, and problem-solving skills.
	12006	Word Processing		Word Processing courses introduce students to automated document production using one or more software packages. These courses may introduce keyboarding techniques or may require prior experience; in either case, speed and accuracy are emphasized. A parallel focus is placed on the use of software commands and functions to create, edit, format, and manipulate documents, capitalizing on the power offered by word processing software programs. These courses may also cover file and disk management and other computer-related skills.
	12009	Business Communications	12S BUS, 12S OFF	Business Communications courses help students to develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all phases of communication: speaking, listening, thinking, responding, reading, writing, communicating nonverbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business may be practiced through problem-based projects and realworld application.
	12048	Administration—Workplace Experience	12S BUS, 12S OFF	Administration—Workplace Experience courses provide students with work experience in fields related to business administration. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Management</b>				
	12052	Business Management	12S BUS	Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.
	12053	Entrepreneurship	12S BUS	Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication. Several topics surveyed in Business Management courses may also be included.
	12054	Business Law	12S BUS	Business Law courses emphasize legal concepts that are relevant to business and business organizations. Topics examined in these courses typically 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	12S BUS	Business Principles and Management courses are designed to provide students with an understanding of the American business system, its organizations, and its management. These courses examine the various leadership and management styles of a variety of successful business organizations, large or small.
	12056	International Business and Marketing	12S BUS	International Business and Marketing courses examine business management and administration in a global economy. Topics covered in this course typically include the principles and processes of export sales, trade controls, foreign operations and related problems, monetary issues, international business and policy, and applications of doing business in specific countries and markets.
	12057	Human Resources and Labor Relations	12S BUS	Human Resources and Labor Relations courses analyze the functions of conflict resolution and collective bargaining. Typically, students examine the history of the labor movement within the United States, the relationship between management and labor, and how organized labor currently operates.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>012 - Business and marketing</b>				
<b>Management</b>				
	12058	Human Resources Management	12S BUS	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	12S BUS	IB Business and Management courses prepare students to take the International Baccalaureate Business and Management exam at either the Subsidiary or Higher level. In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts and principles.
	12098	Management—Workplace Experience	12S BUS	Management—Workplace Experience courses provide students with work experience in fields related to business management. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Finance</b>				
	12101	Banking and Finance	12S BUS	Banking and Finance courses provide students with an overview of the American monetary and banking system as well as types of financial institutions and the services and products that they offer. Course content may include government regulations; checking, savings, and money market accounts; loans; investments; and negotiable instruments.
	12102	Banking	12S BUS	Banking courses are similar to Banking and Finance courses, but they focus specifically on banking. These courses may also address examining and applying the methods used for measuring the financial performance of banks in addition to examining specialized brokerage products, current issues, and future trends in banking.
	12103	Finance	12S BUS	Finance courses are similar to Banking and Finance courses, but they focus specifically on finance, addressing how businesses raise, distribute, and use financial resources while managing risk. Course content typically involves modeling financial decisions (such as borrowing, selling equity or stock, lending or investing) typically undertaken by businesses.
	12104	Accounting	12S BUS	Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.
	12105	Business Economics	12S BUS	Business Economics courses integrate economic principles (such as free market economy, consumerism, and the role of American government within the economic system) with entrepreneurship/business concepts (such as marketing principles, business law, and risk).
	12106	Risk Management and Insurance	12S BUS	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	12S BUS	Investing courses emphasize the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stock, bonds, and mutual funds. Students typically review annual reports, predict growth rates, and analyze trends. Stock market simulations are often incorporated into Investing courses.
	12148	Finance—Workplace Experience	12S BUS	Finance—Workplace Experience courses provide students with work experience in fields related to finance. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Marketing</b>				
	12151	Marketing Career Exploration	12S BUS, 12S MAR	Geared for students with an interest in marketing, sales, or small business operation, Marketing Career Exploration courses expose students to the opportunities available in retail, wholesale, advertising, and other occupational fields using marketing principles.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>012 - Business and marketing</b>				
<b>Marketing</b>				
	12153	Marketing—Fashion	12S BUS, 12S MAR	Marketing—Fashion courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management and entrepreneurship, and so on) but do so with particular attention to the fashion industry. In keeping with the focus on the fashion industry, course topics may also include fashion cycles, fashion history, design, style, and coordination.
	12154	Marketing—Real Estate	12S BUS, 12S MAR	Marketing—Real Estate courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing, advertising, sales, human relations, management and entrepreneurship, and so on) but do so with particular attention to the real estate industry. In keeping with the focus on real estate, course topics may also include financing, investment, ownership rights, ethics, and other real estate principles.
	12155	Marketing—Transportation	12S BUS, 12S MAR	Marketing—Transportation courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the transportation industry. In keeping with the focus on this industry, topics include identification and proper use of auto parts and accessories and the sales and service of new and used cars, vans, trucks, and related parts.
	12156	Marketing—Food/Beverage Industry	12S BUS, 12S MAR	Marketing—Food/Beverage Industry courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the food and beverage industry. In keeping with the focus on this industry, topics include the unique characteristics and functions of the food and beverage service industry.
	12157	Marketing—Insurance	12S BUS, 12S MAR	Marketing—Insurance courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the sale or underwriting of accident, health, life, marine, automobile, and causality insurance.
	12158	Marketing—Floristry	12S BUS, 12S MAR	Marketing—Floristry courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the floristry industry. In keeping with the focus on this field, topics include the unique characteristics and functions of retail and wholesale floral operations.
	12159	Marketing—Hospitality/Tourism	12S BUS, 12S MAR	Marketing—Hospitality/Tourism courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the travel, tourism, and lodging industry. In keeping with the focus on this field, topics include the unique characteristics and functions of travel services and hotel/motel operations.
	12160	Marketing—Merchandising	12S BUS, 12S MAR	Marketing—Merchandising courses are designed to provide students with practical backgrounds in retailing, with emphasis on merchandising, promotion/display, selling, and career planning. The content of this course may also include fundamental principles of human relations.
	12161	Retail Marketing	12S BUS, 12S MAR	Retail Marketing courses cover marketing principles and concepts related to the provision of goods or services directly to the consumer, emphasizing store operation, advertisement and display of goods, store security, human relations, and business management and ownership.
	12162	Internet Marketing	12S BUS, 12S MAR	Internet Marketing covers the principles and functions of marketing from the standpoint of conducting business on the internet. Typically, students develop such skills as using the internet as a marketing tool, conducting a marketing analysis via the internet, planning marketing support activities, managing an electronic marketing campaign, managing/owning a business via the internet, and analyzing the impact of the internet on global marketing.
	12163	Sports and Entertainment Marketing	12S BUS, 12S MAR	Sports and Entertainment Marketing courses introduce students to and help them refine marketing and management functions and tasks that can be applied in amateur or professional sports or sporting events, entertainment or entertainment events, and the sales or rental of supplies and equipment.
	12164	Principles of Marketing	12S BUS, 12S MAR	Principles of Marketing courses offer students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging, and pricing; and business management.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>012 - Business and marketing</b>				
<b>Marketing</b>				
	12165	Principles of Advertising	12S BUS, 12S MAR	Principles of Advertising courses expose students to the varied concepts underlying the promotion of products. The topics included in Principles of Advertising courses range considerably, but typically include the psychology of advertising, a study of various media, advertising planning and budgeting, and advertising layout and design principles. Course topics may also include an overview of commercial art and packaging.
	12166	Marketing Management	12S BUS, 12S MAR	Marketing Management courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems; advertising and sales; and so on) but place a particular emphasis on business management and entrepreneurship, providing exposure to common techniques and problems of management.
	12167	Marketing—Other Specialization	12S BUS, 12S MAR	Marketing—Other Specialization courses typically cover the same scope of topics as Marketing—Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with attention to a particular industry not specified above. The course may also cover specific topics related to the particular industry being covered.
	12198	Marketing—Workplace Experience	12S BUS, 12S MAR	Marketing—Workplace Experience courses provide students with work experience in fields related to marketing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Sales</b>				
	12201	Cashier/Checker Operations	12S BUS, 12S MAR	Cashier/Checker Operations courses provide students with the knowledge and skills to operate a cash register and to handle numerous transactions. Topics typically include cash register procedures; handling cash, credit, checks, food stamps, and other forms of legal tender; human relations; stocking and marking merchandise; and theft prevention. Job search and employability skills are often an integral part of the course.
	12202	Principles of Selling	12S BUS, 12S MAR	Principles of Selling courses provide students with the knowledge and opportunity to develop indepth sales competencies. Course content typically includes types of selling, steps in a sale, sales strategies, and interpersonal skills and techniques.
	12248	Sales—Workplace Experience	12S BUS, 12S MAR	Sales—Workplace Experience courses provide students with work experience in fields related to sales. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>All Others</b>				
	12995	Business and Marketing—Aide	12S BUS, 12S MAR	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.
	12998	Business and Marketing—Workplace Experience	12S BUS, 12S MAR	Business and Marketing—Workplace Experience courses provide students with work experience in fields related to business and marketing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Grade	Code	Course Name	Endorsements	Description
<b>013 - Manufacturing</b>				
<b>Manufacturing Technology</b>				
	13002	Manufacturing—Comprehensive	13S IA, 13S ITE, 13S MET	Manufacturing—Comprehensive courses introduce students to the various methods used to process and transform materials. Processing techniques covered usually include casting, forming, separating, assembling, and finishing. The courses may also include an overview of management techniques in planning, organizing, and controlling various segments of the manufacturing process, including design, engineering, production, and marketing.
	13003	Industrial Arts	13S IA, 13S ITE	Industrial Arts courses expose students to the tools and machines that they may encounter in manufacturing-related occupations and enable them to develop the skills they need to use these tools in various applications. Course topics typically include (but are not limited to) drawing and planning, electricity, graphic arts, woodwork, leatherwork, metalwork, plastics, and power technology. These courses typically cover general safety and career exploration as well.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>013 - Manufacturing</b>				
<b>Manufacturing Technology</b>				
	13004	Industrial Safety/First Aid	13S IA, 13S ITE	Industrial Safety/First Aid courses provide students with instruction in safe operating procedures related to various trades, as well as more general training in emergency first aid and CPR. Course topics may include the importance of standard operation procedures, agencies and regulations related to occupational safety and hazard prevention, and the dangers of particular materials.
<b>Processing/Production</b>				
	13054	Wood Processing/Production	13S IA, 13S ITE, 17S BT, 17S WOO, 17S CAR	Wood Processing/Production courses include studying the properties of woods and composites made from woods and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13055	Metal Processing/Production	13S IA, 13S ITE, 13S WLD, 13S MCH, 13S MET	Metal Processing/Production courses include studying the properties of metals and metal alloys and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13056	Plastics Processing/Production	13S IA, 13S ITE	Plastics Processing/Production courses include studying the properties of plastics and composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13057	Ceramic Processing/Production	13S IA, 13S ITE	Ceramic Processing/Production courses include studying the properties of ceramics and heatresistant 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.
	13098	Processing/Production—Workplace Experience	13S IA, 13S ITE	Processing/Production—Workplace Experience courses provide students with work experience in fields related to manufacturing processing and production. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Production Systems</b>				
	13101	Production Systems	13S IA, 13S ITE, 13S MCH	Production Systems courses provide students with knowledge and skills related to manufacturing technologies from conception through production. Although courses vary, students typically analyze markets, design and develop prototypes, plan a marketing or sales strategy, manage a production plan, and manufacture useful products. These courses may also explore the evolution and impact of technology on society's social, cultural, and economic systems and institutions.
	13102	Electro-Mechanical Systems	13S IA, 13S ITE, 13S MCH	Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods.
	13103	Product Development	13S IA, 13S ITE, 13S MCH	Product Development courses provide students with the opportunity to focus on one or more areas of industrial technology, creatively pursuing new knowledge or solving a technological problem, by designing and building prototypes and working models. Students learn and apply appropriate information in order to complete a project.
	13148	Production Systems—Workplace Experience	13S IA, 13S ITE, 13S MCH	Production Systems—Workplace Experience courses provide students with work experience in fields related to manufacturing systems and/or research. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Metalwork</b>				
	13201	Metalwork Occupations	13S IA, 13S ITE, 13S MCH, 13S MET, 13S WLD	Metalwork Occupations courses provide students with theoretical principles and laboratory experiences related to the planning, manufacturing, assembling, testing, and repairing of parts, mechanisms, and structures in which materials are cast, formed, treated, cut, fused, or otherwise processed in some fashion.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>013 - Manufacturing</b>				
<b>Metalwork</b>				
	13202	Metalworking	13S IA, 13S ITE, 13S MCH, 13S MET, 13S WLD	Metalworking courses introduce students to the qualities and applications of various metals and the tools used to manipulate and form metal into products. Through one or more projects involving metals, students develop planning, layout, and measurement skills; gain experience in cutting, bending, forging, casting, and/or welding metal; complete projects according to blueprints or other specifications; and may also learn to polish and finish metals. Correct use of metalworking tools and equipment is stressed.
	13203	Machining	13S IA, 13S ITE, 13S MCH	Machining courses enable students to create metal parts using various machine tools and equipment. Course content may include interpreting specifications for machines using blueprints, sketches, or descriptions of parts; preparing and using lathes, milling machines, shapers, and grinders with skill, safety, and precision; developing part specifications; and selecting appropriate materials.
	13205	Sheet Metal	13S IA, 13S ITE, 13S MET, 13S WLD	Sheet Metal courses expose students to the skills and information necessary to lay out, fabricate, assemble, install, maintain, and repair items and structures created from sheet metal components. Students learn the safe and efficient operation of various tools and typically gain skill in blueprint reading, welding, and finishing and polishing metals.
	13207	Welding	13S IA, 13S ITE, 13S WLD	Welding courses enable students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications.
	13248	Metalwork—Workplace Experience	13S IA, 13S ITE, 13S MCH, 13S WLD, 13S MET	Metalwork—Workplace Experience courses provide students with work experience in the welding, machine technologies, or metalwork fields. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Repair</b>				
	13301	Appliance Repair	13S IA, 13S ITE, 13S IM	Appliance Repair courses provide students with the knowledge and experience to repair, install, service, and inspect appliances such as stoves, refrigerators, washers, dryers, air conditioners, water heaters, and so on. Students gain an understanding of the mechanics and working systems of these appliances, the skills to read blueprints and specifications, and proficiency in using related tools and products.
	13302	Equipment Maintenance and Repair	13S IA, 13S ITE, 13S IM	Equipment Maintenance and Repair courses prepare students to adjust, maintain, replace, and repair parts of machinery and to repair tools, equipment, and machines. The courses may have a general emphasis or may focus on a specific type of machinery or equipment related to a particular industry. Depending upon the intent, course topics may include electric, hydraulic, or mechanic systems; control devices, valves, and gates; or supplemental equipment such as fans, hoses, and pipes.
	13348	Repair—Workplace Experience	13S IA, 13S ITE, 13S IM	Repair—Workplace Experience courses provide students with work experience in the fields involving repair, supported by classroom attendance and discussion. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>All Others</b>				
	13998	Manufacturing—Workplace Experience	13S IA, 13S ITE, 13S MCH, 17S WOO, 17S CAR	Manufacturing—Workplace Experience courses provide students with work experience in fields involving manufacturing, supported by classroom attendance and discussion. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Grade	Code	Course Name	Endorsements	Description
<b>014 - Health Care Sciences</b>				
<b>Comprehensive</b>				
	14001	Exploration of Health Care Occupations	14S HPT, 14S HPB	Exploration of Health Care Occupations courses expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, dental care, administrative services, and lab technology). These courses provide experiences in several of these occupational clusters, along with information and knowledge related to the health care industry as a whole.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>014 - Health Care Sciences</b>				
<b>Comprehensive</b>				
	14002	Health Care Occupations—Comprehensive	14S HPT, 14S HPB	Health Care Occupations—Comprehensive courses provide students with an orientation to the health care industry and help refine their health care-related knowledge and skills. Topics covered usually include (but are not limited to) an overview of health care delivery; patient care, including assessment of vital signs, body mechanics, and diet; anatomy and physiology; identification and use of medical equipment and supplies; medical terminology; hygiene and disease prevention; first aid and CPR procedures; laboratory procedures; and ethical and legal responsibilities.
<b>Therapeutic Services</b>				
	14051	Nursing	14S HPT	Nursing courses place a special emphasis on the particular knowledge and skills required of nurses and/or nursing assistants and aides while covering general health care topics (i.e., patient care, anatomy and physiology, medical terminology, hygiene and disease prevention, first aid and CPR, and laboratory procedures). Topics covered typically include normal growth and development; bathing, feeding, dressing, and transporting patients; basic pharmacology; doctor, nurse, and patient relationships and roles; medical and professional ethics; death and dying; and care of various kinds of patients (e.g., chronically ill, children, new mothers, and so on).
	14055	Emergency Medical Technology	14S HPT	Emergency Medical Technology courses place a special emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. The courses may also cover the legal and ethical responsibilities involved in dealing with medical emergencies.
	14062	Care of Athletes	14S HPT	Care of Athletes courses provide students with the knowledge and skills to understand and perform therapeutic tasks that would be designated by an athletic or fitness trainer. Topics covered may include taping and bandaging, proper use of protective padding, treatment modalities, anatomy and physiology, and medical terminology. Students may learn to measure cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition, and blood pressure. More advanced topics may include injury assessment, the phases of healing, and the use of exercise and equipment to help in the reconditioning of injured athletes.
	14098	Therapeutic Services—Workplace Experience	14S HPT	Therapeutic Services—Workplace Experience courses provide students with work experience in fields related to therapeutic services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	14099	Therapeutic Services—Other	14S HPT	Other Therapeutic Services courses.
<b>Health Information</b>				
	14152	Pharmacy Assisting	14S HPT	Pharmacy Assisting courses emphasize the knowledge and skills necessary to assist a pharmacist or pharmacy technician. Course topics and experiences enable students to understand medical terminology, keep and maintain records, label medications, perform computer patient billing, perform stock inventory, and order supplies. These courses also emphasize pharmaceutical classification, drug interactions, and interpersonal/communication skills.
	14153	Medical Office Procedures	12S BUS	Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record-keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties.
	14154	Medical Terminology	14S HPI, 14S HPT, 14S HPB, 12S BUS	In Medical Terminology courses, students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.
<b>Health Sciences</b>				
	14251	Health Science	14S HPB, 14S HPT	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.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>014 - Health Care Sciences</b>				
<b>Health Sciences</b>				
	14252	Biotechnology	14S HPB, 14S HPT	Biotechnology courses involve the study of the bioprocesses of organisms, cells, and/or their components and enable students to use this knowledge to produce or refine products, procedures, and techniques. Course topics typically include laboratory measurement, monitoring, and calculation; growth and reproduction; chemistry and biology of living systems; quantitative problem-solving; data acquisition and display; and ethics. Advanced topics may include elements of biochemistry, genetics, and protein purification techniques.
<b>All Others</b>				
	14995	Health Care Sciences—Aide	14S HPB, 14S HPT	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.
	14998	Health Care Sciences—Workplace Experience	14S HPB, 14S HPT	Health Care Sciences—Workplace Experience courses provide students with work experience in the health care industry. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Grade	Code	Course Name	Endorsements	Description
<b>015 - Public, Protective, and Government Services</b>				
<b>All Others</b>				
	15001	Exploration of Public Service Careers	14S HPB	Exploration of Public Service Careers courses expose students to the duties, responsibilities, requirements, and career opportunities within public service. Course topics vary and may include (but are not limited to) protective services; correction, judicial, and probation services; fire protection and fire fighting; public administration; and social work. Course activities depend upon the career clusters that students explore.
<b>Law Enforcement</b>				
	15051	Criminal Justice	04S BF, 14S HPB, 12S BUS	Criminal Justice courses train students to understand and apply the principles and procedures essential to the U.S. criminal justice system. These courses explore the principles and structure of the justice system and the law, and course content also typically includes investigation, search and arrest, and laboratory, forensic, and trial procedures. Students may also learn CPR and first aid skills, personal defense tactics, and crime prevention techniques.
	15052	Corrections	14S HPB	Corrections courses provide instruction regarding the principles and techniques used by institutions that incarcerate, rehabilitate, and monitor people accused or convicted of crimes.
<b>Government Service</b>				
	15202	Community Protection		Community Protection courses provide students with information regarding the personnel and agencies concerned with protection of the home, city, state, and nation. Topics covered typically include civil defense and disaster preparedness; crime prevention; pollution control; fire prevention and control; legal and social systems and principles; and public health. These topics may be explored from the viewpoint of a community resident and citizen using these services or of that of one interested in pursuing a public service career.
Grade	Code	Course Name	Endorsements	Description
<b>016 - Hospitality and Tourism</b>				
<b>All Others</b>				
	16001	Exploration of Hospitality Careers	23S FCS, 23S CA	Exploration of Hospitality Careers courses survey a wide array of topics while exposing students to the variety of career opportunities in hospitality fields (such as food service, lodging, tourism, and recreation). These courses serve to introduce students to the general field of hospitality, providing an opportunity to identify a focus for continued study.
	16995	Hospitality and Tourism—Aide	23S FCS, 23S CA	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.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>016 - Hospitality and Tourism</b>				
<b>All Others</b>				
	16998	Hospitality and Tourism—Workplace Experience	23S FCS, 23S CA	Hospitality and Tourism—Workplace Experience courses provide work experience in fields related to hospitality and tourism. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	16999	Hospitality and Tourism—Other	23S FCS, 23S CA	Other Hospitality and Tourism courses.
<b>Restaurant, Food and Beverage Services</b>				
	16051	Exploration of Restaurant, Food and Beverage Services	23S FCS, 23S CA	Exploration of Restaurant, Food, and Beverage Services courses provide students with an overview of the restaurant, food, and beverage service industry. Topics covered include industry terminology, the history of restaurant, food, and beverage services, introduction to marketing, and the various careers available in the industry.
	16052	Restaurant, Food and Beverage Services—Comprehensive	23S FCS, 23S CA	Restaurant, Food, and Beverage Services—Comprehensive courses provide students with knowledge and skills related to commercial and institutional food service establishments. Course topics range widely, but usually include sanitation and safety procedures, nutrition and dietary guidelines, food preparation (and quantity food production), and meal planning and presentation. Restaurant, Food, and Beverage Service courses may include both "back-of-the-house" and "front-of-the-house" experiences, and may therefore also cover reservation systems, customer service, and restaurant/business management.
	16053	Food Service	23S FCS, 23S CA	Food Service courses provide instruction regarding nutrition, principles of healthy eating, and the preparation of food. Among the topics covered are large-scale meal preparation, preserving nutrients throughout the food preparation process, use and care of commercial cooking equipment, food storage, advances in food technology, sanitation, management, and the careers available in the food service industry.
	16054	Nutrition and Food Preparation	23S CA, 23S FCS	Nutrition and Food Preparation courses provide students with knowledge and skills about food preparation and/or production, with a strong emphasis on nutrition, balanced diets, and satisfying special dietary needs. Topics typically include assessing nutrient content, the science of food and nutrition, physiology and utilization of nutrients. Course content may also cover additives, contaminants, foodborne illnesses, and food technology.
	16055	Restaurant Management and Operations	23S FCS, 23S CA	Restaurant Management and Operations courses provide students with knowledge and skills related to commercial and institutional food service establishments, with an emphasis on management. Course topics therefore include guest service and relationships, planning, resource management, and other topics related to managing and operating restaurants.
	16056	Culinary Art Specialty	23S CA, 23S FCS	Culinary Art Specialty courses provide instruction in a particular type of cooking or culinary style. Examples of such specialty fields include baking, creating and decorating wedding cakes, Middle Eastern cuisine, and so on. These courses emphasize skills specific to the type of culinary art being studied.
	16098	Restaurant, Food and Beverage Services—Workplace Experience	23S CA, 23S FCS	Restaurant, Food, and Beverage Services—Workplace Experience courses provide work experience in fields related to restaurant, food, and beverage services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Lodging</b>				
	16101	Exploration of Lodging Careers	23S FCS	Exploration of Lodging Careers courses provide an overview of the lodging industry. Topics covered include lodging terminology, the history of lodging, introduction to marketing, and the various careers available in the lodging industry.
	16102	Lodging—Comprehensive	23S FCS	Lodging—Comprehensive courses introduce students to the lodging industry and refine their related knowledge and skills. Topics covered typically include property management, guest psychology and relationships, lodging operations, food and beverage services, and other topics related to support services within the lodging industry.
	16148	Lodging—Workplace Experience	23S FCS	Lodging—Workplace Experience courses provide work experience in fields related to lodging. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>016 - Hospitality and Tourism</b>				
<b>Travel and Tourism</b>				
	16151	Introduction to Travel and Tourism	23S FCS	Introduction to Travel and Tourism courses provide an overview of the travel and tourism industry. Topics covered in this course may include travel and tourism terminology, the history of travel, introduction to marketing, and the various careers available in travel and tourism.
	16152	Travel and Tourism—Comprehensive	23S FCS	Travel and Tourism—Comprehensive courses provide the knowledge and skills necessary to work in the travel industry such as sales techniques, marketing principles, and entrepreneurial skills. Additional skills learned in these courses typically include travel agency procedures, airline reservation systems, public relations, hotel/motel registration systems and services, and conference and convention planning.
	16153	World Travel and Tourism	23S FCS	World Travel and Tourism courses provide the knowledge and skills necessary to work in the travel industry, with a focus on travel outside of the United States. Topics covered may include geography of the continents; customs, cultures, and tourist destinations in other countries; special documentation needed for international travel; and planning events to client specifications.
	16154	Eco-tourism	23S FCS	Eco-tourism courses provide the knowledge and skills necessary to work in the travel industry, with particular attention paid to conservation and environmental issues surrounding travel and tourism. Topics covered may include recreational opportunities related to on- and off-site attractions and environmental and ecological principles.
	16198	Travel and Tourism—Workplace Experience	23S FCS	Travel and Tourism—Workplace Experience courses provide work experience in fields related to travel and tourism. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

### Recreation, Amusement and Attractions

	16201	Exploration of Recreation, Amusement and Attractions	23S FCS	Exploration of Recreation, Amusement, and Attractions courses provide an overview of the recreation industry. Topics covered in this course may include industry terminology; the history of recreation, amusement, and attractions; introduction to marketing; and the various careers available in the industry.
	16202	Recreation, Amusement and Attractions—Comprehensive	23S FCS	Recreation, Amusement, and Attractions—Comprehensive courses provide students with the attitudes, skills, and knowledge needed for employment in theme parks, attractions and outdoor recreation facilities, exhibitions, and event planning. Topics covered may include planning trade shows, fairs, and conferences; outdoor recreation and management; financial transactions; salesmanship; guest services and satisfaction; culture and customs; computer and industry technology; eco-tourism; client information; and planning specialized events while incorporating themes, timelines, budgets, target audiences, agendas, and public relations.
	16248	Recreation, Amusement and Attractions—Workplace Experience	23S FCS	Recreation, Amusement, and Attractions—Workplace Experience courses provide work experience in fields related to recreation, amusement, and attractions. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

Grade	Code	Course Name	Endorsements	Description
<b>017 - Architecture and Construction</b>				
<b>Construction-General</b>				
	17001	Construction Careers Exploration	13S IA, 13S ITE, 17S WOO, 17S CAR, 17S BT, 17S DRF	Construction Career Exploration courses expose students to the opportunities available in construction-related trades, such as carpentry, masonry, air conditioning/refrigeration, plumbing, and so on. Students learn about the processes involved in construction projects and may engage in a variety of small projects. These courses emphasize responsibilities, qualifications, work environment, rewards, and career paths within construction-related fields.
	17002	Construction—Comprehensive	13S IA, 13S ITE, 17S BT, 17S WOO, 17S CAR, 17S CAB	Construction—Comprehensive courses provide students with basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>017 - Architecture and Construction</b>				
<b>Construction-General</b>				
	17003	Carpentry	13S IA, 13S ITE, 17S BT, 17S CAR, 17S CAB	Carpentry courses provide information related to the building of wooden structures, enabling students to gain an understanding of wood grades and construction methods and to learn skills such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finish work inside of buildings, and do limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills.
	17004	Framing Carpentry	13S IA, 13S ITE, 17S BT, 17S CAR	Framing Carpentry courses provide students with much of the same knowledge as general carpentry courses (knowledge of various types and grades of woods, proper and safe use of hand and power tools, and site selection and preparation), but place a special emphasis on construction methods applicable to floor, wall, roof, and/or stair framing. Course content may also include insulation installation and painting.
	17006	Woodworking	13S IA, 13S ITE, 17S WOO, 17S BT, 17S CAR	Woodworking courses introduce students to the various kinds of woods used in industry and offer experience in using selected woodworking tools. Students design and construct one or more projects and may prepare a bill of materials. Correct and safe use of tools and equipment is emphasized. As students advance, they focus on learning the terminology necessary to use power tools successfully, developing skills to safely use these tools in the workshop and becoming familiar with various kinds of wood-finishing materials. Advanced students typically design a project, prepare bills of materials, construct, and finish proposed projects.
	17007	Cabinetmaking	13S IA, 13S ITE, 17S CAB, 17S WOO, 17S CAR, 17S BT	Cabinetmaking courses provide students with experience in constructing cases, cabinets, counters, and other interior woodwork. Students learn to distinguish between various types of furniture construction and their appropriate applications, and how to use various woodworking machines and power tools for cutting and shaping wood. Cabinetmaking courses cover the different methods of joining pieces of wood, how to use mechanical fasteners, and how to attach hardware. Initial topics may resemble those taught in Woodworking courses; more advanced topics may include how to install plastic laminates on surfaces and how to apply spray finishes.
	17008	Masonry	17S MAS, 13S IA, 13S ITE, 17S BT	Masonry courses enable students to learn to construct interior and exterior walls, columns, doorways, window openings, fireplaces, chimneys, and foundations from brick and concrete block. Along with other activities, students may mix and spread cement and mortar, read blueprints and plans, and estimate materials needed for a project. Other topics may also include how to layout buildings on footings and how to establish grades using a surveying transit.
	17010	Home Maintenance	13S IA, 13S ITE, 17S BT	Home Maintenance courses provide students with knowledge and skills related to devices and systems found in the home. Course content may include electrical wiring, plumbing, window and door repair and installation, wall and floor repair and finishing, furniture repair and finishing, and small appliance repair.
	17011	Wall Finishings	17S PAI, 13S IA, 13S ITE, 17S BT	Wall Finishings courses prepare students to finish exterior or interior surfaces by applying protective coating materials such as paint, lacquer, wallpaper, plaster, or stucco. Course topics may include instruction in making, mixing, and matching paint colors; applying coating with various types of equipment; applying wallpaper; lathing, preparing surfaces, smoothing, and finishing.
	17048	General Construction—Workplace Experience	13S IA, 13S ITE, 17S WOO, 17S BT, 17S BM, 17S CAR, 17S PAI, 17S MAS, 17S CAB, 17S DRF	General Construction—Workplace Experience courses provide work experience in a field related to construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Air Conditioning, Heating, and Plumbing</b>				
	17051	Air Conditioning	13S IA, 13S ITE, 17S BT	Air Conditioning courses offer students specialized training related to the design, installation, and repair of air conditioning systems for residential and commercial use. These courses may emphasize the theory and design of electrical, electronic, mechanical, and pneumatic control systems used in air conditioning systems; they might also (or instead) focus on procedures used in troubleshooting, servicing, and installing components of air conditioning systems.
	17052	Refrigeration	13S IA, 13S ITE, 17S BT	Refrigeration courses provide students with exposure to and training in the theories, equipment, and skills needed to design, install, and repair commercial and residential refrigeration systems. Course topics typically include the theory of thermodynamics, measurement of pressures and temperatures, components and common accessories of refrigeration systems, and repair and safety procedures.
	17053	Heating	13S IA, 13S ITE, 17S BT	Heating courses offer students training specific to the design, installation, and repair of heating systems for residential use. Topics typically include electric, gas, and/or steam systems; ventilation procedures; safety practices; and installation and trouble-shooting techniques.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>017 - Architecture and Construction</b>				
<b>Air Conditioning, Heating, and Plumbing</b>				
	17054	Air Conditioning/Refrigeration	13S IA, 13S ITE, 17S BT	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	13S IA, 13S ITE, 17S BT	In Air Conditioning, Heating, and Refrigeration courses, students learn the basic principles of these systems, along with how to identify and safely use tools/equipment used in the trade.
	17056	Heating, Ventilation, and Air Conditioning	13S IA, 13S ITE, 17S BT	These courses synthesize basic and advanced principles in heating, ventilation, and air conditioning and include topics such as air filtration methods, humidity control, and the installation and maintenance of heat pumps, furnaces, and air conditioners. Students also learn about climate control systems; electrical wiring; systems design; sizing, fabricating, and installing ductwork; installing and maintaining climate control systems; and safety.
	17058	Plumbing	13S IA, 13S ITE, 17S BT	Plumbing courses provide students with instruction in installing waste and vent systems, water and gas pipes, trim, and fixtures. Skills taught include cutting and joining various types of pipe (for instance, steel, plastic) using various methods (cement, seat method, and so on).
	17059	Plumbing and Heating	13S IA, 13S ITE, 17S BT	Plumbing and Heating courses address the installation, assembly, maintenance, and repair of piping, plumbing, heating equipment, and water and drainage systems. Topics covered include the computation of heat losses and BTU requirements and blueprint reading. Students gain experience with electric, gas, and oil furnaces; vacuum pumps; air compressors; and mechanical and pneumatic testing equipment.
	17098	Air Conditioning, Heating and Plumbing—Workplace Experience	13S IA, 13S ITE, 17S BT	Air Conditioning, Heating, and Plumbing—Workplace Experience courses provide work experience in a field related to air conditioning, heating, and/or plumbing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Electricity/Electronics</b>				
	17101	Exploration of Electricity/Electronics	17S ELC, 13S IA, 13S ITE, 17S BT	Exploration of Electricity/Electronics courses offer instruction in the theory of electricity and in the terminology, skills, and safety procedures common to careers involving electricity and electronics. Topics include (but are not limited to) Ohm's law, electrical equipment, wire systems, and so on; career exploration is often (but not always) an integral part of these courses.
	17102	Electricity—Comprehensive	13S IA, 13S ITE, 17S ELC, 17S BT	Electricity—Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. These courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, commercial, and/or industrial buildings; installing lighting, power circuits, and cables; and estimating job costs. As students progress, their projects become more complex and expansive. In these courses, safety is stressed, and a career exploration component may be offered.
	17103	Residential Wiring	13S IA, 13S ITE, 17S ELC, 17S BT	Covering many of the same topics as Electricity—Comprehensive courses, Residential Wiring courses apply the knowledge and skills that students acquire to the electrical systems found in family dwellings. Because these courses emphasize residential electricity, topics may also include cable installation, telephone systems, and the installation of lighting fixtures, outlets, and so on. Maintenance and repair skills are often included as course topics.
	17104	Industrial Electricity	17S ELC, 13S IA, 13S ITE, 17S BT	Covering many of the same topics as Electricity—Comprehensive courses, Industrial Electricity courses apply the knowledge and skills that students acquire to the electrical systems used in industry. Because of this emphasis, these courses may also cover the installation of transformers and control devices, emergency generator systems, and other industrial applications.
	17106	Electronics—Comprehensive	13S IA, 13S ITE, 17S ELC, 17S BT	Electronics—Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electronic field as well as typically cover the theory of electricity. Course topics may include AC, DC, analog, and integrated circuitry and solid state and digital devices, amplifiers, and semiconductors. Skills covered may involve the repair, maintenance, and building of electronic equipment such as radios, television sets, and industrial equipment.
	17108	Electricity/Electronics—General	13S IA, 17S ELC, 13S ITE, 17S BT	Electricity/Electronics—General courses teach fundamental concepts of electricity and electronics, including safety procedures, and may introduce students to the available occupations in electrical and electronic industries. Topics covered typically include components of circuits; reading schematics and diagrams; electricity and electronics as sources of energy; signal transmission; and using equipment common to these occupations, such as ammeters, voltmeters, capacitor checkers, transistor testers, signal generators, and ohmmeters.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>017 - Architecture and Construction</b>				
<b>Electricity/Electronics</b>				
	17110	Analog and Digital Circuits	17S ELC, 13S IA, 13S ITE, 17S BT	In these courses, analog and digital circuits and systems are compared. Topics covered include binary and continuously variable currents and signals (typically in the context of voltage), waveforms, signal loss and distortion, modulation, and signal processing. These courses may also introduce other media, such as sound waves and liquids.
	17111	Analog Circuits	17S ELC, 13S IA, 13S ITE, 17S BT	Analog Circuit courses emphasize currents and voltages that have continuously variable signals and, due to that emphasis, concentrate on signal modulation, transmission and reception, signal loss and distortion, and waveforms. These courses may also address conversion techniques.
	17112	Digital Circuits	17S ELC, 13S IA, 13S ITE, 17S BT	Digital Circuit courses emphasize currents and voltages that have binary states and, due to that emphasis, concentrate on transmission and reception of binary data, signal loss, and processing circuitry. These courses may also address conversion techniques.
	17148	Electricity/Electronics—Workplace Experience	17S ELC, 13S IA, 13S ITE, 17S BT	Electricity/Electronics—Workplace Experience courses provide students with work experience in a field related to electricity and/or electronics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

### All Others

	17998	Architecture and Construction—Workplace Experience	13S IA, 13S ITE, 17S BT, 17S CAR	Architecture and Construction—Workplace Experience courses provide students with work experience in a field related to architecture or construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
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Grade	Code	Course Name	Endorsements	Description
<b>018 - Agriculture, Food, and Natural Resources</b>				

### Comprehensive

	18001	Introduction to Agriculture and Natural Resources	18S AG	Introduction to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.
	18002	Agriculture—Comprehensive	18S AG, 18S NR	Agriculture—Comprehensive courses cover a wide range of agricultural topics, including plant and animal science, production, and processing; agricultural mechanics, including tool and machine operation and repair; construction and repair of farm structures; business operations and management; and the careers available in the agricultural industry. They may also include topics such as chemical and soil science, ecology, agricultural marketing, and veterinary science.
	18003	Agriculture and Natural Resources—Comprehensive	18S AG, 18S NR	Agriculture and Natural Resources—Comprehensive courses cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; agricultural construction; business operations and management; and the careers available in the agricultural/natural resources industry. They may also include topics such as chemical and soil science, forestry, agricultural marketing, and veterinary science.

### Plant Systems

	18051	Plant Production/Science	18S AG, 18S FO, 18S AH, 18S PS, 18S NR	Plant Production/Science courses provide knowledge about the propagation of plants for food and fiber. These courses may cover such topics as soil science, irrigation, pest and weed control, food and fiber processing, and farm operations. They may also cover the knowledge and skills needed to produce all types of crops or may emphasize a particular area of the agricultural industry.
	18052	General Horticulture	18S AG, 18S AH, 18S FO, 18S PS, 18S NR	General Horticulture courses expose students to the art and science of growing plants, shrubs, trees, flowers, fruits, and vegetables. In doing so, they cover a wide variety of topics, including greenhouse and nursery operations, soils and media mixtures, fruit and vegetable production, turf/golf course management, interior and exterior plantscaping, irrigation systems, weed and pest control, and floral design.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>018 - Agriculture, Food, and Natural Resources</b>				
<b>Plant Systems</b>				
	18053	Ornamental Horticulture	18S AG, 18S AH, 18S FO, 18S PS, 18S NR	Similar to General Horticulture, Ornamental Horticulture courses provide information regarding the care and propagation of plants, flowers, trees, and shrubs, but place a special emphasis on those used for decorative and aesthetic purposes. Because of this particular emphasis, Ornamental Horticulture courses usually concentrate on nurseries and greenhouses and on the floristry industry.
	18054	Turf and Landscape Management	18S AG, 18S AH, 18S FO, 18S PS, 18S NR	Turf and Landscape Management courses provide instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design. These courses emphasize applying such knowledge and skill to the design, establishment, and maintenance of lawns, parks, open space, and similar environments.
	18055	Soil Science	18S AG, 18S AH, 18S FO, 18S PS, 18S NR	Soil Science courses involve the study of soil properties, including soil chemistry, biology, fertility, mineralogy, and hydrology. Topics covered may also include soil conservation, irrigation, and management.
	18098	Plant Systems—Workplace Experience	18S AB, 18S AG, 18S AH, 18S FO, 18S PS, 18S NR	Plant Systems—Workplace Experience courses provide work experience in fields related to plant systems (care, propagation, and processing). Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Animal Systems</b>				
	18101	Animal Production/Science	18S AB, 18S AG, 18S LP	Animal Production/Science courses impart information about the care and management of domestic and farm animals. These courses may cover animal nutrition, health, behavior, selection, reproduction, anatomy and physiology, facilities, product processing, and marketing. Students may study a particular species (swine, cattle, horses, fowl, sheep, and so on), or they may learn how to care for and maintain livestock as a more inclusive study.
	18102	Small Animal Care	18S AG, 18S LP	Small Animal Care courses focus on the care and management of small animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study. Course topics may include kennel operations and sales.
	18103	Large Animal Care	18S AG, 18S LP	Large Animal Care courses focus on the care and management of large animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study. Course topics may include product processing and marketing.
	18104	Equine Science	18S AG, 18S LP	Equine Science courses focus on the care and management of horses. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study.
	18105	Veterinary Science	18S AG, 18S LP	Veterinary Science courses impart information about the causes, diagnosis, and treatment of diseases and injuries of animals, typically emphasizing domestic and farm animals. Course topics focus on anatomy and physiology, nutrition, behavior, and reproduction, but may also include other areas of study as appropriate.
	18148	Animal Systems—Workplace Experience	18S AG, 18S LP, 18S AB	Animal Systems—Workplace Experience courses provide work experience in fields related to animal systems (management, care, and/or processing). Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Agribusiness</b>				
	18201	Agribusiness Management	18S AB, 18S AG	Agribusiness Management courses provide students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. These courses may cover topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decisionmaking, commodities, and building leadership skills. These courses may also incorporate a survey of the careers within the agricultural industry.
	18202	Agricultural Entrepreneurship	18S AB, 18S AG, 18S AH, 18S AM, 18S FO, 18S LP, 18S PS, 18S NR	Agricultural Entrepreneurship courses focus on the personal skills necessary for success in entrepreneurial ventures in the agricultural industry. Topics include setting goals, assessing and solving problems, evaluating financial progress and success, business planning, information management and evaluation, and recordkeeping.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>018 - Agriculture, Food, and Natural Resources</b>				
<b>Agribusiness</b>				
	18203	Agricultural Leadership	18S AB, 18S AG, 18S AH, 18S AM, 18S FO, 18S LP, 18S NR, 18S PS	Agricultural Leadership courses help students develop leadership skills with a focus on opportunities in the food, fiber, and natural resources industries. Topics may include but are not limited to human relationships and effective communication, decision-making and problem-solving, leadership qualities and styles, and ensuring successful completion of group activities.
	18248	Agribusiness—Workplace Experience	18S AB, 18S AG	Agribusiness—Workplace Experience courses provide work experience in fields related to agribusiness. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Agricultural Production/Processing</b>				
	18301	Agricultural Production	18S AB, 18S AG, 18S LP, 18S AH, 18S AM, 18S FO, 18S NR, 18S PS	Agricultural Production courses combine content related to animal and plant production, providing comprehensive coverage of the production functions of the agricultural industry. These courses typically cover such topics as care and management of farm animals, crop production and harvesting, plant and animal insect and disease control, efficient resource management, and farm management.
	18302	Agricultural Processing	18S AB, 18S AG, 18S FO, 18S AM, 18S AH, 18S PS, 18S NR, 18S LP	Agricultural Processing courses impart the knowledge and skills needed to bring animal and plant products to market. They may cover a wide variety of topics, including care and maintenance of animals or plants, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Agricultural Processing courses may present an overview of agricultural processing or may specialize in particular types of products.
	18303	Plant Processing	18S AB, 18S AG, 18S PS, 18S AH, 18S FO	Plant Processing courses impart the knowledge and skills needed to bring plant products to market. They may cover a wide variety of topics, including plant production, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Plant Processing courses may present an overview of product processing or may specialize in specific plant products.
	18304	Animal Processing	18S AB, 18S AG, 18S LP, 18S AM	Animal Processing courses impart the knowledge and skills needed to bring animal products to market. Although these courses may present an overview of animal care and maintenance, they typically emphasize quality selection, product preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Animal Processing courses may present an overview of several types of animal products or may specialize in particular products, such as meat, leather, wool, dairy products, and so on.
	18305	Food Product Processing	18S AB, 18S AG, 18S AH, 18S AM, 18S FO, 18S LP, 18S NR, 18S PS	Food Product Processing courses impart the knowledge and skills needed to produce and manufacture food products for the consumer market. These courses focus on food products while covering a variety of topics, such as quality selection and preservation, equipment care and sanitation, government regulations, marketing, consumer trends, and product research and development.
	18306	Aquaculture	18S AB, 18S AG, 18S PS, 18S NR, 18S AH, 18S LP	Aquaculture courses impart the knowledge and skills needed for producing fish, plants, and other species living in an aquatic environment, and course topics typically include the selection, propagation, harvesting, and marketing of those species. Instruction may also address aquatic and marine biology, ecosystems, water quality and management, and business practices.
	18307	Agriculture and Society	18S AB, 18S AG, 18S NR	Agriculture and Society courses provide an overview of the importance of, impact on, and relationships between agricultural endeavors and society at large. These courses typically emphasize economic and environmental factors and impacts (such as urban and agricultural water use) and the influences of society on agricultural endeavors (including production, processing, and distribution). Current technological advances (such as genetic engineering) may also be discussed.
	18308	Agricultural Biotechnology	18S AB, 18S AG, 18S PS, 18S LP, 18S AH	Agricultural Biotechnology courses apply biological principles and understanding to plant and animal science in order to produce or refine agricultural products. Course topics typically include but are not limited to microbiology, genetics, growth and reproduction, structural basis of function in living systems, chemistry of living systems, quantitative problem-solving, and data acquisition and display. These courses also often cover the ethics of biotechnology.
	18348	Agricultural Production and Processing—Workplace Experience	18S AB, 18S AG, 18S AH, 18S AM, 18S FO, 18S LP, 18S NR, 18S PS	Agricultural Production and Processing—Workplace Experience courses provide students with work experience in fields related to agricultural production and processing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>018 - Agriculture, Food, and Natural Resources</b>				
<b>Agricultural Mechanics and Construction</b>				
	18401	Agriculture Mechanics/Equipment/Structures	18S AG, 18S AM	Agriculture Mechanics/Equipment/Structures courses provide students with the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. While learning to apply basic industrial knowledge and skills (engine mechanics, power systems, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; a study of electricity and power principles; and safety procedures.
	18402	Agriculture Mechanics and Equipment	18S AG, 18S AM	Agriculture Mechanics and Equipment courses provide students with the engineering and power technology principles, skills, and knowledge that are specifically applicable to the agricultural industry. Typical topics include the operation, maintenance, and repair of power, electrical, hydraulic, and mechanical systems.
	18403	Agriculture Structures	18S AG, 18S AM	Agriculture Structures courses provide students with the skills and knowledge that are specifically applicable to the construction, maintenance, and repair of structures integral to the agricultural industry, including but not limited to animal enclosures, irrigation systems, and storage facilities. In these courses, students typically study design, planning, and construction knowledge and skills (such as survey, carpentry, plumbing, concrete, and electrical systems), in addition to the safe operation of tools and machines.
	18404	Agriculture Welding	18S AG, 18S AM	Agriculture Welding courses provide students with the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. In learning to apply basic industrial knowledge and skills (engines, power, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; an introduction or review of electricity and power; and safety procedures.
	18448	Agricultural Mechanics and Construction—Workplace Exp	18S AG, 18S AM	Agricultural Mechanics and Construction—Workplace Experience courses provide work experience in fields related to agricultural mechanics and construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Natural Resources</b>				
	18501	Wildlife Management	18S AG, 18S NR, 18S AB	Often with an emphasis on the conservation of natural resources and frequently including outdoor recreation topics, Wildlife Management courses provide students with the opportunity to understand and appreciate the importance of maintaining the land and ecological systems that enable nondomesticated animals to thrive. Wildlife Management courses emphasize how humans and animals may both take advantage of the same land or how to gain economic benefits from the land while not degrading its natural resources or depleting plant or animal populations.
	18502	Forestry	18S AG, 18S FO, 18S NR, 18S PS, 18S AH	Forestry courses provide students with the information and experience necessary for the cultivation, management, and care of forests or timberlands. Forestry courses cover topics such as the processes of regeneration and reforestation, harvesting and conservation of natural resources, erosion and pest control, trail development and maintenance, mapping and surveying, operation of forestry tools, government regulations, environmental stewardship, and recreational use of forests.
	18503	Forestry Harvesting	18S AG, 18S FO, 18S NR, 18S AM	Forestry Harvesting courses involve the study of methods to manage, protect, and harvest timber stands and specialty forest crops; equipment maintenance and repair; the selection, planting, transplanting, and harvesting of trees; forest management; and safety procedures.
	18504	Natural Resources Management	18S AG, 18S NR, 18S FO, 18S AB	Natural Resources Management courses combine the fields of ecology and conservation with planning for the efficient use and preservation of land, water, wildlife, and forests. Within the general area of natural resources management, these courses usually cover specific topics and uses, such as hunting or fishing preserves, forest production and management, wildlife preservation, and human outdoor recreation.
	18548	Natural Resources—Workplace Experience	18S AB, 18S AG, 18S NR, 18S AH, 18S AM, 18S PS	Natural Resources—Workplace Experience courses provide students with work experience in fields related to natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

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## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>018 - Agriculture, Food, and Natural Resources</b>				
<b>All Others</b>				
	18995	Agriculture, Food, and Natural Resources—Aide	18S AG, 18S NR	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.
	18998	Agriculture, Food, and Natural Resources—Workplace Exp	18S AG, 18S NR	Agriculture, Food, and Natural Resources—Workplace Experience courses provide students with work experience in fields related to agriculture, food, and natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

Grade	Code	Course Name	Endorsements	Description
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### 019 - Human Services

<b>All Others</b>				
	19001	Human Services Career Exploration	23S FCS	Human Services Career Exploration courses introduce and expose students to the career opportunities pertaining to the provision of personal and consumer services for other human beings. Course topics vary and may include (but are not limited to) caring for others, education, cosmetology, apparel/textiles, entrepreneurship, labor laws, and customer service. Course activities depend upon the careers being explored.
	19995	Human Services—Aide	23S FCS	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.
	19998	Human Services—Workplace Experience	23S FCS	Human Services—Workplace Experience courses provide students with work experience in a field related to the provision of human services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

### Child and Elder Care

	19051	Child Care	23S FCS	Child Care courses provide students with knowledge about the physical, mental, emotional, and social growth and development of children from birth through childhood. Main topics include the fundamentals of working with infants, toddlers, and older children; providing healthy environments; evaluating child care settings; and the practices, regulations, and opportunities in the child care industry. Often, Child Care courses provide students with practical experience in a child care center. Advanced topics may include various learning theories; development of activities; operation of a child care center; recognition of childhood diseases, abuse, and neglect; and first aid/emergency training.
	19052	Child Development	23S FCS	Child Development classes provide students with knowledge about the physical, mental, emotional, and social growth and development of children from conception to pre-school age, emphasizing the application of this knowledge in child care settings. These courses typically include related topics such as the appropriate care of infants, toddlers, and young children.
	19053	Elder Care	23S FCS	Elder Care courses emphasize the care of human beings as they grow older. These courses involve the study of the biological, physiological, social, and psychological needs and concerns of the elderly, and deal with the aging process, death, and dying in a realistic manner. Elder Care courses may cover work and personal habits appropriate to the field, and may also offer the opportunity to explore various careers.
	19054	Caregiving Service	23S FCS	Caregiving Service courses emphasize the care of human beings who are unable or who need assistance to care for themselves. These courses involve the study of the biological, physiological, social, and psychological needs and concerns of young children, the elderly, and/or the disabled. Additional topics may include planning daily routines; appropriate environments and activities; growth and aging processes; and techniques for managing a center or working in others' homes.
	19098	Child and Elder Care—Workplace Experience	23S FCS	Child and Elder Care—Workplace Experience courses provide students with work experience in fields related to caring for others. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>019 - Human Services</b>				
<b>Education</b>				
	19151	Teaching Profession	23S FCS	Teaching Profession courses introduce students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. These courses typically expose students to and train them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education.
	19152	Educational Methodology	23S FCS	Educational Methodology courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their own teaching objectives, to design lesson plans, and to experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques.
	19153	Teaching--Early Childhood Education	23S FCS	Formerly known as Early Childhood Education, Teaching--Early Childhood Education courses address child development and education issues, so that students can guide the development of children in educational settings. These courses typically include the planning and implementing of developmentally appropriate learning activities, health and safety practices, safe learning environments, and legal requirements for teaching young children.
	19198	Education—Workplace Experience	23S FCS	Education—Workplace Experience courses provide students with work experience in fields related to education. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Apparel and Furnishings</b>				
	19201	Clothing and Textiles	23S FCS	Clothing and Textiles courses introduce students to and expand upon the various aspects of apparel, garment construction, and the textile industry, conveying the commercial application of design principles, production processes, and maintenance techniques. These courses usually address the selection, characteristics, care, and repair of various textiles; operation and care of commercial sewing machines; design, construction, and production of fabrics and/or garments; and career opportunities in the garment or textile industry.
	19202	Clothing/Textile Maintenance	23S FCS	Clothing/Textile Maintenance courses provide students with the knowledge and skills to clean, care for, and maintain clothing and textiles. Course topics typically include dry cleaning and laundering techniques, identifying fabrics and the optimal cleaning agents and processes, instruction in altering and repairing garments, and the safe use of the equipment, tools, and agents.
	19203	Apparel Construction	23S FCS	Apparel Construction courses provide students with the knowledge and skill to construct, alter, and repair clothing and textile products. Course topics typically include taking measurements, creating and preparing patterns, and various sewing techniques; topics may also include customer service, fashion design principles, and business management. These courses may also offer specialized knowledge in a particular type of garment.
	19204	Apparel and Textile Services	23S FCS	Apparel and Textile Services courses introduce students to and expand upon various services that concern the care and maintenance of apparel, textiles, and furnishing. Course topics may include upholstery, dry cleaning, commercial sewing, and tailoring.
	19205	Home Furnishing	23S FCS	Home Furnishing courses provide students with basic knowledge regarding furnishing and decorating home environments. While exploring design principles, personal needs and style, and decision-making, students may also explore the following topics: color, texture, furniture styles and arrangement, lighting, window treatments, floor and wall coverings, and home improvement/modification. Home Furnishing courses may also cover architectural style and design and take a larger look at housing problems or current housing issues.
	19206	Home Furnishings Production	23S FCS	Home Furnishings Production courses enable students to plan, select, and construct upholstery, slip covers, draperies and other window treatments, and other home accessories. Some courses may emphasize upholstery exclusively. Course content typically includes proper use of equipment, interior decorating principles, and employability skills.
	19248	Apparel and Furnishings—Workplace Experience	23S FCS	Apparel and Furnishings—Workplace Experience courses provide students with work experience in fields related to apparel, textiles, and furnishings. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Grade	Code	Course Name	Endorsements	Description

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>022 - Miscellaneous</b>				
<b>Family and Consumer Sciences</b>				
	19251	Family and Consumer Sciences—Comprehensive	23S FCS	Family and Consumer Sciences—Comprehensive courses help students to develop the knowledge and skills that are used to manage one's family and career efficiently and productively. Course topics typically include foods and nutrition; apparel; child care and development; housing, interior design, and maintenance; consumer decisions; personal financial management; interpersonal relationships; and careers available in family and consumer sciences.
	19252	Food Preparation and Health Management	23S CA, 23S CA, 23S FCS	Formerly known as Food and Nutrition, Food Preparation and Health Management courses provide students with an understanding of food's role in society, instruction in how to plan and prepare meals, and information about the nutritional and health benefits of minimizing processed and prepared food and prepackaged/prepared meals from one's diet. These courses not only build on the basic skills of food preparation but also address financial considerations and recipe conversion to make foods healthier. Some courses place a heavier emphasis on a balanced diet, while others concentrate on specific types of food preparation (such as low sodium, low fat, or increased whole foods). These courses will also address current issues such as organic foods and vegan cooking.
	19253	Nutrition and Wellness	23S FCS, 23S CA	Nutrition and Wellness courses focus on how physical, mental, social, psychological, and emotional wellness are related to food, food selection, and health. Topics typically include dietary needs across one's lifespan, stress management, special dietary issues, and eating disorders as well as societal and genetic health issues that are addressed through the prevention education component of the class. Other topics covered range from healthy food selection, label reading, and diet analysis to understanding additives, making wise food choices, and dealing with food allergies.
	19254	Food Science	23S FCS, 23S CA	Food Science courses offer opportunities for students to study the composition, structure, and properties of foods and their components as well as the consumption of food and the chemical changes that occur during the processing, storage, preparation, and consumption of food for the consumer. These courses often explore the effects of various materials, microorganisms, and processes on food products through laboratory experiments and can address food innovations to meet the needs of society. Culinary techniques and the safe handling of food in the home environment are commonly included.
	19255	Child Development/Parenting	23S FCS	Child Development/Parenting courses provide students with knowledge about family systems and relationships and information about how parents can address the physical, mental, emotional, and social growth and development of children from conception to adolescence. In addition, these courses help students discover how parents should respond to the various stages of childhood. Course content typically includes topics such as prenatal development and birth processes, responsibilities and difficulties of parenthood, family structures, societal and cultural influences, fundamentals of children's emotional and physical development, and the appropriate care of infants, toddlers, and young and school-aged children. These courses may also cover topics specific to teen parenting.
	19256	Clothing/Sewing	23S FCS	Clothing/Sewing courses introduce students to and expand their knowledge of various aspects of wearing apparel, sewing, and fashion. These courses typically include wardrobe planning; selection, care, and repair of various materials; and construction of one or more garments. They may also include related topics, such as fashion design and history, the social and psychological aspects of clothing, careers in the clothing industry, and craft sewing.
	19257	Life Skills	23S FCS	Life Skills courses provide students with information about a wide range of subjects to assist them in becoming wise consumers and productive adults. These courses often emphasize process skills, including goal-setting, decision making, and other topics such as the setting of priorities, money and time management, interpersonal relationships, and the development of the self. Additionally, specific topics such as wellness, selecting and furnishing houses, meeting transportation needs, nutrition, preparing food, selecting clothing and building a wardrobe, insurance, taxation, and consumer protection may also be covered.
	19258	Personal and Career Readiness	23S FCS	Formerly known as Self-Management, Personal and Career Readiness courses introduce students to the skills and strategies that are helpful in becoming more focused, productive individuals, wage earners, and family members. These courses typically emphasize goal-setting; decision making; managing time, energy, and stress; and identifying alternatives and coping strategies. They may also allow students to explore various career and lifestyle choices.
	19259	Family and Interpersonal Relationships	23S FCS	Formerly known as Family Living, Family and Interpersonal Relationships courses emphasize building and maintaining healthy interpersonal relationships among family members and other members of society. These courses often emphasize (but are not limited to) topics such as the responsibilities of a family and wage earner, balancing a career and personal life, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, the family life cycle, and life stages. They also cover topics related to stages of growth and social/dating practices.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>022 - Miscellaneous</b>				
<b>Family and Consumer Sciences</b>				
	19260	Personal Development	23S FCS	Personal Development courses emphasize strengthening self-esteem, recognizing and resisting negative peer pressure, and developing coping skills for dealing with life and career issues and changes (such as family changes). These courses include communication, conflict resolution, practical problem-solving, and decision making. They may also include building resiliency skills and asset building.
	19261	Human Growth and Development	23S FCS	Human Growth and Development courses focus on the application of human development theories and stages of growth to the relationships among individuals at various stages of life, as well as provide an understanding of how people change across their lifespans. Course content may include the application of human development theories in family systems and community settings. Interactions of grandparents and their grandchildren, adult children and their aging parents, as well as the similarities between caring for the elderly and caring for young children may also be explored.
	19262	Consumer Economics/Personal Finance	23S FCS, 12S BUS	Consumer Economics/Personal Finance courses provide students with an understanding of the concepts and principles involved in managing one's personal finances. These courses emphasize lifespan goal-setting, individual and family decision making, and consumer rights as well as topics that are commonly associated with personal finance so that one can become a financially responsible consumer. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also investigate the effects of the global economy on consumers and the family.
	19263	Home Environments and Design	23S FCS	Formerly known as Home Décor, Home Environments and Design courses provide students with knowledge and skills regarding interior design and decoration of the home for the individual or family. While exploring design principles, personal needs and style and decision making, students may have an opportunity to explore such topics as color, texture, furniture styles and arrangement, lighting, window treatments, floor, wall coverings and home improvement/modification. These courses emphasize personal (rather than commercial) use and application of home décor principles.
	19295	Family and Consumer Sciences—Aide	23S FCS	Family and Consumer 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.
	19298	Family and Consumer Sciences—Workplace Experience	23S FCS	Family and Consumer Sciences—Workplace Experience courses provide students with work experience in fields related to family and consumer sciences. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

### Academic Enrichment

	22003	Study Skills		Study Skills courses prepare students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note-taking; vocabulary skills; and test-taking skills. The courses may also include exercises designed to generate organized, logical thinking and writing.
	22004	Dropout Prevention Program		Dropout Prevention Program courses vary widely, but typically are targeted at students who have been identified as being at risk of dropping out of or failing in school. Course content may include study skills and individual tutorials; job preparation, readiness, application, or interview skills; communication skills; personal assessment and awareness activities; speaker presentations; and small group seminars.
	22005	Tutorial		Tutorial courses provide students with the assistance they need to successfully complete their coursework. Students may receive help in one or several subjects.
	22006	Study Hall		Study Hall courses provide students with the opportunity and time to complete classroom assignments or school projects. Students typically work on their own, without the help of a tutor; however, they are supervised and usually remain in the classroom.

### Staff Assistance

	22051	Office Aide		Office Aide courses provide students with the opportunity to work in campus offices, developing skills related to clerical office work. Duties may include typing, filing, record-keeping, receiving visitors, answering the telephone, and duplicating, among others. These courses emphasize appropriate work attitudes, human relations, and proper office procedures.
	22052	Guidance Aide	31A CO1, 31A CO6, 31S CO	Guidance Aide courses provide students with the opportunity to work in the campus guidance office. Duties may include typing, filing, record-keeping, assisting students, answering the telephone, and duplicating, among others. Students may also act as guides to new students. These courses emphasize appropriate work attitudes, human relations, and proper office procedures.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>022 - Miscellaneous</b>				
<b>Staff Assistance</b>				
	22053	Library/AVC Aide	31A LIB, 31S LIB	Library/AVC Aide courses provide students with the opportunity to work in the library or in media and audiovisual centers. Duties may include collecting, distributing, and categorizing materials; operating audiovisual equipment; assisting students and teachers; and performing clerical duties. Students typically gain experience in library science and/or media and audiovisual technology.
<b>School Organization/Leadership</b>				
	22101	Leadership		Leadership courses are designed to strengthen students' personal and group leadership skills. Typically intended for students involved in extracurricular activities (especially as officers of organizations or student governing bodies), these courses may cover such topics as public speaking, effective communication, human relations, parliamentary law and procedures, organization and management, and group dynamics.
	22104	Community Service		Community Service courses provide students with the opportunity to volunteer their time, energy, and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.
<b>Career Exploration/Development</b>				
	22151	Career Exploration		Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.
<b>Support Services</b>				
	22253	Social Development Instruction	32A SPE, 32S SPE	Social Development Instruction courses teach students the social skills needed for independent functioning within the community. Topics may include self-control, self-expression, obeying rules, decision-making, appropriate situational behavior, interacting with others, and maintaining relationships. Students may develop independence, self-confidence, and self-reliance.
<b>All Others</b>				
	23001	Technology for Classroom and Personal Use		In Technology for Classroom and Personal Use courses students acquire knowledge of and experience in the proper, efficient and safe use of a variety of digital tools, i.e., computer, iPad, Smart Board and other emerging technologies to gather, organize and present data. Students learn the basic use of word processing, spreadsheet and digital presentation tools for classroom and personal use. Technology for Classroom and Personal Use courses address the K-12 Content Standards for Technology. Such courses may be taught by teachers with any endorsement at the proper level. Technology for Classroom and Personal Use are NOT approved Career and Technical Education (CTE) courses.
<b>Grade Code Course Name Endorsements Description</b>				
<b>020 - Transportation, Distribution, and Logistics</b>				
<b>Operation</b>				
	20052	Heavy Equipment Operation	20S HEO, 13S IA, 13S ITE	Heavy Equipment Operation courses enable students to safely operate the heavy equipment used for mining, construction, and utility industries. Typically, courses also include light maintenance principles and techniques.
	20053	Aviation	20S AV, 13S IA, 13S ITE	Aviation courses provide students with an understanding of the science of flight and typically include the history, regulations, and possible career paths within the aviation industry. Aviation courses usually cover physics, the relationships of weight and balance, principles of navigation and flight control, ground and airport operations and services, and Federal Aviation Agency regulations.
<b>Mechanics and Repair</b>				
	20104	Automotive Mechanics—Comprehensive	13S IA, 13S ITE, 20S ATT	Automotive Mechanics—Comprehensive courses emphasize the diagnosis and repair of automobile engines and support systems such as brakes, cooling, drive trains, electrical/electronics components, emission, fuel, ignition, steering, suspension, and transmissions. Course topics often include the comprehension and use of repair manuals, safety, and employability skills (including shop management and entrepreneurship).

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>020 - Transportation, Distribution, and Logistics</b>				
<b>Mechanics and Repair</b>				
	20106	Automotive Service	13S IA, 13S ITE, 20S ATT	Automotive Service courses emphasize preventative auto maintenance and automobile troubleshooting. Course content typically includes tune-up, oil change, and lubrication skills; tire replacement, alignment, and balancing; and basic knowledge of brake, cooling, electrical, emission, fuel, ignition, steering, suspension, and transmission systems. These courses may also include public relations, sales techniques, and service station management.
	20107	Diesel Mechanics—Comprehensive	20S DM, 13S IA, 13S ITE	Diesel Mechanics—Comprehensive courses prepare students to maintain and repair diesel engines and related systems. Specific course topics may include principles underlying diesel engines, analyzing electrical circuits and systems, troubleshooting and repairing cooling systems, testing and repairing air conditioning charging systems, reading and interpreting service manuals, and identifying the principles and components of fuel injection systems. Courses may also cover safety, employability skills, and entrepreneurship.
	20109	Small Vehicle Mechanics	13S IA, 13S ITE, 20S ATT, 20S SE	Small Vehicle Mechanics courses equip students with the knowledge and skill to repair and maintain engines in small vehicles (e.g., motorcycles, all-terrain vehicles, snowmobiles, and mopeds). Topics include (but are not limited to) maintaining frames and suspension, wheels and brakes, and drive trains; servicing fuel, exhaust, and electrical systems; performing tune-ups; and maintaining and repairing engines. Students may also learn safety on the job, employability skills, and entrepreneurship.
	20110	Small Engine Mechanics	20S ATT, 20S SE, 13S IA, 13S ITE	Small Engine Mechanics courses provide students with the opportunity to learn how to service and recondition small engines, typically emphasizing two- and four-cycle engines. These courses provide students with opportunities to troubleshoot and repair speed controls, lubrication, ignition, fuel, power transfer, cooling, exhaust, and starting systems; use hand, power, and overhaul tools; and read and interpret service manuals and parts' catalogs. Applications may include lawn mowers, tractors, tillers, power tools, and so on.
	20112	Heavy Equipment Mechanics	20S HEM, 13S IA, 13S ITE	Heavy Equipment Mechanics courses include the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems of heavy equipment such as that used in mining, construction, and utility industries.
	20113	Aircraft Power Plant	20S AV, 13S IA, 13S ITE	Aircraft Power Plant courses provide students with the information necessary to troubleshoot, test, repair, and install aircraft engines. Course content usually includes engine ignition, electrical, lubrication, cooling, exhaust, and fuel systems, along with aircraft instrumentation and safety features.
	20114	Aircraft Airframe	20S AV, 13S IA, 13S ITE	Aircraft Airframe courses offer students information and instruction related to the structure and mechanics of aircraft, typically including hydraulic, pneumatic, instrumental, fuel, electrical, cabin atmosphere, and landing gear systems. Aircraft Airframe courses may also cover aircraft metals and coverings and related welding skills.
	20115	Automotive Detailing and Reconditioning	20S ATB, 13S IA, 13S ITE	Automotive Detailing and Reconditioning courses provide students with knowledge and skills related to repairing, refinishing, and detailing automobiles. Course topics typically include painting and refinishing, plastics and adhesives, damage analysis, and repair, in addition to occupational safety, employability, and entrepreneurship skills.
	20116	Automotive Body Repair and Refinishing—Comprehensive	20S ATB, 13S IA, 13S ITE	Automotive Body Repair and Refinishing courses provide students with knowledge and skills regarding the repair and refinishing of damaged or used cars. Course content may include (but is not limited to) stretching and shrinking auto body sheet metal; welding skills; frame and metal straightening; repair of fiberglass and synthetic materials; removing, repairing, and installing auto body parts such as panels, hoods, doors, and windows/glass; preparing vehicles and vehicle surfaces for refinishing; painting; applying body fillers; and estimating material and labor costs.
	20148	Mechanics and Repair—Workplace Experience	13S IA, 13S ITE, 20S ATT	Mechanics and Repair—Workplace Experience courses provide students with work experience in fields related to the maintenance of vehicles and engines. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Grade	Code	Course Name	Endorsements	Description
<b>021 - Engineering and Technology</b>				
<b>Engineering</b>				
	21007	Engineering Design and Development	02S MAT, 13S IA, 13S ITE, 21S ENG	Engineering Design and Development courses provide students with the opportunity to apply engineering research principles as they design and construct a solution to an engineering problem. Students typically develop and test solutions using computer simulations or models but eventually create a working prototype as part of the design solution.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>021 - Engineering and Technology</b>				
<b>Engineering</b>				
	21008	Digital Electronics	13S IA, 13S ITE, 21S ENG	Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices.
	21010	Computer Integrated Manufacturing	13S IA, 13S ITE, 21S ENG	Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.
	21011	Civil Engineering	13S IA, 13S ITE, 21S ENG	Civil Engineering courses expose students to the concepts and skills used by urban planners, developers, and builders. Students may be trained in soil sampling and analysis, topography and surveying, and drafting or blueprint-reading. Additional course topics may include traffic analysis, geologic principles, and urban design.
	21012	Civil Engineering and Architecture	13S IA, 13S ITE, 21S ENG	Civil Engineering and Architecture courses provide students with an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship of both fields. Students typically use software to address real world problems and to communicate the solutions that they develop. Course topics typically include the roles of civil engineers and architects, project-planning, site-planning, building design, project documentation, and presentation.
	21013	Aerospace Engineering	13S IA, 13S ITE, 21S ENG	Aerospace Engineering courses introduce students to the world of aeronautics, flight, and engineering. Topics covered in the course may include the history of flight, aerodynamics and aerodynamics testing, flight systems, astronautics, space life systems, aerospace materials, and systems engineering.
	21014	Biotechnical Engineering	13S IA, 13S ITE, 21S ENG	Biotechnical Engineering courses enable students to develop and expand their knowledge and skills in biology, physics, technology, and mathematics. Course content may vary widely, drawing upon diverse fields such as biomedical engineering, biomolecular genetics, bioprocess engineering, agricultural biology, or environmental engineering. Students may engage in problems related to biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering, biomedical devices, human interfaces, bioprocesses, forensics, and bioethics.
	21048	Engineering—Workplace Experience	13S IA, 13S ITE, 21S ENG	Engineering—Workplace Experience courses provide students with work experience in an engineering-related field. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Administration</b>				
	21009	Robotics		Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.
<b>Technology</b>				
	21051	Technological Literacy	12S BUS, 12S CIS, 12S CS, 13S IA, 13S ITE, 10S CIS	Technological Literacy courses expose students to the communication, transportation, energy, production, biotechnology, and integrated technology systems and processes that affect their lives. The study of these processes enables students to better understand technological systems and their applications and uses.
	21053	Emerging Technologies	12S BUS, 12S CIS, 12S CS, 13S IA, 13S ITE, 10S CIS	Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber options, electronics, robotics, computer technologies, CAD/CAM, communication modalities, and transportation technologies.
	21054	Technology Innovation and Assessment	12S CIS, 13S IA, 13S ITE, 10S CIS, 12S CS, 21S ENG, 12S BUS	Technology Innovation and Assessment courses use engineering design activities to help students understand how criteria, constraints, and processes affect design solutions and provide students with the skills to systematically assess technological developments or solutions. Course topics may include brainstorming, visualizing, modeling, simulating, constructing, testing, and refining designs.
	21055	Aerospace Technology	13S IA, 13S ITE	Aerospace Technology courses introduce students to the technology systems used in the aerospace industry and their interrelationships. Examples of such systems include satellite communications systems, composite materials in airframe manufacturing, space station construction techniques, space shuttle propulsion systems, aerostatics, and aerodynamics.

\*\* This course is considered a Core Course



## FY 2018 Listing of All Montana K-12 Course Codes and Descriptions

### Secondary Courses

Grade	Code	Course Name	Endorsements	Description
<b>021 - Engineering and Technology</b>				
<b>Technology</b>				
	21098	Technology—Workplace Experience	12S BUS, 13S IA, 13S ITE, 12S CS, 10S CIS, 12S CIS	Technology—Workplace Experience courses provide students with work experience in a field related to technological systems and structures. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Drafting</b>				
	21101	Drafting Careers Exploration	13S IA, 13S ITE, 17S DRF	Geared for students with an interest in careers that use drafting skills and applications, Drafting Careers Exploration courses expose students to the opportunities available for draftspeople (engineering, architectural, industrial, and so on). These courses serve to introduce basic skills and the field in general, providing students with the opportunity to identify a focus for continued study or to determine that their interests lie elsewhere.
	21102	Drafting—General	13S IA, 13S ITE, 17S DRF	Drafting—General courses, usually offered as a sequence of courses, introduce students to the technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting—General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.
	21103	Drafting—Architectural	13S IA, 13S ITE, 17S DRF, 17S BT	Drafting—Architectural courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from architectural applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on interior and exterior residential (and light commercial) design, site orientation, floor plans, electrical plans, design sketches, and presentation drawings. In addition, students may prepare scale models.
	21104	Drafting—Civil/Structural	13S IA, 13S ITE, 17S DRF	Drafting—Civil/Structural courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from civil engineering and/or structural applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on skills needed for typography and survey work.
	21105	Drafting—Electrical/Electronic	13S IA, 13S ITE, 17S DRF	Drafting—Electrical/Electronic courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from electric and/or electronic fields. These courses are intended to help students develop general drafting skills, but place a particular emphasis on those skills needed for electrical and electronic schematics.
	21106	Drafting—Technical/Mechanical	13S IA, 13S ITE, 17S DRF	Drafting—Technical/Mechanical courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from industrial applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on sectioning, auxiliary views, revolutions, and surface development. In these courses, students typically learn basic machining and fabrication processes as they draw schematic diagrams featuring cams, gears, linkages, levers, pulleys, and so on.
	21107	CAD Design and Software	10S CIS, 13S IA, 13S ITE, 17S DRF, 12S CIS, 17S BT, 13S MCH, 12S CS	Frequently offered as an intermediary step to more advanced drafting courses (or as a concurrent course), CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.
	21108	Blueprint Reading	13S IA, 13S ITE, 17S DRF, 17S BT	Blueprint Reading courses provide students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.
	21148	Drafting—Workplace Experience	13S IA, 13S ITE, 17S DRF	Drafting—Workplace Experience courses provide work experience in a field related to drafting. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

\*\* This course is considered a Core Course