Kentucky Academic Course Code List

All without Certification

V.1.10 updated 5/30/18

Table of Contents

Table of Contents 3
Agricultural Education Program Area (010000) 9
Agricultural Education - Agribusiness (010100) 10
Agricultural Education - Power, Structural and Technical Systems (010200) 12
Agricultural Education - Horticulture and Plant Science Systems (010600) 14
Agricultural Education - Food Science and Processing Systems (010700) 16
Agricultural Education - Agribiotechnology (020200) 17
Agricultural Education - Animal Science Systems (020500) 18
Agricultural Education - Environmental and Natural Resources Systems (030600) 20
Agricultural Education - Career Major Electives (030700) 22
Business Education (060000) 25
Business Education - Career Major Electives (060100) 26
Business Education - Finance (060300) 31
Business Education - Business Management (060400) 32
Business Education - Multimedia (060700) 33
Business Education - Accounting (070100) 34
Business Education - Data Base Management (070300) 35
Business Education - Administrative Support (070600) 36
Business Education - Information Processing (070700) 37
Business Education - Legal Office Services (070800) 38
Business Education - Medical Office Services (070900) 39
Marketing Education (080000) 40
Marketing Education - Fashion Marketing (080100) 41
Marketing Education - Management/Entrepreneurship (080300) 42
Marketing Education - Career Major Electives (080700) 43
Marketing Education - Hospitality, Travel & Tourism (080900) 46
Marketing Education - Sports Marketing (081100) 47
Marketing Education - E-Commerce (081300) 48

Marketing Education - Retailing / Wholesaling (081400) 49
Marketing Education - Advertising (081500)..... 50
Information Technology (110000) 51
Information Technology - Information Support and Services (110100)..... 52
Information Technology - Programming (110200)..... 54
Information Technology - Career Major Electives (110300)..... 60
Information Technology - Computer Science (110700) 61
Information Technology - Web Development/Administration (110800)..... 63
Information Technology - Networking (110900)..... 65
Information Technology - Informatics (111000)..... 69
Information Technology - Digital Design/Game Development (113600) 71
World Languages (160000) 73
World Languages - English as a Second Language (160100) 74
World Languages - Middle/High School - ASL (160200) 79
World Languages - Middle/High School - Chinese (160300)..... 81
World Languages - Middle/High School - French (160400) 83
World Languages - Middle/High School - German (160500)..... 86
World Languages - Middle/High School - Greek (160600)..... 89
World Languages - Middle/High School - Hebrew (160700)..... 91
World Languages - Middle/High School - Japanese (160800) 93
World Languages - Middle/High School - Latin (160900)..... 96
World Languages - Middle/High School - Russian (161000) 98
World Languages - Middle/High School - Spanish (161100)..... 100
World Languages - Middle/High School - Arabic (161200) 104
World Languages - Middle/High School - Italian (161300)..... 106
World Languages Elementary (165600) 108
Health Science (170000)..... 112
Health Science - Career Major Electives (170100)..... 113
Health Science - Sports Medicine (170300) 115
Health Science - Allied Health (170500) 116
Health Science - Pre-Nursing (170600)..... 118
Health Science - Biomedical Science (170700)..... 121
Health Science - Veterinary Assisting (170800)..... 123

Health Science - Medical Administrative Assistant (170900) 125
Family & Consumer Sciences (200000) 126
Family & Consumer Sciences - Career Pathway Electives (200100) 127
Family & Consumer Sciences - Early Childhood Education (200200) 129
Family & Consumer Sciences - Cosmetology (200300) 131
Family & Consumer Sciences - Culinary Arts and Food Science (200400) 134
Family & Consumer Sciences - Hospitality, Travel, Tourism & Recreation (200600) 137
Family & Consumer Sciences - Fashion and Interior Design (200800) 139
Family & Consumer Sciences - Consumer and Family Management (201000) 141
Engineering and Technology Program Area (210000) 143
Engineering and Technology - Engineering Technology (210100) 144
Engineering and Technology - Engineering (210200) 152
Engineering and Technology - Career Major Electives (210300) 160
Engineering and Technology - Engineering (Project Lead The Way) (219900) 161
English/ Language Arts (230000) 166
English/ Language Arts - General (230100) 167
English/ Language Arts - Composition (230400) 173
English/ Language Arts - Creative Writing (230500) 174
English/ Language Arts - Speech, Debate, and Forensics (231000) 175
English/ Language Arts - Technical and Business Writing (231100) 176
English/ Language Arts - Language Arts, Reading (231200) 177
English/ Language Arts - Communications (239100) 179
English/ Language Arts - Radio/Television News Broadcast (239600) 180
Mathematics (270000) 181
Mathematics - Middle (270200) 182
Mathematics - Algebra (270300) 185
Mathematics - Geometry (270400) 188
Mathematics - Calculus (270500) 189
Mathematics - Other Mathematical Topics (270600) 192
Mathematics - Integrated Mathematics (270700) 195

Science (300000) 198
Science - Elementary/Middle (300100) 199
Science - High School Life Science (302600) 201
Science - High School Integrated (303000) 206
Science - High School Physical Sciences (304000) 210
Pathway to Careers (320000) 218
Pathway to Careers - Pathway to Careers (320100) 219
Multiple Pathway Career and Technical Education Courses (330000) 221
Health Education and Physical Education (340000) 223
Health Education (340100) 224
Physical Education (340200) 227
Social Studies (450000) 231
Social Studies - Middle (450100) 232
Social Studies - Economics (450600) 233
Social Studies - Geography (450700) 235
Social Studies - History (450800) 236
Social Studies - Political Science and Government (451000) 240
Social Studies - Sociology (451100) 243
Social Studies - Social Sciences, other (459800) 244
Social Studies - Psychology (459900) 246
Industrial Education (460000) 247
Industrial Education - Masonry (460100) 248
Industrial Education - Construction Carpentry (460200) 251
Industrial Education - Electrical Technology (460300) 256
Industrial Education - Heavy Equipment (460400) 261
Industrial Education - Plumbing Technology (460500) 262
Industrial Education - Mining Technology (460700) 264
Industrial Education - HVAC/ Air Conditioning Technology (460800) 265
Industrial Education - Public Services (461000) 270
Industrial Education - Industrial Electronics Technology (470100) 281
Industrial Education - Industrial Maintenance Technology (470300) 285
Industrial Education - Diesel Technology (470400) 291
Industrial Education - Automotive Technology (470500) 298

Industrial Education - Auto Body Technology/ Collision Repair and Refinish (470600) 305
Industrial Education - Aviation Technology (470700) 311
Industrial Education - Small Engines/Motorcycle Technology (470800) 319
Industrial Education - Machine Tool Technology (470900) 320
Industrial Education - CAD/Drafting Technology (480100) 324
Industrial Education - Printing Technology (480300) 330
Industrial Education - Welding (480500) 333
Industrial Education - Wood Manufacturing Technology (480700) 338
Industrial Education - Metal Fabrication (480800) 342
Industrial Arts - Media Arts (480900) 346
Industrial Education - Multiple Pathway Courses (499900) 350
Visual and Performing Arts (500000) 352
Visual and Performing Arts - General (500100) 353
Visual and Performing Arts - Crafts (500200) 354
Visual and Performing Arts - Dance (500300) 357
Visual and Performing Arts - Theatre (500500) 361
Visual and Performing Arts - Creative Film and Electronic Arts (500600) 366
Visual and Performing Arts - Visual Arts (500700) 370
Visual and Performing Arts - Music (500900) 376
ROTC (580000) 384
ROTC - Air Force Junior ROTC (580100) 385
ROTC - Army Junior Reserve Officer Training Corp (580200) 387
ROTC- Navy/Marines (580300) 389
Special Education (600000) 392
Special Education - Alternate Diploma Courses (600100) 393
Special Education - Resource and Collaboration (600200) 406
Special Education - Elementary (670000) 407
Elementary (700000) 414
Elementary - Preschool (700500) 415
Elementary - Primary (701000) 416
Elementary - Intermediate (702000) 418
Elementary - Other (703000) 422

Dual Credit Courses (800000) 429
Dual Credit Courses (800000) 430
Miscellaneous Courses (900000) 433
Miscellaneous Courses (901000) 434

Agricultural Education Program Area
(010000)

This program area consists of courses that prepare students for successful careers and a life time of informed choices in the global food, fiber, and natural resources system.

Agricultural Education - Agribusiness
(010100)

Career Major- A group of courses that prepare individuals in agribusiness, including applying scientific methods and skills of finance, management practices, marketing, economics accounting taxes, business principles, inventory, and personal management. Any course not found under this career major/sub code, may be found in another career major/sub code within this program area.

010101 - Advanced Agricultural Economics and Agribusiness Management

Grade Level: 10 - 12
Credits: 1
Description: Describes the theories, principles of sound business and economics practices, including marketing, finance, record keeping, inventories, personal management, tax laws, labor management, future trading, etc.
Content: Agriculture
Population: General

010102 - Special Topics, Agribusiness

Grade Level: 11 - 12
Credits: 1-3
Description: Instruction related to Agribusiness but not described in other courses.
Content: Agriculture
Population: General

010110 - Agriculture Communications

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles and the practice of sound communication skills, including writing, public speaking, non-verbal communication. Includes TV, radio, print, and internet media.
Content: Agriculture
Population: General

010111 - Agriculture Sales & Marketing

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles of sound sales and marketing practices including customer relations, displays, advertising, marketing plans, etc.
Content: Agriculture
Population: General

010121 - Agriculture Employability Skills

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles and the application of sound employability skills, including writing resumes, job interview skills, competing applications, dress, appearance, communication skills, etc.
Content: Agriculture
Population: General

010131 - Agribusiness/Farm Management

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles and the application of farm and business management principles including marketing, financial management, economics, record keeping, inventories, futures trading, labor management, etc.
Content: Agriculture
Population: General

Agricultural Education - Power, Structural and Technical Systems (010200)

Career Major: A group of courses that prepare individuals for mechanics and engineering for Agriculture, including design, construction, operation, maintenance, repair, sales and service and marketing machinery, equipment and structures. Any course not found under this career major/sub code, may be found in another career major/sub code within this program.

010211 - Agriculture Structures & Design

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles, the application of design and construction of agriculture structures. Includes principles of carpentry, electricity, plumbing, reading blueprints, use and care of tools, safety, etc.
Content: Agriculture
Population: General

010212 - Agriculture Power & Machinery Operation

Grade Level: 9 - 12
Credits: 1
Description: A course that describes theories, principles and the application of operating, repairing, and maintaining agriculture machinery and equipment. Includes principles of engines, hydraulics, welding, electricity, motor, and safety.
Content: Agriculture
Population: General

010231 - Small Power & Equipment

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles, and the application of operating, repairing, maintaining of power equipment and small engines. Includes welding, sales, marketing and safety.
Content: Agriculture
Population: General

010241 - Agriculture Construction Skills

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles, and the application of construction of Agricultural related. Includes principles of carpentry, electricity, plumbing, material selection, use and care of tools, safety, etc.
Content: Agriculture
Population: General

010252 - Special Topics, Ag. Power, Structural & Technical Systems

Grade Level: 11 - 12
Credits: 1-3
Description: Instruction related to Ag. Power, Structural & Technical Systems but not described in other courses.
Content: Agriculture
Population: General

Agricultural Education - Horticulture and Plant Science Systems
(010600)

Career Major: A group or courses that prepare individuals in producing, processing, and marketing plants for ornamental, recreational, and aesthetic purposes and to maintain and manage horticulture enterprises. Introduces the theory, principles and science of horticulture. Any course not found under this career major/sub code, may be found in another career major/sub code within this program area.

010610 - Crop Technology

Grade Level: 10 - 12
Credits: 1
Description: A course that describes the theories, principles, and science of crop production.
Content: Agriculture
Population: General

010611 - Introduction to Greenhouse and Crop Production

Grade Level: 10 - 12
Credits: 1
Description: A course that develops basic scientific knowledge and skills pertaining to management of soil and its effects on human and animal food and fiber production, the environment, and meeting basic needs of life. The relationship of soil to plant growth and horticulture will be emphasized. Plant anatomy, reproduction, growth, health, and current biotechnological advances will be included.
Content: Agriculture
Population: General

010621 - Floriculture & Floral Design

Grade Level: 10 - 12
Credits: 0.5-1
Description: A course that describes theories, principles and the science of floral production, design and distribution.
Content: Agriculture
Population: General

010631 - Landscape & Turf Management

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles and the science of Landscaping and Turf Management. Includes design and drawing, choosing plant materials, maintenance, marketing, etc.
Content: Agriculture
Population: General

010641 - Greenhouse Technology

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles and the science of producing plants and crops within the greenhouse environment. Includes propagation, fertilization, control of pests, marketing, etc.
Content: Agriculture
Population: General

010651 - Nursery & Orchard Technology

Grade Level: 10 - 12
Credits: 1
Description: A course that describes theories, principles and the science of producing ornamental plants, fruit and nut plants and vegetable production. Includes propagation, nutrition, cultural practices, harvesting, marketing, etc.
Content: Agriculture
Population: General

010652 - Special Topics, Horticulture and Plant Science Systems

Grade Level: 11 - 12
Credits: 1-3
Description: Instruction related to Horticulture and Plant Science Systems but not described in other courses.
Content: Agriculture
Population: General

Agricultural Education - Food Science and Processing Systems (010700)

Career Major: This group of courses prepares students for careers in the food science, processing, marketing & Distribution industries.

010701 - Food Processing, Distribution, and Marketing

Grade Level: 10 - 12
Credits: 1
Description: This course emphasizes the science & technology of processing, distributing and marketing food products.
Content: Agriculture
Population: General

010702 - Food Science and Technology

Grade Level: 10 - 12
Credits: 1
Description: This course emphasis the biological, chemical and physical science principles of converting raw agricultural products to food suitable for human consumption, as well as the technical applications involved in the process.
Content: Agriculture
Population: General

010709 - Special Topics, Food Science & Processing Systems

Grade Level: 11 - 12
Credits: 1-3
Description: Instruction related to Food Science & Processing Systems but not described in other courses.
Content: Agriculture
Population: General

Agricultural Education - Agribiotechnology
(020200)

Career Major: A group or courses that prepare individuals in principles, and science content of agricultural/life sciences, as related to the food, fiber, & natural resource industries of Agriculture. Also, this career major prepares students for careers in Agriscience, such as Bio-Technology, Veterinary Science, Food Science, Genetics, etc. Any course not found under this career major/sub code, may be found in another career major/sub code within this program area.

020210 - Agribiotechnology

Grade Level: 10 - 12
Credits: 1
Description: A course that describes the theories, principles, and science of high-tech agricultural/life science such as genetics, tissue culture, DNA extraction, cloning, etc.
Content: Agriculture
Population: General

020252 - Special Topics, Agribiotechnology

Grade Level: 11 - 12
Credits: 1-3
Description: Instruction related to Agribiotechnology but not described in other courses.
Content: Agriculture
Population: General

Agricultural Education - Animal Science Systems
(020500)

Career Major: A group of courses that describe the theories, principles and science of livestock production. Also, prepares students for careers in livestock production. Any course not found under this career major/sub code, may be found in another career major/sub code within this program area.

020501 - Animal Science

Grade Level: 10 - 12
Credits: 1
Description: A course that describes the theories, principles and science of animals and animal products, including nutrition, disease, management, etc.
Content: Animal Science
Population: General

020502 - Animal Technology

Grade Level: 10 - 12
Credits: 1
Description: A course that describes the theories, principles and science of animals, including nutrition, reproduction, health, management, etc.
Content: Animal Science
Population: General

020503 - Small Animal Technology

Grade Level: 10 - 12
Credits: 0.5 - 1
Description: A course that describes the theories, principles, and science of small animals, including pets, nutrition, health, reproduction, training, etc.
Content: Animal Science
Population: General

020510 - Equine Science

Grade Level: 10 - 12
Credits: 0.5 - 1
Description: A course that describes the theories, principles and science of horse production and management.
Content: Animal Science
Population: General

020511 - Veterinary Science

Grade Level: 10 - 12
Credits: 1
Description: This course introduces students to the field of veterinary science. Major topics include veterinary terminology, safety/sanitation, anatomy/physiology, clinical exam, hospital procedures, parasitology, posology, laboratory techniques, nutrition, disease, office management & animal management. Careers are also explored.
Content: Animal Science
Population: General

020520 - Aquaculture

Grade Level: 10 - 12
Credits: 0.5 - 1
Description: A course describing theories, principles and science of producing fish, sea food, etc., including growth, nutrition, harvesting, marketing, etc.
Content: Agriculture
Population: General

020552 - Special Topics, Animal Science Systems

Grade Level: 11 - 12
Credits: 1-3
Description: Instruction related to but not described in other courses.
Content: Animal Science
Population: General

Agricultural Education - Environmental and Natural Resources Systems
(030600)

Career Major: A group of courses that prepare individuals for careers involving conserving, improving and using natural resources such as air, water, soil, trees, wildlife, and recreation areas. Describe the theories, principles and science of natural resources. Any course not found under this career major/sub code, may be found in another career major/sub code within this program area.

030609 - Environmental Science and Technology

Grade Level: 10 - 12
Credits: 1
Description: A course describing theories, principles and science of managing, protecting and utilizing natural resources and the environment, including land, air, water, wildlife, trees, etc.
Content: Agriculture
Population: General

030610 - Forestry

Grade Level: 10 - 12
Credits: 0.5 - 1
Description: A course describing theories, principles and science of managing, preserving, maintaining, utilizing and harvesting forest assets and forest products. Study of silviculture practices.
Content: Agriculture
Population: General

030611 - Wildlife Resources

Grade Level: 10 - 12
Credits: 0.5 - 1
Description: A course describing theories, principles and science of producing, managing, preserving and improving wildlife resources, including habitat management, harvesting marketing, etc.
Content: Agriculture
Population: General

030652 - Special Topics, Environmental Science & Natural Resource Systems

Grade Level: 11 - 12
Credits: 1-3
Description: Instruction related to Environmental Science & Natural Resource Systems but not described in other courses.
Content: Agriculture
Population: General

Agricultural Education - Career Major Electives
(030700)

Courses not falling into one of the other career majors/sub codes

---

030702 - Leadership Dynamics - Agriculture

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.
Content: Leadership Dynamics
Population: General

030707 - Agricultural Math for CTE Credit

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to emphasize high school math core content by utilizing agricultural education as the content for delivering the math concepts.
Content: Agriculture
Population: General

030708 - Agricultural Math for Math Credit

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed to emphasize high school math core content by utilizing agricultural education as the content for delivering the math concepts. A correlation to the math content in the program of studies was used in developing this course to count as a 4th math elective.
Content: Agricultural Math for the Math Elective Requirement
Population: General

030711 - Agriscience

Grade Level: 9 - 12
Credits: 1
Description: A course that describes the science of the Agricultural food, fiber and natural resources industries.
Content: Agriculture
Population: General

030712 - Agriscience Interdisciplinary

Grade Level: 9 - 12
Credits: 1
Description: An interdisciplinary course that counts for Life Science credit for high school graduation. Teaches science through use of agricultural concepts.
Content: Agriscience for Life Science Credit
Population: General

030713 - Agri-biology Interdisciplinary

Grade Level: 10 - 12
Credits: 1
Description: An interdisciplinary course that counts for Life Science credit for high school graduation. Teaches biology through use of Agricultural concepts.
Content: Agribiology for Life Science Credit
Population: General

030714 - Principles of Agri-Science & Technology, Grade 8

Grade Level: 8 - 8
Credits: 0
Description: A foundational course describing the principles, theories and science of the Agricultural food, fiber natural resources industries.
Content: Agriculture
Population: General

030715 - Principles of Agri-Science & Technology, Grade 9

Grade Level: 9 - 9
Credits: 1
Description: A foundational course describing the principles, theories and science of the Agricultural food, fiber natural resources industries.
Content: Agriculture
Population: General

030717 - Agriscience Exploration Grade 6-8

Grade Level: 6 - 8
Credits: 0
Description: A beginning course that describes the science of the Agricultural food, fiber and natural resource industries.
Content: Agriculture
Population: General

030790 - Agricultural Education Co-op

Grade Level: 11 - 12
Credits: 1-3
Description: Cooperative Education for CTE courses indicated within the KY Department of Education provide supervised work site experience related to the student's identified career major. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Agriculture
Population: General

030791 - Agricultural Education Internship

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE Courses provide supervised work-site experience for high school students who have completed courses leading to a career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students receiving pay for intern experience are those participating in an experience that is a semester or longer and have an established employee-employer relationship. A non-paid internship affects those students who participate on a short term basis.
Content: Agriculture
Population: General

Business Education
(060000)

Provides relevant learning that is a critical link to employment and post-secondary education, encourages the development of vital relationships with the business community, and promotes critical thinking and problem solving.

Business Education - Career Major Electives
(060100)

060107 - Business Education Co-op

Grade Level: 11 - 12
Credits: 1-3
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements according to the Work Based Learning Guide.
Content: Business
Population: General

060108 - Business Education Internship

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less). All information referenced to the Work Based Learning Guide.
Content: Business
Population: General

060111 - Business Principles and Applications

Grade Level: 9 - 10
Credits: 1
Description: This course establishes basic foundations for further study in business and marketing courses and provides essential information for making financial and economic decisions. Students learn about the fundamentals of the American free enterprise system and world economies; application of sound money management for personal and family finances; credit management; consumer rights and responsibilities; forms of business ownership; risk and insurance; and the importance of international trade. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060112 - Digital Literacy

Grade Level: 9 - 12
Credits: 1
Description: Students will use a computer and application software including word processing, presentations, database, spreadsheets, internet, and email to prepare documents and reports. The impact of computers on society and ethical issues are presented.
Content: Computer and Technology Applications (Advanced)
Population: General

060113 - Keyboarding Applications - 7th & 8th Grade

Grade Level: 7 - 8
Credits: 0
Description: This course is designed for students who have little or no keyboarding experience. Keyboarding Applications will develop the touch system of keying with added emphasis on the development of proper keyboarding techniques, speed, and accuracy. Six to nine weeks will be spent developing the touch system. The student will apply techniques for proofreading, editing, word division, capitalization, and punctuation for production of mail able copies of letters, simple business forms, tabulated information, and manuscripts. After completion of Keyboarding Applications, a student may take either Word Processing or Computer and Technology Applications.
Content: Business
Population: General

060114 - Touch Keyboarding for 4-6th Grade

Grade Level: 4 - 6
Credits: 0
Description: This is a six-to-nine week course where students will develop skills in operating a keyboard by touch with emphasis on entering the alphabet, numbers, and symbols with proper technique.
Content: Touch Keyboarding
Population: General

060121 - Business Law

Grade Level: 10 - 12
Credits: 1
Description: This course develops an understanding of legal rights and responsibilities in personal law and business law with applications applied to everyday roles as consumers, citizens, and workers. The student will have an understanding of the American legal system, courts/court procedures, criminal justice system, torts, the civil justice system, oral and written contracts, sales contracts and warranties, and consumer protection. Legal terminology is emphasized. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060122 - Accounting and Finance Foundations

Grade Level: 9 - 12
Credits: 1
Description: This course will provide an introduction to both areas of accounting and finance. Topics will include banking, credit, financial literacy, career exploration, spreadsheet usage, and technical writing. The accounting principles taught in this course are based on a double-entry system and include preparing bank reconciliations, payroll taxes, and financial statements. Detailed career exploration in the various fields of accounting will be available. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060142 - Word Processing

Grade Level: 9 - 12
Credits: 1
Description: This course is designed for students who have already developed proficiency in Exploratory Computers (or its equivalent). The student will spend two to three weeks reviewing the touch system of keying with emphasis on proper technique and developing speed and accuracy. The student will apply techniques for composing, proofreading, editing, word division, capitalization, and punctuation for production of mail able copies of letters, business forms, tables, and reports. In-depth instruction for the generation of desktop publishing documents, spreadsheets, graphics, graphs, charts, and databases through application is a vital part of this course. The student will also research career opportunities in computer-related careers. A computerized workstation with appropriate software is required for each student. Leadership development will be provided through FBLA.
Content: Business
Population: General

060155 - Business Communications

Grade Level: 10 - 12
Credits: 1
Description: The study of written, oral, and electronic communication in a business environment. Emphasis is on writing letters, presenting business reports, using the telephone, electronic transfer of information, listening, interpreting, and developing business messages. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060160 - Computer and Technology Concepts

Grade Level: 6 - 6
Credits: 0
Description: This course is a 9-12 weeks course designed for students in 6th grade who have minimal keyboarding experience. Computer and Technology Concepts will develop the touch system of keying with added emphasis on the development of proper keying techniques, speed, and accuracy. The first six weeks will focus on proper techniques utilizing the touch system. The final three weeks will allow the students to develop and demonstrate knowledge of basic word processing skills such as formatting letters in various letter styles, short reports with and without references, and tables. Additional emphasis will be placed on basic communications skills such as proofreading, grammar, word division, and the proper application of proofreader's marks to demonstrate the importance of mail able copy. Different telecommunications concepts may be addressed through simulation or

application.
Content: Business
Population: General

060170 - Financial Literacy (for CTE Credit)

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to provide students with the knowledge and skills to manage one's financial resources effectively for lifetime financial security. Topics include economics, money in the economy, budgeting, credit, consumer rights, investments and retirement planning. A correlation to the math content in the program of studies was used in developing this course to count as a 4th math elective. Leadership development will be provided through FBLA/DECA.
Content: Business
Population: General

060188 - International Business

Grade Level: 11 - 12
Credits: 1
Description: This course is designed to provide students with basic knowledge and skills related to international economic activities and global business transactions. Students will examine the relationship of global business activities to nations, companies, and individuals in their roles as workers, consumers, and citizens; and will examine economic, cultural, geographic, historic, and technological influences on global business activities, management principles, human relation theories, information systems, production, marketing, and finance activities. Students will also explore career planning, mathematical and data analysis, written and oral communication, and problem-solving skills related to international business activities. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060195 - Business and Marketing Career Exploration - 8th & 9th Grade

Grade Level: 8 - 9
Credits: 1
Description: This course provides students with a survey of skills needed for school-to-work transition. Opportunities to explore the business and marketing career cluster and career paths, to heighten self-awareness, and to develop priorities and career decision-making skills are also provided. A variety of instructional resources, self-assessment instruments, and career interest surveys are included in the updating of the Individual Learning Plan (ILP). Interpersonal skill development and orientation to word processing, computer spreadsheet, and database are included. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060196 - Leadership Dynamics - Business

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.
Content: Leadership Dynamics
Population: General

060197 - Special Topics, Business

Grade Level: 9 - 12
Credits: 1 - 3
Description: Special topics expand course offerings, as well as address local office issues. Topics may vary from semester to semester at the discretion of the instructor; courses may be repeated with different topics to a maximum of three credit hours.
Content: Business
Population: General

060199 - Web Page Design

Grade Level: 10 - 12
Credits: 1
Description: Students analyze the structure of the worldwide web, apply basic principles of web documents and HTML, and develop multi-media web pages. Course content will include the understanding of hypertext and web structures. Equipment such as scanners, digital and video cameras, and sound recording devices will be utilized through hands-on instruction. Leadership development will be provided through FBLA and/or DECA.
Content: Web Page Design
Population: General

Business Education - Finance
(060300)

A group of instructional programs that prepare individuals to perform financial or banking services. Includes instruction in credit collection, transit routing of notes and drafts, receiving and paying out money, and functions associated with processing loans and insurance claims. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

060311 - Financial Services I

Grade Level: 11 - 12
Credits: 1
Description: This course is designed for students interested in pursuing a career in the financial institution field. It involves operation of a student financial center in cooperation with a sponsoring bank, which provides application of banking and financial procedures and concepts. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060351 - Financial Services II

Grade Level: 11 - 12
Credits: 1
Description: Financial Services II is a continuation of Financial Services I, providing opportunities to enhance students' employment portfolio. Students continue to learn and practice financial activities associated with the operation of a bank and other finance-related institutions in addition to assuming management and supervisory responsibilities, including training "new employees." Students will participate in a work-based learning experience. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060399 - Advanced Finance and Credit

Grade Level: 11 - 12
Credits: 1
Description: This course is designed to develop an understanding of financial markets, investing institutions, and the finance and credit industry in our economic system. It includes an introduction to the allocation of financial resources, the effects of the finance and credit institutions on the business community, and the impact that financial decisions have on the consumer market. Areas of study include stock markets, bonds, futures, commodities, interest rates and the economy, interpretation of financial information, insurance and risk management, and job opportunities in the finance and credit area. This course should include real and/or simulated occupational experiences and projects. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

Business Education - Business Management
(060400)

A group of courses that describes the planning, organizing, and various theories of management; knowledge and understanding necessary in decision making; personnel selection; leadership abilities; and speech preparation. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

060411 - Business Management

Grade Level: 11 - 12
Credits: 1
Description: This course emphasizes the skills needed for managing a business that involves the selection and supervision of employees including efficient use of time, personnel, facilities, and financial resources. Students will explore forms of business ownership; typical business organizational structure; product or service promotion in business; effective communications; human relations skills required in dealing with employees; and effective management strategies used in personnel, finance, production, marketing, and information processing. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060596 - Business Economics for Economics credit within Social Studies

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to be a comprehensive study of economics which meets the economics requirement for graduation. It provides an in-depth study of how people produce, distribute and consume goods and services. Economic terminology, theory and a comparison of economics systems and policies are integral to the course. Leadership development will be provided through FBLA and/or DECA.
Content: Business Economics for Economics Credit within Social Studies
Population: General

Business Education - Multimedia
(060700)

A program that prepares individuals to function in an organization as a composer, editor and proofreader of business or business-related communications

---

060751 - Multimedia Publishing

Grade Level: 10 - 12
Credits: 1
Description: This hands-on course applies publishing and presentation concepts through the development of sophisticated business documents and projects. These documents include, but are not limited to tri-fold brochures, manuscripts, reports, bi-fold programs, catalogs, newsletters, flyers, business forms, graphs, web pages, on-screen presentations, and video productions. Equipment such as scanners, digital cameras, video cameras, and color laser printers, may be utilized in creating documents. Formatting, editing, page layout, and design concepts are taught. Distribution ready publication standards are applied to all projects. Students will develop communication skills, problem-solving techniques, cooperative learning, and interpersonal skills. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

060761 - Advanced Multimedia Publishing

Grade Level: 11 - 12
Credits: 1
Description: This hands-on course applies advanced web design, publishing, and presentation concepts through the development of sophisticated documents and projects which includes, but is not limited to: web sites, web databases, web movies, video editing and production, television productions. The course is designed around the learning goals of the students and is project-based. Students will complete advanced projects agreed upon with the instructor utilizing hardware and software available. Formatting, editing, layout, and design concepts are reviewed and reinforced. Distribution ready publication standards are applied to all projects. Students will develop communication skills, problem-solving techniques, cooperative learning, and interpersonal skills. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

Business Education - Accounting
(070100)

Prepares individuals to systematize data by applying auditing principles, preparing budgets and financial statements, basic accounting elements, bookkeeping principles in real-world settings, financial management, corporate bookkeeping, advanced basic accounting, accounting cycle, depreciation, and accruals. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

070122 - Financial Accounting

Grade Level: 10 - 12
Credits: 1
Description: The accounting principles taught in this course include an in-depth study of accounting principles, procedures, and techniques used in keeping financial records for sole proprietorships, partnerships, and corporations. There is an emphasis on automated accounting. Topics include a more analytical approach to accounting. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

070125 - Advanced Accounting

Grade Level: 11 - 12
Credits: 1
Description: This course uses an integrated approach to teach accounting. Students first learn how businesses plan for and evaluate their operating, financing, and investing decisions and then how accounting systems gather and provide data to internal and external decisions makers. This year-long course covers all the learning objectives of a traditional college level financial accounting course, plus those from a managerial accounting course. Topics include an introduction to accounting, accounting information systems, time value of money, and accounting for merchandising firms, sales and receivables, fixed assets, debt and equity. Other topics include statement of cash flows, financial ratios, cost-volume profit analysis and variance analysis. Leadership development will be provided through FBLA and/or DECA. (Teachers must go through a 3 day training to teach this course)
Content: Business
Population: General

Business Education - Data Base Management
(070300)

A group of instructional programs that prepare individuals to analyze and design data processing system configurations; write, test, monitor, debug, and maintain data processing programs; and operate computers and peripheral and data entry equipment. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

070331 - Data Modeling/SQL

Grade Level: 10 - 12
Credits: 1/2-1
Description: This course allows students to transform business requirements into an operational database using a systematic approach. Students will be engaged using data storage and retrieval techniques through activities that require teamwork, presentation skills, logical problem-solving, journaling and reflective thinking. Students will create and maintain database objects, and store, retrieve, and manipulate data. Demonstrations and hands-on practice will be used for learning concepts. Students will apply SQL, an industry-standard language, to learn to build and manage database systems. Students will also learn interviewing skills and project management. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

070399 - Web Data Management

Grade Level: 10 - 12
Credits: 1
Description: This course will allow students to use the Oracle Academy curriculum to enhance their knowledge of Data Modeling and SQL programming. Students will use JAVA programming language to write stand-alone programs. Techniques learned during this course will include: code reusability, data encapsulation, dynamically downloadable program units, and platform-independent programs. Applications with databases and web pages will be included. Leadership Development will be provided through FBLA and/or DECA.
Content: Business
Population: General

Business Education - Administrative Support
(070600)

A group of instructional programs that prepare individuals to record and transcribe communications and to provide administrative support. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

Business Education - Information Processing
(070700)

A group of instructional programs that prepare individuals to record, duplicate, and retrieve data, including classifying, sorting and filing correspondence, records, and other data. Includes instruction in shipping and receiving procedures, stock and inventory maintenance, and operation of office machines. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

070743 - Office Administration

Grade Level: 11 - 12
Credits: 1
Description: This course is designed to provide students with an advanced-level experience with practical applications through hands-on instruction. Course content will include understanding of various hardware, software, operating systems, care/operations, administrative applications, and employability skills. The software includes advance business applications using word processing, presentation, spreadsheets, database management, desktop publishing, and electronic communication. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

070750 - Microsoft Office Specialist (MOS/MCAS)

Grade Level: 11 - 12
Credits: 1
Description: This course is an extension of Computer and Technology Applications, students will have the opportunity to increase their computer skills. Advanced functions and integration of Microsoft Word, Excel, Access, and PowerPoint will be taught. Students will work toward MOS Certification in one or more of these Microsoft areas. In addition students will utilize Internet access to complete various projects. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

Business Education - Legal Office Services
(070800)

A group of instructional programs that prepare students to work in a legal office.

070881 - Legal Office

Grade Level: 11 - 12
Credits: 1
Description: This course enables students to gain concepts, skills, and techniques in legal terminology and various forms used in the legal profession. Leadership development will be provided through FBLA and/or DECA.
Content: Business
Population: General

Business Education - Medical Office Services
(070900)

A group of instructional programs that prepare students to work in with medical office records.

070971 - Medical Office

Grade Level: 11 - 12
Credits: 1
Description: This course enables students to gain concepts, skills, and techniques in medical terminology and various forms used in the medical profession. Leadership development provided through FBLA and/or DECA.
Content: Business
Population: General

Marketing Education
(080000)

A program area that consist of a summary of groups of instructional programs that prepare individuals for occupations directed toward and incident to the flow of instructional and consumer goods in channels of trade, or the provision of services to consumers or users. These programs are concerned with marketing, sales, distribution, merchandising, and management.

Marketing Education - Fashion Marketing
(080100)

A group of instructional programs that prepare individuals to perform marketing function and tasks in retail establishments, wholesale establishments, and marketing firms primarily engaged in the marketing of clothing and related articles for personal wear. Any course not found under this career major/sub code maybe found in another career major/sub code within this program area.

080111 - Fashion Marketing

Grade Level: 10 - 12
Credits: 1
Description: This course is a specialized course that provides instruction in marketing of apparel and accessories. This course is based upon the business and marketing core that includes communication skills, economics, operations, professional development, promotion, selling, distribution, and product/service management. The instruction includes basic fashion and marketing basics, the use of design and color, promotions, visual merchandising and career opportunities. Leadership development will be provided through FBLA and/or DECA.
Content: Marketing
Population: General

080132 - Fashion Marketing Management

Grade Level: 11 - 12
Credits: 1
Description: This course is designed as a continuation of Fashion Marketing and provides an in-depth study of merchandising techniques, fashion trends, fashion promotion, and management skills. This course is based on the business and marketing core that includes communication skills, economics, operations, professional development, promotion, selling, distribution, and product/service management. Leadership development will be provided through FBLA and/or DECA.
Content: Marketing
Population: General

Marketing Education - Management/Entrepreneurship (080300)

A group of instructional programs that prepares students for the rewards and risk of business ownership. Emphasis is placed on the day-to-day management functions performed by marketing professionals. Any course not found under this career major/sub code maybe found in another career major/sub code within this program area.

080310 - Entrepreneurship

Grade Level: 11 - 12
Credits: 1
Description: This course is designed to provide students the skills needed to effectively organize, develop, create and manage their own business. This course is based on improving communication skills and understanding economics, financial analysis, operations, promotion and selling. The culminating project of the course is the development of a comprehensive business plan. Cooperative education or shadowing experiences may be used to enhance course instruction. Leadership development provided through FBLA, DECA and/or FCCLA.
Content: Entrepreneurship
Population: General

080317 - Business Economics - CTE Credit

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to be a comprehensive study of economics which meets the economics requirement for graduation. It provides an in-depth study of how people produce, distribute, and consume goods and services. Economic terminology, theory, and a comparison of economic systems and policies are integral to the course. Simulations and/or actual work situations may be used to provide practical experience with various economic conditions. Leadership development will be provided through FBLA and/or DECA.
Content: Marketing
Population: General

Marketing Education - Career Major Electives
(080700)

A program that prepares individuals to teach sales and marketing operations/marketing programs at various educational levels. Any course not found under this career major/sub code maybe found in another career major/sub code within this program area.

080707 - Marketing Education Co-op

Grade Level: 11 - 12
Credits: 1-3
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements according to the Work Based Learning Guide.
Content: Marketing
Population: General

080708 - Marketing Education Internship

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less). All information referenced in the Work Based Learning Guide.
Content: Marketing
Population: General

080711 - Business and Marketing Concepts and Applications

Grade Level: 7 - 7
Credits:
Description: This course is for 7th grade students and is a 9-12 week course that incorporates fundamentals of introduction to business concepts with hands-on application of Word Processing, Spreadsheet, Graphics, Power Point design and Publisher. The student will be introduced to business terminology, practice and procedures for running a small business as well as making realistic decisions regarding their daily operations. Activities are designed to promote creativity, individuality, and encourage students to take ownership in their business enterprise. Students develop their small business through the developmental stage and progress to study marketing plans, various forms of communication, inventory control and payroll.

Content: Marketing
Population: General

080715 - Special Topics, Marketing

Grade Level: 9 - 12
Credits: 1 - 3
Description: Special topics expand course offerings and may vary from semester to semester at the discretion of the instructor; courses may be repeated with different topics to a maximum of three credit hours.
Content: Marketing
Population: General

080716 - Principles of Marketing

Grade Level: 9 - 12
Credits: 1
Description: This course provides a basic foundation for further study in marketing. Students study economic functions at work in the marketplace, marketing functions including purchasing, pricing, and distribution functions. This course is based on the business and marketing core that includes communication skills, economics, financial analysis, and promotion. Both marketing and employment skills learned will improve and increase the chance of successful transition into the world of work. Leadership development will be provided through FBLA and/or DECA.
Content: Marketing
Population: General

080717 - Advanced Marketing

Grade Level: 11 - 12
Credits: 1
Description: This course is designed to enhance marketing skills developed in the marketing prerequisite courses and to learn advanced marketing skills in such areas as advertising, customer service, supervision, and employee/employer relations for a wide range of marketing careers. This course is based on the business and marketing core that includes communication skills, emotional intelligence, economics, marketing, operations, promotion, marketing-information management and financial analysis. Leadership development will be provided through FBLA and/or DECA.
Content: Marketing
Population: General

080719 - Financial Literacy for Math Credit (Marketing)

Grade Level: 9 - 12
Credits: 1E
Description: This course is designed to provide students with the knowledge and skills to manage one's financial resources effectively for lifetime financial security. Topics include economics, money in the economy, budgeting, credit, consumer rights, investments and retirement planning. A correlation to the math content in the program of studies was used in developing this course to count as a 4th math elective. Leadership development will be provided through FBLA/DECA.
Content: Financial Literacy for the Math Elective Requirement
Population: General

080772 - Math for Business and Industry for CTE credit

Grade Level: 9 - 12
Credits: 1
Description: Enables student to explore mathematical content for personal, business, and industrial use; concepts are applied through problem-solving and real-world situations. A correlation to the math content in the Program of Studies was used in developing this course to count for the 4th math credit.
Content: Marketing
Population: General

080780 - Math for Business and Industry for credit in Math

Grade Level: 9 - 12
Credits: 1
Description: Enables student to explore mathematical content for personal, business, and industrial use; concepts are applied through problem-solving and real-world situations. A correlation to the math content in the Program of Studies was used in developing this course to count for the 4th math credit.
Content: Math for Business and Industry for the Math Elective Requirement
Population: General

080799 - Leadership Dynamics

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.
Content: Leadership Dynamics
Population: General

Marketing Education - Hospitality, Travel & Tourism
(080900)

A group of instructional programs that prepare individuals to perform marketing and management functions and tasks in any business enterprise primarily engaged in satisfying the desire of people to make productive or enjoyable use of leisure time.

080910 - Principles of Hospitality

Grade Level: 10 - 12
Credits: 1
Description: This course is designed for students interested in marketing careers in the hospitality industry. The instruction includes career awareness in the areas of recreation, travel/tourism, hotel/motel, and restaurant. This course is based on the business and marketing core that includes communication skills, economics, operations, promotion, selling, and product/service management. Leadership development will be provided through FBLA and/or DECA.
Content: Marketing
Population: General

080911 - Travel and Tourism Marketing

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the student to the travel and tourism industry. This course is based on the Business and Marketing Core that includes communication skills, economics, human resource management, promotion, marketing-information management, and selling. Instruction includes domestic and international travel, sales techniques, transportation methods (road, water, air, rail), food and beverage marketing, and destination marketing. Leadership development will be provided through DECA and/or FBLA.
Content: Marketing
Population: General

Marketing Education - Sports Marketing
(081100)

A group of instructional programs that prepare individual to perform marketing and management functions and tasks in sports marketing. Any course not found under this career major/sub code maybe found in another career major/sub code within this program area.

081121 - Sports and Event Marketing

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to develop a thorough understanding of the marketing concepts and theories that apply to sports and events. This course is based on the business and marketing core that includes communication skills, distribution, marketing-information management, pricing, product/service management, promotion, selling, operations, strategic management, human resource management, and the economic impact and considerations involved in the sports and event marketing industries. Leadership development will be provided through DECA and/or FBLA.
Content: Marketing
Population: General

Marketing Education - E-Commerce
(081300)

A group of instructional programs that prepare individuals to perform electronic marketing functions or E-Commerce. Any course not found under this career major/sub code maybe found in another career major/sub code within this program area.

081310 - Internet Marketing

Grade Level: 11 - 12
Credits: 1
Description: This course provides an in-depth study in electronic marketing/commerce associated with the Internet. Students learn how to practice good marketing principles in an "electronic" marketing place. Decision-making and problem-solving skills are involved in such units as human relations, distribution, market information management, and product/service planning. The employment skills learned will improve and increase the chance of successful transition into the world of work. Leadership development will be provided through DECA and/or FBLA.
Content: Marketing
Population: General

Marketing Education - Retailing / Wholesaling
(081400)

A group of instructional programs that prepare individuals to perform marketing and management functions and tasks in retail and wholesale establishments. Any course not found under this career major/sub code maybe found in another career major/sub code within this program area.

081411 - Retail Marketing

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to provide an overview of the marketing responsibilities of individuals employed in the retail industry. This course is based on the business and marketing core that includes communication skills, operations, distribution, marketing-information management, pricing, product/service management, promotion and selling. Leadership development will be provided through DECA and/or FBLA.
Content: Marketing
Population: General

081431 - Retail Marketing Management

Grade Level: 11 - 12
Credits: 1
Description: This course is designed as a continuation of Retail Marketing and provides an in-depth study of merchandising techniques and management skills. This course is based on the business and marketing core that includes communication skills, economics, operations, professional development, promotion, selling, distribution, and product/service management. Leadership development will be provided through DECA and/or FBLA.
Content: Marketing
Population: General

Marketing Education - Advertising
(081500)

A group of instructional programs that describe the creation, execution, transmission, and evaluation of commercial messages concerned with the promotion and sale of products and services. Any course not found under this career major/sub code maybe found in another career major/sub code within this program area.

081511 - Advertising & Promotion

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to provide students with a realistic "hands-on" applications of techniques used in the advertising and promotion of goods and services. Students use typical media software, media equipment, while being exposed to all forms of media (print, web page, etc.), methods, budgets, and evaluations used by industry. Leadership development will be provided through DECA.
Content: Marketing
Population: General

081512 - Promotional Applications & Media

Grade Level: 11 - 12
Credits: 1
Description: This course is designed to provide students with hands-on applications, of running a school based industry simulated experience. Students will apply basic fundamentals of advertising using digital and print media. This course is based on the business and marketing core that includes communication skills, economics, financial analysis, product/service management and promotion. Leadership development will be provided through DECA and/or FBLA.
Content: Marketing
Population: General

Information Technology
(110000)

The Information Technology Program prepares students for careers by applying technical knowledge and skills in the rapidly growing fields of computer networking, programming, digital media, support services, and e-commerce/web design.

Information Technology - Information Support and Services (110100)

Career Major-Focuses on the design of computing systems. Includes instruction in the principles of computer hardware & software components, algorithms data basis, telecommunications, etc. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

110101 - Computer Hardware and Software Maintenance

Grade Level: 9 - 12
Credits: .5-1
Description: Focuses on the design of computing systems, including instruction in the principles of computer hardware and software components, algorithms data basis, telecommunications, etc. Includes the knowledge to identify and explain PC components, setup a basic PC workstation, conduct basic software installation, identify compatibility issues and recognize/prevent basic security risks and also gives knowledge in the areas of Green IT and preventative maintenance of computers.
Content: Information Technology
Population: General

110102 - Help Desk Operations

Grade Level: 9 - 12
Credits: 1
Description: Introduces a variety of tools and techniques to provide user support in help desk operations. Explores help desk concepts, customer service skills, troubleshooting problems, writing for end users, help desk operations and software, needs, analysis, facilities management, and other topics related to end user support.
Content: Information Technology
Population: General

110110 - Computer Literacy

Grade Level: 9 - 12
Credits: 1
Description: Introduces students to the main components of computer literacy including Computer Fundamentals, Key Applications and Living Online. Provides an introduction to the computer and the convergence of technology as used in today's global environment. Introduces topics including computer hardware and software, file management, the Internet, e-mail, the social web, green computing, security and computer ethics. Presents basic use of application, programming, systems and utility software. Basic keyboarding skills are strongly recommended. Note: This course is equivalent to Digital Literacy (060112) and will combine as one course effective 2016-2017.
Content: Computer and Technology Applications (Advanced)
Population: General

110152 - Special Topics, Information Support & Services

Grade Level: 9 - 12
Credits: 1
Description: Instruction related to Information Support & Services but not described in above courses.
Content: Information Technology
Population: General

Information Technology - Programming
(110200)

Career Major - Focuses on the general writing and implementation of generic and atomized programs to drive operating systems. Includes software design, languages, and program writing, trouble-shooting, etc. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

110201 - Introduction to Programming

Grade Level: 9 - 12
Credits: 1
Description: Focuses on the general writing and implementation of generic and atomized programs to drive operating systems. Includes software design, languages, and program writing, trouble-shooting, etc.
Content: Programming (Advanced)
Population: General

110202 - C++ 1

Grade Level: 10 - 12
Credits: 1
Description: Introduces students to fundamental programming concepts using the C++ programming language. Includes data types, control structures, simple data structures, error-handling, modular programming, and information and file processing.
Content: Programming (Advanced)
Population: General

110204 - Productivity Software

Grade Level: 10 - 12
Credits: 1
Description: Utilizes current word processing, spreadsheet, database, and presentation application software to solve common technology and business problems. Covers basic features of each software application.
Content: Information Technology
Population: General

110205 - JAVA Programming I

Grade Level: 10 - 12
Credits: 1
Description: Introductory course to object oriented programming in Java. Students learn to write, compile, test, and debug basic applets and applications that use a graphical user interface.
Content: Programming (Advanced)
Population: General

110206 - JAVA Programming II

Grade Level: 10 - 12
Credits: 1
Description: This course is a continuation of Java Programming I. Students learn input and output streams, networking, advanced graphical user interface features, and the benefits of object-oriented techniques such as encapsulation, inheritance, etc.
Content: Programming (Advanced)
Population: General

110207 - Visual Basic 1

Grade Level: 10 - 12
Credits: 1
Description: Introduces students to fundamental programming concepts using the Visual Basic programming language. Includes data types, control structures, simple data structures, error-handling, modular programming, event-driven programming, graphical user interfaces, and file processing
Content: Programming (Advanced)
Population: General

110208 - Visual Basic II: Creating Desktop Applications

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to provide students with the knowledge and skills to design, develop, and implement Visual Basic applications designed to run on individual computers or workstations. This course helps prepare the student for Microsoft Certified Professional Examination.
Content: Programming (Advanced)
Population: General

110211 - Introduction to Database Design

Grade Level: 9 - 12
Credits: 1
Description: Provides an overview of database and database management system concepts, internal design models, normalization, network data models, development tools, and applications.
Content: Information Technology
Population: General

110213 - Design for the Internet

Grade Level: 10 - 12
Credits: 1
Description: Introduces basic computer graphics with special emphasis on graphics for games.
Content: Information Technology
Population: General

110214 - C# I

Grade Level: 10 - 12
Credits: 1
Description: Introduces students to fundamental programming concepts using the C# programming language. Includes data types, control structures, simple data structures, error-handling, object-oriented programming, graphical user interfaces, and modular programming.
Content: Programming (Advanced)
Population: General

110215 - C# II

Grade Level: 10 - 12
Credits: 1
Description: Provides students with an extensive overview of designing and developing advanced object-oriented applications using the C# programming language. Includes advanced graphical user interfaces, event-driven programming, advanced data types and structures, concurrency, file and data base processing, mobile computing, and other advanced topics.
Content: Programming (Advanced)
Population: General

110216 - C++ II

Grade Level: 10 - 12
Credits: 1
Description: Introduces students to advanced programming concepts using C++. Includes advanced data structures, concurrency, innovative algorithms, advanced file processing, and topics that are unique to C++
Content: Programming (Advanced)
Population: General

110217 - Perl I

Grade Level: 10 - 12
Credits: 1
Description: Provides students with an overview of the Perl scripting language. Includes coding, testing, and debugging Perl programs; using variables, operators, and data types; and using control structures, pattern matching, objects, and application scripts.
Content: Programming (Advanced)
Population: General

110218 - PHP I

Grade Level: 10 - 12
Credits: 1
Description: Explores the fundamentals of PHP, with emphasis on syntax, structure, and current usage. Includes dynamic generation of web pages, fluid forms, and web security.
Content: Programming (Advanced)
Population: General

110219 - PHP II

Grade Level: 10 - 12
Credits: 1
Description: Explores the dynamic features of PHP and how it can interact to form spontaneous websites and dynamic feature rich content.
Content: Programming (Advanced)
Population: General

110220 - Python I

Grade Level: 10 - 12
Credits: 1
Description: Introduces students to fundamental programming concepts using the Python programming language. Includes data types, control structures, simple data structures, error-handling, modular programming, object-oriented programming, graphical user interfaces and file processing.
Content: Programming (Advanced)
Population: General

110221 - Python II

Grade Level: 10 - 12
Credits: 1
Description: Provides students with an extensive overview of designing advanced computer applications using the Python programming language. Includes graphical user interfaces, event-driven programming, modular programming, advanced object-oriented programming, advanced data types and structures, input validation, error-handling, database processing, and client/server programming.
Content: Programming (Advanced)
Population: General

110222 - Cyber Literacy I (NICERC)

Grade Level: 9 - 12
Credits: 1
Description: Cyber Literacy I (NICERC) is a hands-on curriculum that builds a strong cyber foundation for high school students. The course introduces students to cyber by blending robotics, programming, electricity, and elements of liberal arts. Students learn about the opportunities, threats, responsibilities, and legal constraints associated with operating in cyberspace. Throughout the course, students learn the basics of electricity, programming, and networking as well as developing critical thinking skills. Cyber Literacy lays a foundation for further exploration into STEM and cyber-related topics.
Content: Information Technology
Population: General

110223 - Cyber Literacy II (NICERC)

Grade Level: 9 - 12
Credits: 1
Description: Cyber Literacy II (NICERC) is a project-driven curriculum that expands a student's understanding of cyberspace through two primary topics: systems engineering and liberal arts. The Cyber Literacy II course builds upon fundamental cyber skills developed in Cyber Literacy and challenges students to go deeper into the world of cyberspace.
Content: Information Technology
Population: General

110224 - Cyber Science (NICERC)

Grade Level: 9 - 12
Credits: 1
Description: Cyber Science (NICERC) is an innovative, project-driven course that integrates science, technology, engineering, and mathematics (STEM) disciplines with liberal arts. Cyber Science uses the Parallax® Boe-Bot® robot as a platform for teaching important cyber concepts and fundamentals. Throughout the course, students are engaged in a systems-level approach to problem-solving using robotics and computer science in the context of liberal arts. Seamlessly integrating the different disciplines provides students with a dynamic learning environment and a unique educational experience. Through Cyber Science, students are not only able to make meaningful connections between STEM and liberals arts, they also learn how to become better cyber citizens.
Content: Information Technology
Population: General

110225 - Computer Science (NICERC)

Grade Level: 9 - 12
Credits: 1
Description: Computer Science (NICERC) is a hands-on, projects-based curriculum that utilizes a unique computing platform to engage students in an immersive exploration of the breadth of computer science. Through a puzzle-based learning approach that is strategically meshed with candid discussions of the philosophy and expectations that underlie the learning process, a foundation of problem solving and critical thinking is laid upon which the four major themes of computer science are then iteratively built as pillars. Various beams that showcase the applications of computer science are finally laid atop the pillars. The high-level goals of the curriculum are to (1) Expose students to the beauty of computer science through an engaging discovery process; (2) Show how exploring computer science can be used to solve hard problems; and (3) Cultivate problem solvers who are comfortable at tackling hard problems and who understand that computer science is a lifelong learning process.
Content: Information Technology
Population: General

110226 - Project-Based Programming

Grade Level: 10 - 12
Credits: 1
Description: This project-based learning course engages the conscientious and serious programming student. In this course, students will create projects that require computer science fundamentals and extensive research to successfully complete. Students will work either solo or in a team to execute a project decided upon by the student(s). Students must learn and demonstrate proficiency in time management, scope, research, computer science, and teamwork to be successful in this course.

Finally, students will engage in leadership skills by being held accountable for completion of tasks and projects.
Content: Information Technology
Population: General

110251 - Computational Thinking

Grade Level: 10 - 12
Credits: 1
Description: Students analyze the structure of the worldwide web, apply basic principles of web documents and HTML, and develop multi-media web pages. Course content will include the understanding of hypertext and web structures. Equipment such as scanners, digital and video cameras and sound recording devices will be utilized through hands-on instruction. Promotes understanding of computer programming and logic by teaching students to "think like a computer". Covers skills needed to develop and design language-independent solutions to solve computer related problems. Covers developmental and design basics including use of variables, control and data structures, and principles of command-line and object-oriented languages.
Content: Information Technology
Population: General

110252 - Special Topics, Programming

Grade Level: 9 - 12
Credits: 1-3
Description: Instruction related to Programming but not described in above courses.
Content: Information Technology
Population: General

Information Technology - Career Major Electives
(110300)

110302 - Management of Support Services

Grade Level: 11 - 12
Credits: 1
Description: Digitally organizing the information technology milestone achieved by the student that is reflective of their industry certification readiness, understanding the cost of doing business, and preparation of technical and behavioral job interviews. Focuses on employability skills to include: a professional digital portfolio that emphasizes critical milestones that focus on entry level information technology employability skills. (Previously Help Desk II)
Content: Information Technology
Population: General

110399 - Leadership Dynamics - Information Technology

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.
Content: Leadership Dynamics
Population: General

Information Technology - Computer Science
(110700)

Career Major- Focuses on computers, computing problems and solutions, and the design of computer systems and user interfaces from a scientific perspective. Includes instruction in the principles of computational Science, and computing theory; computer hardware design; computer development and programming; and applications to a variety of end-use situations. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

110701 - AP Computer Science A

Grade Level: 10 - 12
Credits: 1
Description: AP Computer Science A is equivalent to a first-semester, college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. College credit is earned with a qualifying score on an AP exam.
Content: AP Computer Science
Population: General

110710 - Introduction to Computer Science

Grade Level: 9 - 12
Credits: 1
Description: Introduction to Computer Science is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. Rather than focusing the entire course on learning particular software tools or programming languages, the course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of the course is to develop in students the computational practices of algorithm development, problem solving and programming within the context of problems that are relevant to the lives of today's students. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.
Content: Computer Science
Population: General

110711 - AP Computer Science Principles

Grade Level: 9 - 12
Credits: 1
Description: The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational

thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. College credit is earned with a qualifying score on an AP exam.
Content: Computer Science
Population: General

110752 - Special Topics, Computer Science

Grade Level: 9 - 12
Credits: 1-3
Description: Instruction related to Computer Science but not described in above courses.
Content: Computer Science
Population: General

Information Technology - Web Development/Administration
(110800)

Career Major- Prepares individuals to apply HTML, XML, JavaScript and other authoring tools to the design, editing, and publishing of documents, images, graphics, sound and multimedia products on the World Wide Web. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

110801 - Web Page Development

Grade Level: 10 - 12
Credits: 1
Description: Introduces we page design through the use of HTML and CSS. Uses text and/or web editors to create web documents with various formats and page layouts, multimedia, tables and forms. Emphasizes W3C web design and accessibility standards.
Content: Web Page Design
Population: General

110804 - Website Design and Production

Grade Level: 10 - 12
Credits: 1
Description: This course gives the student an experience with advanced topics in planning and implementing a professional web site. Emerging technologies will be explored in creating interactive web pages that incorporate cascading style sheets, DHTML, JavaScript and multimedia and graphics. Designing for a cross-browser web site and different monitor resolutions should be covered. Introduces web site production processes with emphasis on design involving layout, navigation, interactivity and using web production software.
Content: Web Page Design
Population: General

110809 - JavaScript

Grade Level: 10 - 12
Credits: 1
Description: Provides students with an overview of the JavaScript scripting language. Includes coding, testing, and debugging JavaScript programs; using variables, operators, and data types; creating dynamic web pages using JavaScript; controlling the behavior of forms, buttons, and text elements; and using control structures, pattern matching, objects, and application scripts.
Content: Web Page Design
Population: General

110810 - Flash with Action Script

Grade Level: 10 - 12
Credits: 1
Description: This course will introduce Macromedia Flash. Students will gain experience in creating graphics, animation, text, forms, and special effects.
Content: Web Page Design
Population: General

110852 - Special Topics, Web Development/Administration

Grade Level: 9 - 12
Credits: 1
Description: Instruction related to Web Development/Administration but not described in above courses.
Content: Information Technology
Population: General

Information Technology - Networking
(110900)

Career Major - Focuses on the design, implementation and management of linked systems of computers, peripherals, associated software. Includes introduction in systems and applications; systems design and analysis; networking theory and solutions; types of networks; network management and control; network and flow optimization; security; configuring; and troubleshooting. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

110901 - Introduction to Networking Concepts (non-vendor)

Grade Level: 9 - 12
Credits: 1
Description: Introduces technical level concepts of non-vendor specific networking including technologies, media, topologies, devices, management tools, and security. Provides the basics of how to manage, maintain, troubleshoot, install, operate, and configure basic network infrastructure.
Content: Information Technology
Population: General

110902 - Network Fundamentals/Cisco I

Grade Level: 9 - 12
Credits: 1
Description: Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. Provides the opportunity to build simple LAN topologies by applying principles of cabling; performing basic configurations of network devices, including routers and switches; and implementing IP addressing schemes. (This is the first course in the 2013 Cisco curriculum.)
Content: Information Technology
Population: General

110903 - Routing Protocol and Concepts/Cisco II

Grade Level: 10 - 12
Credits: 1
Description: Provides students with the skills necessary to understand and apply concepts related to networking hardware. Covers TCP/IP concepts such as IP addressing and subnetting, router configuration, routed and routing protocols. Completes one of a series of four courses that helps prepare students for the Cisco Certified Network Associate (CCNA) certification exam. (This is the second course in the 2013 Cisco curriculum.)
Content: Information Technology
Population: General

110904 - LAN Switching and Wireless/Scaling Networks/Cisco III

Grade Level: 10 - 12
Credits: 1
Description: Provides students with the skills necessary to understand and apply advanced networking concepts. Covers local area network (LAN) switching, virtual local area networks (VLANS), advanced network design concepts, advanced router configuration and advanced network management projects. (This is the third course in the 2013 Cisco curriculum.)
Content: Information Technology
Population: General

110905 - Accessing the WAN/Connecting Networks/Cisco IV

Grade Level: 10 - 12
Credits: 1
Description: Provides students with the skills necessary to understand and apply advanced principles and applications in deploying networking hardware Covers WAN design, WAN connectivity protocols such as PPP, ISDN and Frame Relay, as well as advanced network management projects. (This is the fourth course in the 2013 CISCO curriculum.)
Content: Information Technology
Population: General

110906 - Network Hardware Installation and Troubleshooting

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to provide students with the knowledge and skills to design, configure, troubleshoot, wire and cabling systems, and equipment involved with connecting a local area network.
Content: Information Technology
Population: General

110907 - Microsoft Active Directory Server

Grade Level: 10 - 12
Credits: 1
Description: Provides students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows Directory Services. Focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers. Assists in prepping students for exams in the Microsoft certification exam series.
Content: Information Technology
Population: General

110912 - Security Fundamentals

Grade Level: 10 - 12
Credits: 1
Description: Introduces basic computer and network security concepts and methodologies. Covers principles of security; compliance and operational security; threats and vulnerabilities; network security; application, data, and host security; access control and identity management; and cryptography. This course leads to the Security + Certification.
Content: Information Technology
Population: General

110913 - Microsoft Client Server/Config

Grade Level: 10 - 12
Credits: 1
Description: Covers installation and configuration of Microsoft Windows client and server operating systems. Helps prepare students for exams in the Microsoft certification exam series.
Content: Information Technology
Population: General

110917 - Internet Technologies

Grade Level: 10 - 12
Credits: 1
Description: Provides students with a study of traditional and emerging Internet technologies. Covers topics including Internet fundamentals, Internet applications, Internet delivery systems, and Internet client/server computing. Provides a hands-on experience and some programming in an Internet environment.
Content: Information Technology
Population: General

110918 - IT Co-op

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in a valid course in the pathway during the same school year that the co-op experience is completed, unless the student has already met completer status in the pathway. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements according to the Work Based Learning Guide.
Content: Information Technology
Population: General

110919 - Information Technology Internship

Grade Level: 11 - 12
Credits: 1
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a

semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Information Technology
Population: General

110952 - Special Topics, Networking

Grade Level: 9 - 12
Credits: 1-3
Description: Instruction related to Networking but not described in above courses.
Content: Information Technology
Population: General

Information Technology - Informatics
(111000)

111001 - Computers, Networks, and Databases

Grade Level: 9 - 12
Credits: 1
Description: This project-based-learning course engages students who are curious about Informatics. In this course, students will learn how to use a design process to create systems that acquire, store and communicate data for a variety of career fields. Students will work collaboratively in teams to design systems, problem solve, think critically, be creative and communicate with each other and business partners. Students will participate in real-world experiences such as designing an inventory system for a retail store, comparing stores in a company to project future sales, track customer buying habits and more.
Content: Informatics
Population: General

111002 - Design for the Digital World

Grade Level: 9 - 12
Credits: 1
Description: A project-based-learning course that engages students who are interested in applying the design process to create systems such as a cloud-based digital storage system for images, design a system to automatically collect and report data on highway usage, apply a geospatial system to map a store and develop a database that studies shopping habits, etc. Through these projects, students will learn about data management, logic-based queries, the collection of data utilizing GPS and analysis utilizing GIS, and how to automate data collection to make processes more effective and efficient. They will work collaboratively in teams and demonstrate their learned knowledge and skills by presenting their new and innovative ideas, techniques and solutions to business and industry partners.
Content: Informatics
Population: General

111003 - Databases in the Cloud

Grade Level: 9 - 12
Credits: 1
Description: This project-based-learning course is for students who successfully completed Courses 1 and 2 and are interested in more complex challenges that business and industry face. Students at this level will learn about web technologies, cloud storage, information security, data, animation, introductory computer programming and database applications. Students will take more responsibility for their own learning, problem-solving, and thinking outside of the box. Real world challenges will require higher levels of research, building, testing, analyzing and improving systems. Students design solutions for real world problems by the designing a database for ticket sales; designing security for a database; creating a game with animation; reporting information based on data for a population in a community; as well as designing, building and testing an application for a database.

Content: Informatics
Population: General

111004 - Developing a Cloud Presence

Grade Level: 9 - 12
Credits: 1
Description: Students in this capstone course will focus on the ethics of privacy, social networking, designing for clients and artificial intelligence through six authentic projects. Students will select a business partner and design, build and test a Web presence for a company that will apply the concepts from the three prior courses. Student teams will work collaboratively with a business partner to develop a proposal for the project with evaluation criteria. Once the business partner accepts the proposal, the student team will implement it by designing, planning, building the system, and testing and revising the system to meet the needs of the business. Depending on articulation agreements or state policy, opportunity for dual credit may be available to students who successfully complete this course.
Content: Informatics
Population: General

Information Technology - Digital Design/Game Development
(113600)

Provides students with a thorough understanding of techniques for designing advanced 3D games and simulations. Courses will cover 2D and 3D graphics, animation, character development, texturing, rigging, scripting and game setup using state-of-the-art software development tools.

113601 - Introduction to Digital Game Graphics

Grade Level: 9 - 12
Credits: 1
Description: Emphasizes creating 3D graphics using one or more state-of-the-art software packages. Provides students with a thorough understanding of techniques for designing advanced 3D games and simulations. Courses will cover 2D and 3D graphics, animation, character development, texturing, rigging, scripting and game setup using state-of-the-art software development tools.
Content: Information Technology
Population: General

113602 - Advanced Game Development and Publishing

Grade Level: 10 - 12
Credits: 1
Description: Introduces the techniques for creating textures and lighting for 3D games and simulations. This course will focus on creating games using code, animation, and an introduction to 3d design software utilized in the industry. In addition, students will see how the skills and knowledge acquired in Game Design I & II come together utilizing a game engine.
Content: Information Technology
Population: General

113603 - Advanced 3D Game Development

Grade Level: 10 - 12
Credits: 1
Description: Develop realistic 3D characters with complete body structure. This course will focus on creating games using code, 3d characters, objects, and animation utilizing game engines. Students will see how the skills and knowledge acquired in Game Design I - III come together. Students will create work ready products for the industry.
Content: Information Technology
Population: General

113604 - Digital 3D Graphics and Special Effects II

Grade Level: 9 - 12
Credits: 1
Description: Introduces advanced texturing and lighting techniques to enhance depth perception and realism within 3D environments.
Content: Information Technology
Population: General

113605 - Game Design and Development Principles

Grade Level: 9 - 12
Credits: 1
Description: This course is a general introduction to Game Design providing an overview of story development, gaming history, game reviews, current gaming trends and industry software. Students will begin to create and develop a game story/plot that can be further developed in higher level courses as well as critique current games. In addition, game development software will be explored to further enhance their design skills.
Content: Information Technology
Population: General

World Languages
(160000)

World Languages - English as a Second Language
(160100)

160109 - Basic English as a Second Language

Grade Level: 9 - 12
Credits: double block, 1 elective English credit
Description: This course addresses needs of students who are not literate in their native language or English, and who have limited formal education. The focus is on basic literacy development from surface structure to deep structure systems so that students can begin to make sense of a variety of reading materials. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160110 - ESL, Life Skills

Grade Level: 9 - 12
Credits: 1 elective English or 1 elective social studies credit
Description: This course addresses needs of the student who is preliterate and who has limited formal schooling. The course focuses on basic communicative skills and civics concepts; provides the student with the skills needed to competently function in ESL I, Course 160121. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160121 - English as a Second Language I

Grade Level: 9 - 12
Credits: double block, 1 required English, 1 foreign language credit
Description: Introductory course to English as a second language for the student of limited English proficiency. Course focuses on the development of the four basic communication skills of listening, speaking, reading, and writing in English. Placement through English language proficiency assessment and evaluation by the counselor and ESL specialist. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160122 - English as a Second Language 2

Grade Level: 9 - 12
Credits: double block, 1 required English, 1 foreign language
Description: This course continues the study of English begun in 160121. Academic content is learned through the English language, as the four basic communication skills of listening, speaking, reading, and writing in English are developed. Prerequisite: 160121 or placement through English language proficiency assessment and evaluation by counselor and ESL specialist. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160123 - English as a Second Language 3

Grade Level: 9 - 12
Credits: 1 elective English or 1 foreign language credit
Description: This course continues the study of English begun in 160121 and 160122. Academic content is learned through the English language, as the four basic communication skills of listening, speaking, reading, and writing in English are developed. Prerequisite: 160122 or placement through English language proficiency assessment and evaluation by counselor and ESL specialist. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160124 - English as a Second Language, Skills Lab

Grade Level: 9 - 12
Credits:
Description: This course provides individualized instruction for English language learner. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160126 - ESL Reading /Writing

Grade Level: 9 - 12
Credits: 1 elective English credit
Description: Course focuses on development of literacy skills using literary, informational, persuasive, and practical/workplace reading and writing materials. Companion course to English as a Second Language 1, Course 160121. This ESL course adheres to the WIDA English Language Development (ELD) Standards.
Content: Literacy
Population: English Language Learners - Extensive Support

160127 - English as a Second Language 4

Grade Level: 9 - 12
Credits: 1 elective English or 1 foreign language credit
Description: This course continues the study of English begun in 160121,160122, and 160123. Academic content is learned through the English language, as the four basic communication skills of listening, speaking, reading, and writing in English are developed. Prerequisite: 160123 or placement through English language proficiency assessment and evaluation by counselor and ESL specialist. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160128 - ESL Writing for Juniors

Grade Level: 11 - 11
Credits: 1 elective English credit
Description: Course focuses on refining the student's writing skills from an ESL perspective by continuing to build cognitive academic language proficiency so that student is able to write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes. This ESL course adheres to the WIDA English Language Development (ELD) Standards.
Content: Writing
Population: English Language Learners - Extensive Support

160129 - ESL Writing for Seniors

Grade Level: 12 - 12
Credits: 1 elective English credit
Description: Course focuses on refining the student's writing skills from an ESL perspective by continuing to build cognitive academic language proficiency so that the student is able to write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes. This ESL course adheres to the WIDA English Language Development (ELD) Standards.
Content: Writing
Population: English Language Learners - Extensive Support

160130 - ESL/Special Topics in Social Studies

Grade Level: 9 - 12
Credits: 1 elective social studies credit
Description: This course presents skills and content, equivalent to those taught in general education social studies courses, to the student of limited English proficiency. Instruction and reading materials are adapted to ensure comprehension by the ELL student. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: Social Studies
Population: English Language Learners - Extensive Support

160131 - ESL/Special Topics in Science

Grade Level: 9 - 12
Credits: 1 elective science credit
Description: This course presents skills and content, equivalent to those taught in general education science courses, to the student of limited English proficiency. Instruction and reading materials are adapted to ensure comprehension by the ELL student. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: Integrated Science 1
Population: English Language Learners - Extensive Support

160132 - ESL/Special Topics in Math

Grade Level: 9 - 12
Credits: 1 math credit; may fulfill graduation requirement as the fourth math course
Description: This course focuses on English language and basic mathematical concepts and skills needed by ELL students with little or no prior academic experience in mathematics. Emphasis is on the development of English skills needed to be successful in mathematics courses. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: Mathematics
Population: English Language Learners - Extensive Support

160133 - ESL/Strategies for Academic Achievement

Grade Level: 9 - 12
Credits: 1 elective English credit
Description: This course refines the research, study and test-taking skills of the ELL student to ensure the student has the support to achieve academically in general education courses. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: Study Skills
Population: English Language Learners - Extensive Support

160194 - English as a Second Language, Elementary

Grade Level: 0 - 5
Credits:
Description: The elementary program in English as a Second Language focuses on the development of listening, speaking, reading and writing skills in English. This program is designed to support and supplement the ELL student's instructional program in the mainstream classroom. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: Elementary Education
Population: English Language Learners - Extensive Support

160195 - Basic English as a Second Language, Middle School

Grade Level: 6 - 8
Credits:
Description: This course addresses needs of students who are not literate in their native language or English, and who have limited formal education. The focus is on basic literacy development from surface structure to deep structure systems so that students can begin to make sense of a variety of reading materials. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160196 - English as a Second Language, Grade 6

Grade Level: 6 - 6
Credits:
Description: This course focuses on the development of the four basic communication skills of listening, speaking, reading, and writing in English. Content instruction at the student's comprehensible language level supports the student's transition to grade appropriate instructional activities in challenging academic content. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160197 - English as a Second Language, Grade 7

Grade Level: 7 - 7
Credits:
Description: This course focuses on the development of the four basic communication skills of listening, speaking, reading, and writing in English. Content instruction at the student's comprehensible language level supports the student's transition to grade appropriate instructional activities in challenging academic content. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

160198 - English as a Second Language, Grade 8

Grade Level: 8 - 8
Credits:
Description: This course focuses on the development of the four basic communication skills of listening, speaking, reading, and writing in English. Content instruction at the student's comprehensible language level supports the student's transition to grade appropriate instructional activities in challenging academic content. This ESL course should address all four language domains (reading, writing, speaking and listening) and adhere to the WIDA English Language Development (ELD) Standards.
Content: English as a Second Language
Population: English Language Learners - Extensive Support

World Languages - Middle/High School - ASL
(160200)

160202 - Middle School World Languages: American Sign Language

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: American Sign Language
Population: General

160208 - High School World Languages 1 - American Sign Language

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: American Sign Language
Population: General

160209 - High School World Languages 2 - American Sign Language

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students

develop insight into their own language and culture.
Content: American Sign Language
Population: General

160210 - High School World Languages 3 - American Sign Language

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: American Sign Language
Population: General

160211 - High School World Languages 4 - American Sign Language

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: American Sign Language
Population: General

World Languages - Middle/High School - Chinese
(160300)

160303 - High School World Languages 1 - Chinese

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Chinese
Population: General

160304 - High School World Languages 2 - Chinese

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Chinese
Population: General

160305 - High School World Languages 3 - Chinese

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Chinese
Population: General

160306 - High School World Languages 4 - Chinese

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Chinese
Population: General

160312 - Middle School World Languages - Chinese

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Chinese
Population: General

160330 - AP Chinese Language and Culture

Grade Level: 11 - 12
Credits: 1
Description: The AP Chinese Language and Culture course in Mandarin Chinese emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Chinese Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Chinese. The AP Chinese Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products, (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). College credit is earned with a qualifying score on an AP exam.
Content: Chinese
Population: General

World Languages - Middle/High School - French
(160400)

160402 - Middle School World Languages - French

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: French
Population: General

160408 - High School World Languages 1 - French

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: French
Population: General

160409 - High School World Languages 2 - French

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: French
Population: General

160410 - High School World Languages 3 - French

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: French
Population: General

160411 - High School World Languages 4 - French

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: French
Population: General

160419 - IB French Middle Years Program

Grade Level: 6 - 8
Credits: 1
Description: International Baccalaureate (IB) French Middle Years program enables students to gain competence in modern French and encourage respect for an understanding of other languages and cultures.
Content: French
Population: General

160424 - IB French 4 Language

Grade Level: 11 - 12
Credits: 1
Description: Develops advanced language skills needed for the International Baccalaureate exam.
Content: French
Population: General

160425 - IB French 5 Language

Grade Level: 11 - 12
Credits: 1
Description: Develops advanced skills in reading, interpretation, and writing needed for the International Baccalaureate exam.
Content: French
Population: General

160430 - AP French Language and Culture

Grade Level: 11 - 12
Credits: 1
Description: The AP French Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP French Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in French. The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). College credit is earned with a qualifying score on an AP exam.
Content: AP French
Population: General

World Languages - Middle/High School - German
(160500)

160502 - Middle School World Languages - German

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: German
Population: General

160508 - High School World Languages 1 - German

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: German
Population: General

160509 - High School World Languages 2 - German

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: German
Population: General

160510 - High School World Languages 3 - German

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: German
Population: General

160511 - High School World Languages 4 - German

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: German
Population: General

160524 - IB German 4

Grade Level: 11 - 12
Credits: 1
Description: Develops advanced language skills with focus on oral and written expression.
Content: German
Population: General

160525 - IB German 5

Grade Level: 11 - 12
Credits: 1
Description: Develops advanced language skills needed for the International Baccalaureate exam.
Content: German
Population: General

160530 - AP German Language and Culture

Grade Level: 11 - 12
Credits: 1
Description: The AP German Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP German Language and Culture course

strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in German. The AP German Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music , laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). College credit is earned with a qualifying score on an AP exam.
Content: AP German
Population: General

World Languages - Middle/High School - Greek
(160600)

160601 - High School World Languages 1 - Greek

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Greek
Population: General

160602 - High School World Languages 2 - Greek

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Greek
Population: General

160603 - High School World Languages 3 - Greek

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Greek
Population: General

160604 - High School World Languages 4 - Greek

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Greek
Population: General

World Languages - Middle/High School - Hebrew
(160700)

160701 - High School World Languages 1 - Hebrew

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Hebrew
Population: General

160702 - High School World Languages 2 - Hebrew

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Hebrew
Population: General

160703 - High School World Languages 3 - Hebrew

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Hebrew
Population: General

160704 - High School World Languages 4 - Hebrew

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Hebrew
Population: General

World Languages - Middle/High School - Japanese
(160800)

160802 - High School World Languages 1 - Japanese

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Japanese
Population: General

160803 - High School World Languages 2 - Japanese

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Japanese
Population: General

160804 - High School World Languages 3 - Japanese

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Japanese
Population: General

160805 - High School World Languages 4 - Japanese

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Japanese
Population: General

160807 - Middle School World Languages - Japanese

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Japanese
Population: General

160819 - IB Japanese Middle Years Program

Grade Level: 6 - 8
Credits: 1
Description: International Baccalaureate (IB) Japanese Middle Years program enables students to gain competence in modern French and encourage respect for an understanding of other languages and cultures.
Content: Japanese
Population: General

160824 - IB Japanese 4

Grade Level: 11 - 12
Credits: 1
Description: Develops advanced language skills with focus on oral and written expression
Content: Japanese
Population: General

160825 - IB Japanese 5

Grade Level: 11 - 12
Credits: 1
Description: Develops advanced language skills needed for the International Baccalaureate exam.

Content: Japanese
Population: General

160830 - AP Japanese Language and Culture

Grade Level: 11 - 12
Credits: 1
Description: The AP Japanese Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Japanese Language and Culture course strives not to emphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Japanese. The AP Japanese Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of social, political, and educational issues (e.g., the role of religion in society, traditional versus modern gender roles), as well as more traditional topics (e.g., arts, customs, festivals, geography, and history). Throughout the course, students develop interpersonal skills that enable them to request and confirm the receipt of information, ask for and provide directions, and issue and respond to invitations. They also develop more cognitively challenging functional language skills, including the ability to compare phenomena, express opinions and preferences, and discuss life experiences. Additionally, students develop a command of a significant number of the most prevalent kanji characters used in Japanese writing. College credit is earned with a qualifying score on an AP exam.
Content: Japanese
Population: General

World Languages - Middle/High School - Latin
(160900)

160902 - Middle School World Languages - Latin

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Latin
Population: General

160908 - High School World Languages 1 - Latin

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Latin
Population: General

160909 - High School World Languages 2 - Latin

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Latin
Population: General

160910 - High School World Languages 3 - Latin

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Latin
Population: General

160911 - High School World Languages 4 - Latin

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Latin
Population: General

160931 - AP Latin

Grade Level: 11 - 12
Credits: 1
Description: The AP Latin course focuses on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's Aeneid and Caesar's Gallic War. The course requires students to prepare and translate the readings and place these texts in a meaningful context, which helps develop critical, historical, and literary sensitivities. Throughout the course, students consider themes in the context of ancient literature and bring these works to life through classroom discussions, debates, and presentations. Additional English readings from both of these works help place the Latin readings in a significant context. College credit is earned with a qualifying score on an AP exam.
Content: AP Latin
Population: General

World Languages - Middle/High School - Russian
(161000)

161002 - High School World Languages 1 - Russian

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Russian
Population: General

161003 - High School World Languages 2 - Russian

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Russian
Population: General

161004 - High School World Languages 3 - Russian

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Russian
Population: General

161005 - High School World Languages 4 - Russian

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Russian
Population: General

World Languages - Middle/High School - Spanish
(161100)

161102 - Middle School World Languages - Spanish

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Spanish
Population: General

161108 - High School World Languages 1 - Spanish

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Spanish
Population: General

161109 - High School World Languages 2 - Spanish

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Spanish
Population: General

161110 - High School World Languages 3 - Spanish

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Spanish
Population: General

161111 - High School World Languages 4 - Spanish

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Spanish
Population: General

161119 - IB Spanish Middle Years program

Grade Level: 6 - 8
Credits: 1
Description: International Baccalaureate (IB) Spanish Middle Years program enables students to gain competence in modern Spanish and encourage respect for an understanding of other languages and cultures.
Content: Spanish
Population: General

161124 - IB Spanish 3

Grade Level: 11 - 12
Credits: 1
Description: This course develops advanced Spanish language skills with focus on oral and written expression.
Content: Spanish
Population: General

161125 - IB Spanish 4

Grade Level: 11 - 12
Credits: 1
Description: This course develops advanced Spanish language skills needed for the International Baccalaureate exam.
Content: Spanish
Population: General

161130 - AP Spanish Language and Culture

Grade Level: 11 - 12
Credits: 1
Description: The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music , laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). College credit is earned with a qualifying score on an AP exam.
Content: AP Spanish
Population: General

161131 - AP Spanish Literature and Culture

Grade Level: 11 - 12
Credits: 1
Description: The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretive), thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, literary criticism). College credit is earned with a qualifying score on an AP exam.
Content: AP Spanish
Population: General

161141 - Spanish for native speakers 1

Grade Level: 9 - 12
Credits: 1
Description: High School course. Develops literacy skills for native speakers.
Content: Spanish
Population: General

161142 - Spanish for native speakers 2

Grade Level: 9 - 12
Credits: 1
Description: High School course. Develops literacy skills for native speakers.
Content: Spanish
Population: General

World Languages - Middle/High School - Arabic
(161200)

161202 - Middle School World Languages - Arabic

Grade Level: 6 - 8
Credits: 0
Description: Middle school course. Prepares students to: perform interpersonal, interpretive and presentational communicative tasks within the novice range on the ACTFL Proficiency scale; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of Arabic and other cultures. In addition, students develop insight into their own language and culture.
Content: Arabic
Population: General

161208 - High School World Languages 1 - Arabic

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Arabic
Population: General

161209 - High School World Languages 2 - Arabic

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Arabic
Population: General

161210 - High School World Languages 3 - Arabic

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Arabic
Population: General

161211 - High School World Languages 4 - Arabic

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Arabic
Population: General

World Languages - Middle/High School - Italian
(161300)

161302 - Middle School World Languages - Italian

Grade Level: 6 - 8
Credits: 0
Description: Middle School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Italian
Population: General

161308 - High School World Languages 1 - Italian

Grade Level: 9 - 12
Credits: 1
Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Italian
Population: General

161309 - High School World Languages 2 - Italian

Grade Level: 9 - 12
Credits: 1
Description: High School course. Intermediate course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Italian
Population: General

161310 - High School World Languages 3 - Italian

Grade Level: 10 - 12
Credits: 1
Description: High School course. Intermediate course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Italian
Population: General

161311 - High School World Languages 4 - Italian

Grade Level: 10 - 12
Credits: 1
Description: High School course. Advanced course. It prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures. In addition, students develop insight into their own language and culture.
Content: Italian
Population: General

161315 - AP Italian Language and Culture

Grade Level: 11 - 12
Credits: 1
Description: The AP Italian Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Italian Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Italian. The AP Italian Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). College credit is earned with a qualifying score on an AP exam.
Content: Italian
Population: General

World Languages Elementary
(165600)

165602 - Elementary School World Languages - American Sign Language

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: American Sign Language
Population: General

165611 - Elementary School World Languages - Chinese

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Chinese
Population: General

165621 - Elementary School World Languages - French

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: French
Population: General

165631 - Elementary School World Languages - German

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: German
Population: General

165641 - Elementary School World Languages - Japanese

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Japanese
Population: General

165651 - Elementary School World Languages - Latin

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Latin
Population: General

165661 - Elementary School Russian

Grade Level: 0 - 5
Credits: 0
Description: Engages learners in developmentally appropriate activities to acquire the language necessary to communicate within the novice range on the ACTFL Proficiency scale on a variety of topics, including connections to other subject areas. Cultural aspects of the people(s) speaking the language being learned are typically included in order to understand the relationship among the products, practices and perspectives of Russian speaking cultures. In addition, students develop insight into their own language and culture.
Content: Russian
Population: General

165671 - Elementary School World Languages - Spanish

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Spanish
Population: General

165681 - Elementary School World Languages - Arabic

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Arabic
Population: General

165691 - Elementary School World Languages - Italian

Grade Level: 0 - 5
Credits: 0
Description: Elementary School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (interpret, exchange, and present information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.
Content: Italian
Population: General

165698 - World Languages Technical Language

Grade Level: 9 - 12
Credits: 1 HS
Description: High School course. This course develops language skills for professional use in a career cluster area, such as: agriculture, business, health, science, public services, etc. NOTE: One of these specific language contents must be assigned manually for each section of this course: American Sign Language, Chinese, French, German, Japanese, or Spanish.
Content: None
Population: General

Health Science
(170000)

Health Science - Career Major Electives
(170100)

170111 - Principles of Health Science

Grade Level: 9 - 12
Credits: 1
Description: Orientation and foundation for occupations and functions across the health care cluster. Includes broad health care core standards which specify the knowledge and skills that the vast majority of health care workers should have. Prerequisite to additional courses in the Health Science Program.
Content: Health Science (CTE)
Population: General

170131 - Medical Terminology

Grade Level: 9 - 12
Credits: 0.5-1
Description: An intense study of the medical language used in all health career major areas. Pronunciation, spelling and application rules of medical terminology are included.
Content: Health Science (CTE)
Population: General

170141 - Emergency Procedures

Grade Level: 9 - 12
Credits: 0.5-1
Description: This course is intended to combine all existing courses in the Health Science Cluster to include foundational emergency skills for all Health Science Career Pathway students. This course will include certifications in: Cardiopulmonary Resuscitation for the Healthcare Provider; AED; bloodborne pathogen; first aid; and emergency care as outlined by an approved first aid/CPR/Bloodborne Pathogen certifying agency as put forth by the American Heart Association, National Safety Council or American Red Cross.
Content: Health Science (CTE)
Population: General

170167 - Body Structures and Functions

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to provide knowledge of the structure and function of the human body with an emphasis on normalcy. The interactions of all body systems in maintaining homeostasis will promote an understanding of the basic human needs necessary for health maintenance. Academic knowledge from life science core content as it relates to the human body (including anatomy and physiology) are included. Laboratory activities should be a part of the course when appropriate.
Content: Health Science (CTE)
Population: General

170169 - Medical Math

Grade Level: 9 - 12
Credits: 0.5-1
Description: This course is designed to focus, utilize and build on mathematical skills commonly used in all health occupations. Students will use applied techniques, problem-solving and critical thinking to perform mathematical operations such as computations, ratio and proportion, weights and measurements and conversions. This course is strongly recommended for all Health Science majors. Successful completion of Algebra I is suggested prior to enrolling in this course. This course may meet the requirements for the fourth elective mathematics credit required for graduation with an allied health major.
Content: Health Science (CTE)
Population: General

170199 - Leadership Dynamics - Health Science

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.
Content: Leadership Dynamics
Population: General

Health Science - Sports Medicine
(170300)

170301 - Essentials of Sports Medicine

Grade Level: 10 - 12
Credits: 1
Description: An instructional program that prepares individuals to perform routine sports medicine related services for the physically active, under the training and supervision of an approved licensed athletic trainer. The purpose of this program is to give individuals knowledge and skills to prevent, recognize, and provide basic care for injuries and sudden illness.
Content: Health Science (CTE)
Population: General

170302 - Applied Sports Medicine

Grade Level: 11 - 12
Credits: 1
Description: An instructional program that emphasizes the prevention, assessment and care for injuries and illness to the physically active including the components of exercise science, anatomy, and principles of safety under the supervision of an approved licensed athletic trainer. Subject matter also includes legal issues, acute care skills, nutrition, human performance, taping and wrapping, therapeutic modalities, and application of sports medicine concepts.
Content: Health Science (CTE)
Population: General

170322 - Health Care Delivery Management

Grade Level: 10 - 12
Credits: 1
Description: Introduces delivery and management of health care including professionalism, health care roles, health care delivery models, and types of health care coverage. Explores legal/ethical issues.
Content: Health Science (CTE)
Population: General

Health Science - Allied Health
(170500)

A group of courses for students interested in pursuing a health career that serve as a foundation for further studies in the broad health care field. Courses are aligned with national Health Science Core Standards.

170501 - Allied Health Core Skills

Grade Level: 11 - 12
Credits: 0.5-1
Description: Allied Health Core Skills is designed to provide knowledge, concepts and psychomotor skills necessary for gainful employment as an entry-level health care worker. Assisting students in selecting a career major, classroom instruction and educational objectives are combined with learning experiences and observations and clinical rotations. This course is designed for students not enrolled in the Medicaid Nurse Aide program and who have completed Principles of Health Science and Emergency Procedures.
Content: Health Science (CTE)
Population: General

170502 - Acute Care Basic Skills

Grade Level: 12 - 12
Credits: 1-2
Description: Introduces students to basic health care skills. Prepares individuals to perform routine nursing-related services to patients in acute care settings under the training and supervision of an approved registered nurse or licensed practical nurse. Certification is available upon successful completion of National Health Career Association (NHA) Patient Care Technician exam. Prepares the student for entry-level health care positions in an acute care setting.
Content: Health Science (CTE)
Population: General

170550 - Internship: Allied Health

Grade Level: 10 - 12
Credits: 0.5-1
Description: The practicum provides supervised on-the-job work experience related to the students' education objectives. Students participating in the practicum do not receive compensation.
Content: Health Science (CTE)
Population: General

170552 - Internship: Dental Assistant

Grade Level: 11 - 12
Credits: 1
Description: This internship provides supervised on-the-job work experience related to the students' education objectives in the area of Dental Assisting. Students participating in internship for CTE

courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).
Content: Dental
Population: None

170555 - EKG Technician

Grade Level: 11 - 12
Credits: 1
Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of EKG. Students participating in the practicum do not receive compensation.
Content: Health Science (CTE)
Population: General

170558 - Pharmacy Technician

Grade Level: 11 - 12
Credits: 1
Description: This is an online (computer assisted) or traditional course with a pharmacy internship that prepares students for the National Pharmacy Technician Certification (CPhT). You will gain the skills and knowledge to qualify for entry-level positions in a hospital or retail setting.
Content: Health Science (CTE)
Population: General

170567 - Medical Laboratory Aide (Phlebotomist)

Grade Level: 11 - 12
Credits: 1
Description: The internship provides supervised on-the-job work experience related to the students' education objectives in the area of Medical Laboratory Aide/Phlebotomist. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).
Content: Health Science (CTE)
Population: General

170591 - Special Topics in Allied Health

Grade Level: 10 - 12
Credits: 0.5-1
Description: Special Topics in Allied Health is an expanded course offering the study of current world health-related issues. Topics may vary at the discretion of the instructor. (.5 to 1 credit)
Content: Health Science (CTE)
Population: General

Health Science - Pre-Nursing
(170600)

An instructional program that prepares students to work as an entry-level nursing assistant upon successful completion of the state Medicaid Nurse Aid program and examination. Additional courses to complete a career major are found under Allied Health career major.

170601 - Co-op (Nursing)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Health Science (CTE)
Population: General

170610 - Introduction to Nursing and Health Care System

Grade Level: 10 - 12
Credits: 1
Description: Historical overview of current health care including medical economics, ethical and legal parameters, roles and responsibilities of health care team members with an emphasis on reflective nursing practice. Medical terminology, therapeutic communication techniques, concepts of health, health assessment, self-care and basic needs related to activities of daily living (ADL) across the lifespan are explored.
Content: Health Science (CTE)
Population: General

170611 - Development of Care Giver Role

Grade Level: 10 - 12
Credits: 1
Description: Introduction to nursing and the nursing process as related to client activities of daily living across the life span; opportunity to develop and practice psychomotor skills related to health assessment, promotion, maintenance, and illness prevention.
Content: Health Science (CTE)
Population: General

170614 - Pharmacological and Other Therapeutic Modalities

Grade Level: 10 - 12
Credits: 1
Description: Introduction to techniques used to administer commonly used drugs; dosage calculations; diagnostic studies and other related medical therapies; legal responsibilities.
Content: Health Science (CTE)
Population: General

170620 - Advanced Nursing Assistant

Grade Level: 10 - 12
Credits: 3
Description: Provides knowledge and skills for nurse aides to assume the role and responsibility required in a variety of health care settings. The focus is communication, infection control, safety, resident/patient rights, and basic nursing skills. Prepares the student to perform basic nursing skills at an advanced level.
Content: Health Science (CTE)
Population: General

170622 - Health Care Delivery Management

Grade Level: 10 - 12
Credits: 1
Description: Introduces delivery and management of health care including professionalism, health care roles, health care delivery models, and types of health care coverage. Explores legal/ethical issues.
Content: Health Science (CTE)
Population: General

170623 - Health Care Communication

Grade Level: 10 - 12
Credits: 1
Description: Introduces communication in the health care field. Focuses on communication between members of the health team, patient, and caregivers through an interdisciplinary approach. Emphasizes diversity, sociocultural influences and teamwork.
Content: Health Science (CTE)
Population: General

170631 - Medicaid Nurse Aide

Grade Level: 11 - 12
Credits: 1-2
Description: An instructional program that prepares individuals to perform routine nursing-related services to patients in hospitals or long-term care facilities, under the training and supervision of an approved registered nurse or licensed practical nurse. State Registry is available upon successful completion of state written and performance examination. Prior to offering this course, the instructor and health science program must be approved for meeting state requirements set by the Cabinet for Health and Family Services.
Content: Medicaid Nurse Aide
Population: General

170632 - Health Care Basic Skills with Clinical

Grade Level: 11 - 12
Credits: 1-2
Description: Introduces student to basic healthcare skills. Incorporates American Heart Association CPR. Prepares student for the State Registered Nurse Aide examination. Note: faculty and clinical sites must comply with MNA regulations.
Content: Medicaid Nurse Aide
Population: General

170640 - Health Science Microbiology/Infection Control

Grade Level: 10 - 12
Credits: 0.5
Description: This course is designed to promote an understanding of the effects of microorganisms on the human body. The study includes standard precautions necessary for health maintenance and infection control. The focus is on reduction of diseases that interfere with basic human needs.
Content: Health Science (CTE)
Population: General

Health Science - Biomedical Science
(170700)

170701 - Principles of Biomedical Science

Grade Level: 9 - 11
Credits: 1
Description: Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts including: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including: the design process, feedback loops, fluid dynamics, and the relationship of structure to function are incorporated in the curriculum where appropriate. The course is designed to provide an overview of all the courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.
Content: Biomedical Science
Population: General

170702 - Human Body Systems

Grade Level: 10 - 11
Credits: 1
Description: Students will engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The central theme is how the body systems work together to maintain homeostasis and good health. The systems will be studied as parts of a whole, working together to keep the amazing human machine functioning at an optimal level. Students will design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students will work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.
Content: Biomedical Science
Population: General

170703 - Medical Interventions

Grade Level: 11 - 12
Credits: 1
Description: Student projects will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will study the design and development of various medical interventions including vascular stents, cochlear implants, and prosthetic limbs. They will review the history of organ transplants and gene therapy, and read current scientific literature to be aware of cutting edge developments. Using 3-D imaging software and current scientific research students will design and build a model of a therapeutic protein. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.
Content: Biomedical Science
Population: General

170704 - Biomedical Innovations

Grade Level: 11 - 12
Credits: 1
Description: This capstone course gives student teams the opportunity to work with a mentor, identify a science research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers. Each team will have one or more mentors from the scientific and/or medical community guiding their scientific research. This course may be combined with the capstone course from the pre-engineering pathway, allowing students from both pathways to work together to engineer a product that could impact healthcare. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.
Content: Biomedical Science
Population: General

Health Science - Veterinary Assisting
(170800)

170801 - Principles of Veterinary Assisting

Grade Level: 9 - 12
Credits: 1
Description: This is a fundamental course provides a Health Science student with an opportunity to develop and demonstrate knowledge and skills in veterinary assisting. Students are introduced to Animal Behavior & Restraint, Sanitation and Safety as pertains to Veterinary Hospital, and Radiology. Small Animal Nutrition, Canine Breeds, and Zoonotic diseases are covered. This is the first of three courses to prepare students for the NAVTA (National Association of Veterinary Technicians in America) Approved Veterinary Assistant (AVA) certification.
Content: Animal Science
Population: General

170802 - Veterinary Assisting Skills

Grade Level: 10 - 12
Credits: 1
Description: This skills-based course offers students the ability to master skills involved in veterinary assisting. Skills involving grooming, proper restraining, preliminary physical examination, employability, surgical preparation and assisting, and laboratory techniques are introduced and practiced in the clinical setting. Units in Pharmacology, Small Animal Diseases and Parasitology are also covered along with Feline Breeds. This is the final course to prepare students for the NAVTA (National Association of Veterinary Technicians in America) Approved Veterinary Assistant (AVA) certification. Qualified students will take this examination at the end of this course.
Content: Animal Science
Population: General

170803 - Advanced Veterinary Assisting Skills

Grade Level: 11 - 12
Credits: 1
Description: This course offers the student the opportunity to expand knowledge of veterinary assisting by discussing the history and domestication of animals, identifying breeds (Equine, Bovine, Porcine), anatomy and physiology/ pharmacology, dentistry, as well as Livestock parasitology and nutrition. The student will continue perfecting their skills in the clinical setting.
Content: Animal Science
Population: General

170804 - Veterinary Assisting Internship

Grade Level: 12 - 12
Credits: 1
Description: The internship provides supervised on-the-job work experience related to the students' education objectives in the area of veterinary assistant. The student's participating in the internship should have successfully completed the prior courses in the Veterinary Assisting pathway.
Content: Health Science (CTE)
Population: General

Health Science - Medical Administrative Assistant
(170900)

170920 - Medical Office Procedures

Grade Level: 11 - 12
Credits: 1
Description: Provides a working knowledge of the duties required in a medical office. Includes professional and career responsibilities, interpersonal communication, administrative responsibilities, and financial administration.
Content: Health Science (CTE)
Population: General

170922 - Internship: Medical Administrative Assistant

Grade Level: 12 - 12
Credits: 1
Description: The internship provides supervised work site experience related to the students education objectives in the area of medical administrative assistant. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).
Content: Health Science (CTE)
Population: General

Family & Consumer Sciences
(200000)

A group of instructional programs that prepares individuals at all educational levels for the family and consumer sciences skills needed for life and extending to teaching family and consumer science or extension agent, emphasizing the acquisition of knowledge and the comprehension of attitudes, standards, values and skills relevant to individual and family life and nurturing. Includes instruction in consumer education, child growth and development, housing and home management (including resource management), and clothing and textiles. Also, prepares individuals for balancing work and family roles and enhancing employability skills.

Family & Consumer Sciences - Career Pathway Electives
(200100)

A group of instructional programs that prepares individuals at all educational levels for the family and consumer sciences skills needed for life and extending to teaching family and consumer science or extension agent, emphasizing the acquisition of knowledge and the comprehension of attitudes, standards, values and skills relevant to individual and family life and nurturing. Includes instruction in consumer education, child growth and development, housing and home management (including resource management), and clothing and textiles. Also, prepares individuals for balancing work and family roles and enhancing employability skills. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

200110 - Introduction to FACS Essentials 6

Grade Level: 6 - 6
Credits: 0
Description: Basic principles; understanding personal growth and development; foods and nutritional needs; child care; significance of home and interpersonal relationships; careers
Content: Family and Consumer Sciences
Population: General

200111 - Introduction to FACS Essentials 7

Grade Level: 7 - 7
Credits: 0
Description: Basic principles; foods and nutrition; clothing and textiles; consumer education; child care; goal setting and decision making; careers
Content: Family and Consumer Sciences
Population: General

200112 - Introduction to FACS Essentials 8

Grade Level: 8 - 8
Credits: 0
Description: Basic principles and concepts; clothing and textiles, parenting, interpersonal relationships; consumer education; nutrition and foods; goal setting and decision making; careers; enabling skills and processes
Content: Family and Consumer Sciences
Population: General

200113 - FACS Essentials

Grade Level: 9 - 10
Credits: 1
Description: Introductory Course; meal preparation and nutrition; home environment; child development; consumer education; family living; family health; careers; enabling skills and processes
Content: Family and Consumer Sciences
Population: General

200161 - FACS Essentials Health

Grade Level: 9 - 10
Credits: 0.5 - 1
Description: Basic principles of individual and family well-being; wellness; nutrition; mental health problems food related diseases; goals, decisions, time management and stress management; conflict resolution; body systems and structure; first aid, emergencies and safety; related careers
Content: FCS Life Skills/Health for Health Credit
Population: General

200171 - Relationships

Grade Level: 10 - 12
Credits: 0.5-1
Description: Peer relations; family relations; self-understanding; pre-marital concerns; parenthood; child abuse, divorce
Content: Family and Consumer Sciences
Population: General

200173 - Parenting

Grade Level: 10 - 12
Credits: 0.5 - 1
Description: This course is designed to aid students in developing parenting and care giving skills that can be applied in a variety of situations. Major topics include becoming an informed parent, understanding prenatal development, caring for the newborn, being an effective parent/caregiver, caring for the sick and elderly and exploring career opportunities in care giving.
Content: Family and Consumer Sciences
Population: General

200199 - FACS Leaders at Work

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.
Content: Leadership Dynamics
Population: General

Family & Consumer Sciences - Early Childhood Education
(200200)

Career Major: A group of instructional programs that prepares individuals for the occupations in early childhood education. Child care and guidance, foster care/family day care and teacher assistance are often under the supervision of professional personnel. Includes instruction in child growth and development, nutrition, program planning and management, safety and behavior guidance; recreation and play activities. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

200201 - Early Childhood Education Internship

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE Courses provide supervised work-site experience for high school students who have completed courses leading to a career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students receiving pay for intern experience are those participating in an experience that is a semester or longer and have an established employee-employer relationship. A non-paid internship affects those students who participate on a short term basis.
Content: Family and Consumer Sciences
Population: General

200210 - Early Childhood Education Co-op

Grade Level: 11 - 12
Credits: 1-3
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Family and Consumer Sciences
Population: General

200219 - Special Topics in Child Development

Grade Level: 9 - 12
Credits: 1/2 -1
Description: Instruction related to Child Development but not described in above courses
Content: Family and Consumer Sciences
Population: General

200223 - Early Lifespan Development

Grade Level: 9 - 12
Credits: 1
Description: This course addresses the concepts related to understanding the areas and stages of human growth and development, recognizing effects of heredity and environment on human growth and development, meeting the needs of exceptional children, promoting optimum growth and development in the infancy, toddler, and preschool stages. Careers in child/human development are explored. Leadership development will be provided through the Family, Career and Community Leaders of America.
Content: Family and Consumer Sciences
Population: General

200226 - Middle to Late Lifespan Development

Grade Level: 10 - 12
Credits: 0.5-1
Description: This course addresses the practical problems related to understanding the types and stages of human growth and development, recognizing effects of heredity and environment on the life stages, meeting the needs of exceptional children, promoting optimum growth and development in the middle childhood, adolescent, and adulthood stages. Careers in child/human development and adult care services are explored. Leadership development will be provided through the Family, Career and Community Leaders of America.
Content: Family and Consumer Sciences
Population: General

200261 - Child Development Services I

Grade Level: 11 - 12
Credits: 1-2
Description: This course provides training for entry-level positions in day care centers, nurseries, kindergartens, and private homes. Students study careers in child development, child development and guidance, children's health and well-being in group care, value of play, teaching strategies and management, and curriculum development. The subject content is reinforced with work experience in a variety of childcare establishments.
Content: Family and Consumer Sciences
Population: General

200262 - Child Development Services II

Grade Level: 11 - 12
Credits: 1-3
Description: Preparation for developing and managing effective child care programs and facilities. Includes instruction in the management of financial operations; selecting and developing facilities; selecting staff and staffing patterns; providing for staff development opportunities; developing a total program for children and working with parents, community organizations and others concerned with children.
Content: Family and Consumer Sciences
Population: General

Family & Consumer Sciences - Cosmetology
(200300)

The Cosmetology Program provides the secondary student with orientation, exploration, and preparation into the Cosmetology industry. Courses are sequenced to provide continuous student progress toward achievement of a career major goal. The integration of mathematics, science, communication and technical knowledge is a vital component of each offering. This program assists the student in developing essential cognitive, affective, and psychomotor skills. The program is designed for students who desire entry-level training and/or plan to enroll in a postsecondary program to complete the training begun in the high school Cosmetology program. After obtaining a satisfactory performance level in the cosmetology core competencies, the student will develop manipulative skills and practice procedures utilizing mannequins and classmates. After 300 hours, the student will begin to apply procedures on clients under the direct supervision of the instructor.

200310 - Basic Nail Technology, 4-1

Grade Level: 10 - 12
Credits: 2.5
Description: Provides knowledge of the art and science of nail technology including the rules and regulations of the State Board of Cosmetology as they apply to the salon. Bacteriology and infection control through the practice of sanitation procedures. The study of the cells, structure of the hand, arm, nail, and their diseases and disorders are included. The study of beauty salon management, including the practice of interacting with clients, co-workers, and supervisors. Students practice on classmates and progress to work on clients.
Content: Cosmetology
Population: General

200311 - Applied Nail Technology, 4-2

Grade Level: 10 - 12
Credits: 2.5
Description: A continuation of nail technology is studied. A comprehensive written and practical exam will be given in preparation for State Board Licensure. Students are expected to exhibit a high performance level.
Content: Cosmetology
Population: General

200312 - Cosmetology IV, 4-4

Grade Level: 10 - 12
Credits: 2.5
Description: This course is designed for a total review of the cosmetology curriculum. A comprehensive written and practical exam is given in preparation for the State Board Licensure exam. Students implement their own judgment of procedures and solutions to be used on clients with supervision.
Content: Cosmetology
Population: General

200313 - Advanced Cosmetology I

Grade Level: 10 - 12
Credits: 2.5
Description: This course is designed for a total review of the cosmetology curriculum. A comprehensive written and practical exam is given in preparation for the State Board Licensure exam. Students implement their own judgment of procedures and solutions to be used on clients with supervision.
Content: Cosmetology
Population: General

200320 - Cosmetology I, 4-1

Grade Level: 10 - 12
Credits: 2.5
Description: This course is designed to cultivate proper attitude and behavior patterns needed to create a successful cosmetologist. Kentucky Statutes and Regulations, safety, microbiology, sanitation, infection control, first aid treatment, structure, and disorders of the nail are studied. Basic fundamentals of hair, skin and nail care, hair styling and shaping, manicures and pedicures, chemical and thermal services, and wigs are introduced. The student, in developing manipulative skills and practicing procedures, utilizes mannequins and classmates. After 300 hours, students begin to apply procedures on clients under the direct supervision of the instructor.
Content: Cosmetology
Population: General

200322 - Cosmetology II, 4-2

Grade Level: 10 - 12
Credits: 2.5
Description: A study of basic chemistry emphasizes the physical and chemical properties of cosmetic materials. Electricity and light therapy are discussed and an in-depth study of anatomical structures affected by cosmetological services including disorders of the skin, scalp, and hair. The instructor gives the students progressively more difficult assignments with close supervision.
Content: Cosmetology
Population: General

200323 - Cosmetology III, 4-3

Grade Level: 10 - 12
Credits: 2.5
Description: Provides knowledge of the structure and function of the human body, including the interaction of all the body systems in maintaining homeostasis. All phases of beauty salon management are studied, including interacting with clients, co-workers and supervisors. Laboratory experience is advanced with performance expectations set at a higher level.
Content: Cosmetology
Population: General

200379 - Special Problems

Grade Level: 10 - 12
Credits: 1
Description: This is a course designed for a student who has demonstrated a need for specific studies.
Content: Cosmetology
Population: General

200387 - Student Teaching I, 5-1

Grade Level: 10 - 12
Credits: 3
Description: This course is an introduction to teaching methods used in training cosmetology and nail technology students. This is inclusive of theory, class methods of lecture, media use, and testing methods. This class is an introduction to training teachers for methods used to teach the practical application of learned skills.
Content: Cosmetology
Population: General

200388 - Student Teaching II, 5-2

Grade Level: 10 - 12
Credits: 3
Description: This course continues to expand the apprentice instructor's ability to apply various methods used to train cosmetology and nail technology students.
Content: Cosmetology
Population: General

200389 - Student Teaching III, 5-3

Grade Level: 10 - 12
Credits: 3
Description: This course gives preparatory work which enables the apprentice instructor to prepare for the Kentucky Board of Hairdressers instructor exam.
Content: Cosmetology
Population: General

Family & Consumer Sciences - Culinary Arts and Food Science (200400)

A group of instructional programs that prepare individuals in managerial, production, and service skills used in institutional, commercial, or self-owned food establishments or other food industry occupations. Includes instruction in planning, selecting, storing, purchasing, preparing, and serving quality food and food products; nutritive values; safety and sanitation precautions; use and care of commercial equipment, serving techniques; special diets. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

200409 - Culinary Arts Co-op

Grade Level: 11 - 12
Credits: 1-3
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Culinary Skills
Population: General

200411 - Culinary I

Grade Level: 11 - 12
Credits: 1-3
Description: This advanced course allows students to increase competencies in a variety of food preparation techniques. Emphasis will be placed on food presentation, garnishing, menu planning and the skills necessary to prepare for a career in the culinary arts. Leadership development will be provided through the Family, Career and Community Leaders of America
Content: Culinary Skills
Population: General

200412 - Culinary II

Grade Level: 11 - 12
Credits: 1-3
Description: In this course students resume progress in pursuing competencies in food production and services. Orientation to the food service industry and development of food preparation skills are reinforced. Food service management functions are introduced. More in-depth information is provided and higher levels of skills are taught. Time is provided for work based learning opportunities. Leadership development will be provided through the Family, Career and Community Leaders of America. Food preparation; bakery operation; dinner catering; model restaurant; laws and regulations; unions; safety, sanitation; receive, store and issue food are addressed.
Content: Culinary Skills
Population: General

200414 - Fundamentals of Dietetics

Grade Level: 11 - 12
Credits: 1-2
Description: This course provides an overview of the dietetics field of work including the study of professional ethics and practices, career training and credentialing requirements, dietary research, lifespan and community nutrition, counseling and communication, and legislative law related to the field of dietetics and human nutrition. Work-based learning opportunities may be provided through the course curriculum.
Content: Family and Consumer Sciences
Population: General

200415 - Nutritional and Food Science

Grade Level: 10 - 12
Credits: 1
Description: Eating patterns; nutrition science; consumer aspects; world hunger; fitness foods; application of scientific principles.
Content: Family and Consumer Sciences
Population: General

200416 - Interdisciplinary Nutritional and Food Science

Grade Level: 10 - 12
Credits: 1
Description: Application of physical and life science; identifying qualities of various foods; collecting and testing food samples as directed; making elementary statistical calculations; recording test results; comparing test results with samples or prepared standards; reporting variations from standards.
Content: Nutritional and Food Science for the Life Science Component within the Science Requirement
Population: General

200441 - Foods and Nutrition

Grade Level: 10 - 12
Credits: 0.5-1
Description: This course is designed to assist students in making critical decisions about food, which contributes to health and well-being. Laboratory instruction is included as an application process. Practical problems addressed relate to attitudes toward food, nutrition facts, special health concerns and diets, management of food resources, preparation skills, food safety, sanitation and careers in nutrition and food service.
Content: Culinary Skills
Population: General

200442 - Advanced Foods and Nutrition

Grade Level: 10 - 12
Credits: 0.5-1
Description: This course is designed to assist students in principles related to food preparation. Specific content addressed will include planning, serving, food presentation, special diets, nutrition for the lifespan, serving, and food planning for entertainment services. An emphasis on careers related to food service and nutrition (i.e. catering, dietician and other culinary careers). Lab instruction emphasizes the application process. Leadership development will be provided through the Family, Career and Community Leaders of America.
Content: Culinary Skills
Population: General

200478 - Culinary Arts Internship

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Culinary Skills
Population: General

200499 - Special Topics in Culinary Arts

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Instruction related to Culinary Arts but not described in above courses
Content: Culinary Skills
Population: General

Family & Consumer Sciences - Hospitality, Travel, Tourism & Recreation
(200600)

A group of instructional programs that prepare individuals for occupations in hospitality such as: concierge, dining, housekeeping for hotel and/or motel; commercial cleaning; provision of services to the aged in their homes and in institutions; and assistance to consumers in relation to housing/food, clothing, community resources, and other concerns. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

200601 - Internship: Hospitality, Travel, Tourism and Recreation

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Family and Consumer Sciences
Population: General

200610 - Principles of Hospitality

Grade Level: 9 - 12
Credits: 1
Description: This course is designed for students interested in careers in the hospitality industry. The instruction includes career awareness in the areas of recreation, travel/tourism, hotel/motel, and restaurant. This course is based on the family and consumer sciences core that includes communication skills, economics, food and beverage operations, promotion, selling, and product/service management. Leadership development will be provided through FCCLA activities and competitive events.
Content: Family and Consumer Sciences
Population: General

200641 - Specialized Services in Hospitality

Grade Level: 10 - 12
Credits: 1
Description: Advanced instruction and training to assist persons with personal, social, and business affairs; care for apparel and linens; preparation and service of meals; safety; keeping clean facilities; correspondence and paying bills; outings for exercise and social activities
Content: Family and Consumer Sciences
Population: General

200671 - Special Topics in Hospitality Services

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Instruction related to Hospitality Services but not described in above courses
Content: Family and Consumer Sciences
Population: General

200690 - Co-op: Hospitality, Travel, Tourism and Recreation

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Family and Consumer Sciences
Population: General

Family & Consumer Sciences - Fashion and Interior Design (200800)

This major prepares students in the entire spectrum of fashion and interior design including home furnishings, construction of apparel, and textiles management, production and services. Fashion design includes construction and design of apparel and accessories, fabric and pattern design, principles of clothing selection and care, custom tailoring, and textiles testing. Interior design includes instruction in selecting and maintaining home furnishings and equipment; and upholstery; planning and designing interior spaces; making slipcovers, draperies, curtain and window treatments, and designing accessories for retail sale.

200801 - Fashion & Interior Design Internship

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Family and Consumer Sciences
Population: General

200810 - Fashion & Interior Design Co-op

Grade Level: 11 - 12
Credits: 1-3
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Family and Consumer Sciences
Population: General

200821 - Fashion and Interior Design I

Grade Level: 10 - 12
Credits: 1
Description: This course provides opportunities for students to explore career competencies in the fashion and interior design industry. Students will examine the impact of history, culture, and the environment on current and future trends in the fashion and interior design industries. Students will evaluate elements and principles of design as well as construct fashion and interior design projects that demonstrate comprehension. Leadership development will be provided through Family, Career and Community Leaders of America (FCCLA) student organization.
Content: Family and Consumer Sciences
Population: General

200825 - Fashion and Interior Design II

Grade Level: 11 - 12
Credits: 1
Description: This course provides opportunities for students to develop career competencies in the fashion and interior design industry. Advanced fiber classification, textile performance and construction techniques are used for client designs and application as an integral component of this course. Students will implement technology to create visual presentations for clients and the development of an individual digital portfolio. Leadership development will be provided through the Family, Career, and Community Leaders of America (FCCLA) student organization.
Content: Family and Consumer Sciences
Population: General

200826 - Fashion & Interior Design III

Grade Level: 11 - 12
Credits: 1-2
Description: This course provides opportunities for students to apply career competencies and equip students with entrepreneurial skills for the fashion and interior design industry. Students may develop a business plan and operate a student-run enterprise. An emphasis on client-based projects through advanced textile construction, creation of floor plans, and other related fashion and interior design projects are incorporated. Individual digital portfolios will be finalized to document growth and enhancement in the career pathway. Leadership development will be provided through the Family, Career, and Community Leaders of America (FCCLA) student organization.
Content: Family and Consumer Sciences
Population: General

200831 - Special Topics in Fashion and Interior Design

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Instruction related to Fashion and Interior Design but not described in above courses
Content: Family and Consumer Sciences
Population: General

Family & Consumer Sciences - Consumer and Family Management
(201000)

The Consumer & Family Management pathway prepares individuals for occupations that provide direct services to individuals and families in areas of money management, consumer decision-making skills, family relationships, and adult/elder care. Many individuals in these occupations are employed through community and governmental agencies while others may be self-employed. Examples of jobs in this major include: clinical psychologist, marriage counselor, lawyer (specializing in family issues), personal finance advisor, director of human services and loan officer.

201010 - Money Skills

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to prepare students to understand and use sound financial management skills and practices contributing to financial stability, improving the quality of life for individuals and families. Decision-making, problem solving, goal setting and using technology are integrated throughout the content. Leadership development will be provided through the Family, Career and Community Leaders of America.
Content: Family and Consumer Sciences
Population: General

201011 - Money Skills for Math

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed to provide students with math concepts needed in developing sound money management skills which will help to improve the quality of life for individuals and their families. Components of math, decision making and problem solving skills, goal setting and technology will be integral components of the course. A correlation to the math content in the program of studies was used in developing this course to count as a fourth math elective. Leadership development will be coordinated through Family, Career and Community Leaders of America student organization.
Content: Money Skills for the Math Elective Requirement
Population: General

201015 - Consumer Economics for Economics within Social Studies

Grade Level: 10 - 12
Credits: 1
Description: Family finance; insurance; banking; credit purchasing; economic principles and systems; global economy; investments; decision making process.
Content: Consumer Economics for Economics within Social Studies
Population: General

201051 - Special Topics in Consumer and Family Management

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Instruction related to Consumer and Family Management but not described in above courses
Content: Family and Consumer Sciences
Population: General

Engineering and Technology Program Area
(210000)

The Engineering and Technology program is a study of technology, innovation, design, and engineering, which provides an opportunity for students to learn about the processes and knowledge related to technology that are needed to solve problems and extended human capabilities.

Engineering and Technology - Engineering Technology
(210100)

Career Major: Technology courses derive content from the study of technology, innovation, design, and engineering, which provides an opportunity for students to learn about the processes and knowledge related to technology that are needed to solve problems and extend human capabilities. Any course not found under this career major/sub code may be found in another career major/sub code within this program area.

210101 - Invention and Innovation

Grade Level: 6 - 8
Credits: n/a
Description: This course provides students with opportunities to apply the design process in the invention or innovation of a new product, process, or system, In this course, students will learn all about invention and innovation. They will have opportunities to study the history of Invention and Innovations, including their impacts on society. They will learn about the core concepts of technology, and about the various approaches to solving problem, including engineering design and experimentation. Finally students learn about how various Invention and Innovations impact their lives. Students participate in engineering-design activities to understand how criteria, constraints, and processes affect designs. Students are involved in activities where they learn about brainstorming, visualizing, modeling, constructing, testing, experimenting, and refining designs. Students also develop skills in researching for information, communicating design information, and reporting results. This course will make extensive use of a laboratory environment through a variety of instructional strategies. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210103 - Technological Systems

Grade Level: 6 - 8
Credits: n/a
Description: This course is intended to teach students how technological systems work together to solve problems and capture opportunities. A system can be as small as two components working together (technical system/device level) or can contain millions of interacting devices (use system/network level). We often break down the macro-systems into less complicated micro-systems in order to understand the entire system better. However, technology is becoming more integrated, and systems are becoming more and more dependent upon each other than ever before. Electronic systems are interacting with natural (i.e., biological) systems as humans use more and more monitoring devices for medical reasons. Electrical systems are interacting with mechanical and fluid-power systems as manufacturing establishments become more and more automated. This course will give students general background on the different types of systems but will concentrate more on the connections between these systems. The goals of this course can be accomplished in a laboratory environment through a variety of instructional strategies. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210105 - Special Technology Topics

Grade Level: 6 - 8
Credits: n/a
Description: Special Technology Topics allows the teacher to develop a course for in-depth exploration of technological topics. This course will allow students to gain a more comprehensive knowledge of a particular technology topic or explore specialized technology careers. This can be accomplished in a laboratory environment through a variety of instructional strategies. The structure of this course is determined at the local level to address individual situations. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210107 - Foundations of Engineering Technology

Grade Level: 9 - 12
Credits: 1
Description: This course provides the foundation for students to understand and apply technological concepts and processes that are the cornerstone for the high school technology program. Group and individual activities engage students in creating ideas, developing innovations, and engineering practical solutions. The course will employ teaching/learning strategies that enable students to build their understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of big ideas regarding technology. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210108 - Technological Design

Grade Level: 9 - 12
Credits: 1
Description: This course contributes to the development of each high school student's capability to understand how technology's development, control, and use are based on design constraints and human wants and needs. The structure of the course challenges students to use technological design processes so that they can think, plan, design, and create solutions to engineering and technological problems. Students are actively involved in the organized and integrated application of technological resources, engineering concepts, and scientific procedures. Students address the complexities of technology that stem from designing, developing, using, and assessing technological systems. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210110 - Engineering and Engineering Technology Design (Capstone)

Grade Level: 11 - 12
Credits: 1
Description: Engineering scope, content, and professional practices are presented through practical applications in this capstone course. Students in engineering teams apply technology, Kentucky Academic Standards, and skills to solve engineering design problems and create innovative designs. Students research, develop, test and analyze engineering designs using criteria such as design effectiveness, public safety, human factors and ethics. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210112 - Special Topics, Engineering Technology

Grade Level: 11 - 12
Credits: 1-4
Description: The course allows the teacher to develop a course for in-depth exploration of technological topics. This is a laboratory-based course designed to study a technological system or topic, and/or a recent technological advancement. This study should include how this advancement affects society and/or the environment. A culminating project integrating one or more of the seven contexts of technological literacy is encouraged. It should include research, design, construction, analysis, writing, and presenting. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210117 - Advanced Design Applications

Grade Level: 11 - 12
Credits: 1
Description: This course is a continuation into the broad perspective of the science, engineering and technology. It focuses on understanding concepts and skills of engineering and technology. Students will learn the importance of the application of critical thinking and problem solving skills in pursuing an engineering and technology related careers. Students will gain a deeper understanding of these technological areas: Energy and Power, Information and Communication, Transportation, Manufacturing, Construction, Medical, Agriculture, and Bio-Related Technologies. Students engage in individual and group activities creating ideas; developing innovations; and designing, fabricating, and engineering practical solutions to a variety of technological problems. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210118 - Advanced Technological Applications

Grade Level: 11 - 12
Credits: 1
Description: This course includes activities and real world projects with state-of-the-art equipment and trainers. Students explore and study an introduction to engineering, engineering design problem solving, and engineering graphics with a 3D parametric modeling software. Students prototype a part design and prepare the manufacturing process using a 3D printer, CNC Vertical Mill, CNC turning center, a material handling robot and/or plastic molding machine. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210119 - Exploration of Power Energy and Transportation Technology

Grade Level: 6 - 8
Credits: n/a
Description: This course allows for exploration in the many phases of Power Energy and Transportation through hands-on activities. This program of study facilitates STEM principles to be applied in real world situations. This course should include Aviation and Aerospace, Transportation Systems, Power and Energy, and Research. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210120 - Exploration of Manufacturing Technology

Grade Level: 6 - 8
Credits: n/a
Description: An exploratory course designed to investigate the types of activities performed in the manufacturing industry and through laboratory experiences students explore the skills and technologies of this industry. Content includes the application of technology; the design of products and services; emerging and innovative technologies; safety and maintenance of technology; and career explorations. Activities may include computer aided drafting, manufacturing parts, CNC programming, computer control, and robotics. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210121 - Exploration of Construction Technology

Grade Level: 6 - 8
Credits: n/a
Description: An exploratory course designed to investigate the types of activities performed in the construction industry and through laboratory experiences students explore the skills and technologies of this industry. Content includes the application of technology; the design of products and services; emerging and innovative technologies; safety and maintenance of technology; marketing; and technology-related career explorations. Activities may include computer aided design, architectural drafting, building models of buildings, using construction tools, machines, to design and building simple structures. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210122 - Exploration of Computer and Graphic Communication Technology

Grade Level: 6 - 8
Credits:
Description: An exploratory course designed to provide students the skills and knowledge that are performed in the computer and communication industries. The types of activities may include but not limited to developing images, digital photography, desktop publishing, computer aided design, mechanical drafting, and printing, computer animation, sublimation, screen printing, bindery, audio/video production, and file management through laboratory experiences. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210127 - Exploring Technology

Grade Level: 6 - 8
Credits: n/a
Description: Students develop an understanding of the progression and scope of technology through exploratory experiences. In group and individual activities, student experience ways in which technological knowledge and processes contribute to effective design and solutions to technological problems. Students participate in design activities to understand how criteria, constraints, and processes affect designs. Brainstorming, visualizing, modeling, constructing, testing, and refining designs provide first hand opportunities for students to understand the uses and impacts of innovations. Students develop skills in communicating design information and reporting results. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210133 - Graphic Communications

Grade Level: 9 - 12
Credits: 1
Description: This is a fundamental course that offers a cross-disciplinary program designed for students interested in gaining knowledge and skills in various phases of graphic communication technology. This is a project based program with activities in, but not limited to, computer design, digital imaging, document layout, multimedia, web site development, digital printing, offset printing, screen and sublimation printing processes, bindery, packaging technology. Students apply creative problem solving while learning about technology and management practices related to the production and distribution of graphic media in its many forms. Participation in Kentucky Technology Student

Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210135 - Production Technology

Grade Level: 11 - 12
Credits: 1
Description: This course allows students the opportunity to develop a project from "vision to reality by working with teams to design, engineer, manufacture, construct, test, redesign, and produce a finished project. This course can serve as capstone course working with business and industry as part of their design, development, fabrication, and marketing using skills and knowledge from previous manufacturing courses. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210136 - Advanced Technology for Design and Production (SREB)

Grade Level: 9 - 10
Credits: 1
Description: This course engages students in the use of modern technologies in the design and improvement of products. Students use three-dimensional CAD software in the creation and analysis process. Students document designs using standards set by industry for design documentation. Students implement methods of green production and just-in-time component supply, which allow for the lowest cost and highest quality products. Students design and troubleshoot data acquisition, programmable logic control, process monitoring, automation, and robotic systems. Students incorporate sensing and vision systems, utilizing cameras and sensors to control automated systems. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Advanced Manufacturing Technology
Population: General

210137 - Systems of Advanced Technology (SREB)

Grade Level: 10 - 11
Credits: 1
Description: In this course, students apply the technologies that are found in modern clean, production environments. Students study effective and energy efficient control of pumping, conveyors, piping, pneumatic and hydraulic control systems. Students apply total quality management to production design to assure quality. Students also focus on properties of materials and material testing, creating documentation to support designs, examining properties, and justifying material selections based on properties. Students learn that old products become the new raw materials for new products. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Advanced Manufacturing Technology
Population: General

210138 - Mechanical and Technical Design

Grade Level: 9 - 10
Credits: 1
Description: This is considered a basic course that will provide students with instructions in the characteristics and evolution of drafting technology, underlying principles of design and fundamental knowledge and skills in the use mechanical drawing, illustrations, and various forms of mechanical drawings, geometry and applied mathematics that apply to architectural and/or engineering design. Introduction to various forms of computer aided software to gain basic skills and knowledge. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210139 - Introduction to Aircraft Maintenance Technology

Grade Level: 10 - 12
Credits: 1
Description: The purpose of this curriculum is for students to develop basic knowledge and personal skills that can be applied to a broad range of career opportunities with emphases to aviation maintenance technology. Students will gain experience in electricity and electronics, metalworking, woodworking, plastics and composite materials through the use of tools, machines and materials that are basic to aviation industry. It will cover both hand and machine-tool operations, and supplies background knowledge on equipment and processes utilized in aviation industry and manufacturing. The program allows students to learn basic problem solving skills, instruction in mechanical drawing, blue print reading, engineering CAD, and the application of the engineering concepts and mathematics. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210140 - Architectural Design and Civil Engineering

Grade Level: 10 - 12
Credits: 1
Description: This course is for students who wish to broaden their basic skills in the field of residential architectural drafting and surveying. Covers procedures used in developing complete set of residential plans, history of surveying, mathematics, measurement and computations, and the proper use of basic drafting and surveying instruments, equipment and software. Students will develop projects in accordance to drafting and building code requirements. Projects will emphasize the importance of communication and organization as they participate in the roles of civil engineers, architects, land developers, surveyors, and/or general contractors in residential planning and construction. Participation in Kentucky Technology Student Association will greatly enhance instruction. Prerequisite: 210223 Fundamentals of Architectural and Civil Engineering.
Content: Engineering and Technology
Population: General

210141 - Fundamentals of Building Construction Technologies

Grade Level: 11 - 12
Credits: 1
Description: Students explore architectural design foundations and increase understanding of working drawings, construction techniques, and codes regulating building design. They learn the design process and apply the elements and principles of design to architectural projects. Through producing models and illustrations of all aspects of a building, students create architectural design solutions using CAD (computer aided design). Students design and build scale or full-size structures and work with projects that help them understand the jobs of architects, carpenters, electricians, plumbers, surveyors, contractors, masons, design engineers, and a variety of other construction careers. They also explore aspects of the construction industry. Participation in Kentucky Technology Student Association will greatly enhance instruction. Prerequisites: 210223 Fundamentals of Architectural and Civil Engineering and 210140 Architectural Design and Civil Engineering.
Content: Engineering and Technology
Population: General

210142 - Power and Energy Equipment Technology

Grade Level: 9 - 12
Credits: 1
Description: Power and Energy Equipment is used every day in many different ways. To become a more environmentally friendly society, students will have a basic understanding of the various types of energy equipment and how energy is obtained or generated. Everyone should know what energy sources are available that do not pollute the environment and how this energy can be converted into a useful power supply. This course provides students with the foundation in content and skills associated with various energy sources, and electrical power generation, working with AC/DC electrical circuits, and transfer of various energy forms to produce DC current. Laboratory-based activities are an integral part of the course that includes safe use and application of appropriate technology, scientific testing and observation equipment. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

210143 - Mechatronic Systems for Advanced Production (SREB)

Grade Level: 11 - 12
Credits: 1
Description: Students will design cost-effective work cells incorporating automation and robotics to improve quality of final products. The advanced production in this course depends on the use and coordination of information, automation, network systems, vision and sensing systems. Students will design and create mechatronic systems and automated tooling to accomplish these advanced tasks. Students produce authentic documentation about their cyber-mechanical systems and the integration with data to control and monitor processes. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering and Technology
Population: General

Engineering and Technology - Engineering
(210200)

Career Major: Engineering is a four year sequence of courses which, when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering. Any course not found under this career major/sub code may be found in another career major/sub code with in this program area.

210221 - Fundamentals of Engineering Design

Grade Level: 9 - 12
Credits: 1
Description: This course applies the skills, concepts, and principles of engineering. Students explore various technological systems and engineering processes in related career fields. Topics include investigating technological system, design optimization, and problem solving. Students utilize CAD and physical and virtual modeling concepts to construct, test, collect, and report data. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210222 - Engineering Design

Grade Level: 10 - 12
Credits: 1
Description: A project and research based course that extends the learning experiences where students focus on mechanical, electrical, fluid and thermal systems allowing in depth exploration in selected disciplines of engineering areas such as manufacturing, power/energy/transportation, bio-medical, robotics, hydraulics, electricity/electronics, communications, construction systems, alternative energy, computer aided design and problem solving. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210223 - Fundamentals of Architectural and Civil Engineering

Grade Level: 9 - 12
Credits: 1
Description: This is an introduction to residential and light commercial building construction and design. Students will learn basic sketching, mechanical drafting skills with an emphasis on computer aided drafting. In this class, students will design a structure relevant to today's modern architecture and create models of their designs with various materials and tools. Students will experience and solve many problems in designing or building structures with regards to environment and community impact and limitations from town planning, urban design and landscape architecture to furniture and objects. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210224 - Principles of Engineering Technology

Grade Level: 9 - 10
Credits: 1
Description: This course provides a project based learning approach to understanding the principles and concepts of physics and associated mathematics for most Engineering Technology programs. Students explore various careers and disciplines of engineering areas, problem solving and core technology such as, but not limited to; manufacturing, power/energy/transportation, robotics, hydraulics, electricity/electronics, communications, construction systems, alternative energy and computer aided design. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210225 - Introduction to Manufacturing and Manufacturing Systems

Grade Level: 9 - 12
Credits: 1
Description: This is a comprehensive course designed for the study of general concepts and principles of manufacturing and manufacturing systems. This course provides for hands-on learning experience which enhances the understanding of various metallic/nonmetallic materials, processes, and products. Materials studied may include polymers, ceramics, woods, composites, and metal materials associated with manufacturing Students have the opportunity to engage in product design, prototyping, computer-assisted manufacturing applications, CNC machines, robotics, and production management. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210226 - Introduction to Aerospace

Grade Level: 9 - 10
Credits: 1
Description: The course covers the exploration of aerospace including, flight/aeronautics, aircraft maintenance, aeronautical engineering, and space. Students will learn about the forces that affect controlled flight, investigate properties of lift, and explore flight through a flight simulator. Students

will also learn about aerospace standard materials, aviation safety, aircraft and wing design, and elements of a space mission resource system. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210229 - Fundamentals of Aerospace Engineering

Grade Level: 10 - 12
Credits: 1
Description: The fundamental concepts and approaches of aerospace engineering are highlighted through lectures on aeronautics, astronautics, and design. Project based course where students will design, build and test projects such as lighter-than-air (LTA) vehicle or various wing designs. The connections between theory and practice are realized in the design exercises. Required design reviews precede the LTA race competition. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210230 - Fundamentals of Mechatronics

Grade Level: 11 - 12
Credits: 1
Description: Electro-Mechanical Systems courses provide students with instruction and experience with mechanical devices, actuators, sensors, electronics, intelligent controllers and computers. Students gain an understanding of the principles of electricity and mechanics and their application to gears, including hydraulic/pneumatic equipment, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210232 - Electricity and Electronics

Grade Level: 9 - 12
Credits: 1
Description: In this course students will gain skills and knowledge through classroom and lab activities in the areas of basic DC and AC circuits, circuit components, codes, testing, electromagnetism and inductance, capacitance, power supplies, power generation and distribution, amplification, digital circuits, and computer fundamentals. Students will develop a basic understanding of the various types of energy and how energy is obtained. Students will learn the safe use of the tools, test instruments, equipment and supplies used in this course plus information on career opportunities in this field. Hands-on and problem solving activities will expose students to areas of electron theory, Ohm’s Law, insulators, conductors, electronic components, oscillators, and electronic fabrication. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210233 - Fundamentals of Aviation Science

Grade Level: 9 - 12
Credits: 1
Description: The course covers the fundamentals of aerospace including, the development of the balloon, lighter than air vehicles, gliders, rockets, and heavier than air flight vehicles. Introduces students to the basic science of aerodynamics: including the development of aircraft from the Wright Brothers to the present day while exposing students to the various career opportunities in aviation. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210234 - Aviation Science

Grade Level: 10 - 12
Credits: 1
Description: This course prepares students for flight training and aircraft operations. Students will gain knowledge and skills in airport systems, air traffic control procedures, aviation weather, air navigation, radio communication procedures, and Federal Aviation Regulations (FAR's). This course covers the history of aviation law, federal regulation of air transportation and the role of state and federal government in aviation law including functions of the Federal Aviation Administration. Students will become familiar with aircraft power plants, principles of flight, aircraft systems/instruments, and science of weather. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210235 - Introduction to Space Systems Engineering

Grade Level: 10 - 12
Credits: 1
Description: The course introduces students to satellites and space systems: orbital mechanics; the space environment; satellite application; spacecraft design consideration; the roles universities, industry and government play in space exploration, and future technologies of spacecrafts and satellites. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210236 - Space Systems Engineering

Grade Level: 10 - 12
Credits: 1-3
Description: An instructional program in astronautics designed to develop basic knowledge of space systems and to gain practical experience in designing, fabricating, and testing space type experiments. Students will learn and understand the constraints on device design to operate in the LEO (Low Earth Orbit) space environment. Students will also get hands-on experience in a laboratory environment and in the safe use of shop equipment. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210237 - Commercial Aviation Science

Grade Level: 11 - 12
Credits: 1
Description: This course discusses the Federal Aviation Regulations covering the privileges, limitations, and operations of a commercial pilot, and the operations for which an air taxi/commercial operator, agricultural aircraft operator, and external load operator certificate, waiver, or exemption is required. The course also discusses the safe and efficient operation of airplanes, including inspection and certification requirements, operating limitations, high altitude operations and physiological considerations, loading computations, the significance of the use of airplane performance speeds, the computations involved in runway and obstacle clearance and cross wind component considerations, and cruise control. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Aerospace Engineering
Population: General

210238 - Foundations of Robotics

Grade Level: 9 - 10
Credits: 1
Description: This course provides students with the foundation in content and skills associated with robotics and automation, including artificial intelligence, electronics, physics, and principles of engineering. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210239 - Robotics Design Essentials and Systems

Grade Level: 9 - 12
Credits: 1
Description: This course provides students with content and skills essential to the design and operation of robotic systems. Students activities will include artificial intelligence specialized sensors, electronic applications, engineering technologies, environmental physics, manufacturing, topographical considerations, programming, motions physics, electric motors, communications, simulations, simulation and modeling, and critical thinking skills. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210240 - Robotic Application Capstone

Grade Level: 11 - 12
Credits: 1
Description: This course provides students with skills essential to the design and operation of autonomous robotic systems in the context of a capstone project. Students will design and build an autonomous robot to perform pre-designed tasks. Participation in Kentucky Technology Student Association will greatly enhance instruction. Prerequisites: 210238 Foundations of Robotics and 210239 Robotics Design Essentials and Systems.
Content: Engineering
Population: General

210242 - Introduction to Alternative Energy

Grade Level: 10 - 11
Credits: 1
Description: This course provides students with the foundation in content and skills associated with various energy sources, and electrical power generation, transmission, and distribution. Students will develop competencies in the area of energy history and the global impact of renewable and non-renewable resources; career opportunities; environmental principles, working with AC/DC electrical circuits, and transfer of various energy forms to produce DC current. Laboratory-based activities are an integral part of the course that includes safe use and application of appropriate technology, scientific testing and observation equipment. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210243 - Alternative Energy

Grade Level: 10 - 12
Credits: 1
Description: This course provides students with the foundation in content and skills associated with various energy sources, and electrical power generation, transmission, and distribution. Students will develop competencies in the area of energy history and the global impact of renewable and non-renewable resources; career opportunities; environmental principles, working with AC/DC electrical circuits, and transfer of various energy forms to produce DC current. Participation in Kentucky Technology Student Association will greatly enhance instruction. Prerequisite: 210242 Introduction to Alternative Energy.
Content: Engineering
Population: General

210244 - Global Energy Issues

Grade Level: 10 - 12
Credits: 1
Description: The course critically examines issues associated with the technical, economic, societal, environmental, and geopolitical aspects of energy and sustainability. Students will develop competencies in the area of energy history and the global impact of renewable and non-renewable resources; career opportunities; environmental principles. The course is taught through lectures, discussions, hands on activities, field trips and invited speakers. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210245 - Energy I: Energy Industry Basics

Grade Level: 9 - 12
Credits: 1
Description: Investigates competencies required for employment by various industries that manufacture energy sources. Addresses the competencies identified by the Center for Energy Workforce Development (CEWD) organization that are needed for energy industries. Combined with Energy II and Energy III qualifies students to take the CEWD Energy Industry Fundamentals (EIF) certification exam. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210246 - Energy II: Power Generation and Distribution

Grade Level: 10 - 12
Credits: 1
Description: Introduces students to methods of power production, power distribution, and physics principles that are associated with both. Addresses the competencies identified by the Center for Energy Workforce Development (CEWD) organization that are needed for energy industries. Combined with Energy I and Energy III qualifies students to take the CEWD Energy Industry Fundamentals (EIF) certification exam. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210247 - Energy III: Emerging Technologies in Energy

Grade Level: 11 - 12
Credits: 1
Description: Introduces students to emerging technologies and careers in the energy industry. It is the third of three modules that addresses the competencies identified by the Center for Energy Workforce Development (CEWD) organization that are needed for energy industries. Combined with Energy I and Energy II qualifies students to take the CEWD Energy Industry Fundamentals (EIF) certification exam. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210248 - Energy IV: Sustainability Management

Grade Level: 12 - 12
Credits: 2
Description: Examines the management of corporations as it relates to sustainability. Includes an overview of energy technology, energy resources, and emerging future energy technologies coupled with social and environmentally related legislation and its effect on corporations' triple bottom line (people, profit, and planet). Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210290 - Special Topics, Engineering

Grade Level: 9 - 12
Credits: 1
Description: This is a laboratory-based course design to study an engineering challenge, and/or recent technological advancements such as alternative energy, transportation, or other energy related fields. This study should include how this advancement affects society and/or environment. A culminating project integrating one or more of the contexts of the field of engineering is encouraged. It should include research, design, construction, analysis, writing, and presenting. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

Engineering and Technology - Career Major Electives
(210300)

Courses not falling into one of the other career majors/sub codes

---

210330 - Engineering and Engineering Technology Co-op

Grade Level: 11 - 12
Credits: 1
Description: Cooperative education is a paid educational program consisting of in-school instruction combined with the program related on-the-job work experience in a business or industrial establishment. These are planned experiences supervised by the school and the employer to ensure that each phase contributes to the students Individual Learning Plan (ILP). Refer to the KDE Work Based Learning Manual for further specifications. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210331 - Engineering and Engineering Technology Internship

Grade Level: 11 - 12
Credits: 1
Description: Internship for CTE courses provides supervised work-site experience for high school students associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

210341 - Foundations of Energy

Grade Level: 9 - 11
Credits: 1
Description: The course provides an overview of renewable and nonrenewable energy resources reflecting how energy impacts the environment and the economy from regional, state, national and global perspectives. Extensive hands-on laboratory activities are vital components of the curriculum. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Engineering
Population: General

Engineering and Technology - Engineering (Project Lead The Way)
(219900)

Career Major: Engineering is a four year sequence of courses which, when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering. Any course not found under this career major/sub code may be found in another career major/sub code with in this program area.

219901 - Introduction to Engineering Design (PLTW)

Grade Level: 9 - 12
Credits: 1
Description: Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219902 - Principles of Engineering (PLTW)

Grade Level: 10 - 12
Credits: 1
Description: Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219903 - Digital Electronics (PLTW)

Grade Level: 10 - 12
Credits: 1
Description: From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219904 - Computer Integrated Manufacturing (PLTW)

Grade Level: 10 - 12
Credits: 1
Description: Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219905 - Civil Engineering and Architecture (PLTW)

Grade Level: 10 - 12
Credits: 1
Description: Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3-D architectural design software. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219906 - Engineering Design and Development (Capstone) (PLTW)

Grade Level: 11 - 12
Credits: 1
Description: The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219907 - Aerospace Engineering (PLTW)

Grade Level: 10 - 12
Credits: 1
Description: This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219908 - Environmental Sustainability (PLTW)

Grade Level: 10 - 12
Credits: 1
Description: Students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply, and renewable energy. Applying their knowledge through hands-on activities and simulations, students research and design potential solutions to these true-to-life challenges. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219909 - Design and Modeling (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. They are then challenged and empowered to use and apply what they've learned throughout the unit to design a therapeutic toy for a child who has cerebral palsy. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219910 - Automation and Robotics (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219911 - Science and Technology (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Science impacts the technology of yesterday, today, and the future. Students apply the concepts of physics, chemistry, and nanotechnology to STEM activities and projects, including making ice cream, cleaning up an oil spill, and discovering the properties of nano-materials. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219912 - Flight and Space (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: The exciting world of aerospace comes alive through Flight and Space. During this unit, students delve into the history of flight and space, discover the science behind aeronautics, and explore traveling and living in space. Students are then challenged to use their knowledge to design, build, and test an airfoil. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219913 - Magic of Electrons (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Through hands-on projects, students explore electricity, the behavior and parts of atoms, and sensing devices. They learn knowledge and skills in basic circuitry design, and examine the impact of electricity on the world around them. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219914 - Energy and the Environment (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Students are challenged to think big and toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219915 - Green Architecture (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Today's students have grown up in an age of green choices. In this unit, students learn how to apply this concept to the fields of architecture and construction by exploring dimensioning, measuring, and architectural sustainability as they design affordable housing units using Autodesk's® 3D architectural design software. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219916 - Medical Detectives (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a crime scene. They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219918 - Introduction to Computer Science I (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: In this unit, students discover the principles of this fast-growing field by focusing on creativity and an iterative design process as they create their own basic apps using MIT App Inventor. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

219919 - Introduction to Computer Science II (PLTW)

Grade Level: 6 - 8
Credits: n/a
Description: Students continue to explore the fundamentals of the stimulating career path of computer science. They venture into text-based programming through Python and, in the final problem, develop an app to crowdsource and analyze data on a topic of their interest. Participation in Kentucky Technology Student Association will greatly enhance instruction.
Content: Pre-Engineering
Population: General

English/ Language Arts
(230000)

English/ Language Arts - General
(230100)

A summary of groups of instructional programs that incorporate all language arts strands of Kentucky Core Academic Standards. A group of instructional programs that generally describes the skills and techniques essential to learning the English language.

230101 - English 6

Grade Level: 6 - 6
Credits:
Description: Middle level English/Language Arts is designed to present a wide range of reading experiences with print and non-print text for literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies, as well as the writing process and criteria for effective writing, to write in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to continue to discover and communicate ideas and information.
Content: English Language Arts
Population: General

230101 English 6 Course Standard Document

230103 - English 7

Grade Level: 7 - 7
Credits:
Description: Middle level English/Language Arts is designed to present a wide range of reading experiences with print and non-print text for literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies, as well as the writing process and criteria for effective writing, to write in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to continue to discover and communicate ideas and information.
Content: English Language Arts
Population: General

230103 English 7 Course Standard Document

230105 - English 8

Grade Level: 8 - 8
Credits:
Description: Middle level English/Language Arts is designed to present a wide range of reading experiences with print and non-print text for literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies, as well as the writing process and criteria for effective writing, to write in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to continue to discover and communicate ideas and information.
Content: English Language Arts
Population: General

230105 English 8 Course Standard Document

230107 - English 1

Grade Level: 9 - 9
Credits: 1 English credit
Description: *Course Required for Graduation. The courses are designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The courses also require students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas.
Content: English I
Population: General

230107 English 1 Course Standard Document

230110 - English 2

Grade Level: 10 - 10
Credits: 1 English credit
Description: *Course Required for Graduation. The courses are designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The courses also require students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas.
Content: English II
Population: General

230110 English 2 Course Standard Document

230113 - English 3

Grade Level: 11 - 11
Credits: 1 English credit
Description: *Course Required for Graduation. The courses are designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The courses also require students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas. Course adheres to Kentucky Academic Standards requirements.
Content: English III
Population: General

230113 English 3 Course Standard Document

230116 - English 4

Grade Level: 12 - 12
Credits: 1 English credit
Description: *Course Required for Graduation. The courses are designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The courses also require students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas. Course adheres to Kentucky Academic Standards
Content: English IV
Population: General

230116 English 4 Course Standard Document

230118 - World Literature

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: reading and critiquing; world classical literature
Content: English Language Arts
Population: General

230125 - Bible as Literature

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: study of the Old Testament; New Testament; Heroes; prophecies; poetry
Content: English Language Arts
Population: General

230140 - Literature of a Genre

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: focused on a specific genre
Content: English Language Arts
Population: General

230141 - Literature of a Period

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: focused on a period of literature
Content: English Language Arts
Population: General

230154 - Research Technique

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: Research paper format; organization and presentation of researched material
Content: English Language Arts
Population: General

230164 - IB English 4 (grade 11 or 12)

Grade Level: 11 - 12
Credits: 1 English credit
Description: English IV course - Adheres to Kentucky Academic Standards requirements and meets IB guidelines.
Content: English IV
Population: General

230165 - IB English 5 (grade 12)

Grade Level: 12 - 12
Credits: 1 English credit
Description: English IV course - Adheres to Kentucky Academic Standards requirements and meets IB guidelines.
Content: English IV
Population: General

230166 - AP Language and Composition

Grade Level: 11 - 12
Credits: 1 English credit
Description: English III or English IV course. The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. College credit is earned with a qualifying score on an AP exam.
Content: AP English
Population: General

230167 - AP Literature and Composition

Grade Level: 11 - 12
Credits: 1 English credit
Description: English IV course. The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. College credit is earned with a qualifying score on an AP exam.
Content: AP English
Population: General

230170 - AP Seminar

Grade Level: 9 - 12
Credits:
Description: AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, student practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts, and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. College credit is earned with a qualifying score on an AP exam.
Content: English Language Arts
Population: General

230171 - AP Research Project

Grade Level: 10 - 12
Credits:
Description: AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense. College credit is earned with a qualifying score on an AP exam. College credit is earned with a qualifying score on an AP exam.
Content: None
Population: General

English/ Language Arts - Composition
(230400)

A group of instructional programs that describe the principles and techniques of selecting, combining, arranging, and developing ideas, and expressing them in appropriate written form.

230401 - Composition

Grade Level: 9 - 12
Credits:
Description: Content for this course may vary. Possible topics include basic composition structure and skill development and may focus on a combination of the modes of writing, e.g., narrative, expository and argumentative. Topics may vary depending on the mode of writing.
Content: Composition
Population: General

230402 - Writing Laboratory

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: intensive practice; writing skills; laboratory setting
Content: Writing
Population: General

English/ Language Arts - Creative Writing
(230500)

A group of instructional programs that describe the techniques of composition of such forms of literature as the short story, verse, drama, and others that involve some degree of spontaneity and exercise of the imagination on the part of the writer.

230511 - Creative Writing

Grade Level: 9 - 12
Credits: 1 English elective
Description: Content for this course may vary but should provide students an opportunity to analyze and create works such as short stories, one-act plays, poetry and/or personal, expressive pieces.
Content: Writing
Population: General

English/ Language Arts - Speech, Debate, and Forensics
(231000)

A group of instructional programs that describe strategies to improve competence in speaking and listening and the application of forms of argument to test ideas or reach decisions.

231011 - Public Speaking

Grade Level: 9 - 12
Credits: 1 English elective
Description: Content for this course may vary. Possible topics may include research, preparation, delivery, and analysis of extemporaneous, demonstrative, persuasive (including debate and forensic techniques) and informative oral communication.
Content: Speech/Oral Communication (English)
Population: General

English/ Language Arts - Technical and Business Writing (231100)

A group of instructional programs that describe the theory, methods, and skill that is needed for writing scientific, technical, and business papers and monographs.

231111 - Technical English

Grade Level: 9 - 12
Credits: 1 English elective
Description: Methods and skills for writing scientific, technical and business papers.
Content: English Language Arts
Population: General

English/ Language Arts - Language Arts, Reading (231200)

231205 - Middle School Reading

Grade Level: 6 - 8
Credits: 0
Description: Middle School Reading is designed to present a wide range of reading experiences with print and non-print text that have literary and information purposes. Informational texts include expository, persuasive, and procedural texts and documents. Students use reading strategies before, during and after reading to aid in comprehension of texts. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry and technology allows students to continue to discover and communicate ideas and information. In isolation, this supplemental course will not fulfill the middle school language arts requirements defined in the Kentucky Academic Standards.
Content: Reading
Population: General

231211 - Reading Development

Grade Level: 9 - 12
Credits: 1 English elective
Description: Content for this course focuses on instruction for students with reading difficulties and may include skill acquisition and reading technique, word attack skills, reading comprehension strategies, functional literacy and career reading skills.
Content: Reading
Population: General

231295 - Reading and English/Language Arts Intervention (High School)

Grade Level: 9 - 12
Credits: 1 English elective
Description: This course is for students who need additional time and support or for students in reading at the high school level who could benefit from enrichment. This course includes social sciences, natural sciences, humanities, and literary texts. This course could serve as an English/Language Arts elective for high school graduation, but not as one of the four required English Language Arts courses.
Content: English Language Arts
Population: General

231296 - Reading and English/Language Arts Intervention (Middle)

Grade Level: 5 - 8
Credits:
Description: This course is for students who need additional time and support or for students in reading at the middle school level who could benefit from enrichment. This course includes social sciences, natural sciences, humanities, and literary texts.
Content: English Language Arts
Population: General

English/ Language Arts - Communications
(239100)

A summary of groups of instructional programs that describe the creation, transmission, and evaluation of messages.

239101 - Mass Media

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: media awareness; communication theory; critical skill development; major media components; media history; communications psychology
Content: Broadcast Journalism
Population: General

239111 - Journalism

Grade Level: 9 - 12
Credits: 1 English elective
Description: Content for this course may vary. Possible topics may include: information gathering, writing, editing/proofreading, layout and production in print, digital and online formats.
Content: Journalism
Population: General

239131 - Literary Magazine

Grade Level: 9 - 12
Credits: 1 English elective
Description: Special Topics: advanced writing techniques; literary magazine publishing
Content: Writing
Population: General

239141 - Yearbook Production

Grade Level: 9 - 12
Credits: 1 English elective
Description: Content for this course may vary. Possible topics include yearbook production, publication, format, layout, photographs, and financial management.
Content: Yearbook
Population: General

English/ Language Arts - Radio/Television News Broadcast (239600)

A group of instructional programs that describe the methods and techniques by which radio and television news programs are produced and broadcasted.

239611 - Broadcast Journalism

Grade Level: 9 - 12
Credits: 1 English elective
Description: Content for this course may vary but may include researching, reporting, writing, filming/recording and editing in digital and/or online formats.
Content: Broadcast Journalism
Population: General

Mathematics
(270000)

Mathematics - Middle
(270200)

270201 - Grade 6 Mathematics

Grade Level: 6 - 6
Credits:
Description: In Grade 6, instructional time should focus on the critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking. (1) Students use reasoning about multiplication and division to solve ratio and rate problems about quantities. By viewing equivalent ratios and rates as deriving from, and extending, pairs of rows (or columns) in the multiplication table, and by analyzing simple drawings that indicate the relative size of quantities, students connect their understanding of multiplication and division with ratios and rates. Thus students expand the scope of problems for which they can use multiplication and division to solve problems, and they connect ratios and fractions. Students solve a wide variety of problems involving ratios and rates. (2) Students use the meaning of fractions and the meanings of and relationship between multiplication and division to understand and explain why the procedures for dividing fractions make sense. Students use these operations to solve problems. Students extend their previous understandings of number and the ordering of numbers to the full system of rational numbers, which includes negative rational numbers, and in particular negative integers. They reason about the order and absolute value of rational numbers and about the location of points in all four quadrants of the coordinate plane. (3) Students understand the use of variables in mathematical expressions. They write expressions and equations that correspond to given situations, evaluate and use expressions and formulas to solve problems. Students understand that expressions in different forms can be equivalent, and use the properties of operations to rewrite equivalent expressions. Students know the solutions of an equation are the values of the variables that make the equation true. Students use properties of operations and the idea of maintaining the equality of both sides of an equation to solve simple one-step equations. Students construct and analyze tables and they use equations (such as $3x = y$) to describe relationships between quantities. (4) Building on and reinforcing their understanding of number, students begin to develop their ability to think statistically. Students recognize a data distribution may not have a definite center and different ways to measure center yield different values. Students recognize a measure of variability (interquartile range or mean absolute deviation) can also be useful for summarizing data because two very different sets of data can have the same mean and median yet be distinguished by their variability. Students learn to describe and summarize numerical data sets, identifying clusters, peaks, gaps, and symmetry, considering the context in which the data were collected. Students also build on their work with area from elementary school by reasoning about relationships among shapes to determine area, surface area, and volume. They find areas of triangles and special quadrilaterals by decomposing these shapes and relating the shapes to rectangles. Using these methods, students discuss, develop, and justify formulas for areas of triangles and parallelograms. Students find areas of polygons and surface areas of prisms and pyramids by decomposing them into pieces whose area they can determine. They reason about right rectangular prisms with fractional side lengths to extend formulas for the volume of a right rectangular prism to fractional side lengths. They prepare for work on scale drawings and constructions in Grade 7 by drawing polygons in the coordinate plane.
Content: Middle School Mathematics (general)
Population: General

270201 Grade 6 Mathematics Course Standards Document

270202 - Grade 7 Mathematics

Grade Level: 7 - 7
Credits:
Description: In Grade 7, instructional time should focus on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples. (1) Students extend their understanding of ratios and develop understanding of proportionality to solve single- and multi-step problems. Students use their understanding of ratios and proportionality to solve a wide variety of percent problems, including those involving discounts, interest, taxes, tips, and percent increase or decrease. Students solve problems about scale drawings by relating corresponding lengths between the objects or by using the fact that relationships of lengths within an object are preserved in similar objects. Students graph proportional relationships and understand the unit rate informally as a measure of the steepness of the related line, called the slope. They distinguish proportional relationships from other relationships. (2) Students develop a unified understanding of number, recognizing fractions, decimals (that have a finite or a repeating decimal representation), and percents as different representations of rational numbers. Students extend addition, subtraction, multiplication, and division to all rational numbers, maintaining the properties of operations and the relationships between addition and subtraction, and multiplication and division. By applying these properties, and by viewing negative numbers in terms of everyday contexts (e.g., amounts owed or temperatures below zero), students explain and interpret the rules for adding, subtracting, multiplying, and dividing with negative numbers. They use the arithmetic of rational numbers as they formulate expressions and equations in one variable and use these equations to solve problems. (3) Students continue their work with area from Grade 6, solving problems involving the area and circumference of a circle and surface area of three-dimensional objects. In preparation for work on congruence and similarity in Grade 8 they reason about relationships among two-dimensional figures using scale drawings and informal geometric constructions, and they gain familiarity with the relationships between angles formed by intersecting lines. Students work with three-dimensional figures, relating them to two-dimensional figures by examining cross-sections. They solve real-world and mathematical problems involving area, surface area, and volume of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes and right prisms. (4) Students build on their previous work with single data distributions to compare two data distributions and address questions about differences between populations. They begin informal work with random sampling to generate data sets and learn about the importance of representative samples for drawing inferences.
Content: Middle School Mathematics (general)
Population: General

270202 Grade 7 Mathematics Course Standards Document

270203 - Grade 8 Mathematics

Grade Level: 8 - 8
Credits:
Description: In Grade 8, instructional time should focus on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. (1) Students use linear equations and systems of linear equations to represent, analyze, and solve a variety of problems. Students recognize equations for proportions ($y/x= m$ or $y = mx$) as special linear equations ($y = mx + b$), understanding that the

constant of proportionality (m) is the slope, and the graphs are lines through the origin. They understand that the slope (m) of a line is a constant rate of change, so that if the input or x-coordinate changes by an amount A, the output or y-coordinate changes by the amount m×A. Students also use a linear equation to describe the association between two quantities in bivariate data (such as arm span vs. height for students in a classroom). At this grade, fitting the model, and assessing its fit to the data are done informally. Interpreting the model in the context of the data requires students to express a relationship between the two quantities in question and to interpret components of the relationship (such as slope and y-intercept) in terms of the situation. Students strategically choose and efficiently implement procedures to solve linear equations in one variable, understanding that when they use the properties of equality and the concept of logical equivalence, they maintain the solutions of the original equation. Students solve systems of two linear equations in two variables and relate the systems to pairs of lines in the plane; these intersect, are parallel, or are the same line. Students use linear equations, systems of linear equations, linear functions, and their understanding of slope of a line to analyze situations and solve problems. (2) Students grasp the concept of a function as a rule that assigns to each input exactly one output. They understand that functions describe situations where one quantity determines another. They can translate among representations and partial representations of functions (noting that tabular and graphical representations may be partial representations), and they describe how aspects of the function are reflected in the different representations. (3) Students use ideas about distance and angles, how they behave under translations, rotations, reflections, and dilations, and ideas about congruence and similarity to describe and analyze two-dimensional figures and to solve problems. Students show that the sum of the angles in a triangle is the angle formed by a straight line, and that various configurations of lines give rise to similar triangles because of the angles created when a transversal cuts parallel lines. Students understand the statement of the Pythagorean Theorem and its converse, and can explain why the Pythagorean Theorem holds, for example, by decomposing a square in two different ways. They apply the Pythagorean Theorem to find distances between points on the coordinate plane, to find lengths, and to analyze polygons. Students complete their work on volume by solving problems involving cones, cylinders, and spheres.
Content: Middle School Mathematics (general)
Population: General

270203 Grade 8 Mathematics Course Standards Document

270290 - Mathematics Intervention (Middle School)

Grade Level: 6 - 8
Credits:
Description: This course is for students who need additional time and support or for students in mathematics at the middle school level that could benefit from enrichment. This course includes support for all middle school mathematics courses.
Content: Middle School Mathematics (general)
Population: General

Mathematics - Algebra
(270300)

270301 - HS Pre-Algebra/Pre-High School Mathematics (Grades 9 - 10)

Grade Level: 9 - 10
Credits: 1E
Description: This course should focus on skills necessary to be successful in a HS Algebra 1 course and is not necessarily limited to the following: (1) completing understanding of division of fractions and extending the notion of number to the system of rational numbers and developing understanding of operations with rational numbers and writing, interpreting, and using expressions and equations; (2) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (3) developing understanding of and applying proportional relationships and solving problems involving scale drawings; (4) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (5) grasping the concept of a function and using functions to describe quantitative relationships; (6) understanding and applying the Pythagorean Theorem; (7) working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume and (8) developing understanding of statistical thinking and drawing inferences about populations based on samples. This course cannot serve as Algebra 1, Geometry or Algebra 2 credit for high school graduation. This course is not available for middle school students because middle school mathematics is pre-algebra and is described as such in this course description. This course is for high school students who are not prepared to successfully complete a high school Algebra 1 course or an Integrated 1 course.
Content: Pre-Algebra
Population: General

270304 - Algebra 1

Grade Level: 9 - 11
Credits: 1
Description: This course is the study of high school Algebra 1 content. Upon completion of the course, students should be able to represent relationships mathematically, develop fluency in writing, interpret expressions and equations, translate between various forms of linear equations and inequalities and use them to solve problems including those that require a system of equations, solve linear equations, apply related solution techniques and the laws of exponents to solve simple exponential equations, understand function definition and notation, contrast linear and exponential graphical representations, make judgments about the appropriateness of linear models, perform arithmetic operations on inequalities, interpret functions and fluently use function notation, construct and compare linear and exponential models and solve related problems, factor quadratic and cubic expressions solve quadratic equations to interpret related quadratic functions and explore non-linear relationships. This course should be designed to meet the high school graduation credit for Algebra 1 and to build a solid foundation necessary for future high school math courses.

This course contains "modeling" standards. Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Mathematical modeling is the process of choosing and applying appropriate mathematical content to analyze empirical situations. When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and

comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★).
Content: Algebra I
Population: General

270304 Algebra 1 Course Standards Document

270309 - Mathematics Intervention (High School)

Grade Level: 9 - 12
Credits: 1E
Description: This course is for students who need additional time and support or for students in mathematics at the high school level who could benefit from enrichment. This course includes support for all high school mathematics courses.
Content: High School Mathematics (General)
Population: General

270311 - Algebra 2

Grade Level: 9 - 12
Credits: 1
Description: This course is the study of high school Algebra 2 content. Upon completion of the course, students should be able to use properties of numerical operations to perform calculations involving polynomials,, identify zeros of polynomials and make connections between zeros of polynomials and solutions of geometry to extend trigonometry to model periodic phenomena, work with a variety of function families exploring the effects of transformations, analyze functions using different representations, build, interpret and compare functions including square root, cube root, piece-wise, trigonometric and logarithmic functions, identify appropriate functions to model situations, adjust parameters to improve the models, and compare models by analyzing appropriateness of fit.

NOTE: The content of the course is High School Algebra 2 and may be titled locally as Applied Algebra 2, Technical Algebra 2 or named as an interdisciplinary Algebra 2. This code is to be used for both middle and high school students taking Algebra 2 for graduation credit. It is also to be used in lieu of the Integrated/Applied Math 3 or 4 depending on which course completes the required high school math curriculum (see course code 270704). (Please consult the EPSB website regarding teaching permissions for teaching this course in middle school grades 6-8. Credentials listed for this course code (270311) are KY EPSB certified high school mathematics teachers.)

This course contains "modeling" standards. Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Mathematical modeling is the process of choosing and applying appropriate mathematical content to analyze empirical situations... When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★).
Content: Algebra II
Population: General

270311 Algebra 2 Course Standards Document

270320 - Algebra 3

Grade Level: 11 - 12
Credits: 1E
Description: The content of this course goes beyond a traditional Algebra 2 course and should provide opportunities for students to: solve applied (in context) problems using various types of equations (linear, quadratic, exponential, trigonometric, logarithmic and power functions piece-wise), read and analyze real-life problems using mathematical modeling, perform matrix operations, graph and interpret data represented by linear, quadratic, exponential, logarithmic and power functions, use numerical and graphical data to make reasonable and valid conclusions, solve applied problems that can be modeled with equations and inequalities involving absolute value, solve systems of linear equations using several techniques including matrices, use and verify trigonometric identities, solve applied problems that can be modeled with exponential and logarithmic equations, find terms of sequences and find the sum of finite series.
Content: Advanced Topics in Mathematics
Population: General

Mathematics - Geometry
(270400)

270401 - Geometry

Grade Level: 9 - 12
Credits: 1
Description: This course is the study of high school Geometry content. Upon completion of the course, students should be able to prove theorems and solve problems about triangles, quadrilaterals, and other polygons, apply reasoning to complete geometric constructions and explanations, establish triangle congruence criteria based on analyses of rigid motions and formal constructions, use similarity to solve problems and apply similarity in right triangles to understand right triangle trigonometry (with particular attention to special right triangles and the Pythagorean theorem), develop the Law of Sines and Cosines from understanding relationships in right triangles, apply knowledge of two-dimensional shapes to consider the shapes of cross-sections and the result of rotating a two-dimensional object about a line, connect algebraic concepts to geometric concepts through the rectangular coordinate system (such as deriving the equation of a circle given the center and radius length using the distance formula or Pythagorean Theorem) and prove basic theorems about circles, chords, secants, and tangents.

Since the content of Applied Geometry, Technical Geometry, Honors Geometry, Accelerated Geometry and other courses named as an interdisciplinary geometry is “High School Geometry”, the course code 270401 - HS Geometry should be used; however, this course may be titled locally as Applied Geometry, Technical Geometry, Honors Geometry, Accelerated Geometry, MST Geometry or named as an interdisciplinary Geometry.

This course contains "modeling" standards. Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Mathematical modeling is the process of choosing and applying appropriate mathematical content to analyze empirical situations. When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★).
Content: Geometry
Population: General

270401 Geometry Course Standards Document

Mathematics - Calculus
(270500)

270501 - Pre-Calculus

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed for students to attain the concepts necessary to be successful in a Calculus course, an AP Calculus course or a College Calculus course. Objectives for this course should include, but are not limited to: solve equations and inequalities involving polynomial, rational, exponential, logarithmic and trigonometric functions, understand and apply the behavior and properties of polynomial, rational, exponential, logarithmic, and trigonometric functions, graph polynomial, rational, exponential, logarithmic, and trigonometric functions, use technology to solve and graph various types of equations and inequalities and prove trigonometric identities. Standards for this course may also include the (+) standards denoted in the Kentucky academic standards document. NOTE: Since the content of Honors Pre-Calculus, Accelerated Pre-Calculus and MST Pre-Calculus is pre-calculus, the course code 270501 Pre-Calculus should be used; however, this course may be titled locally as Honors Pre-Calculus, Accelerated Pre-Calculus or MST Pre-Calculus. IB pre-calculus classes should use 270505.
Content: Pre-Calculus
Population: General

270505 - IB Pre-Calculus

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed to address the curriculum for the IB Pre-Calculus course as described in the International Baccalaureate (IB) guidelines. Only schools with an IB program should use this code (270505) for Pre-Calculus. All others should use course code 270501 Pre-Calculus.
Content: Pre-Calculus
Population: General

270511 - Calculus

Grade Level: 11 - 12
Credits: 1E
Description: This course is designed to address all the concepts normally covered in differential and integral calculus. Students who successfully complete this course should be able to demonstrate an understanding and use of the concept of a function, whether the function is represented by tabulated data, graphs, or formulas, use calculus to formulate and solve problems, understand the derivative as a rate of change, including its connections to tangent lines, linear approximations, extrema, and instantaneous velocity, understand the definite integral as a measurement of area, as a limit, and as an inverse of differentiation, use technology to solve problems, compute limits, derivatives, and anti-derivatives and determine the continuity of a function and understand its significance and effectively communicate solutions to problems using correct and precise mathematical language. Students taking this course are not expected to take the College Board Advanced Placement exam for AP Calculus AB or BC. This course code should not be used for IB, AP or dual credit calculus courses.
Content: Calculus
Population: General

270512 - IB Calculus

Grade Level: 11 - 12
Credits: 1E
Description: This course is designed to address the curriculum for the IB Calculus course as described in the International Baccalaureate guidelines. Only schools with an IB program should use this code (270512) for Calculus. All other schools should use course code 270511 Calculus or 270513 AP Calculus AB.
Content: Calculus
Population: General

270513 - AP Calculus AB

Grade Level: 10 - 12
Credits: 1E
Description: AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. College credit is earned with a qualifying score on an AP exam.
Content: AP Calculus
Population: General

270514 - AP Calculus BC

Grade Level: 11 - 12
Credits: 1E
Description: AP Calculus BC is roughly equivalent to both first and second semester college calculus courses. It extends the content learned in AB to different types of equations (polar, parametric, vector-valued) and new topics (such as Euler's method, integration by parts, partial fraction decomposition, and improper integrals), and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches

students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. College credit is earned with a qualifying score on an AP exam.
Content: AP Calculus
Population: General

Mathematics - Other Mathematical Topics
(270600)

270601 - Data and Measurement

Grade Level: 9 - 12
Credits: 1E
Description: This course should focus primarily on the conceptual categories: Statistics & Probability and Modeling and should include summarizing, representing and interpreting data and making inferences, justifying conclusions representing using linear, quadratic and exponential relationships and modeling descriptively and analytically. Technology should be an integral part of this course to generate plots, regressions functions and correlation coefficients and to simulate possible outcomes relatively quickly based on a given situation.
Content: Extended Topics In Algebra (Data and Measurement)
Population: General

270602 - Probability and Statistics

Grade Level: 9 - 12
Credits: 1E
Description: This course should focus primarily on the conceptual categories: Statistics & Probability and Modeling to address such concepts as theoretical and experimental probability, independent and conditional probability using them to interpret data, rules of probability to compute probabilities of compound events in a uniform probability model, calculations of expected values, analysis of decisions and strategies using probability concepts, binomial distributions, normal distributions, displaying and describing distributions of data, collecting data, measures of central tendency and spread and methods of inferential statistics. Technology should be an integral part of this course to generate plots, regressions functions and correlation coefficients and to simulate possible outcomes relatively quickly based on a given situation.
Content: Probability/Statistics
Population: General

270604 - AP Statistics

Grade Level: 11 - 12
Credits: 1E
Description: The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. College credit is earned with a qualifying score on an AP exam.
Content: AP Statistics
Population: General

270611 - Discrete Mathematics

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed for students who have completed high school mathematics courses through Algebra 2 and are interested in a future in business or computer applications, and should address such topics as set theory, proofs by mathematical induction, graph theory, permutations and combinations, and other topics as deemed appropriate.
Content: Discrete Mathematics
Population: General

270612 - Finite Mathematics

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed for students who have completed high school mathematics courses through Algebra 2, and should include modeling situations through linear systems using matrices, linear inequalities systems (programming), data analysis, probability and finance applications. Course content may include but is not limited to: Finding an Euler circuit on a graph or show that no Euler circuit exists; solving the traveling salesperson problem for complete weighted graphs with four or fewer vertices using Hamiltonian cycles; finding a minimum cost spanning tree; schedule tasks using a list-processing algorithm; applying bin-packing heuristics; applying graph theory to real-world problems; solving real-world linear programming problems using the pictorial method and applying other mathematical models and techniques to real-world problems. See conceptual category for high school: Modeling for the basic mathematical modeling cycle and examples of modeling situations.
Content: Finite Mathematics
Population: General

270621 - Advanced Topics in Mathematics

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed for students who have completed Algebra 1, Geometry and Algebra 2 content and should allow students to pursue topics in mathematics beyond content required for high school students. This course may cover topics from combined higher level courses or topics which are not found in other higher level courses but are of interest to students for college and career readiness. This course should be locally named according to the major content of the course.
Content: Advanced Topics in Mathematics
Population: General

270631 - Trigonometry

Grade Level: 10 - 12
Credits: 1E
Description: This course is designed for students who have completed Algebra 2 and want to proceed further into aspects of Trigonometry. This course should contain, but is not limited to: evaluating a trigonometric function for an angle expressed in radians and degrees, solving right and oblique triangles, including real-life applications, using and verifying (proving) trigonometric identities, solving trigonometric equations; and graphing and interpreting graphs of trigonometric functions in rectangular and polar form.
Content: Trigonometry
Population: General

270643 - Technical Mathematics

Grade Level: 10 - 12
Credits: 0.5E or 1E
Description: Some mathematical concepts from algebra, geometry, and trigonometry and applications relevant to these topics are studied. Topics to be covered include unit conversions, variation, measurement of geometric figures, vectors, and solving right and oblique triangles using trigonometry. Emphasis is on applications in the various technologies.
Content: High School Mathematics (General)
Population: General

270661 - Mathematics Concepts

Grade Level: 10 - 12
Credits: 0.5E or 1E
Description: This course is designed to be taken after completion of Algebra 1, Geometry and Algebra 2. Topics include probability and statistics, extension of algebra and geometry concepts, and discrete mathematics. This course could serve as a mathematics elective for high school graduation, but not as one of the three required credits for high school graduation: Algebra 1, Geometry or Algebra 2.
Content: Mathematics
Population: General

Mathematics - Integrated Mathematics
(270700)

270701 - Integrated/Applied Mathematics 1

Grade Level: 9 - 10
Credits: 1
Description: This course is the first year of Integrated Mathematics pathway. The integrated approach to high school mathematics is typically seen internationally and consists of a sequence of three to four courses depending on school's curriculum; each course includes number, algebra, geometry, probability and statistics and is no less rigorous than a traditional pathway: Algebra 1, Geometry and Algebra 2. Typically Integrated 1 has more geometric concepts than a traditional Algebra 1 course. For possible models on how to organize HS standards into courses, see the Common Core State Standards, Appendix A: Integrated Model Course Pathways in Mathematics or the open education resource Mathematics Vision Project at http://www.mathematicsvisionproject.org/curriculum.html.

This course includes "modeling" standards. Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Mathematical modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. Quantities and their relationships in physical, economic, public policy, social, and everyday situations can be modeled using mathematical and statistical methods. When creating mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Modeling with mathematics is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★).
Content: High School Mathematics, Algebra, Geometry
Population: General

270701 Integrated Applied Mathematics 1 Course Standards Document

---

270702 - Integrated/Applied Mathematics 2

Grade Level: 10 - 11
Credits: 1
Description: This course is the second year of Integrated Mathematics. The integrated approach to high school mathematics is typically seen internationally and consists of a sequence of three to four courses depending on school's curriculum; each course includes number, algebra, geometry, probability and statistics and is no less rigorous than a traditional pathway: Algebra 1, Geometry and Algebra 2. Typically Integrated II has a blend of geometric and algebraic concepts along with probability. For possible models on how to organize HS standards into courses, see the Common Core State Standards, Appendix A: Integrated Model Course Pathways in Mathematics or the open education resource Mathematics Vision Project at http://www.mathematicsvisionproject.org/curriculum.html. If the integrated series, Integrated 1, Integrated 2 and Integrated 3 is used in place of the traditional series of Algebra 1, Geometry and

Algebra 2 and the integrated series allows students the access and opportunity to learn all required high school mathematics standards then students who complete this series have met the high school graduation requirements of Algebra 1, Geometry and Algebra 2.

This course contains "modeling" standards. Mathematical modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. Quantities and their relationships in physical, economic, public policy, social, and everyday situations can be modeled using mathematical and statistical methods. When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Modeling with mathematics is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★).
Content: High School Mathematics, Algebra, Geometry
Population: General

270702 Integrated Applied Mathematics 2 Course Standards Documents

---

270703 - Integrated/Applied Mathematics 3

Grade Level: 10 - 12
Credits: 1
Description: This course is the third course of Integrated Mathematics. The integrated approach to high school mathematics is typically seen internationally and consists of a sequence of three to four courses depending on school's curriculum; each course includes number, algebra, geometry, probability and statistics and is no less rigorous than a traditional pathway: Algebra 1, Geometry and Algebra 2. Typically, Integrated 3 has a blend of geometric, algebraic and statistical concepts using modeling. For possible models on how to organize HS standards into courses, see the Common Core State Standards, Appendix A: Integrated Model Course Pathways in Mathematics or the open education resource Mathematics Vision Project at http://www.mathematicsvisionproject.org/curriculum.html.

If the integrated series, Integrated 1, Integrated 2 and Integrated 3 is used in place of the traditional series of Algebra 1, Geometry and Algebra 2 and the integrated series allows students the access and opportunity to learn the required high school mathematics standards then students who complete this series have met the high school graduation requirements of Algebra 1, Geometry and Algebra 2.

This course contains "modeling" standards. Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Mathematical modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. Quantities and their relationships in physical, economic, public policy, social, and everyday situations can be modeled using mathematical and statistical methods. When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Modeling with mathematics is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★).
Content: High School Mathematics, Advanced Algebra, Geometry
Population: General

270703 Integrated Applied Mathematics 3 Course Standards Document

270704 - Integrated/Applied Mathematics 4

Grade Level: 11 - 12
Credits: 1E
Description: An integrated approach to high school mathematics is typically seen internationally and consists of a sequence of four courses depending on school's curriculum; each course includes number, algebra, geometry, probability and statistics and is no less rigorous than a traditional pathway of Algebra 1, Geometry, Algebra 2 and pre-calculus. This course is the fourth year of an integrated mathematics sequence and should address the (+) standards included in the Kentucky Academic Standards. This course is beyond Algebra 2 and therefore, should not be used as the Algebra 2 course to meet graduation requirements. For possible models on how to organize HS standards into integrated courses, please see the Appendix A: Integrated Model Course Pathways in Mathematics or the open education resource Mathematics Vision Project at http://www.mathematicsvisionproject.org/curriculum.html.

If the integrated series, Integrated I, Integrated II and Integrated III is used in place of the traditional series of Algebra 1, Geometry and Algebra 2 and the integrated series allows students the access and opportunity to learn the required high school mathematics standards then students who complete this series have met the high school graduation requirements of Algebra 1, Geometry and Algebra 2. At the end of Integrated III, students will be required to take the EOC for Algebra 2.

This course contains "modeling" standards. Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. Quantities and their relationships in physical, economic, public policy, social, and everyday situations can be modeled using mathematical and statistical methods. When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data. Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★).
Content: High School Mathematics, Advanced Algebra, Geometry
Population: General

Science
(300000)

Science - Elementary/Middle
(300100)

300155 - Integrated Science 5

Grade Level: 5 - 5
Credits:
Description: In this course, students are engaged in experiences related to properties and changes of matter, interaction of the Earth's systems, and energy transfer within ecosystems, as outlined in the Kentucky Academic Standards for Science. The use of the science practices describes the behaviors students will engage in as they investigate the natural world. The use of the engineering practices describe behaviors students will use as they design and build models and systems.
Content: Integrated Science (Non-High School)
Population: General

300155 Integrated Science 5 Course Standards Document

300166 - Integrated Science 6

Grade Level: 6 - 6
Credits:
Description: In this course, students are engaged in experiences demonstrating structure and properties of matters, motion and forces, biodiversity, Earth in the Solar System, and Earth's systems as described in the Kentucky Academic Standards for Science. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the tools students will use, and skills they develop, as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Integrated Science (Non-High School)
Population: General

300166 Integrated Science 6 Course Standards Document

300177 - Integrated Science 7

Grade Level: 7 - 7
Credits:
Description: In this course, students are engaged in experiences that demonstrate chemical reactions, energy transfer, forces, information processing, and genetics as described in the Kentucky Academic Standards for Science. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the tools students will use, and skills they develop, as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Integrated Science (Non-High School)
Population: General

300177 Integrated Science 7 Course Standards Document

300188 - Integrated Science 8

Grade Level: 8 - 8
Credits:
Description: In this course, students will be engaged in experiences which will connect their understandings about Life, Earth and Space, and Physical Science concepts experienced in grades 6 and 7. These connections should be related to human impact, as described in the Kentucky Academic Standards for Science. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the tools students will use, and skills they develop, as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Integrated Science (Non-High School)
Population: General

300188 Integrated Science 8 Course Standards Document

300190 - Middle School STEM

Grade Level: 6 - 8
Credits:
Description: This course is one designed to allow students to explore the sciences, in a STEM environment, beyond the Kentucky Academic Standards. Students should, however, explore using the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains in the STEM fields.
Content: Pre-Engineering
Population: General

Science - High School Life Science
(302600)

302601 - Biology 1

Grade Level: 9 - 12
Credits: 1
Description: Students develop a conceptual understanding of biological sciences, as outlined in the Kentucky Academic Standards for Science. They experience concepts such as the cellular organization; molecular basis of heredity; biological change; interdependence of organisms; matter, energy and organization in living systems; and behavior of organisms. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the tools students will use, and skills they develop, as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Life Science
Population: General

302601 Biology I Course Standards Document

302602 - Biology 2

Grade Level: 9 - 12
Credits: 1
Description: This is a second-level biology course for average or college track students.
Content: Biology
Population: General

302611 - Biochemistry

Grade Level: 9 - 12
Credits: 1
Description: Major concepts addressed in this course include biochemical evolution, macromolecules, metabolism, glycolysis, photosynthesis, and respiration.
Content: Biochemistry
Population: General

302612 - Botany

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the study of the plant kingdom, including plant evolution, classification, plant ecology, and domestic plants.
Content: Botany
Population: General

302613 - Microbiology

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the study of microbiological techniques, viruses, fungi, protozoans, bacteria, and pathogenic organisms.
Content: Microbiology
Population: General

302614 - Ecology

Grade Level: 9 - 12
Credits: 1
Description: Students will develop understanding of ecological concepts as outlined in the Kentucky Academic Standards for Science, such as cycling of matter, biodiversity, ecosystems, earth systems and human impact. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Ecology
Population: General

302614 Ecology Course Standards Document

302615 - Zoology

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the study of the animal kingdom, including organ systems and dissection.
Content: Zoology
Population: General

302616 - Forensics

Grade Level: 9 - 12
Credits: 1 credit
Description: This course is a problem-based inquiry course dealing with Forensic sciences.
Content: Forensic Science
Population: General

302618 - Medical Science

Grade Level: 9 - 12
Credits: 1
Description: This course uses health occupations as a vehicle to present the life science content outlined in the Kentucky Academic Standards for Science. The course is interdisciplinary in nature and integrates academic expectations and activities with the disciplines of life science, mathematics, health, social studies, language arts, arts and humanities, and vocational studies. During their study

of medical science, students will gain an understanding of the normal structure and function of the human body through scientific inquiry. Life science conceptual understandings, applications, and connections make this science relevant to students. Anatomy, physiology, physics, and chemistry concepts are reinforced with real-life analogies and health-related examples are used to illustrate potentially difficult scientific concepts.
Content: Medical Science for the Life Science Component within the Science Requirement
Population: General

302621 - Marine Biology

Grade Level: 9 - 12
Credits: 1
Description: This course addresses key concepts related to marine science, including ocean zones, seawater, habitats, and marine taxonomy.
Content: Marine Biology
Population: General

302623 - IB Environmental Systems

Grade Level: 9 - 12
Credits: 1
Description: This course code is applicable only to schools enrolled in the International Baccalaureate program. This course may include, but is not limited to, the topics from the Environmental Systems Standard Level syllabus specified by the International Baccalaureate Organization. Topics may include: systems and models, the ecosystem, global cycles and physical systems, human population and carrying capacity, analyzing ecosystems, impacts of resource exploitation and conservation & biodiversity, pollution management.
Content: Ecology
Population: General

302631 - Anatomy

Grade Level: 9 - 12
Credits: 1
Description: Major concepts addressed in this course include plant structure, animal structure, tissues, organs, and systems.
Content: Anatomy and Physiology
Population: General

302644 - IB Biology 2

Grade Level: 9 - 12
Credits: 1
Description: This course code is applicable only to schools enrolled in the International Baccalaureate program. The IB is a two year, highly academic program for juniors and seniors which can lead to their receiving first year course credit at many universities and colleges. Its internationally recognized curriculum provides able and ambitious students with a comprehensive background in Biology.
Content: Life Science
Population: General

302645 - IB Biology 3

Grade Level: 9 - 12
Credits: 1
Description: This course code is applicable only to schools enrolled in the International Baccalaureate program. The IB is a two year, highly academic program for juniors and seniors which can lead to their receiving first year course credit at many universities and colleges. Its internationally recognized curriculum provides able and ambitious students with a comprehensive background in Biology.
Content: Life Science
Population: General

302646 - AP Biology

Grade Level: 9 - 12
Credits: 1
Description: AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes â€" energy and communication, genetics, information transfer, ecology, and interactions. College credit is earned with a qualifying score on an AP exam.
Content: AP Biology
Population: General

302651 - Human Physiology

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the study of the human body, including nutrition concepts, digestive system, circulatory system, nervous system, and the reproductive system.
Content: Anatomy and Physiology
Population: General

302661 - Genetics

Grade Level: 9 - 12
Credits: 1
Description: Major concepts addressed in this course include mutation, heredity, genetic principles, DNA and RNA, recombination, and viruses.
Content: Life Science
Population: General

302680 - AgriBiology

Grade Level: 9 - 12
Credits: 1
Description: This one-credit course uses agricultural contexts to present the life science content outlined in the Kentucky Academic Standards for Science. As students study practical agricultural concepts, they apply scientific ways of thinking and working to real-life problems. During their study of agri-biology, students perform many practical tasks. Students develop an understanding of many concepts such as cell structure and function, morphology and physiology of agriculturally significant animals, heredity principles and inheritance patterns, genetic engineering, animal behavior, biological

change, interdependence of plants and animals, and the flow of matter and energy through ecosystems. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Agribiology for Life Science Credit
Population: General

302680 AgriBiology Course Standards Document

302698 - Intro Biology with Earth/Space Science

Grade Level: 9 - 12
Credits: 1
Description: Students develop a conceptual understanding of Biology and Earth/Space Science. They experience biology and Earth/space science concepts, as outlined in the Kentucky Academic Standards for Science, such as structure and function of cells; molecular basis of heredity; biological change; changes in the Earth system; interdependence of organisms; matter, energy and organization in living systems; and the behavior of organisms. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. For this model the suggested sequence is Introductory Physics with Earth/Space Science, Introductory Chemistry with Earth/Space Science, and Introductory Biology with Earth/Space Science.
Content: Life Science
Population: General

302698 Intro Biology with Earth/Space Science Course Standards Document

Science - High School Integrated
(303000)

303010 - Astrobiology

Grade Level: 9 - 12
Credits: 1
Description: This is an inquiry-based course designed around the scientific study of life in the universe--its origin, evolution, distribution and future. This multidisciplinary course brings together the physical and biological sciences to address some of the most fundamental questions of the natural world: How do living systems emerge? How do habitable worlds form and how do they evolve? Does life exist on worlds other than Earth and what forms may they take? Approval to offer this course must be made on an individual basis. Approval will be based upon the relative proportions of science disciplines addressed in the course syllabus and the credentials of the assigned teacher.
Content: Integrated Science 4
Population: General

303051 - Conceptual Progression Science I

Grade Level: 8 - 12
Credits: 1
Description: Students will develop a conceptual understanding of key disciplinary core ideas (DCI) as defined in the Kentucky Academic Standards for Science. Students examine the Physical Science Disciplinary Core Ideas (DCI) of Structure & Properties of Matter, Chemical Reactions, Conservation of Energy & Energy Transfer, Definitions of Energy, Forces & Motion, Types of Interactions and Wave Properties. Life science DCI examined are Interdependent Relationships in Ecosystems. Earth/Space Science DCI are the Earth & the Solar System, Natural Resources, Plate Tectonics & Large-scale Interactions and The Roles of Water in Earth's Surface Processes. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. This course is designed to be offered as the first course of a sequence that includes 303052 Conceptual Progressions Science II and 303053 Conceptual Progressions Science III.
Content: Conceptual Progression Science 1
Population: General

303051 Conceptual Progression Science I Course Standard Document

303052 - Conceptual Progression Science II

Grade Level: 9 - 12
Credits: 1
Description: This lab based course students will develop a conceptual understanding of key disciplinary core ideas (DCI) as defined in the Kentucky Academic Standards for Science. The Physical Science DCI of Energy & Processes in Everyday Life, Relationship between Energy & Forces, Information Technologies and Instrumentation and Electromagnetic Radiation. Life science DCI examined Structure & Function, Growth & Development of Organisms, Organization For Matter &

Energy Flow in Organisms, Cycles of Matter & Energy Transfer in Ecosystems, Inheritance of Traits and Variation of Traits. Earth/Space Science DCI are The Universe & its Stars, Earth Materials & Systems, Weather & Climate and Natural Hazards. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. This course is designed to be offered as the middle course of a sequence that includes 303051 Conceptual Progressions Science I and 303053 Conceptual Progressions Science III.
Content: Conceptual Progression Science 2
Population: General

303052 Conceptual Progression Science II Course Standards Document

---

303053 - Conceptual Progression Science III

Grade Level: 9 - 12
Credits: 1
Description: In this lab based introductory course students will develop a conceptual understanding of key disciplinary core ideas (DCI) as defined in the Kentucky Academic Standards for Science. Students examine the Physical Science Disciplinary Core Ideas (DCI) of Nuclear Processes and Stability & Instability in Physical Systems. Life science DCI examined are Information Processing, Ecosystem Dynamics Functioning & Resilience, Social Interaction & Group Behavior, Evidence of Common Ancestry & Diversity, Natural Selection, Adaptation, and Biodiversity & Humans. Earth/Space Science DCI are History of Planet Earth, Biogeology, Human Impacts on Earth Systems and Global Climate Change. The science and engineering practices are the skills students will use as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. This course is designed to be offered as the culmination of a sequence that includes 303051 Conceptual Progressions Science I and 303052 Conceptual Progressions Science II.
Content: Conceptual Progression Science 3
Population: General

303053 Conceptual Progression Science III Course Standards Document

---

303091 - Integrated Science I

Grade Level: 9 - 12
Credits: 1
Description: This lab-based introductory course is organized based on the topical structure contained in the Kentucky Academic Standards for Science. Integrated Science I includes those standards listed within the topics of: Structure and Properties of Matter, Chemical Reactions, Structure and Function, Interdependent Relationships in Ecosystems, and Earth's Systems. These topics provide the foundational concepts needed for successive Integrated Science courses to build upon. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. This course is intended to be offered as the first course of a sequence that includes 303092 Integrated Science II and 303093 Integrated Science III. Students may be required to complete an EOC exam upon completion of this course, depending upon their individual course sequence.
Content: Integrated Science 1
Population: General

303091 Integrated Science I Course Standards Document

303092 - Integrated Science II

Grade Level: 9 - 12
Credits: 1
Description: This lab-based intermediate course is organized based on the topical structure contained in the Kentucky Academic Standards for Science. Integrated Science II includes those standards listed within the topics of: Forces and Interactions, Energy, Matter and Energy in Organisms and Ecosystems, Weather and Climate, and Human Sustainability. These topics build upon and extend the foundational concepts introduced in Integrated Science I. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. This course is intended to be offered as the middle course of a sequence that includes 303091 Integrated Science I and 303093 Integrated Science III. Approval to offer this course must be made on an individual basis. Approval will be based upon the relative proportions of science disciplines addressed in the course syllabus and the credentials of the assigned teacher.
Content: Integrated Science 2
Population: General

303092 Integrated Science II Course Standards Documents

303093 - Integrated Science III

Grade Level: 9 - 12
Credits: 1
Description: This lab-based culminating course is organized based on the topical structure contained in the Kentucky Academic Standards for Science. Integrated Science II includes those standards listed within the topics of: Waves and Electromagnetic Radiation, Inheritance and Variation of Traits, Natural Selection and Evolution, Space Systems, and History of Earth. These topics unify, extend, and complete the conceptual understandings contained in the Kentucky Academic Standards for Science. Students will learn these core ideas within these topics through the use of the science and engineering

practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. This course is intended to be offered as the culminating course of a sequence that includes 303091 Integrated Science I and 303092 Integrated Science II. Approval to offer this course must be made on an individual basis. Approval will be based upon the relative proportions of science disciplines addressed in the course syllabus and the credentials of the assigned teacher.
Content: Integrated Science 3
Population: General

303093 Integrated Science III Course Standards Documents

Science - High School Physical Sciences
(304000)

304021 - Physical Science

Grade Level: 9 - 12
Credits: 1
Description: Students develop a conceptual understanding of physical science, as outlined in the Kentucky Academic Standards for Science. They experience physical science concepts such as structure of atoms, structure and properties of matter, chemical reactions, motions and forces, conservation of energy and increase in disorder, and interactions of energy and matter. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Physical Science
Population: General

304021 Physical Science Course Standards Document

304058 - Introduction to Chemistry and Physics

Grade Level: 9 - 12
Credits: 1
Description: This course serves as an introduction which integrates the basic concepts of chemistry and physics as outlined in the Kentucky Academic Standards for Science. Students learn how the physical and chemical properties of matter can be explained and predicted in terms of atomic and molecular structures and forces. They also learn how balanced and unbalanced forces influence the behavior of objects. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Intro to Chemistry and Physics
Population: General

304058 Introduction to Chemistry and Physics Course Standards Document

---

304521 - Chemistry I

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on problem solving techniques; bonding; equilibrium; equations. Students develop a conceptual understanding of chemistry content, outlined in the Kentucky Academic Standards. Students will learn these core ideas within these topics through the use of the science and

engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Chemistry
Population: General

304521 Chemistry I Course Standards Documents

304522 - Chemistry II

Grade Level: 9 - 12
Credits: 1
Description: This college level course focuses on the study of the structure of matter, chemical kinetics, solution chemistry, and laboratory techniques.
Content: Chemistry
Population: General

304524 - IB Chemistry 2

Grade Level: 9 - 12
Credits: 1
Description: This course code is applicable only to schools enrolled in the International Baccalaureate program. The IB is a two year, highly academic program for juniors and seniors which can lead to their receiving first year course credit at many universities and colleges. Its internationally recognized curriculum provides able and ambitious students with a comprehensive background in Chemistry.
Content: Chemistry
Population: General

304525 - IB Chemistry 3

Grade Level: 9 - 12
Credits: 1
Description: This course code is applicable only to schools enrolled in the International Baccalaureate program. The IB is a two year, highly academic program for juniors and seniors which can lead to their receiving first year course credit at many universities and colleges. Its internationally recognized curriculum provides able and ambitious students with a comprehensive background in Chemistry.
Content: Chemistry
Population: General

304526 - AP Chemistry

Grade Level: 9 - 12
Credits: 1
Description: The AP Chemistry course provides students with a college-level foundation to support future advanced course work in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. College credit is earned with a qualifying score on an AP exam.
Content: AP Chemistry
Population: General

304598 - Intro Chemistry with Earth/Space Science

Grade Level: 9 - 12
Credits: 1
Description: Students develop a conceptual understanding of Chemistry and Earth/Space Science, as outlined in the Kentucky Academic Standards for Science, through the use of the science and engineering practices. They experience chemistry and Earth/space science concepts such as the structure of atoms, structure and properties of matter, chemical reactions, geochemical cycles, and formation and ongoing changes of the universe. The use of the science practices describes the behaviors students will engage in as they investigate the natural world. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. For this course, the suggested sequence is Introductory Physics with Earth/Space Science, Introductory Chemistry with Earth/Space Science, and Introductory Biology with Earth/Space Science.
Content: Chemistry
Population: General

304598 Intro Chemistry with Earth Space Science Course Standards Document

304611 - Earth Space Science

Grade Level: 9 - 12
Credits: 1
Description: Students develop a conceptual understanding of Earth/space science, as outlined in the Kentucky Academic Standards for Science, through the use of science and engineering practices. They experience Earth/space concepts such as energy in the Earth system, geochemical cycles, formation and ongoing changes of the Earth system, and formation and ongoing changes of the universe. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Earth-Space Science
Population: General

304611 Earth Space Science Course Standards Document

304612 - Astronomy

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the study of basic astronomical principles, stars, planets, and galaxies.
Content: Astronomy
Population: General

304613 - Meteorology

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the study of weather, the atmosphere, clouds, and frontal weather conditions.
Content: Earth Science
Population: General

304614 - Oceanography

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the study of ocean landscapes, waves, currents, ocean ecology, and estuaries.
Content: Oceanography
Population: General

304620 - Environmental Science

Grade Level: 9 - 12
Credits: 1
Description: Students will develop understanding of environmental concepts as outlined in the Kentucky Academic Standards for Science, such as cycling of matter, biodiversity, earth systems, energy flow and climate, and human impact. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Environmental Science
Population: General

304620 Environmental Science Course Standards Document

304622 - AP Environmental Science

Grade Level: 9 - 12
Credits: 1
Description: The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. College credit is earned with a qualifying score on an AP exam.
Content: AP Environmental Science
Population: General

304631 - Geology

Grade Level: 9 - 12
Credits: 1
Description: Major concepts addressed in this course include erosion, glaciation, mountain formation, and diastrophism.
Content: Geology
Population: General

304698 - Principles of Technology with Earth/Space Science

Grade Level: 9 - 12
Credits: 1
Description: Students develop understandings of traditional physics and Earth/space science concepts, as outlined in the Kentucky Academic Standards for Science, through the use of the science and engineering practices. Students investigate concepts of force, work, efficiency, rate, and energy. Students apply conceptual understandings to industrial, technological, and personal situations. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. It is suggested that Principles of Technology with Earth/Space Science be taken before either Introductory Chemistry with Earth/Space Science or Introductory Biology with Earth/Space Science.
Content: Earth-Space Science
Population: General

304698 Principles of Technology with Earth Space Science Course Standards Document

---

304811 - Aerospace Science

Grade Level: 9 - 12
Credits: 1
Description: In this course, students study conceptual ideas and understandings related to aerospace sciences.
Content: Physics
Population: General

304821 - Physics I

Grade Level: 9 - 12
Credits: 1
Description: Students develop a conceptual understanding of physics as outlined in the Kentucky Academic Standards for Science. They experience concepts such as motions and forces, conservation of energy and the increase in disorder, interactions of energy and matter. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Physics
Population: General

304821 Physics I Course Standards Documents

304823 - IB Physics

Grade Level: 9 - 12
Credits: 1
Description: This course code is applicable only to schools enrolled in the International Baccalaureate program. The IB is a two year, highly academic program for juniors and seniors which can lead to their receiving first year course credit at many universities and colleges. Its internationally recognized curriculum provides able and ambitious students with a comprehensive background in Physics.
Content: Physics
Population: General

304825 - AP Physics C: Mechanics

Grade Level: 9 - 12
Credits: 1
Description: AP Physics C: Mechanics is equivalent to a one-semester, calculus based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. College credit is earned with a qualifying score on an AP exam.
Content: AP Physics
Population: General

304826 - AP Physics C: Electricity & Magnetism

Grade Level: 9 - 12
Credits: 1
Description: AP Physics C: Electricity and Magnetism is a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course. College credit is earned with a qualifying score on an AP exam.
Content: AP Physics
Population: General

304828 - AP Physics 1: Algebra-Based

Grade Level: 9 - 12
Credits: 1
Description: AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sound. College credit is earned with a qualifying score on an AP exam.
Content: AP Physics
Population: General

304829 - AP Physics 2: Algebra-Based

Grade Level: 9 - 12
Credits: 1
Description: AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics. College credit is earned with a qualifying score on an AP exam.
Content: AP Physics
Population: General

304890 - IB Design Technology

Grade Level: 9 - 12
Credits: 1
Description: This course code is applicable only to schools enrolled in the International Baccalaureate program. Design Technology is designed to teach students how to adapt to new experiences, and to approach problems with the appropriate skills and techniques in design, as specified by the International Baccalaureate Organization.
Content: Principles of Technology (Applied Physics)
Population: General

304898 - Intro Physics with Earth/Space Science

Grade Level: 9 - 12
Credits: 1
Description: Students develop a conceptual understanding of physics and Earth/space science content, as outlined in the Kentucky Academic Standards for Science, through the use of the science and engineering practices. They experience physics and Earth/space science concepts such as motions and forces, conservation of energy and the increase in disorder, interactions of energy and matter, and energy in the Earth system. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. For this course, the suggested sequence is Introductory Physics with Earth/Space Science, Introductory Chemistry with Earth/Space Science, and Introductory Biology with Earth/Space Science.
Content: Physics
Population: General

304898 Intro Physics with Earth Space Science Course Standards Document

Pathway to Careers
(320000)

Pathway to Careers - Pathway to Careers
(320100)

Pathway to Careers is a program in career and technical education, which provides a continuum of career education experiences. Incorporated in the curriculum are basic concepts of human relations, life skills, overview of career clusters and work-based learning.

320101 - Career Choices 6-8

Grade Level: 6 - 8
Credits: 0
Description: Career Choice is a program designed for middle school students and introduces them to a broad range of career opportunities in today's society. It includes assessment of student's aptitudes and abilities, interests and learning styles in order to assist them in identifying careers and planning a career path.
Content: Career Choices (Middle School)
Population: General

320102 - Career Choices 9

Grade Level: 9 - 9
Credits: 1/2
Description: Career choice is a program in career and technical education designed for high school students and introduces them to a broad range of career opportunities in today's society. It includes assessment of student's aptitudes and abilities, interests and learning styles in order to assist them in identifying careers and planning a career path.
Content: Career Choices (Middle School)
Population: General

320103 - Career Options-Level 1

Grade Level: 9 - 12
Credits: 1
Description: Career Options is a course in career and technical education at the secondary level focusing on orientation to careers. Course content includes orientation to 14 career clusters, employability skills self-management and work ethics. Opportunities are provided for development of problem solving, decision making and reasoning through school and work-based learning experience.
Content: Career Options (High School)
Population: General

320104 - Career Networking-Level II

Grade Level: 10 - 12
Credits: 1
Description: Career Networking is a second level course in career and technical education and provides opportunities for exploration of career clusters with an in-depth focus on two or more clusters. The curriculum includes a continuum of employability and computer skills needed in the workplace. Opportunities are provided for students to participate in internships in cluster interest areas. Upon completion of the course, the students have an opportunity to select a career major.
Content: Career Options (High School)
Population: General

320105 - Career Work Experience-Level III

Grade Level: 11 - 11
Credits: 3
Description: Career Work Experience is a course in career and technical education at the secondary level focusing on a cooperative work experience for students in 11th and 12th grades. This course includes a related class and cooperative work experience in business and industry. (Career and Technical Education (CTE) class.)
Content: Career Options (High School)
Population: General

320106 - Career Work Experience-Level IV

Grade Level: 12 - 12
Credits: 3
Description: Career Work Experience is a course in career and technical education at the secondary level focusing on a cooperative work experience for students in 11th and 12th grades. This course includes a related class and cooperative work experience in business and industry. (Career and Technical Education (CTE) class.)
Content: Career Options (High School)
Population: General

320107 - Special Topics in Pathway to Careers

Grade Level: 9 - 12
Credits: 1/2-1
Description: Instruction related to Pathway to Careers, but not included in program of studies
Content: Pathway to Careers
Population: General

Multiple Pathway Career and Technical Education Courses
(330000)

331010 - Leadership Dynamics

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: This course in career and technical education is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.
Content: Leadership Dynamics
Population: General

331020 - Principles of Teaching

Grade Level: 9 - 12
Credits: 1-3
Description: This course provides opportunities for students with an interest in teaching to develop skills, strategies, and techniques used for instruction at various grade levels. Instruction addresses the principles and procedures for promoting the physical, emotional, social, and intellectual development of children, adolescents and developmentally appropriate practices in educational settings. Students will gain work experience in classrooms with certified teachers as part of their course work. Other components include the development of a four-year post-secondary plan, salaries and benefits of a teacher, job security, and future projections of the job market. Leadership experiences will be provided through a Career & Technical Student Organization. NOTE: Teacher Certification requirements for this course: Must have a Rank II valid teaching certificate, plus 5 years teaching experience.
Content: Principles of Teaching
Population: General

331030 - The Learning Community

Grade Level: 9 - 12
Credits: 1
Description: In this course, The Learning Community, students develop an understanding of the various responsibilities and systems involved in the K-12 educational system. Specifically, students will acquire the knowledge of education through the perspectives of classroom, school, district, state, and federal roles. NOTE: Teacher Certification requirements for this course: Must have a Rank II valid teaching certificate, plus 5 years teaching experience.
Content: Principles of Teaching
Population: General

331031 - The Learner-Centered Classroom

Grade Level: 9 - 12
Credits: 1
Description: This course will develop rising educators' awareness of their funds of knowledge, as well as their personal biases that develop from their life experiences. Using research-based methods, rising educators will develop methods to impact student equity based on culturally competent models as well as growth mindset methods. NOTE: Teacher Certification requirements for this course: Must have a Rank II valid teaching certificate, plus 5 years teaching experience.
Content: Principles of Teaching
Population: General

331032 - The Professional Educator

Grade Level: 10 - 12
Credits: 1
Description: In this course, The Professional Educator, students will develop an understanding of how educators advance their profession within the classroom. Specifically, students will gain both the knowledge and skills to plan, deliver, and reflect on the process of teaching and learning. NOTE: Teacher Certification requirements for this course: Must have a Rank II valid teaching certificate, plus 5 years teaching experience.
Content: Principles of Teaching
Population: General

331033 - Collaborative Clinical Experience

Grade Level: 11 - 12
Credits: 1
Description: In this course, Collaborative Clinical Experience, students will refine the required knowledge and skills to be an effective educator while also practicing the dispositions necessary for the educational profession. Specifically, students will gain an understanding of how teachers lead through both individual and collaborative growth and reflection. NOTE: Teacher Certification requirements for this course: Must have a Rank II valid teaching certificate, plus 5 years teaching experience.
Content: Principles of Teaching
Population: General

331034 - Principles of Career and Technical Education

Grade Level: 11 - 12
Credits: 1
Description: This course is designed to provide a general overview of career and technical education including program areas, components, philosophy and current trends and issues. Students will examine a variety of topics including: history of CTE, work based learning, career and technical student organizations, advisory councils, professional organizations as well as the influence of legislation on CTE. NOTE: Teacher Certification requirements for this course: Must have a Rank II valid teaching certificate, plus 5 years teaching experience.
Content: Principles of Teaching
Population: General

Health Education and Physical Education
(340000)

Health Education
(340100)

340133 - Health Education I

Grade Level: 9 - 12
Credits: .5
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health Education program in accordance with the Kentucky Academic Standards for High School Health Education. The emphasis of this course is to teach students the ability to access, understand, appraise, apply and advocate for health information and services in order to maintain or enhance one's own health and the health of others.
Content: Health Education
Population: General

340133 Health Education I Course Standards Document

340136 - 6th Grade Health Education

Grade Level: 6 - 6
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health Education program in accordance with the Kentucky Academic Standards for Middle School (6th Grade) Health Education. The emphasis of this course is to teach students the ability to access, understand, appraise, apply and advocate for health information and services in order to maintain or enhance one's own health and the health of others.
Content: Health Education
Population: General

340136 6th Grade Health Education Course Standards Document

340137 - 7th Grade Health Education

Grade Level: 7 - 7
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health Education program in accordance with the Kentucky Academic Standards for Middle School (7th Grade) Health Education. The emphasis of this course is to teach students the ability to access, understand, appraise, apply and advocate for health information and services in order to maintain or enhance one's own health and the health of others.
Content: Health Education
Population: General

340137 7th Grade Health Education Course Standards Document

340138 - 8th Grade Health Education

Grade Level: 8 - 8
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health Education program in accordance with the Kentucky Academic Standards for Middle School (8th Grade) Health Education. The emphasis of this course is to teach students the ability to access, understand, appraise, apply and advocate for health information and services in order to maintain or enhance one's own health and the health of others.
Content: Health Education
Population: General

340138 8th Grade Health Education Course Standards Document

340287 - 6th Grade Integrated Health & Physical Education

Grade Level: 6 - 6
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Middle School (6th Grade) Physical Education and Health Education (6th Grade) into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340287 6th Grade Integrated Health & Physical Education Course Standards Document

340288 - 7th Grade Integrated Health & Physical Education

Grade Level: 7 - 7
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Middle School (7th Grade) Physical Education and Health Education (7th Grade) into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340288 7th Grade Integrated Health & Physical Education Course Standards Document

340289 - 8th Grade Integrated Health & Physical Education

Grade Level: 8 - 8
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Middle School (8th Grade) Physical Education and Health Education (8th Grade) into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340289 8th Grade Integrated Health & Physical Education Course Standards Document

---

340290 - High School Integrated Health & Physical Education

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for High School Physical Education and High School Health Education into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340290 High School Integrated Health and Physical Education Course Standards Document

Physical Education
(340200)

340214 - Fitness Conditioning

Grade Level: 9 - 12
Credits:
Description: This course emphasizes conditioning activities that help develop muscular strength, muscular endurance, flexibility and cardiorespiratory endurance.
Content: Physical Education
Population: General

340215 - Aerobics

Grade Level: 9 - 12
Credits:
Description: This course is designed to offer the students a wide variety of cardiorespiratory fitness activities in order to enhance cardiorespiratory endurance.
Content: Physical Education
Population: General

340216 - Physical Education I

Grade Level: 9 - 12
Credits: .5
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education program in accordance with the Kentucky Academic Standards for High School (9th-12th Grade) Physical Education. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime. Students will have the opportunity to develop skills in fitness/conditioning activities, individual/team sports and recreational activities. Students will learn how lifetime physical activity contributes to optimal physical, mental, emotional and social health.
Content: Physical Education
Population: General

340216 Physical Education I Course Standards Document

340219 - Advanced Physical Education

Grade Level: 9 - 12
Credits:
Description: This course is designed to be an extension of Physical Education I to provide students with the advanced skills, knowledge, attitude and confidence to be active for a lifetime.
Content: Physical Education
Population: General

340225 - Aquatics

Grade Level: 9 - 12
Credits:
Description: This course is designed to help students develop skills useful or necessary in an aquatic environment. Topics may include: swimming and competitive strokes, team-oriented water sports, diving and/or lifesaving skills.
Content: Physical Education
Population: General

340226 - 6th Grade Physical Education

Grade Level: 6 - 6
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education program in accordance with the Kentucky Academic Standards for Middle School (6th Grade) Physical Education. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime. Students will have the opportunity to develop skills in fitness/conditioning activities, individual/team sports and recreational activities. Students will learn to define, describe and identify how physical education contributes to optimal development of physical, mental, emotional and social health.
Content: Physical Education
Population: General

340226 6th Grade Physical Education Course Standards Document

340227 - 7th Grade Physical Education

Grade Level: 7 - 7
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education program in accordance with the Kentucky Academic Standards for Middle School (7th Grade) Physical Education. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime. Students will have the opportunity to develop skills in fitness/conditioning activities, individual/team sports and recreational activities. Students will learn to explain and summarize how physical education contributes to optimal development of physical, mental, emotional and social health.
Content: Physical Education
Population: General

340227 7th Grade Physical Education Course Standards Document

340228 - 8th Grade Physical Education

Grade Level: 8 - 8
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education program in accordance with the Kentucky Academic Standards for Middle School (8th Grade) Physical Education. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime.

Students will have the opportunity to develop skills in fitness/conditioning activities, individual/team sports and recreational activities. Students will learn to analyze and translate how physical education contributes to optimal development of physical, mental, emotional and social health.
Content: Physical Education
Population: General

340228 8th Grade Physical Education Course Standards Document

---

340287 - 6th Grade Integrated Health & Physical Education

Grade Level: 6 - 6
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Middle School (6th Grade) Physical Education and Health Education (6th Grade) into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340287 6th Grade Integrated Health & Physical Education Course Standards Document

---

340288 - 7th Grade Integrated Health & Physical Education

Grade Level: 7 - 7
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Middle School (7th Grade) Physical Education and Health Education (7th Grade) into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340288 7th Grade Integrated Health & Physical Education Course Standards Document

---

340289 - 8th Grade Integrated Health & Physical Education

Grade Level: 8 - 8
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Middle School (8th Grade) Physical Education and Health Education (8th Grade) into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340289 8th Grade Integrated Health & Physical Education Course Standards Document

---

340290 - High School Integrated Health & Physical Education

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for High School Physical Education and High School Health Education into one course.
Content: Integrated Health and Physical Education (6-12)
Population: General

340290 High School Integrated Health and Physical Education Course Standards Document

Social Studies
(450000)

Social Studies - Middle
(450100)

450189 - Social Studies Grade 6 World Geography

Grade Level: 6 - 6
Credits: None
Description: Middle level social studies uses the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. Grade six includes world geography through an integrated social studies perspective composed of historical perspective, economics, government and civics, and culture and society. Regardless of the grade-level context, students use the five categories of social studies to explore the content.
Content: Geography
Population: General

450189 Social Studies Grade 6 World Geography Course Standards Document

450190 - Social Studies Grade 7 World Civilization

Grade Level: 7 - 7
Credits: None
Description: Middle level social studies uses the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. Grade seven focuses on an integrated study of world history from the earliest civilizations to 1500. Regardless of the grade-level context, students use the five categories of social studies to explore the content.
Content: World Civilization
Population: General

450190 Social Studies Grade 7 World Civilization Course Standards Document

450191 - Social Studies Grade 8 American (U.S. History)

Grade Level: 8 - 8
Credits: None
Description: Middle level social studies uses the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. Grade eight covers the history of the United States from the early inhabitants to Reconstruction. Regardless of the grade-level context, students use the five categories of social studies to explore the content.
Content: U.S. History
Population: General

450191 Social Studies Grade 8 American (U.S. History) Course Standards Document

Social Studies - Economics
(450600)

A group of instructional programs that describe the transformation of limited resources into goods and services which, upon distribution, are again transformed by consumption to yield satisfaction of human wants.

450601 - Economics

Grade Level: 9 - 12
Credits: 1
Description: Economics is the study banks, profits, corporations, unions, money, GNP; consumer protection laws; American and other systems; personal income tax; production and distribution; scarcity and demand.
Content: Economics
Population: General

450601 Economics Course Standards Document

450605 - AP Economics: Macro

Grade Level: 9 - 12
Credits: 1
Description: This is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. College credit is earned with a qualifying score on an AP exam.
Content: Economics
Population: General

450606 - AP Economics: Micro

Grade Level: 9 - 12
Credits: 1
Description: This is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. College credit is earned with a qualifying score on an AP exam.
Content: Economics
Population: General

450698 - International Economics

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to help students understand the basics of international trade and finance and the effects of various international economic policies on domestic and world welfare.
Content: Business Economics for Economics Credit within Social Studies
Population: General

450699 - Business Economics

Grade Level: 9 - 12
Credits: 1
Description: Business Economics emphasizes the fundamentals of economics and is designed to offer students models for and practice in using the elements of economic choices in three social roles: producer/workers, consumers, and citizens.
Content: Business Economics for Economics Credit within Social Studies
Population: General

Social Studies - Geography
(450700)

A group of instructional programs that describe the earth and its life; the description of land, sea, and air; and the distribution of plant and animal life, including human beings and industries.

450707 - Physical Geography

Grade Level: 9 - 12
Credits: 1
Description: Physical Geography is the descriptive science dealing with the surface area of the earth including continents and countries, and the climate, plants, animals and natural resources of the various earth divisions.
Content: Geography
Population: General

450709 - Human and Physical Geography

Grade Level: 9 - 12
Credits: 1
Description: Human Geography is a discipline in which the concepts, generalizations, and facts derived from both social and physical sciences converge in the study of specific places and the people who inhabit them. Geography therefore, functions as a bridge linking the social and physical science. Geographers study the interrelations of humans and their environment, patterns of location of human activities, human beings themselves and their cultures and patterns of human variation: regional, national, and global, as well as variations among cultures.
Content: Human Geography
Population: General

450709 Human and Physical Geography Course Standards Document

---

450712 - AP Human Geography

Grade Level: 9 - 12
Credits: 1
Description: This course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. College credit is earned with a qualifying score on an AP exam.
Content: AP World Geography
Population: General

Social Studies - History
(450800)

A group of instructional programs that describe the past, including the recording, gathering, criticizing, synthesizing, and interpreting evidence about past events.

450809 - U.S. History Survey

Grade Level: 9 - 12
Credits: 1
Description: U.S. History Survey is a basic overview of the history from Reconstruction to present; government institutions; applications to daily living. This course code will be deprecated in the 19-20 school year.
Content: U.S. History
Population: General

450812 - U.S. History: Reconstruction to Present

Grade Level: 9 - 12
Credits: 1
Description: This course is an overview of the history from Reconstruction through current events; American and world affairs.
Content: U.S. History
Population: General

450812 U.S History: Reconstruction to Present Course Standards Document

---

450814 - AP U.S. History

Grade Level: 9 - 12
Credits: 1
Description: This course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and the development of students' abilities to think conceptually about U.S. history from approximately 1491 to the present. Seven themes of equal importance - American and National Identity; Migration and Settlement; Politic s and Power; Work, Exchange, and Technology; America in the World; Geography and the Environment; and Culture and Society - provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. The course also allows teachers flexibility across nine different periods of U.S. history to teach topics of their choice in depth. College credit is earned with a qualifying score on an AP exam.
Content: AP U.S. History
Population: General

450835 - World History

Grade Level: 9 - 12
Credits: 1
Description: World History is a survey of the history of the world focusing on cultural and political aspects; ancient and modern history; the study of western and non-western civilizations; and current events.
Content: World History
Population: General

450835 World History Course Standards Document

450837 - World History, Modern

Grade Level: 9 - 12
Credits: 1
Description: Modern World History is a survey of post renaissance; nations' development; wars.
Content: World History
Population: General

450842 - Western Civilization, History

Grade Level: 9 - 12
Credits: 1
Description: Western Civilization involves the study of European development and its effect on the rest of the world.
Content: World Civilization
Population: General

450844 - AP European History

Grade Level: 9 - 12
Credits: 1
Description: AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity. College credit is earned with a qualifying score on an AP exam. NOTE: Unless further supplemented to incorporate all five subdomains, this course does not fulfill the Program of Studies, and therefore cannot be used as one of the three social studies credits required for graduation.
Content: AP European History
Population: General

450875 - Kentucky Studies

Grade Level: 9 - 12
Credits: 1
Description: The Kentucky Studies elective course brings together various elements of Kentucky Studies stressed in the earlier grades. The course focuses on the historical and cultural forces that have influenced the people and the institutions of the Commonwealth. The Kentucky Studies elective should give equal chronological coverage to Kentucky before and after the Civil War. It should stress the role of geography in the state's development and the importance of the regional variations across Kentucky. The customs of the people, their values, their folklore, and their family life should be examined in the context of such forces as agrarianism and urbanism. All of this should be done through the historical context, and should enhance the forces shaping government, politics and social change. Topics of study may be the arts, civil rights, communications, education, environment, labor history, religions, the sciences and transportation.
Content: Kentucky Studies
Population: General

450876 - AP World History

Grade Level: 9 - 12
Credits: 1
Description: AP World History is designed to be the equivalent of a two semester introductory college or university world history course. In AP World History students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures. College credit is earned with a qualifying score on an AP exam.
Content: World History
Population: General

450877 - African American Studies

Grade Level: 9 - 12
Credits: 1
Description: African American History will trace the historical, political, societal, economic and cultural issues from ancient Africa through the African American experience. Emphasis will be placed on contemporary issues facing African-Americans.
Content: U.S. History
Population: General

450878 - Contemporary U.S. History

Grade Level: 9 - 12
Credits: 1
Description: Contemporary U. S. History is a study of local, state and national government operations; economic issues; citizenship responsibilities; current events and historical origins; problem solving techniques.
Content: U.S. History
Population: General

Social Studies - Political Science and Government
(451000)

A group of instructional programs that the analysis of political institutions and processes, including the origin, development, geographical units, forms, sources of authority, powers, purposes, functions, and operations of government.

451001 - Civics

Grade Level: 9 - 12
Credits: 1
Description: A Civics course is the study of citizenship, the responsibilities and government - introduction; federal, state and local government; organization and function.
Content: Civics
Population: General

451004 - American Government

Grade Level: 9 - 12
Credits: 1
Description: American Government is the study of the United States, local, and other political systems; recruitment; roles and decision making; official duties; executive, legislative, and judicial government branches
Content: Civics
Population: General

451029 - Political Science

Grade Level: 9 - 12
Credits: 1
Description: Political Science is the study of local, national, and foreign political processes.
Content: Political Science
Population: General

451030 - AP United States Government and Politics

Grade Level: 9 - 12
Credits: 1
Description: This course introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning assess causes and consequences of political events, and interpret data to develop evidence-based arguments. College credit is earned with a qualifying score on an AP exam.
Content: AP U.S. Government and Politics
Population: General

451031 - Government and Civics

Grade Level: 9 - 12
Credits: 1
Description: Government and Civics is the study of citizenship responsibilities and government - introduction; federal, state and local government; organization and function. It also covers the study of United States voting procedures; court operations; local, state and national lawmaking.
Content: Civics
Population: General

451031 Government and Civics Course Standards Document

451032 - AP Comparative Government and Politics

Grade Level: 9 - 12
Credits: 1
Description: This course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and the political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. College credit is earned with a qualifying score on an AP exam.
Content: AP Government
Population: General

451038 - Global Issues

Grade Level: 9 - 12
Credits: 1
Description: Global Issues is the study of persistent issues related to social, political, and economic facets of human behavior. This is an opportunity for the mature pupil to examine the concepts, skills, and tools of the social scientist and the humanist in some decision-making and problem-international concern. This should be more than a survey course in current events. Independently, pupils might pursue a new issue in considerable depth through comprehensive research and analysis. It would also be possible for the teacher to utilize this course to involve the students in some direct manner with community issues and problems. The student could identify with a practitioner who shares the concern or problem.
Content: Global Issues
Population: General

451039 - Law and Justice

Grade Level: 9 - 12
Credits: 1
Description: Law and Justice is a study of law-civil, criminal, constitutional, and international; the legal and justice systems. Students will examine the need for rules and regulations; interpretations of the constitution, both state and federal; Supreme Court decisions; the Bill of Rights, and individual rights law, criminal law, family law, and consumer law. The study of the basic social contracts of society will enable students to understand the preferred democratic values: justice, equality, responsibility, freedom, rule of law, human rights, honesty, equity, rational process and human dignity.
Content: Law and Justice
Population: General

Social Studies - Sociology
(451100)

A group of instructional programs that describe human society, social institutions, and social relationships including the development, purposes, structures, and functions of human groups.

451121 - Sociology, General

Grade Level: 9 - 12
Credits: 1
Description: Sociology is the scientific study of human society. It is concerned with the behavior of human beings in group situations. The study of sociology, therefore, consists of trying to understand: The basic units and institutions of social life, such as the family, schools, neighborhoods, rural and urban communities, and the many other kinds of groups with which humans identify. This group can include occupational, political, religious, ethnic, family, economic status, or ideology. The sociological perspectives focus on how those social relationships arise, why they persist, why antagonisms develop, and how they maintain social order to contribute to social change.
Content: Sociology
Population: General

Social Studies - Social Sciences, other
(459800)

This category of courses can cover a wide range of topics in social science.

459801 - Integrated Social Studies

Grade Level: 9 - 12
Credits: 1
Description: Integrated Social Studies is an introductory survey of the various areas of social studies. It is designed to give the student exposure to different topics of social studies to prepare them for the more intensive studies that they will be participating in future courses.
Content: Social Studies
Population: General

459801 Integrated Social Studies Course Standards Document

459811 - History and Literature of the Biblical Era: Hebrew Scriptures and Old Testament

Grade Level: 9 - 12
Credits: 1 Elective
Description: The History and Literature of the Biblical Era: Hebrew Scriptures and Old Testament course focuses on the historical impact and literary style from texts of the Old Testament era, including the Hebrew Scriptures. Topics may include historical background and events of the period, the customs and cultures of the peoples and societies, and the influence of the texts on law, history, government, literature, art, music, customs, morals, values, culture and events, including recent and current events.
Content: Social Studies
Population: General

459812 - History and Literature of the Biblical Era: New Testament

Grade Level: 9 - 12
Credits: 1 Elective
Description: The History and Literature of the Biblical Era: New Testament course focuses on the historical impact and literary style from texts of the New Testament era. Topics may include historical background and events of the period, the customs and cultures of the peoples and societies, and the influence of the texts on law, history, government, literature, art, music, customs, morals, values, culture and events, including recent and current events.
Content: Social Studies
Population: General

459813 - History and Literature of the Biblical Era: Hebrew Scriptures and the New Testament

Grade Level: 9 - 12
Credits: 1 Elective
Description: The History and Literature of the Biblical Era: Hebrew Scriptures and the New Testament course focuses on the historical impact and literary style from texts of the New Testament era, including the Hebrew Scriptures. Topics may include historical background and events of the period, the customs and cultures of the peoples and societies, and the influence of the texts on law, history, government, literature, art, music, customs, morals, values, culture and events, including recent and current events.
Content: Social Studies
Population: General

Social Studies - Psychology
(459900)

A group of instructional programs that study basic scientific theoretical principles of human behavior.

459901 - Psychology

Grade Level: 9 - 12
Credits: 1
Description: Psychology is an introduction to the basic scientific theoretical principles of individual human behavior. Students will be exposed to various topics in the field of psychology research.
Content: Psychology
Population: General

459902 - AP Psychology

Grade Level: 9 - 12
Credits: 1
Description: This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, development psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. College credit is earned with a qualifying score on an AP exam.
Content: AP Psychology
Population: General

Industrial Education
(460000)

Industrial Education - Masonry
(460100)

460112 - Introductory Masonry

Grade Level: 9 - 12
Credits: 1
Description: The basic introductory course identifies various types of mortar and cement along with the use of basic masonry tools. The different methods of spacing materials on a construction site and the 6-8-10 method are emphasized, in addition to the use of the transit level, brick spacing, and modular rule. This course also focuses on laying straight and plumb brick to the line, as well as bricking gables and building columns. Setting up different types of masonry material, marking off layout lines, and erecting batter boards will be practiced, along with techniques employed in different types of weather and climates.
Content: Masonry
Population: General

460113 - Advanced Masonry

Grade Level: 10 - 12
Credits: 1
Description: The advanced course provides experience in laying quoin corners, bricking in around electrical and plumbing units, and laying door and window brick sills The student will construct expansion joints, piers, pilasters and retaining and split face block walls.
Content: Masonry
Population: General

460114 - Residential Maintenance Masonry

Grade Level: 10 - 12
Credits: 1
Description: This course covers the basic aspects of masonry as it relates to the residential structure. Emphasis is placed on proper handling, mixing, placing, and finishing of Portland cement products.
Content: Masonry
Population: General

460116 - Intermediate Masonry

Grade Level: 10 - 12
Credits: 1
Description: Builds on proficiency in competencies learned in MASE 105. Focuses on laying straight and plumb brick to the line, emphasizing bricking gables and building columns. Laboratory.
Content: Masonry
Population: General

460117 - Anchors and Reinforcement

Grade Level: 10 - 12
Credits: 1
Description: This course presents different types of reinforcement used in masonry units such as installing wall ties and reinforcing wire, tying intersecting walls with metal ties, installing masonry anchor bolts, setting and anchoring door and window frames, and setting steel lintels and bearing plates. Students will also install dovetail ties to concrete, set preformed masonry lintels, and lay paving brick in a herringbone pattern.
Content: Masonry
Population: General

460118 - Fireplace Construction

Grade Level: 10 - 12
Credits: 1
Description: This course presents different types and styles of indoor and outdoor fireplaces, and the principles of layout, drafting, and drawing a fireplace. Finishing dimensions of fireplace opening, firebox layout, setting the flue lining, and applying a chimney cap are also included.
Content: Masonry
Population: General

460119 - Concrete Finishing

Grade Level: 10 - 12
Credits: 1
Description: The focus of this course is on the theory and techniques inherent in the art of concrete finishing.
Content: Masonry
Population: General

460179 - Special Problems (Masonry)

Grade Level: 10 - 12
Credits: 1
Description: This course is designed for the student who has demonstrated specific special needs.
Content: Masonry
Population: General

460180 - Co-op (Masonry)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Masonry
Population: General

460183 - Internship (Masonry)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Masonry
Population: General

460199 - Special Topics - Masonry

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - Masonry but not described in the above courses.
Content: Masonry
Population: General

Industrial Education - Construction Carpentry
(460200)

460201 - Introduction to Construction Technology

Grade Level: 9 - 12
Credits: 1
Description: This course is broad-based with emphasis on all phases of the construction process, including safety; legal and permitting requirements; site selection; excavation; foundation; utilities; framing and structural components; interior and exterior finishing. Topics also include: Tool and equipment selection, safety and use; preventive maintenance; materials inventory, waste management and prevention.
Content: Construction Technology for Industrial Ed. Credit
Population: General

460209 - Cabinet Construction and Installation

Grade Level: 10 - 12
Credits: 1
Description: Students will layout and plan the construction of base and wall cabinets. They will construct, sand, prepare wood surfaces for finishing, install cabinets and special units.
Content: Residential/Commercial Carpentry
Population: General

460212 - Floor and Wall Framing

Grade Level: 9 - 12
Credits: 1
Description: The student will practice floor framing, layout, and construction of floor frames. Cutting and installing floor and wall framing members according to plans and specifications will also be practiced.
Content: Residential/Commercial Carpentry
Population: General

460213 - Ceiling and Roof Framing

Grade Level: 9 - 12
Credits: 1
Description: This course covers roof types and combinations of roof types used in the construction industry. The emphasis of this course is on layout, cutting and installing ceiling joists, rafters, roof decking, and roof coverings.
Content: Residential/Commercial Carpentry
Population: General

460214 - Site Layout and Foundations

Grade Level: 10 - 12
Credits: 1
Description: Students will prepare materials, calculate the cost for a building site, and lay out a site with a transit, locating property lines and corners. Students calculate the amount of concrete needed for footing and foundation walls and construct different types of foundations and forms.
Content: Residential/Commercial Carpentry
Population: General

460215 - Construction Technology for Industrial Education Credit

Grade Level: 9 - 12
Credits: 1
Description: Additional instructional programs that prepare individuals to apply technical knowledge and skills in the construction cluster of programs.
Content: Construction Technology for Industrial Ed. Credit
Population: General

460217 - Construction Prints

Grade Level: 10 - 12
Credits: 0.5
Description: This course will provide a series of lectures, demonstrations, and practice exercises in the study of symbols, views, sections, details, and material lists found on architectural working drawings, building materials and specifications lists, and construction dimensioning systems and charts/schedules.
Content: Residential/Commercial Carpentry
Population: General

460218 - Construction Forms

Grade Level: 10 - 12
Credits: 1
Description: This course will introduce the student to heavy and commercial construction. The student will receive information about rigging, mall forms, vertical piers and columns, grade curb forms, horizontal beam forms, above-grade slab systems, fireproof encasement forms, stair forms, bridge and bridge deck forms.
Content: Residential/Commercial Carpentry
Population: General

460219 - Exterior and Interior Finish

Grade Level: 10 - 12
Credits: 1
Description: This course presents basic concepts of building trim, gypsum wallboard, paneling, base, ceiling and wall molding with instruction on acoustical ceilings and insulation, wood floors, tile, inlaid adhesive and tools of the flooring trade. This course will continue to refine the techniques and skills taught in the previous carpentry courses. In this course, cost control, speed, and precision are

emphasized. In addition, students will perfect the skills associated with the exterior finishing of a house.
Content: Residential/Commercial Carpentry
Population: General

460220 - Residential Maintenance Carpentry

Grade Level: 10 - 12
Credits: 1
Description: This course covers the basic aspects of framing, roofing, window, door, and stair maintenance. The student will receive training in the proper use of ladders and in the handling and storage of building materials.
Content: Residential/Commercial Carpentry
Population: General

460222 - Residential Interior Maintenance

Grade Level: 10 - 12
Credits: 1
Description: This course covers the basic aspects of drywall hanging, finishing, and repair; painting; window, door, and floor moldings; laying composition and vinyl flooring; and maintaining ceramic tile.
Content: Residential/Commercial Carpentry
Population: General

460229 - Co-op (BAM)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Building and Apartment Maintenance
Population: General

460232 - Internship (BAM)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Building and Apartment Maintenance
Population: General

460241 - Introduction to Building & Apartment Maintenance

Grade Level: 9 - 12
Credits: 1
Description: This course covers required safety practices in the shop and workplace; identification and use of hand tools used in the construction trades; identification of construction materials; interpretation of blueprints and/or drawings; and exposure to various mechanical and structural systems in a residential structure.
Content: Building and Apartment Maintenance
Population: General

460242 - Co-op (Carpentry)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Residential/Commercial Carpentry
Population: General

460245 - Internship (Carpentry)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Residential/Commercial Carpentry
Population: General

460290 - Construction Trades, Other

Grade Level: 9 - 12
Credits: 1
Description: Additional instructional programs that prepare individuals to apply technical knowledge and skills in the building, inspecting, and maintaining of structures and related properties.
Content: Construction Technology for Industrial Ed. Credit
Population: General

460298 - Special Topics (Construction Carpentry)

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education Construction Cluster but not described in the above courses.
Content: Construction Technology for Industrial Ed. Credit
Population: General

Industrial Education - Electrical Technology
(460300)

460305 - Transformers

Grade Level: 10 - 12
Credits: 1
Description: Focuses on the operation, installation and application of AC single-phase and three-phase transformers. Testing and maintaining transformer equipment are emphasized, with safety integrated as a core component of the study.
Content: Electrical Technology
Population: General

460311 - DC Circuits

Grade Level: 9 - 12
Credits: 1
Description: Introduces the theory of electricity and magnetism, and the relationship of voltage, current, resistance, and power in electrical circuits. Circuit analysis techniques are stressed. DC circuits are analyzed using Ohm's Law, Kirchoff's Laws, and various network theorems.
Content: Electrical Technology
Population: General

460312 - Electrical Construction I

Grade Level: 9 - 12
Credits: 1
Description: Involves the study of materials and procedures used in construction wiring.
Content: Electrical Technology
Population: General

460313 - Electrical Construction II

Grade Level: 10 - 12
Credits: 1
Description: Expands the knowledge and skills needed to work in commercial and industrial construction wiring.
Content: Electrical Technology
Population: General

460316 - Circuits I

Grade Level: 10 - 12
Credits: 1.5
Description: Introduction to basic theory of DC and AC circuits, including circuit analysis techniques, introductory magnetism, and transformer principles.
Content: Electrical Technology
Population: General

460319 - Circuits II

Grade Level: 10 - 12
Credits: 1.5
Description: Complex alternating current and direct current circuits. Emphasis is on impedance, reactance, power and electrical energy, electrical measurement instruments, and circuit analysis.
Content: Electrical Technology
Population: General

460323 - Rotating Machinery

Grade Level: 10 - 12
Credits: 1
Description: Focuses on the underlying principles of rotating electrical equipment including DC and AC motors and generating equipment construction, operating applications, and the maintenance of DC and AC motors and generating equipment.
Content: Electrical Technology
Population: General

460325 - Rotating Machinery Electrical Motor Controls

Grade Level: 10 - 12
Credits: 1
Description: This course focuses on the construction, operation and maintenance of DC motors and generators and AC motors and alternators. This course addresses the diversity of control devices and applications used in industry today. Safety and electrical lockouts are also included.
Content: Electrical Technology
Population: General

460329 - Basic Electricity for Non-Majors

Grade Level: 10 - 12
Credits: 0.5
Description: This course introduces non-majors to the basic physics of electricity. Students apply Ohm's law; measure resistance, voltage, ohms, watts and amps; construct various types of electrical circuits; select wire and fuse sizes; and learn to troubleshoot an electric motor and coil.
Content: Electrical Technology
Population: General

460331 - Electrical Motor Controls

Grade Level: 10 - 12
Credits: 1
Description: This course addresses the diversity of control devices and applications used in industry today. Safety and electrical lockouts are also included.
Content: Electrical Technology
Population: General

460333 - Residential Maintenance Wiring

Grade Level: 10 - 12
Credits: 1
Description: This course covers the basic aspects of electric theory, wire and cables, fixtures and devices, and troubleshooting and maintenance wiring.
Content: Electrical Technology
Population: General

460339 - National Electrical Code

Grade Level: 10 - 12
Credits: 0.5
Description: Emphasizes the importance of the National Electrical Code as it applies to electrical installations: electrical safety issues, prevention of fire due to the use of electrical energy, prevention of loss of life and property from the hazards that might arise from the use of electrical energy, and proper selection of electrical equipment for hazardous and non-hazardous environments. A learning resource in the preparation for electrical licensing examinations.
Content: Electrical Technology
Population: General

460340 - Sustainable Energy Systems

Grade Level: 10 - 12
Credits: 1
Description: Examines the sustainability of various energy resources. An overview of energy technology, energy resources, and emerging future energy technologies coupled with our energy use will bring into context the strengths and weaknesses of different energy methodologies in developing a working concept of sustainable energy.
Content: Electrical Technology
Population: General

460342 - Renewable Energy Systems

Grade Level: 10 - 12
Credits: 1
Description: Examines the need for alternative and renewable energy resources as a survey course providing citizens from all walks of life an understanding for responsible stewardships of technologies that will contribute to the sustainability of energy in our present and future societies. The object of this course is to take a more in-depth look at renewable energy forms and the replacement of fossil fuels in our society. Through wind, solar, and biomass this class will focus on live projects and scientific studies and comparisons of feasibility.

Content: Electrical Technology
Population: General

460344 - Renewable Energy Systems (Special Problems)

Grade Level: 10 - 12
Credits: 0.5
Description: The object of this course is to take a more in-depth look at renewable energy forms and the replacement of fossil fuels in our society. Through scientific research methods, portfolio and presentations, students will focus on live projects, social energy issues problems and solutions using comparisons of feasibility.
Content: Electrical Technology
Population: General

460345 - Co-op (Electrical)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Electrical Technology
Population: General

460348 - Internship (Electrical)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Electrical Technology
Population: General

460377 - Special Problems - Electrical Technology

Grade Level: 10 - 12
Credits: 1
Description: A course designed for the student who has demonstrated specific special needs.
Content: Electrical Technology
Population: General

460399 - Special Topics - Electrical Technology

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Electrical Technology but not described in the above courses.
Content: Electrical Technology
Population: General

Industrial Education - Heavy Equipment
(460400)

460403 - Heavy Highway Construction Equipment Repair

Grade Level: 9 - 12
Credits: 1-5
Description: The maintenance of heavy highway equipment and the related studies in construction.
Content: Heavy Highway Construction
Population: General

460404 - Heavy Equipment Operation

Grade Level: 9 - 12
Credits: 1-5
Description: The operation of heavy equipment and the related studies in construction.
Content: Heavy Equipment Operation
Population: General

460499 - Special Topics - Heavy Equipment

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - Heavy Equipment but not described in the above courses.
Content: Heavy Equipment Operation
Population: General

Industrial Education - Plumbing Technology
(460500)

460511 - Introduction to Plumbing

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the origin and basic principles of the plumbing industry. Also included is the orientation of methods associated with the plumbing industry.
Content: Plumbing Technology
Population: General

460512 - Plumbing Systems

Grade Level: 9 - 12
Credits: 1
Description: This course presents a study of designing and sizing water distribution, drain, waste, and vent pipes, in addition to studies of code requirements and installation of common residential fixtures.
Content: Plumbing Technology
Population: General

460513 - Basic Plumbing Skills

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the student to basic pipe joining techniques.
Content: Plumbing Technology
Population: General

460514 - Bathroom Install

Grade Level: 9 - 12
Credits: 1
Description: This course will develop the skills necessary to rough-in and install a bathroom group and auxiliary fixtures for residential or commercial applications.
Content: Plumbing Technology
Population: General

460515 - Kitchen Install

Grade Level: 10 - 12
Credits: 1
Description: This course will develop the skills necessary to rough in and install a kitchen group and laundry fixtures for residential and commercial applications.
Content: Plumbing Technology
Population: General

460516 - Residential Maintenance Plumbing

Grade Level: 10 - 12
Credits: 1
Description: This course covers the basic aspects of clearing blocked drains, repairing leaks, repair and replacement of residential plumbing fixtures, and working with copper, plastic, and steel pipes.
Content: Plumbing Technology
Population: General

460518 - Co-op I (Plumbing)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Plumbing Technology
Population: General

460521 - Internship (Plumbing)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Plumbing Technology
Population: General

460599 - Special Topics - Plumbing

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Plumbing Technology but not described in the above courses.
Content: Plumbing Technology
Population: General

Industrial Education - Mining Technology
(460700)

Industrial Education - HVAC/ Air Conditioning Technology
(460800)

460801 - Heat Pump Application

Grade Level: 10 - 12
Credits: 1
Description: Explains reverse cycle heating systems, defrost cycles, reversing valves, and auxiliary heating. This course will also concentrate on the line and control voltage circuitry pertaining to these units. ARI Controls: Subtopic E; Heat Pump Systems: Subtopics A and B; System Installation and Start-Up: Subtopic C; System Servicing and Troubleshooting: Subtopic E
Content: Air Conditioning Technology
Population: General

460804 - Residential Energy Auditor Prep

Grade Level: 10 - 12
Credits: 1
Description: This course will provide step by step instruction and best practices involved in performing a residential energy audit. Ethics and customer relations, energy consumption and quality control inspecting. Building shell diagnosing, shell leakage, evaluating heating systems. Evaluation base load measures, windows, doors, and exterior insulation evaluations. Mobile homes and health and safety issues are also covered.
Content: Air Conditioning Technology
Population: General

460806 - Green Awareness/Energy Management

Grade Level: 10 - 12
Credits: 1
Description: This course will instruct students in the areas of energy management and analysis, green heating, ventilation, air conditioning and refrigeration. It will also cover electrical generation and consumption as well as green plumbing.
Content: Air Conditioning Technology
Population: General

460817 - HVAC Electricity

Grade Level: 9 - 12
Credits: 1
Description: This course introduces students to the basic physics of electricity. Students apply Ohm's law; measure resistance, voltage, ohms, watts and amps; construct various types of electrical circuits; select wire and fuse sizes; and learn to troubleshoot an electric motor and motor controls.
Content: Air Conditioning Technology
Population: General

460818 - Residential HVAC Maintenance

Grade Level: 10 - 12
Credits: 1
Description: This course covers the basic aspects of maintaining various heating, ventilating, and air conditioning systems in residential buildings.
Content: Air Conditioning Technology
Population: General

460820 - Heating and Humidification

Grade Level: 10 - 12
Credits: 1
Description: Explains heating systems from simple fossil fuel furnaces through more complex systems. This course will also concentrate on the line and control voltage circuitry pertaining to these systems. ARI Controls: Subtopics A-C; Heating Systems: Subtopics A-C; System Installation and Start-Up: Subtopics A and B; System Servicing and Troubleshooting: Subtopic C; Tools and Equipment: Subtopic D
Content: Air Conditioning Technology
Population: General

460822 - Commercial Refrigeration

Grade Level: 9 - 12
Credits: 1
Description: Develops techniques for servicing and troubleshooting mechanical and electromechanical refrigeration components. Electrical and refrigeration safety are emphasized. Proper tool use and environmentally sound refrigerant handling are taught.
Content: Air Conditioning Technology
Population: General

460824 - Cooling and Dehumidification

Grade Level: 9 - 12
Credits: 1
Description: Explains the working characteristics of air conditioning units with air and water cooled condensers. Line, low voltage and pneumatic controls will also be covered. ARI - Air Conditioning Systems: Subtopics A-E; System Installation and Start-Up: Subtopic D; System Servicing and Troubleshooting: Subtopic D; Controls: Subtopic D.
Content: Air Conditioning Technology
Population: General

460826 - Electrical Components

Grade Level: 9 - 12
Credits: 1
Description: This course defines the electrical components of an air conditioning system. Different types of line voltages, wiring diagrams, and solid-state devices are included. Safety is emphasized.
Content: Air Conditioning Technology
Population: General

460828 - Refrigeration Fundamentals

Grade Level: 9 - 12
Credits: 1
Description: Introduces the fundamentals of refrigeration, refrigeration terms, and the basic refrigeration cycle. Proper use of tools, test equipment, and materials is stressed. Environmental issues including refrigerant handling are discussed. Refrigerant piping and methods used to join them are taught. General and specific safety is emphasized.
Content: Air Conditioning Technology
Population: General

460845 - Ice Machines

Grade Level: 10 - 12
Credits: 1
Description: Introduces the operation, checking, adjusting, and troubleshooting of commercial ice makers. The student will learn to adjust, check, clean, and troubleshoot commercial ice machines.
Content: Air Conditioning Technology
Population: General

460846 - Journeyman Preparation

Grade Level: 10 - 12
Credits: 0.5
Description: A series of lectures, discussions, and presentations pertaining to the proper application of HVAC codes. The class will help prepare the student to pass the Kentucky Journeyman HVAC licensing exam.
Content: Air Conditioning Technology
Population: General

460847 - Sheet Metal Fabrication

Grade Level: 10 - 12
Credits: 1
Description: The student will learn to make patterns and lay out and construct common sheet metal duct fittings.
Content: Air Conditioning Technology
Population: General

460877 - Special Problems (AIR COND)

Grade Level: 10 - 12
Credits: 1
Description: This course provides advanced experiences in the trade theories and practices appropriate for the occupational objectives of the student.
Content: Air Conditioning Technology
Population: General

460880 - Co-op (Air Cond)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Air Conditioning Technology
Population: General

460883 - Internship (Air Cond)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Air Conditioning Technology
Population: General

460890 - Special Topics - HVAC

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: Instruction related to Industrial Education - HVAC but not described in the above courses.
Content: Air Conditioning Technology
Population: General

Industrial Education - Public Services
(461000)

461011 - Basic Telecommunications

Grade Level: 9 - 12
Credits: 1
Description: This course is a study of basic emergency communications and of the federal and state laws that govern these communications; telephone and radio communications systems; communication documentation; emergency management; 911; stress and crisis management.
Content: Law Enforcement
Population: General

461012 - Bloodborne Pathogens

Grade Level: 9 - 12
Credits: 1
Description: This course provides bloodborne pathogens education for emergency responders, health professionals, and others who are subject to exposure, in the 1) transmission; 2) prevention and control; 3) treatment; 4) legal issues; and 5) attitudes and behavior regarding human infections, and covers requirements of OSHA 1910.1030.
Content: EMS Training
Population: General

461013 - Emergency Management

Grade Level: 10 - 12
Credits: 1
Description: Commanding the Initial Response is designed to give the participant the information and skills necessary to establish command, perform size-up, develop and implement an action plan, transfer command, and organize an incident using an effective command system.
Content: Emergency Services
Population: General

461014 - First Aid

Grade Level: 9 - 12
Credits: 1
Description: This course addresses the knowledge and skills for administering the first aid including the assessment and treatment of patients sustaining injury or sudden illness until a higher level of trained emergency care technician arrives.
Content: EMS Training
Population: General

461015 - Hazardous Materials Awareness

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the student to the principles of recognizing hazardous materials presence, protecting themselves from hazardous materials and calling for training/personnel, and securing the area safety.
Content: Fire Service Technology
Population: General

461018 - Health and Well-Being for Law Enforcement

Grade Level: 9 - 12
Credits: 1
Description: his course is designed to give the student an overview of personal fitness and wellness including how to maintain good physical fitness and proper nutrition. The course will also give the student an overview of the warning signs of and how to deal with stress in the law enforcement profession.
Content: Law Enforcement
Population: General

461019 - Civil Law and Procedures

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to provide students with a comprehensive overview of civil law, both substantive and procedural. Critical case law analysis will be emphasized as an integral part of the course.
Content: Law Enforcement
Population: General

461020 - Criminal Law and Procedures

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to provide students with an overview of criminal law, both substantive and procedural. Upon successful completion of this course, students will have acquired an understanding of the criminal prosecutorial process, while also learning the elements of individual crimes. In addition, students will have gained an appreciation for the balance of personal accountability with constitutionally-protected rights.
Content: Law Enforcement
Population: General

461021 - CPR

Grade Level: 9 - 12
Credits: 1
Description: This course provides the knowledge and skills for administering care for respiratory or cardiac arrest including airway, breathing, and circulation assessment and the procedures to eliminate blockage of the airway, provide breathing assistance, and cardiac compressions.
Content: EMS Training
Population: General

461022 - Emergency Medical Technician (EMT)

Grade Level: 9 - 12
Credits: 1
Description: This basic Emergency Medical Technician Course covers all knowledge aspects of trauma care as outlined by national standards, created by federal guidelines, considered to be the responsibilities of ambulance operations. Training involves typical anatomy and physiology; patient assessment; care for respiratory and cardiac emergencies; control of bleeding; application of dressing and bandages; treatment for traumatic shock; care for fractures, dislocation, sprains and strains; medical emergencies; emergency child birth; burns and heat emergencies; environmental emergencies; principles of vehicle rescue; transportation of patients and general operations of ambulance systems.
Content: EMS Training
Population: General

461023 - EMS Training

Grade Level: 9 - 12
Credits: 1-6
Description: Public Service Program that provides instruction in Emergency Medicine.
Content: EMS Training
Population: General

461031 - Firefighters Basic Skills III

Grade Level: 10 - 12
Credits: 1
Description: This course includes Kentucky Fire Commission Training topics V0000 Building Construction, FC30000 KY Wildland Fire Awareness, M0000 Fire Control, H0000 Ventilation, Y0000 Fire Investigation, C0000 Communications, U0000 Fire Prevention, O0000 Victim Search/Rescue, Q0001 Vehicle Rescue, FC10000 KY FF Survival, and FC20000 KY FF Rescue.
Content: Fire Service Technology
Population: General

461032 - Firefighters Basic Skills I

Grade Level: 9 - 12
Credits: 1
Description: This course includes Kentucky Fire Commission Training topics I0000 Ropes, J0000 Ladders, W0000 Aircraft Rescue, Q0000 Rescue, P0021 First Aid, P0002 Bloodborne Pathogens, X0000 Emergency Disaster Planning, G0000 Forcible Entry, and P0001 CPR.
Content: Fire Service Technology
Population: General

461033 - Introduction to Fire Service

Grade Level: 9 - 11
Credits: 1
Description: This course includes Kentucky Fire Commission Training topics A0000 Administration & Organization, D0000 Fire Behavior, B0000 Safety, F0000 Personal Protective Equipment, E0000 Extinguishers, and K0000 Hose, Nozzles, and Appliances.
Content: Fire Service Technology
Population: General

461034 - Firefighters Basic Skills II

Grade Level: 9 - 12
Credits: 1
Description: This course includes Kentucky Fire Commission Training topics R0000 Water Supply, L0000 Foam Streams, N0000 Salvage/Overhaul, S0000 Fire Alarms - Sprinklers, T0001 Hazmat Awareness, and T0002 Hazmat Operations.
Content: Fire Service Technology
Population: General

461036 - Firefighters Intermediate Skills I

Grade Level: 10 - 12
Credits: 0.5
Description: This course includes water supply, foam fire streams, fire alarms and communications, hazardous materials awareness, hazardous materials operations, sprinklers, and salvage and overhaul.
Content: Fire Service Technology
Population: General

461037 - Correctional Systems

Grade Level: 10 - 12
Credits: 1
Description: The function of custodial staff is examined with emphasis on the correctional officer. Institutional procedures are reviewed including reception, classification, program assignment and release procedures.
Content: Law Enforcement
Population: General

461038 - Introduction to Homeland Security

Grade Level: 10 - 12
Credits: 1
Description: This course focuses on security policy, planning and operations dedicated to the protection of U.S. territory, assets, infrastructure, institutions and citizens from external threats. Includes instruction in national security policy, government relations, intelligence, law enforcement, security technology, communications and information technology, homeland security planning and operations, disaster planning and applications to specific threat scenarios.
Content: Law Enforcement
Population: General

461039 - Terrorism and Counterterrorism Operations

Grade Level: 10 - 12
Credits: .5
Description: This course focuses on the study of terrorism as a global and national threat and the methods for analyzing and countering it. Includes instruction in psychology, cultural studies, terrorist history and organization, terrorist capabilities, terrorist finance and international money-laundering, threat assessment, intelligence operations, incident command systems, border security, emergency response, joint operations, surveillance and communications systems, cyberterrorism, weapons of mass destruction, counterterrorist operations, and applications to specific terrorist organizations and threats.
Content: Law Enforcement
Population: General

461040 - Critical Infrastructure Protection

Grade Level: 10 - 12
Credits: 0.5
Description: A course focusing on the design, planning and management of systems and procedures for protecting critical national physical and cyber infrastructure from external threats, including terrorism. Includes instruction in homeland security policy, critical infrastructure policy, information security, matrix vulnerability assessment, threat assessment, physical security, personnel security, operational security, contingency planning, case analyses of specific industries and systems, redundancy planning, emergency and disaster planning, security systems, and intelligence operations.
Content: Law Enforcement
Population: General

461042 - Basic Security Services

Grade Level: 9 - 12
Credits: 1
Description: This course includes history and philosophy of security; nature and impact of security; an overview of security systems; concepts and skills for security officers; security applications; and security of the future.
Content: Law Enforcement
Population: General

461043 - Criminal Investigation

Grade Level: 10 - 12
Credits: 1
Description: This course includes investigative theory; collection and preservation of evidence, and sources of information; procedures for conducting interviews and interrogations; using forensic sciences; and preparing for cases and trials.
Content: Law Enforcement
Population: General

461044 - Introduction to Criminal Justice

Grade Level: 9 - 12
Credits: 1
Description: This course studies the history and philosophy of criminal justice, ethical considerations, definition of crime, the nature and impact of crime, an overview of the criminal justice system including law enforcement, corrections, and the court system.
Content: Law Enforcement
Population: General

461045 - Law Enforcement

Grade Level: 9 - 12
Credits: 1
Description: This course trains students to evaluate the powers granted to the police and restrictions placed upon them by respective constitutions and their amendments. Specific topics of discussion will include search and seizure, arrests, interviews, interrogations, and confessions in the context of criminal prosecution. Activities include tactics, methods, and skills utilized in the law enforcement field. Skills will be obtained in basic disaster response.
Content: Law Enforcement
Population: General

461047 - Advanced Legal Practice

Grade Level: 11 - 12
Credits: 1
Description: Advanced Legal Practice is a project-based capstone course. Students will continue to develop their legal research, writing, and oral advocacy skills by working to resolve legal issues for mock clients.
Content: Law Enforcement
Population: General

461048 - Alternative Dispute Resolution

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to provide students with a comprehensive overview of dispute resolution processes and techniques that act as a means for disagreeing parties to come to an agreement short of litigation. Upon successful completion of this course, students will have developed the skills necessary to participate in, and manage, a successful arbitration, mediation, and negotiation. Critical analysis and communication skills will be emphasized as an integral part of this course.
Content: Law Enforcement
Population: General

461049 - Appellate Advocacy

Grade Level: 10 - 12
Credits: 1
Description: This course focuses on appellate advocacy in both civil and criminal cases. After reviewing the principles of trial procedure and how these principles affect appellate work, students will examine the appellate process. Topics covered include the trial record, appellate briefing, oral argument, and application for discretionary appeal.
Content: Law Enforcement
Population: General

461050 - Constitutional Law and Civil Rights

Grade Level: 10 - 12
Credits: 1
Description: This course focuses on the U.S. Constitution and federal anti-discrimination laws. Topics covered include judicial review; the legal relationship between the federal government and states; the legal relationship between the branches of the federal government; and protection of individuals and organizations by the Bill of Rights, the Fourteenth Amendment, and federal anti-discrimination laws.
Content: Law Enforcement
Population: General

461051 - Introduction to Law

Grade Level: 9 - 12
Credits: 1
Description: This course studies the history, purpose, and function of law. Students will learn about law-related careers, study the major areas of law, gain an understanding of the court system, analyze case law, and study the adversary system.
Content: Law Enforcement
Population: General

461052 - Trial Advocacy

Grade Level: 10 - 12
Credits: 1
Description: This course focuses on trial advocacy in both civil and criminal cases. Topics covered include opening statement and closing argument, direct and cross examination, courtroom decorum, and evidence law. Additionally this course will prepare students for a competitive mock trial.
Content: Law Enforcement
Population: General

461062 - Company Officer Development

Grade Level: 10 - 12
Credits: 1
Description: This course involves information and activities that will help the student understand the role of Fire Service Company Officers
Content: Fire Service Technology
Population: General

461063 - Co-op (Fire Service/EMT)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Cooperative Education program receive compensation for their work. Work based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screenings
Content: Fire Service Technology
Population: General

461064 - Firefighting Advanced Skills I

Grade Level: 11 - 12
Credits: 1
Description: This course provides further expansion of the Firefighters Intermediate Skills I course and includes Kentucky Fire Commission Training topics Z0000 Pumper Operations, CC0000 Drivers Training, A0000 Administration and Organization, FC40000 KY Flashover, F0000 Personal Protective Equipment II, K0000 Fire Hose, and D0000 Fire Behavior.
Content: Fire Service Technology
Population: General

461065 - Firefighting Advanced Skills II

Grade Level: 11 - 12
Credits: 1
Description: This course provides further expansion of the Firefighter Intermediate Skills II course and includes Kentucky Fire Commission Training topics D0000 Fire Behavior K0000 Fire Hose, 10000 Ropes, G0000 Forcible Entry, and F0000 Personal Protective Equipment
Content: Fire Service Technology
Population: General

461066 - Firefighting Intermediate Skills II

Grade Level: 10 - 12
Credits: 1
Description: This course includes Kentucky Fire Commission Training topics D0000 Fire Behavior, K0000 Fire Hose, 10000 ropes, G0000 Forcible Entry, and F0000 Personal Protective Equipment. Students will complete the NIMS 100, 200, 300, and 700 certifications during this course.
Content: Fire Service Technology
Population: General

461067 - Firefighting Intermediate Skills III

Grade Level: 10 - 12
Credits: 1
Description: This course provides further expansion of Firefighter Basic Skills III and includes Kentucky Fire Commission Training topics V0000 Building Construction, M0000 Fire Control, H0000 Ventilation, Y0000 Fire Investigation, C0000 Communications, U0000 Fire Prevention, O0000 Victim Search/Rescue, Q0001 Vehicle Rescue, FC10000 KY FF Survival, and FC20000 KY FF Rescue
Content: Fire Service Technology
Population: General

461068 - Internship (Fire Service/EMT)

Grade Level: 11 - 12
Credits: 1
Description: Internship provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Internship program do not receive compensation for their work. Work-based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screenings.
Content: Fire Service Technology
Population: General

461069 - Special Topics in Fire Service

Grade Level: 11 - 12
Credits: 1
Description: Special Topics is an expanded course offering the study of emergency and fire services issues. Topics may vary at the discretion of the instructor.
Content: Fire Service Technology
Population: General

461094 - Internship (Public Services/Protective Services)

Grade Level: 11 - 12
Credits: 1
Description: Internship provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Internship program do not receive compensation for their work. Work-based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screenings. Prerequisite: Students may enroll in Internship only after successful completion of at least three courses in the pathway.
Content: Law Enforcement
Population: General

461095 - Internship (Pre-Law)

Grade Level: 11 - 12
Credits: 1
Description: Internship provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Internship program do not receive compensation for their work. Work-based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screening. Prerequisite: Students may enroll in Internship only after successful completion of at least three courses in the Pre-Law Pathway.
Content: Law Enforcement
Population: General

461096 - Co-op (Public Services/Protective Services)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Cooperative Education program receive compensation for their work. Work-based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screenings. Prerequisite: Students may enroll in Co-op only after successful completion of at least three courses in the pathway.
Content: Law Enforcement
Population: General

461097 - Co-op (Pre-Law)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Cooperative Education program receive compensation for their work. Work-based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screenings. Prerequisite: Students may enroll in Co-op only after successful completion of at least three courses in the Pre-Law Pathway.
Content: Law Enforcement
Population: General

461098 - Special Topics--Pre-Law

Grade Level: 11 - 12
Credits: 1
Description: Special Topics is an expanded course offering the study of current law and public safety issues. Topics may vary at the discretion of the instructor. Prerequisite: Students may enroll in Special Topics only after successful completion of at least three courses in the Pre-Law Pathway.
Content: Law Enforcement
Population: General

461099 - Special Topics - Public Services/Protective Services

Grade Level: 11 - 12
Credits: 1
Description: Special Topics is an expanded course offering the study of current law and public safety issues. Topics may vary at the discretion of the instructor. Prerequisite: Students may enroll in Special Topics only after successful completion of at least three courses in the pathway.
Content: Emergency Services
Population: General

Industrial Education - Industrial Electronics Technology
(470100)

470101 - Digital I

Grade Level: 10 - 12
Credits: 0.5
Description: Introduces digital logic methods. Topics include: Boolean algebra, combinational logic theory, sequential circuits, number systems and codes, and design and troubleshooting of digital logic circuits.
Content: Industrial Electronics Technology
Population: General

470102 - Digital I Lab

Grade Level: 10 - 12
Credits: 0.5
Description: Application of digital logic methods. Topics include: Boolean algebra, combinational logic theory, sequential circuits, number systems and codes, and design and troubleshooting of digital logic circuits.
Content: Industrial Electronics Technology
Population: General

470115 - Devices and Circuits I

Grade Level: 9 - 12
Credits: 1
Description: This course combines theory and application in the study of semiconductor devices including: diodes, Zener diodes, bipolar junction transistors, field effect transistors, and circuits involved.
Content: Industrial Electronics Technology
Population: General

470116 - Digital Electronics

Grade Level: 9 - 12
Credits: 1
Description: Develops an understanding of fundamental digital principles including logic gates, Boolean algebra, flip-flops, register, combinational and sequential logic circuits and basic digital design techniques.
Content: Industrial Electronics Technology
Population: General

470117 - DC Circuits

Grade Level: 9 - 12
Credits: 1
Description: Introduces the theory of electricity and magnetism, and the relationship of voltage, current, resistance, and power in electrical circuits. Circuit analysis techniques are stressed. DC circuits are analyzed using Ohm's Law, Kirchoff's Laws, and various network theorems.
Content: Industrial Electronics Technology
Population: General

470118 - AC Circuits

Grade Level: 9 - 12
Credits: 1
Description: The Alternating Current (AC) Circuits course is designed to develop an understanding of alternating current fundamentals and theory with emphasis on the study of reactance, resonance, RC, RL, RLC, transformers, phase angles and power factors. Students will apply formulas to analyze the operation of AC circuits.
Content: Industrial Electronics Technology
Population: General

470119 - Devices and Circuits II

Grade Level: 9 - 12
Credits: 1
Description: Combines theory and applications in the study of operational amplifiers, oscillators, basic modulation circuitry, linear integrated circuits, thyristors, and regulated/switching power supplies.
Content: Industrial Electronics Technology
Population: General

470120 - Devices I Lab

Grade Level: 10 - 12
Credits: 0.5
Description: Basic application of semi-conductor devices. Emphasis is on design, construction and troubleshooting of diode and transistor circuits, amplifiers and power supplies.
Content: Industrial Electronics Technology
Population: General

470125 - Devices II

Grade Level: 10 - 12
Credits: 0.5
Description: Emphasis is on thyristors, FETs, integrated circuits, and other devices as applied to audio frequency amplifiers, feedback circuits, modulators, detectors, and other basic electronic circuits.
Content: Industrial Electronics Technology
Population: General

470126 - Devices II Lab A

Grade Level: 10 - 12
Credits: 0.5
Description: Applies basic knowledge of thyristors, FETs, integrated circuits, and other devices as applied to audio frequency amplifiers, feedback circuits, modulators, detectors, and other basic electronic circuits.
Content: Industrial Electronics Technology
Population: General

470127 - Devices II Lab B

Grade Level: 10 - 12
Credits: 0.5
Description: Advanced application of theory related to thyristors, FETs, integrated circuits, and other devices as applied to audio frequency amplifiers, feedback circuits, modulators, detectors, and other basic electronic circuits.
Content: Industrial Electronics Technology
Population: General

470130 - Digital II

Grade Level: 10 - 12
Credits: 0.5
Description: Advanced digital logic methods. Topics include: small and medium scale integrated circuit logic families, interfacing techniques, arithmetic circuitry, programmable devices, and an introduction to microprocessors.
Content: Industrial Electronics Technology
Population: General

470131 - Digital II Lab

Grade Level: 10 - 12
Credits: 0.5
Description: Application of advanced digital logic methods. Topics include: small and medium scale integrated circuits logic families, interfacing techniques, arithmetic circuitry, programmable devices, and an introduction to microprocessors.
Content: Industrial Electronics Technology
Population: General

470132 - Robotics and Industrial Automation

Grade Level: 10 - 12
Credits: 0.5
Description: Introduction to the theory of robots including terminology, components, and basic programming. Provides theory of serve and non-servo robots. Topics include robot types, controllers, manipulators, basic robotic programming, and fluid power systems. Provides basic theory of flexible and computer-integrated manufacturing and control systems.
Content: Industrial Electronics Technology
Population: General

470133 - Robotics and Industrial Automation Lab A

Grade Level: 10 - 12
Credits: 0.5
Description: This is a lab course to accompany ENGT 260.
Content: Industrial Electronics Technology
Population: General

470134 - Robotics and Industrial Automation Lab B

Grade Level: 10 - 12
Credits: 0.5
Description: This is a lab course to accompany ENGT 260.
Content: Industrial Electronics Technology
Population: General

470135 - Co-op I (Electronics)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Industrial Electronics Technology
Population: General

470138 - Internship (Electronics)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Industrial Electronics Technology
Population: General

470199 - Special Topics - Industrial Electronics

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - Industrial Electronics but not described in the above courses.
Content: Industrial Electronics Technology
Population: General

Industrial Education - Industrial Maintenance Technology
(470300)

470301 - Shop Management

Grade Level: 10 - 12
Credits: 0.5
Description: Introduces the basic principles of sound and efficient shop management. Inventory control, fiscal management, and customer relations are emphasized.
Content: Industrial Maintenance Technology
Population: General

470305 - Co-op I (Ind Maint)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Industrial Maintenance Technology
Population: General

470308 - Internship (Ind Maint)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Industrial Maintenance Technology
Population: General

470311 - Applied Machining I

Grade Level: 9 - 12
Credits: 1
Description: Consists of intermediate level skills using machining machines and surface grinders. It will include the selection of grinding wheels. Applications in milling, lathe, benchwork, and utilizing gauge blocks and the sine bar are covered in this course. Surface grinding and abrasives are introduced and properties of metals are discussed.
Content: Industrial Maintenance Technology
Population: General

470312 - Applied Machining II

Grade Level: 9 - 12
Credits: 1
Description: Carries the student to higher levels in the operation of machine tools. Applications in milling, lathe, benchwork, and utilizing gauge blocks and the sine bar are covered in this course. Surface grinding and abrasives are introduced, and properties of metals are discussed.
Content: Industrial Maintenance Technology
Population: General

470313 - Fundamentals of Machine Tools-A (For Maintenance)

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: This course provides the basic principles needed for a solid foundation in machine tool technology. Areas and machines covered include shop safety, benchwork, drill press, power saw, measurement, mills, and lathes.
Content: Machine Tool Technology for Maintenance
Population: General

470314 - Fundamentals of Machine Tools-B (For Maintenance)

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: This course provides intermediate skill development in machine tool technology. The course builds on basic skills developed in MTT 110, especially in the calculation of safe cutting speed and feed rates for the drill press, power saw, mills, and lathes. Shop safety, benchwork, and precision measurement are also emphasized.
Content: Machine Tool Technology for Maintenance
Population: General

470316 - Advanced Hydraulic Systems

Grade Level: 11 - 12
Credits: 1
Description: The advanced hydraulic systems class will cover design, repair, and troubleshooting of hydraulic systems.
Content: Industrial Maintenance Technology
Population: General

470318 - Maintaining Industrial Equipment I

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to introduce the student to maintenance techniques and procedures used to maintain industrial equipment.
Content: Industrial Maintenance Technology
Population: General

470321 - Fluid Power

Grade Level: 10 - 12
Credits: 1
Description: This course is a study of fluid power theory, component identification and application, schematic reading, and basic calculations related to pneumatic and hydraulic systems and their operations.
Content: Industrial Maintenance Technology
Population: General

470322 - Industrial Maintenance Electrical Principles

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the theory of electricity and magnetism and the relationship of voltage, current, resistance, and power in electrical circuits. The course is designed to develop an understanding of alternating and direct current fundamentals. Students will apply formulas to analyze the operation of AC and DC circuits.
Content: Industrial Maintenance Technology
Population: General

470326 - Advanced Pneumatic Systems

Grade Level: 11 - 12
Credits: 1
Description: Design, repair, and troubleshooting of pneumatic systems will be covered in this course. Lecture.
Content: Industrial Maintenance Technology
Population: General

470328 - Welding for Maintenance

Grade Level: 9 - 12
Credits: 1
Description: This course will provide basic instruction needed for student to weld using SMAW, MIG, TIG and Oxy-Fuel.
Content: Welding for Maintenance
Population: General

470330 - Industrial Maintenance of PLC's

Grade Level: 11 - 12
Credits: 1
Description: This course includes the theory of Programmable Logic Controllers to include installation, programming, interfacing, and troubleshooting PLC's.
Content: Industrial Maintenance Technology
Population: General

470336 - Special Topics - Industrial Maintenance Technology

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Instruction related to Industrial Education - Industrial Maintenance Technology but not described in the above courses.
Content: Industrial Maintenance Technology
Population: General

470348 - Industrial Maintenance Electrical Motor Controls

Grade Level: 11 - 12
Credits: 1
Description: This course addresses the diversity of electric motor control devices and applications used in industry today with safety and electrical lockouts included.
Content: Industrial Maintenance Technology
Population: General

470349 - Refrigeration Fundamentals (For Maintenance)

Grade Level: 9 - 12
Credits: 1
Description: Introduces the fundamentals of refrigeration, refrigeration terms, and the basic refrigeration cycle. Proper use of tools, test equipment, and materials is stressed. Environmental issues including refrigerant handling are discussed. Refrigerant piping and methods used to join them are taught. General and specific safety is emphasized.
Content: HVAC for Maintenance
Population: General

470351 - Robotics and Automation (For Maintenance)

Grade Level: 11 - 12
Credits: 1
Description: Introduction to the theory of robots including terminology, components, and basic programming. Provides theory of serve and non-servo robots. Topics include robot types, controllers, manipulators, basic robotic programming, and fluid power systems. Provides basic theory of flexible and computer-integrated manufacturing and control systems.
Content: Industrial Maintenance Technology
Population: General

470354 - Shielded Metal Arc Welding (For Maintenance)

Grade Level: 9 - 12
Credits: 1
Description: Teaches students the identification, inspection, and maintenance of SMAW electrodes; principles of SMAW; the effects of variables on the SMAW process to weld plate and pipe; and metallurgy.
Content: Welding for Maintenance
Population: General

470358 - Electrical Components (Ind. Maint.)

Grade Level: 10 - 12
Credits: 1
Description: This course defines the electrical components of an air conditioning system. Different types of line voltages, wiring diagrams, and solid-state devices are included. Safety is emphasized.
Content: HVAC for Maintenance
Population: General

470360 - Applied Machining I (for Industrial Maint.)

Grade Level: 11 - 12
Credits: 1
Description: This course consists of intermediate level skills using machining machines and surface grinders. It will include the selection of grinding wheels. Applications in milling, lathe, benchwork, and utilizing gauge blocks and the sine bar are covered in this course. Surface grinding and abrasives are introduced and properties of metals are discussed.
Content: Machine Tool Technology for Maintenance
Population: General

470361 - Cooling and Humidification (for Industrial Maint.)

Grade Level: 11 - 12
Credits: 1
Description: Explains the working characteristics of air conditioning units with air and water cooled condensers. Line, low voltage and pneumatic controls will also be covered. ARI - Air Conditioning Systems: Subtopics A-E; System Installation and Start-Up: Subtopic D; System Servicing and Troubleshooting: Subtopic D; Controls: Subtopic D.
Content: HVAC for Maintenance
Population: General

470363 - Heating and Humidification (for Industrial Maint.)

Grade Level: 11 - 12
Credits: 1
Description: Explains heating systems from simple fossil fuel furnaces through more complex systems. This course will also concentrate on the line and control voltage circuitry pertaining to these systems. ARI Controls: Subtopics A-C; Heating Systems: Subtopics A-C; System Installation and Start-Up: Subtopics A and B; System Servicing and Troubleshooting: Subtopic C; Tools and Equipment: Subtopic D
Content: HVAC for Maintenance
Population: General

470365 - HVAC Electricity (for Industrial Maint.)

Grade Level: 10 - 12
Credits: 1
Description: This course defines the electrical components of an air conditioning system. Different types of line voltages, wiring diagrams, and solid-state devices are included. Safety is emphasized.
Content: HVAC for Maintenance
Population: General

470367 - Gas Metal Welding (Ind. Maint.)

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to teach students the identification, inspection, and maintenance of GMAW machines; identification, selection and storage of GMAW electrodes; principles of GMAW; and the effects of variables on the GMAW process. Theory and applications of related processes such as FCAW and SAW and metallurgy are also included.
Content: Welding for Maintenance
Population: General

Industrial Education - Diesel Technology
(470400)

470403 - Preventive Maintenance Lab

Grade Level: 10 - 12
Credits: 0.5
Description: This course provides the student with instruction on preventive maintenance practices, scheduled procedures, documents, DOT-required record system, and determining the needs for repair. It is assumed that: 1. In all areas, appropriate theory, safety, and support instruction will be required in the performance of each task; 2. This instruction includes identification and use of the appropriate tools and testing and measurement equipment required to accomplish certain tasks; 3. The student has received the necessary training to locate and use current reference and training materials from accepted industry resources (paper and electronic formats).
Content: Diesel Technology
Population: General

470404 - Diesel Technology

Grade Level: 9 - 12
Credits: 1-6
Description: This program focuses on the skills needed to analyze malfunctions and repair, build and maintain construction equipment, farm equipment, or medium and heavy trucks. This program includes climate control, computer fundamentals, mechanical concepts, introduction to diesel engines, and introduction to maintenance welding. Leadership and professionalism will be provided through SkillsUSA and the Professional Development Program.
Content: Diesel Technology
Population: General

470405 - Basic Equipment Operation for Mechanics

Grade Level: 10 - 12
Credits: 1
Description: This course is designed to give diesel technology students, who are seeking the construction equipment mechanic track, the basic operation of various types of heavy equipment. This class gives the student the skills needed to operate heavy equipment to the level that allows them to diagnose mechanical and other operational problems of the equipment. *** (This course is a prerequisite for the Construction Equipment Technician diploma program at Hazard Technical College and CVTC - Middlesboro Campus.)
Content: Diesel Technology
Population: General

470406 - Mechanical Concepts

Grade Level: 10 - 12
Credits: 0.5
Description: This course introduces the student to the basic fundamentals of precision measurement and its application to the industrial setting.
Content: Diesel Technology
Population: General

470411 - Commercial and Recreational Small Engine Technology/Marine Technology

Grade Level: 9 - 12
Credits: 1-6
Description: This course will focus on the student's practical information about lawn equipment, light commercial, marine and /or motorcycle engine construction, operation, lubrication, maintenance, troubleshooting, service, rebuilding, and repair. Leadership and professionalism will be developed through SkillsUSA and the Professional Development Program.
Content: Commercial and Recreational Small Engine Technology
Population: General

470420 - Introduction to Maintenance Welding

Grade Level: 10 - 12
Credits: 0.5
Description: This course provides training in the identification, inspection, and maintenance of welding electrodes. Training will be given in the principles and processes of welding plates and pipes. Instruction will be given in lab safety and basic oxy fuel cutting.
Content: Diesel Technology
Population: General

470421 - Introduction to Diesel Engines

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the fundamental concepts of the operation of two- and four-stroke diesel and gasoline engines. Topics included are basic engine components and their functions, engine performance terminology, two-and four-stroke operation, combustion principles, and engine disassembly with basic hand tools.
Content: Diesel Technology
Population: General

470422 - Brakes

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the theory and operation of air and hydraulic braking systems. This will include components such as: air and hydraulic actuators, air brake chambers, disc drums, linings, and brake adjustments. It is assumed that: 1. In all areas, appropriate theory, safety, and support instruction will be required in the performance of each task; 2. This instruction includes

identification and use of the appropriate tools and testing and measurement equipment required to accomplish certain tasks; 3. The student has received the necessary training to locate and use current reference and training materials from accepted industry resources (paper and electronic formats).
Content: Diesel Technology
Population: General

470423 - Diesel Engine Repair

Grade Level: 9 - 12
Credits: 1
Description: This course provides a series of lectures and demonstrations on the fundamentals of engine repair, troubleshooting, and engine operation and maintenance.
Content: Diesel Technology
Population: General

470424 - Steering and Suspension (Diesel)

Grade Level: 9 - 12
Credits: 1
Description: The theory and operation of steering and suspension systems are presented including manual steering, power steering, springs and supports, steering linkage and alignment.
Content: Diesel Technology
Population: General

470425 - Electrical System for Diesel Equipment

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the student to the principles, theories, and concepts of the automotive electrical system that include the unique diagramming, coding and locating of wiring, and component devices.
Content: Diesel Technology
Population: General

470426 - Hydraulics (Diesel)

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the theory and operation of a complete hydraulic system including all components. Components include: fluids, piping, reservoirs, actuators, directional valves, servo valves, pressure control valves, pumps, complete hydraulic circuits and accessories. It is assumed that: 1. In all areas, appropriate theory, safety, and support instruction will be required in the performance of each task; 2. This instruction includes identification and use of the appropriate tools and testing and measurement equipment required to accomplish certain tasks; 3. The student has received the necessary training to locate and use current reference and training materials from accepted industry resources (paper and electronic formats).
Content: Diesel Technology
Population: General

470427 - Power Train (Diesel)

Grade Level: 10 - 12
Credits: 1
Description: This course emphasizes the theory and principles of the power train systems. Students learn to diagnose and repair components, such as: clutches, drive lines, propeller shafts, differentials, and final drives. It is assumed that: 1. In all areas, appropriate theory, safety, and support instruction will be required in the performance of each task; 2. This instruction includes identification and use of the appropriate tools and testing and measurement equipment required to accomplish certain tasks; 3. The student has received the necessary training to locate and use current reference and training materials from accepted industry resources (paper and electronic formats).
Content: Diesel Technology
Population: General

470428 - Powertrain for Construction Equipment

Grade Level: 10 - 12
Credits: 0.5
Description: Students learn the theory and principles of the operation of power transmissions. They learn to diagnose and repair power train units including torque connectors, standard and automatic transmissions.
Content: Diesel Technology
Population: General

470429 - Undercarriage

Grade Level: 10 - 12
Credits: 0.5
Description: Students learn the theory and operation of undercarriage systems and their components. These components include endless track, roller track, roller frames, idlers, roller supports, and mainframes.
Content: Diesel Technology
Population: General

470432 - Introduction to Maintenance Welding Lab

Grade Level: 10 - 12
Credits: 0.5
Description: This course provides laboratory experiences in which students acquire the manipulative skills needed to weld surface, fillet, and groove welds in flat and horizontal positions. The studies will perform oxy fuel cutting operations.
Content: Diesel Technology
Population: General

470433 - Undercarriage Lab

Grade Level: 10 - 12
Credits: 0.5
Description: This course provides opportunities to troubleshoot and repair some parts of undercarriage systems and their components. These components include endless track, roller track, roller frames, idlers, roller supports, and mainframes.
Content: Diesel Technology
Population: General

470436 - Powertrain for Construction Equipment Lab

Grade Level: 10 - 12
Credits: 0.5
Description: Students troubleshoot, disassemble, evaluate parts, and reassemble components of a power train system, such as torque connectors, standard and automatic transmissions, and drive lines.
Content: Diesel Technology
Population: General

470438 - Climate Control (Diesel)

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the theory and operation of heating and air conditioning systems. Air conditioning terminology and how to service and troubleshoot mechanical and electrical circuits of heating and air conditioning systems as emphasized. It is assumed that: 1. In all areas, appropriate theory, safety, and support instruction will be required in the performance of each task 2. This instruction includes identification and use of the appropriate tools and testing and measurement equipment required to accomplish certain tasks; 3. The student has received the necessary training to locate and use current reference and training materials from accepted industry resources (paper and electronic formats).
Content: Diesel Technology
Population: General

470442 - Co-op I (Diesel)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student’s identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Diesel Technology
Population: General

470445 - Diesel/Medium Heavy Truck Internship I

Grade Level: 11 - 12
Credits: 1
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Diesel Technology
Population: General

470477 - Special Problems I (Diesel)

Grade Level: 10 - 12
Credits: 0.5
Description: Courses designed to enhance a student's understanding of shop situations and problems that arise when dealing with live work. It expands on the task lists that have already been taught in previous Diesel/Medium Heavy Duty Truck Courses. The instructor will teach students how to deal with real world problems that arise when repairing vehicles subjected to various types of customer road use.
Content: Diesel Technology
Population: General

470478 - Special Problems II (Diesel)

Grade Level: 10 - 12
Credits: 1
Description: Courses designed to enhance a student's understanding of shop situations and problems that arise when dealing with live work. It expands on the task lists that have already been taught in previous Diesel/Medium Heavy Duty Truck Courses. The instructor will teach students how to deal with real world problems that arise when repairing vehicles subjected to various types of customer road use.
Content: Diesel Technology
Population: General

470479 - Special Problems III (Diesel)

Grade Level: 10 - 12
Credits: 1
Description: Courses designed to enhance a student's understanding of shop situations and problems that arise when dealing with live work. It expands on the task lists that have already been taught in previous Diesel/Medium Heavy Duty Truck Courses. The instructor will teach students how to deal with real world problems that arise when repairing vehicles subjected to various types of customer road use.
Content: Diesel Technology
Population: General

470499 - Special Topics - Diesel Technology

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - Diesel Technology but not described in the above courses.
Content: Diesel Technology
Population: General

Industrial Education - Automotive Technology
(470500)

470501 - Co-op I (Auto)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Automotive Technology
Population: General

470504 - Automotive Internship I

Grade Level: 11 - 12
Credits: 1
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Automotive Technology
Population: General

470507 - Automotive Maintenance & Light Repair Section A

Grade Level: 10 - 12
Credits: 1
Description: These courses introduce the student to the principles, theories, and concepts of Automotive Technology, and include instruction in the maintenance and light repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care and cleaning of customers vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470509 - Automotive Maintenance & Light Repair Section B

Grade Level: 10 - 12
Credits: 1
Description: These courses introduce the student to the principles, theories, and concepts of Automotive Technology, and include instruction in the maintenance and light repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care and cleaning of customers vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470511 - Automotive Maintenance & Light Repair Section C

Grade Level: 10 - 12
Credits: 1
Description: These courses introduce the student to the principles, theories, and concepts of Automotive Technology, and include instruction in the maintenance and light repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care and cleaning of customers vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470513 - Automotive Maintenance & Light Repair Section D

Grade Level: 10 - 12
Credits: 1
Description: These courses introduce the student to the principles, theories, and concepts of Automotive Technology, and include instruction in the maintenance and light repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care and cleaning of customers vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470515 - Automobile Service Technology Section A

Grade Level: 10 - 12
Credits: 1
Description: These courses present the theory, component identification, operation, diagnosis, and the service and repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also locate and use current reference and training materials from accepted industry publications and resources, and write industry standard work orders.
Content: Automotive Technology
Population: General

470517 - Automobile Service Technology Section B

Grade Level: 10 - 12
Credits: 1
Description: These courses present the theory, component identification, operation, diagnosis, and the service and repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also locate and use current reference and training materials from accepted industry publications and resources, and write industry standard work orders.
Content: Automotive Technology
Population: General

470519 - Automobile Service Technology Section C

Grade Level: 10 - 12
Credits: 1
Description: These courses present the theory, component identification, operation, diagnosis, and the service and repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also locate and use current reference and training materials from accepted industry publications and resources, and write industry standard work orders.
Content: Automotive Technology
Population: General

470521 - Automobile Service Technology Section D

Grade Level: 10 - 12
Credits: 1
Description: These courses present the theory, component identification, operation, diagnosis, and the service and repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for

performing each task. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also locate and use current reference and training materials from accepted industry publications and resources, and write industry standard work orders.
Content: Automotive Technology
Population: General

470523 - Master Automobile Service Technology Section A

Grade Level: 10 - 12
Credits: 1
Description: This advanced automotive course presents the theory, component identification, operation, diagnosis, and the service and repair of Engines and Engine Systems, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also locate and use current reference and training materials from accepted industry publications and resources, and write industry standard work orders which include information regarding problem resolution and the results of the work performed. NOTE: Master Automobile Service Technology Section A is NOT a pre-requisite for Master Automobile Service Technology Section B. Either section can be taken first. The necessary pre-requisites for the Master Automobile Service Technology Courses are all sections of the Automotive Maintenance and Light Repair Courses, and all sections of the Automobile Service Technology Courses.
Content: Automotive Technology
Population: General

470525 - Master Automobile Service Technology Section B

Grade Level: 12 - 12
Credits: 1
Description: This advanced automotive course presents the theory, component identification, operation, diagnosis, and the service and repair of Engines and Engine Systems, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also locate and use current reference and training materials from accepted industry publications and resources, and write industry standard work orders which include information regarding problem resolution and the results of the work performed. NOTE: Master Automobile Service Technology Section A is NOT a pre-requisite for Master Automobile Service Technology Section B. Either section can be taken first. The necessary pre-requisites for the Master Automobile Service Technology Courses are all sections of the Automotive Maintenance and Light Repair Courses, and all sections of the Automobile Service Technology Courses.
Content: Automotive Technology
Population: General

470527 - Light Vehicle Diesel Engines Section A

Grade Level: 10 - 12
Credits: 1
Description: These courses introduce the student to the principles, theories, and concepts of Light Vehicle Diesel Engines, and include instruction in General Engine Diagnosis, Cylinder Head and Valve Train Diagnosis and Repair, Engine Block Diagnosis and Repair, Lubrication and Cooling Systems

Diagnosis and Repair, Air Induction and Exhaust Systems Diagnosis and Repair, and Fuel System Diagnosis and Repair. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care of customer's vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470528 - Light Vehicle Diesel Engines Section B

Grade Level: 10 - 12
Credits: 1
Description: "These courses introduce the student to the principles, theories, and concepts of Light Vehicle Diesel Engines, and include instruction in General Engine Diagnosis, Cylinder Head and Valve Train Diagnosis and Repair, Engine Block Diagnosis and Repair, Lubrication and Cooling Systems Diagnosis and Repair, Air Induction and Exhaust Systems Diagnosis and Repair, and Fuel System Diagnosis and Repair. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care of customer's vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470529 - Light Vehicle Diesel Engines Section C

Grade Level: 10 - 12
Credits: 1
Description: "These courses introduce the student to the principles, theories, and concepts of Light Vehicle Diesel Engines, and include instruction in General Engine Diagnosis, Cylinder Head and Valve Train Diagnosis and Repair, Engine Block Diagnosis and Repair, Lubrication and Cooling Systems Diagnosis and Repair, Air Induction and Exhaust Systems Diagnosis and Repair, and Fuel System Diagnosis and Repair. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care of customer's vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470530 - Light Vehicle Diesel Engines Section D

Grade Level: 10 - 12
Credits: 1
Description: "These courses introduce the student to the principles, theories, and concepts of Light Vehicle Diesel Engines, and include instruction in General Engine Diagnosis, Cylinder Head and Valve Train Diagnosis and Repair, Engine Block Diagnosis and Repair, Lubrication and Cooling Systems Diagnosis and Repair, Air Induction and Exhaust Systems Diagnosis and Repair, and Fuel System Diagnosis and Repair. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care of customer's vehicles. The instruction

will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The student will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.
Content: Automotive Technology
Population: General

470545 - Carburetors and Fuel Systems

Grade Level: 10 - 12
Credits: 1
Description: The student will be able to identify parts of a motorcycle carburetor and discuss the components and operations of various carburetor circuits. The student will also be able to remove, clean, and install a carburetor and remove, clean, and install a fuel valve.
Content: Automotive Technology
Population: General

470546 - Precision Measurement

Grade Level: 10 - 12
Credits: 0.5
Description: This class introduces the student to the basic fundamentals of precision measurement and its application in the industrial setting.
Content: Automotive Technology
Population: General

470556 - Basic Automotive Electricity

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the student to the principles, theories, and concepts of the automotive electrical system that include the unique diagramming, coding and locating of wiring, and component devices.
Content: Automotive Technology
Population: General

470566 - Special Topics - Automotive Technology

Grade Level: 9 - 12
Credits: 1
Description: Instruction related to Industrial Education - Automotive Technology but not described in the above courses.
Content: Automotive Technology
Population: General

470577 - Automotive Special Problems I

Grade Level: 11 - 12
Credits: 1
Description: Courses designed to enhance a student's understanding of shop situations and problems that arise when dealing with live work. It expands on the task lists that have already been taught in previous Automotive Technology Courses. The instructor will teach students how to deal with real world problems that arise when repairing vehicles subjected to various types of customer road use.
Content: Automotive Technology
Population: General

470578 - Automotive Special Problems II

Grade Level: 11 - 12
Credits: 1
Description: Courses designed to enhance a student's understanding of shop situations and problems that arise when dealing with live work. It expands on the task lists that have already been taught in previous Automotive Technology Courses. The instructor will teach students how to deal with real world problems that arise when repairing vehicles subjected to various types of customer road use.
Content: Automotive Technology
Population: General

470579 - Automotive Special Problems III

Grade Level: 11 - 12
Credits: 1
Description: Courses designed to enhance a student's understanding of shop situations and problems that arise when dealing with live work. It expands on the task lists that have already been taught in previous Automotive Technology Courses. The instructor will teach students how to deal with real world problems that arise when repairing vehicles subjected to various types of customer road use.
Content: Automotive Technology
Population: General

470584 - Automotive Special Problems IV

Grade Level: 11 - 12
Credits: 1
Description: Courses designed to enhance a student's understanding of shop situations and problems that arise when dealing with live work. It expands on the task lists that have already been taught in previous Automotive Technology Courses. The instructor will teach students how to deal with real world problems that arise when repairing vehicles subjected to various types of customer road use.
Content: Automotive Technology
Population: General

Industrial Education - Auto Body Technology/ Collision Repair and Refinish
(470600)

470601 - Co-op I (Collision Repair)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Collision Repair and Refinish Technology
Population: General

470604 - Collision Repair Internship I

Grade Level: 11 - 12
Credits: 1
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Collision Repair and Refinish Technology
Population: General

470620 - Structural Analysis and Damage Repair I

Grade Level: 10 - 12
Credits: 1
Description: This course presents instruction on the analysis, repair and replacement of structural panels on unibody automobiles and body and frame alignment on unibody and frame cars. It will be taught by demonstration and lecture.
Content: Collision Repair and Refinish Technology
Population: General

470622 - Structural Analysis and Damage Repair II

Grade Level: 11 - 12
Credits: 1
Description: This course presents instruction on the analysis, repair and replacement of structural panels on unibody automobiles and body and frame alignment on unibody and frame cars. It will be taught by demonstration and lecture.
Content: Collision Repair and Refinish Technology
Population: General

470628 - Damage Analysis, Estimating, and Customer Service

Grade Level: 10 - 12
Credits: 0.5
Description: This course instructs students on how to perform Damage Analysis, Estimating, and providing quality Customer Service. For every task in Damage Analysis, Estimating and Customer Service, the following safety requirement must be strictly enforced: Comply with personal and environmental safety practices associated with clothing and the use of gloves; respiratory protection; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations.
Content: Collision Repair and Refinish Technology
Population: General

470631 - Introduction to Collision Repair

Grade Level: 9 - 12
Credits: 1/2-1
Description: This course introduces the student to safety, sanding, grinding, pulling, roughing and filling; the use of tools and equipment; and preparing and priming automotive panels through lectures and demonstrations.
Content: Collision Repair and Refinish Technology
Population: General

470632 - Auto Body Technology/ Collision Repair and Refinish

Grade Level: 9 - 12
Credits: 1-6
Description: This program includes introduction to auto body repair, non-structural analysis and damage repair, structural analysis and damage repair, and painting and refinishing. Leadership and professionalism will be provided through SkillsUSA and the Professional Development Program.
Content: Collision Repair and Refinish Technology
Population: General

470633 - Non-Structural Damage Repair I

Grade Level: 9 - 12
Credits: 1
Description: This course gives instruction and provides practical experience in replacing and aligning bolts on automotive parts such as doors, hoods, and fenders; as well as instruction on the repair and replacement of non-structural weld-on automotive panels by aligning, welding, cutting, and drilling through demonstrations and lectures. It will be taught by demonstration and hands-on practice. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470635 - Plastics and Adhesives

Grade Level: 9 - 12
Credits: 1
Description: This course will be designed for students to satisfactorily complete collision repair tasks or to enhance their skills in the occupational area.
Content: Collision Repair and Refinish Technology
Population: General

470639 - Painting and Refinishing I

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in the use of lacquer, acrylic enamel and base coat/clear coat refinishing products, masking procedures, preparations and paint problems. It will be taught by demonstration and lecture. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470640 - Painting and Refinishing II

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in the use of lacquer, acrylic enamel and base coat/clear coat refinishing products, masking procedures, preparations and paint problems. It will be taught by demonstration and lecture. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470642 - Mechanical and Electrical Components I

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in the diagnosis, repair and/or replacement of suspension, steering, electrical, brake, drive train, fuel, exhaust, and restraint systems. It will be taught by demonstration and lecture. The theories and concepts of heating and air conditioning

systems will also be discussed and demonstrated. This course provides practical experience in the inspection and repair or replacement of suspension and steering systems. It will be taught by demonstration and hands-on experience. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470644 - Non-Structural Damage Repair II

Grade Level: 10 - 12
Credits: 1
Description: This course gives instruction and provides practical experience in replacing and aligning bolts on automotive parts such as doors, hoods, and fenders; as well as instruction on the repair and replacement of non-structural weld-on automotive panels by aligning, welding, cutting, and drilling through demonstrations and lectures.
Content: Collision Repair and Refinish Technology
Population: General

470645 - Painting and Refinishing III

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in the use of lacquer, acrylic enamel and base coat/clear coat refinishing products, masking procedures, preparations and paint problems. It will be taught by demonstration and lecture. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470647 - Painting and Refinishing Special Projects

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in the use of lacquer, acrylic enamel and base coat/clear coat refinishing products, masking procedures, preparations and paint problems. It will be taught by demonstration and lecture. The skills required are most effectively taught and practiced on live work. due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470649 - Non-Structural Analysis and Damage Repair III

Grade Level: 10 - 12
Credits: 1
Description: This course gives instruction and provides practical experience in replacing and aligning bolts on automotive parts such as doors, hoods, and fenders; as well as instruction on the repair and replacement of non-structural weld-on automotive panels by aligning, welding, cutting, and drilling through demonstrations and lectures. It will be taught by demonstration and hands-on practice. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks ay carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470651 - Non-Structural Analysis and Damage Repair Special Projects

Grade Level: 10 - 12
Credits: 1
Description: This course gives instruction and provides practical experience in replacing and aligning bolts on automotive parts such as doors, hoods, and fenders; as well as instruction on the repair and replacement of non-structural weld-on automotive panels by aligning, welding, cutting and drilling through demonstrations and lectures. It will be taught by demonstration and hands-on practice. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470652 - Non-Structural analysis and Damage Repair Special Projects Lab

Grade Level: 10 - 12
Credits: 1
Description: This course provides practical experience in replacing and alignment of bolts on automotive parts such as doors, hoods, and fenders. It will be taught by demonstration and hands-on practice. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470653 - Mechanical and Electrical Components II

Grade Level: 11 - 12
Credits: 1
Description: This course provides instruction in the diagnosis, repair and/or replacement of suspension, steering, electrical, brake, drive train, fuel, exhaust, and restraint systems. It will be taught by demonstration and lecture. The theories and concepts of heating and air conditioning systems will also be discussed and demonstrated. This course provides practical experience in the inspection and repair or replacement of suspension and steering systems. It will be taught by demonstration and hands-on experience. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.
Content: Collision Repair and Refinish Technology
Population: General

470677 - Special Projects I (Collision Repair)

Grade Level: 10 - 12
Credits: 0.5
Description: This course will be designed for students to satisfactorily complete collision repair tasks or to enhance their skills in the occupational area.
Content: Collision Repair and Refinish Technology
Population: General

470678 - Special Projects II (Collision Repair)

Grade Level: 10 - 12
Credits: 1
Description: This course will be designed for students to satisfactorily complete collision repair tasks to enhance their skills in the occupational area.
Content: Collision Repair and Refinish Technology
Population: General

470679 - Special Projects III (Collision Repair)

Grade Level: 10 - 12
Credits: 1
Description: This course will be designed for students to satisfactorily complete collision tasks to enhance their skills in the occupational area.
Content: Collision Repair and Refinish Technology
Population: General

470699 - Special Topics - Auto Body Repair

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - Auto Body Repair but not described in the above courses.
Content: Collision Repair and Refinish Technology
Population: General

Industrial Education - Aviation Technology
(470700)

470704 - Aviation Technology

Grade Level: 9 - 12
Credits: 1-6
Description: Instruction in aviation careers, aviation history, air traffic control, aircraft maintenance, aerodynamics and flight is the basis for this program. Knowledge of various aircraft systems, maintenance practices, and flight principles are used to develop skills in troubleshooting, and problem solving. Leadership and professionalism will be provided through SkillsUSA and the Professional Development Program.
Content: Aviation Technology
Population: General

470705 - Flight

Grade Level: 9 - 12
Credits: 1-6
Description: The theory and operation of aviation flight.
Content: Aviation Technology
Population: General

470710 - Aviation Math

Grade Level: 10 - 12
Credits: 0.25
Description: This course provides instruction in general math and calculations used in maintenance and repair of aircraft and aircraft power plants. It will be taught by lecture, demonstrations, worksheets, and reading assignments
Content: Aviation Technology
Population: General

470711 - Blue Print Reading & Drawing

Grade Level: 10 - 12
Credits: 0.25
Description: This course provides instruction in reading and interpretation of basic industrial and aircraft blueprints. It is taught by lecture, demonstration, worksheets, reading assignments, and projects.
Content: Aviation Technology
Population: General

470712 - Physics

Grade Level: 10 - 12
Credits: 0.25
Description: Provides instruction in basic principles of physics as related to aviation maintenance. This is taught by lecture, demonstration, worksheets, reading assignments and projects.
Content: Aviation Technology
Population: General

470713 - Aircraft Maintenance I

Grade Level: 11 - 12
Credits: 1
Description: This course provides instruction in the use of aircraft maintenance publications, use and completion of required forms and records, and aircraft mechanic privileges and limitations.
Content: Aviation Technology
Population: General

470714 - Aircraft Maintenance II

Grade Level: 11 - 12
Credits: 1
Description: This course provides instruction in the identification, cause, prevention, removal, and treatment of corrosion. It also includes interior and exterior cleaning of the aircraft.
Content: Aviation Technology
Population: General

470720 - Aircraft Non-Metallic Structures

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in the inspection, testing, repair, selection, and installation of aircraft fabric covering: the identification, application, and inspection of aircraft finishing materials. It also covers inspection, service, and repair of metal and composite aircraft structures, including laminated and honeycomb structures, plastic materials, interior furnishings, and access openings.
Content: Aviation Technology
Population: General

470721 - Sheet Metal Aircraft Structures

Grade Level: 10 - 12
Credits: 1
Description: This course covers the principles of sheet metal layout, bending, rivet installation, structural inspection, materials and fasteners, and repair methods.
Content: Aviation Technology
Population: General

470722 - Aircraft Wood & Welding

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in the inspection and repair of welded aircraft assemblies and structures as well as the repair of wood structures.
Content: Aviation Technology
Population: General

470723 - Assembly, Rigging & Inspection

Grade Level: 10 - 12
Credits: 1
Description: This course covers the methods and techniques used in the assembly of subunits and major components of the airframe. It also covers the rigging of primary, secondary, and auxiliary control surfaces; theory of flight; and jacking of aircraft, in addition to inspection of airframes to determine airworthiness.
Content: Aviation Technology
Population: General

470724 - Aircraft Environment & Fuel Systems

Grade Level: 10 - 12
Credits: 1
Description: This course covers instruction on checking, inspection, servicing, repair, and troubleshooting of the heating, cooling, air conditioning, pressurization, and oxygen systems; rain and ice control and removal systems; and fire detection and extinguishing systems.
Content: Aviation Technology
Population: General

470725 - Aircraft Utility Sys & Basic Electricity

Grade Level: 10 - 12
Credits: 1
Description: This course provides instruction in inspecting, checking, troubleshooting and repair of heading, speed, altitude, time, attitude, temperature, pressure and position indicating systems, and installation of instruments. It also includes inspection, checking and servicing of speed and take-off warning systems, electrical brake controls, antiskid systems, auto pilot, and navigation and communication systems.
Content: Aviation Technology
Population: General

470726 - Hydraulic, Pneumatic & Landing Gear

Grade Level: 10 - 12
Credits: 1
Description: Repair hydraulic and pneumatic power systems components; identify and select hydraulic fluids; and inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems. Inspect, check, service and repair landing gear, retraction systems, shock struts, brakes, wheels, tires, and steering system. Instruction provided by lecture, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470727 - Aircraft Electrical Systems

Grade Level: 10 - 12
Credits: 1
Description: This course includes checking, inspecting, troubleshooting, and repair of aircraft electrical system and system components. Instruction is provided by lecture, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470728 - Turbine Engines & Theory

Grade Level: 10 - 12
Credits: 1
Description: This course covers the construction, repair, and overhaul of turbine engines.
Content: Aviation Technology
Population: General

470729 - Turbine Operation & Inspection

Grade Level: 10 - 12
Credits: 1
Description: This course includes the operation and inspection of turbine engines.
Content: Aviation Technology
Population: General

470730 - Reciprocating Engine Overhaul

Grade Level: 10 - 12
Credits: 1
Description: This course covers inspection, checking, servicing, and repair of opposed and radial engines and reciprocating engine installation. It will be taught by lecture, demonstration, student feed-back, and participation.
Content: Aviation Technology
Population: General

470731 - Recip Eng Theory, Operations & Inspection

Grade Level: 10 - 12
Credits: 1
Description: This course covers theory and development of the aircraft internal combustion engine, in addition to instruction in the use of engine construction and repair. It also includes powerplant conformity and airworthiness inspections.
Content: Aviation Technology
Population: General

470732 - Engine Fuel Systems & Components

Grade Level: 10 - 12
Credits: 1
Description:
Content: Aviation Technology
Population: General

470733 - Fuel Metering Systems

Grade Level: 10 - 12
Credits: 1
Description: This course covers the operation, inspection, service, and repair of fuel metering systems by lecture, reading assignments, worksheets, demonstrations, and practical projects.
Content: Aviation Technology
Population: General

470734 - Engine Induction Systems

Grade Level: 10 - 12
Credits: 1
Description: This course covers inspection, checking, troubleshooting, servicing, and repair of engine ice and rain control systems, heat exchangers, superchargers, carburetor air intake, and induction manifolds by lecture, reading assignments, worksheets, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470735 - Propeller Systems & Components

Grade Level: 10 - 12
Credits: 0.5
Description: The student will inspect, check, service, and repair propeller synchronizing and ice control systems; identify and select propeller lubricants; balance propellers; repair propeller control system components. Inspect, check, service, and repair fixed-pitch, constant-speed, and feathering propellers and propeller governing systems and to install, troubleshoot, and remove propellers. Instruction provided by lecture, reading assignments, worksheets, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470736 - Engine Instrument Systems

Grade Level: 10 - 12
Credits: 1
Description: This course covers troubleshooting, servicing and repair of fluid rate-of-flow indicating systems, and repair of engine temperature, pressure, and r.p.m. indicating systems by lecture, reading assignments, worksheets, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470737 - Engine Exhaust Systems

Grade Level: 10 - 12
Credits: 0.5
Description: This course covers inspection and repair of engine exhaust system components by lecture, reading assignments, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470738 - Aviation Maintenance Regulations

Grade Level: 10 - 12
Credits: 0.25
Description: This course provides instruction in the use of aircraft maintenance publications, use and completion of required forms and records, and aircraft mechanic privileges and limitations
Content: Aviation Technology
Population: General

470739 - Aircraft Cleaning & Corrosion Control

Grade Level: 10 - 12
Credits: 0.25
Description: This course provides instruction in the identification, cause, prevention, removal and treatment of corrosion. It also includes interior and exterior cleaning of the aircraft.
Content: Aviation Technology
Population: General

470740 - Ground Handling & Servicing

Grade Level: 10 - 12
Credits: 0.25
Description: Basic handling and ground service techniques of the aircraft taught by lecture, demonstration, worksheets, reading assignments, and projects.
Content: Aviation Technology
Population: General

470741 - Fluid Lines & Fittings

Grade Level: 10 - 12
Credits: 0.25
Description: This course teaches basic hydraulic functions, the fabrication of tubing and flex hoses, as well as seal compatibility. This is taught by lectures, demonstrations, worksheets, reading assignments, and projects.
Content: Aviation Technology
Population: General

470742 - Aircraft Weight & Balance

Grade Level: 10 - 12
Credits: 0.25
Description: This course teaches knowledge and skills necessary in measuring, calculating, and documenting aircraft weight and balance.
Content: Aviation Technology
Population: General

470743 - Engine Fire Protection Systems

Grade Level: 10 - 12
Credits: 1
Description: This course covers inspecting, checking, servicing, troubleshooting, and repair of engine fire detection systems by lecture, reading assignments, worksheets, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470744 - Engine Cooling Systems

Grade Level: 10 - 12
Credits: 1
Description: This course covers inspection and repair of engine cooling system components by lecture, reading assignments, worksheets, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470745 - Lubrication Systems & Components

Grade Level: 10 - 12
Credits: 1
Description: This course covers purpose, use, and selection of lubricants; repair engine lubrication system components; inspect, check, service, troubleshoot and repair engine lubrication systems taught by lecture, reading assignments, worksheets, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470746 - Engine Electrical Systems

Grade Level: 10 - 12
Credits: 1
Description: This course covers repair of engine electrical system components, and instruction on how to install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices by lecture, reading assignments, demonstration, and practical projects.
Content: Aviation Technology
Population: General

470747 - Engine Ignition Systems

Grade Level: 10 - 12
Credits: 1
Description: This course teaches students how to operate and overhaul magneto and ignition harness; repair engine ignition system components; inspect, check, service, troubleshoot, and repair reciprocating and turbine engine ignition systems by lecture, reading assignments, worksheets, demonstration, and practical projects
Content: Aviation Technology
Population: General

470771 - Maintenance A&P

Grade Level: 9 - 12
Credits: 1-6
Description: The theory and operation of aviation maintenance.
Content: Aviation Technology
Population: General

470799 - Special Topics - Aviation Technology

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - Aviation Technology but not described in the above courses.
Content: Aviation Technology
Population: General

Industrial Education - Small Engines/Motorcycle Technology (470800)

470818 - Fundamentals of Mathematics

Grade Level: 9 - 12
Credits: 1
Description: This course concentrates on basic math and is designed to assist the student in mastering and applying math skills in the areas of whole numbers, fractions, decimals, percentages, basic measurements, simple equations, ratio and proportions, computed measurements, tables and graphs, and use of the hand-held calculator.
Content: Commercial and Recreational Small Engine Technology
Population: General

470821 - Small Engine Repair I

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the student to small engines and their various applications. Also included are the identification and demonstration of hand tools, special tools, and measuring tools. It covers the selection and use of shop manuals and applying safety procedures when working with small engines.
Content: Commercial and Recreational Small Engine Technology
Population: General

470836 - Special Topics - Small Engines

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Instruction related to Industrial Education - Small Engines but not described in the above courses.
Content: Commercial and Recreational Small Engine Technology
Population: General

Industrial Education - Machine Tool Technology
(470900)

470911 - Applied Machining I

Grade Level: 9 - 12
Credits: 1
Description: Consists of intermediate level skills using machining machines and surface grinders. It will include the selection of grinding wheels. Applications in milling, lathe, benchwork, and utilizing gauge blocks and the sine bar are covered in this course. Surface grinding and abrasives are introduced and properties of metals are discussed.
Content: Machine Tool Technology
Population: General

470912 - Applied Machining II

Grade Level: 9 - 12
Credits: 1
Description: Carries the student to higher levels in the operation of machine tools. Applications in milling, lathe, benchwork, and utilizing gauge blocks and the sine bar are covered in this course. Surface grinding and abrasives are introduced, and properties of metals are discussed.
Content: Machine Tool Technology
Population: General

470913 - Fundamentals of Machine Tools-A

Grade Level: 9 - 12
Credits: 1
Description: This course provides the basic principles needed for a solid foundation in machine tool technology. Areas and machines covered include shop safety, benchwork, drill press, power saw, measurement, mills, and lathes.
Content: Machine Tool Technology
Population: General

470914 - Fundamentals of Machine Tools-B

Grade Level: 9 - 12
Credits: 1
Description: This course provides intermediate skill development in machine tool technology. The course builds on basic skills developed in MTT 110, especially in the calculation of safe cutting speed and feed rates for the drill press, power saw, mills, and lathes. Shop safety, benchwork, and precision measurement are also emphasized.
Content: Machine Tool Technology
Population: General

470915 - Manual Programming

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the student to CNC format and the Cartesian Coordinate System. It also introduces the student to CNC codes and programming, set-up and operation of CNC machine tools. The student will utilize process planning and manual programming for CNC equipment. The student will load a CNC program and set tool and work offsets.
Content: Machine Tool Technology
Population: General

470921 - Blueprint Reading for Machinists

Grade Level: 10 - 12
Credits: 1
Description: Provides the student with a beginning and advanced series of lectures, demonstrations, and practice exercise in the study of prints. Safety will be emphasized as an integral part of this course.
Content: Machine Tool Technology
Population: General

470922 - Mechanical Blueprint Reading

Grade Level: 10 - 12
Credits: 0.5
Description: Provides the student with an advanced series of lectures, demonstrations, and practice exercises in the study of prints involving math (both decimal and metric), combination of lines, multi-view drawings, assembly drawings, fasteners, machining and construction processes, datum coordinates, numerical control prints, sheet metal prints, welding, casting and forging prints. Safety will be emphasized.
Content: Machine Tool Technology
Population: General

470924 - Advanced Dimensioning and Measurement

Grade Level: 10 - 12
Credits: 1
Description: Presents an in-depth study of advanced industrial dimensioning principles, tolerances, fits, and A.N.S.I. standards. Exploration of the shape and geometric characteristics of parts through geometric tolerancing.
Content: Machine Tool Technology
Population: General

470925 - CAD/CAM/CNC

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the student to CAD/CAM/CNC systems which includes CAM software. The student will utilize process planning, manual programming and CAD/CAM for CNC equipment. This student will load a CNC program and set tool and work offsets, and machine part.
Content: Machine Tool Technology
Population: General

470926 - Introduction to Conversational Programming

Grade Level: 10 - 12
Credits: 1
Description: Introduce students to conversational programming guidelines, which will include program preparation, conversational input, and minor editing.
Content: Machine Tool Technology
Population: General

470927 - Conversational Editing and Subroutines

Grade Level: 10 - 12
Credits: 1
Description: Introduces students to performing editing routines, to subroutines, and to programs that contain loops. Students will also interpret error messages from the control.
Content: Machine Tool Technology
Population: General

470928 - Metrology/Control Charts

Grade Level: 10 - 12
Credits: 0.5
Description: Provides the basic principles in using precision measurement instruments and their application to inspection and quality control.
Content: Machine Tool Technology
Population: General

470929 - Co-op I (Machine Tool)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Machine Tool Technology
Population: General

470932 - Internship (Machine Tool)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Machine Tool Technology
Population: General

470979 - Special Problems (CMM)

Grade Level: 10 - 12
Credits: 1
Description: This is a course designed for the student who has demonstrated specific needs.
Content: Machine Tool Technology
Population: General

Industrial Education - CAD/Drafting Technology (480100)

480101 - Digital Literacy (CAD)

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: The impact of computers on society, and ethical issues are presented. Students use a microcomputer and application software, including word processing, database, spreadsheets, presentation software, and the Internet, to prepare elementary documents, reports, and electronic presentations.
Content: Drafting
Population: General

480102 - Computer Fundamentals (For CAD)

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Students use a microcomputer to develop skills in using the operating system and application software including word processing, database, spreadsheet, and the Internet. Communication skills, terminology, impact on society, technology awareness, and ethical issues are presented. This course is intended for the student with some computer-related experience or training.
Content: Drafting
Population: General

480104 - Introduction to Surveying (For CAD)

Grade Level: 9 - 12
Credits: 1/2 - 1
Description: Introduces the elements of surveying including measurements, distance corrections, leveling, angles, area computation, computer calculations, topographic surveying, and electronic distance measuring instruments, construction surveying, GPS, and GIS.
Content: Drafting
Population: General

480110 - Intro to Computer Aided Drafting

Grade Level: 9 - 12
Credits: 1
Description: This combined lecture and lab course is designed to introduce the student to the terminology, capabilities, and various applications of interactive computer graphics. It involves hands-on use with a graphic design workstation and the application of the fundamentals of computer assisted drafting. This course emphasizes skill development of basic computer drafting commands, techniques exploration, and in-depth study of command utilization as they apply to industrial applications.
Content: Introduction to Computer Aided Drafting
Population: General

480111 - Basic Drafting

Grade Level: 9 - 12
Credits: 1
Description: This course introduces students to the application of elements and principles of design and the development of studio skills. These skills include conceptualizing and translating ideas into visual form through the use of thumbnails, roughs, and full-sized marker comps.
Content: Drafting
Population: General

480112 - Intermediate Computer Aided Drafting

Grade Level: 9 - 12
Credits: 1
Description: This course is designed to introduce the student to creating symbol libraries and symbol construction. The student will learn construction of assembly drawings through file manipulation and demonstrate advanced command structure. It allows the student to explore computer drafting in-depth and to increase skill. This course will introduce the student to 3D solid models. It will allow the student to use the advanced functions of rendering.
Content: Computer Aided Drafting
Population: General

480113 - Engineering Graphics

Grade Level: 9 - 12
Credits: 1
Description: This is an in-depth study of advanced industrial dimensioning principles, tolerances, fits, and ANSI standards. The shape and geometric characteristics of parts will be explored through geometric tolerancing. The student will also study the basic fundamentals of precision measurement and its application in the industrial setting.
Content: Drafting
Population: General

480114 - Interdisciplinary Geometry and Computer Aided Drafting (CAD)

Grade Level: 9 - 12
Credits: 1

Description: Two computer aided drafting (CAD) courses meet the required geometry credit and one CAD credit.
Content: Computer Aided Drafting for Geometry Requirement
Population: General

480116 - Architectural Design

Grade Level: 10 - 12
Credits: 1
Description: Combines the elements and fundamentals of architectural design with the theory and application of presentation techniques. Deals with site selection, use of materials in design, spatial relationships, and aesthetics. Traditional and contemporary design, designers, processes, and historical milestones are explored. Board and computer techniques are used in illustrating interiors of student designs.
Content: Drafting
Population: General

480117 - Introduction to Architecture

Grade Level: 10 - 12
Credits: 1
Description: Provides a practical approach to architectural drafting. An introduction to board and computer aided drafting as it relates to residential and commercial architecture, specifications, and structural systems including wood, masonry, concrete, and steel.
Content: Drafting
Population: General

480119 - Construction Drafting (Techniques)

Grade Level: 10 - 12
Credits: 1
Description: This lecture and lab course covers the elements for constructing standard residential and commercial buildings. Wood frame, solid masonry veneer, concrete, and steel construction details are explored. Students will learn essentials of standard construction details, which illustrate the various construction methods and will develop a portfolio for those techniques.
Content: Drafting
Population: General

480127 - Industrial Drafting Processes

Grade Level: 10 - 12
Credits: 1
Description: Explores weldment design, welding symbols, welding processes, and fabrication techniques, tool and die, and jig and fixture drawings. Design specifications, pattern drawings, casting, forming processes, and mechanical drawing principles in relation to the manufacturing industry. Screw-thread design and related fastening concepts as they relate to manufactured items and construction.
Content: Drafting
Population: General

480133 - Introduction to GIS

Grade Level: 10 - 12
Credits: 1/2 - 1
Description: This is an introductory course designed to provide basic theories and concepts of geographical information systems including basic GIS capabilities, data collection, data types, GPS, and basic mapping concepts. Introduces GIS software using industry-specific applications and technology to provide a conceptual base to build expertise in GIS.
Content: Drafting
Population: General

480135 - Mechanical Design

Grade Level: 10 - 12
Credits: 1
Description: Explores the design process involved in the development of mechanical working drawings and the design principles in various manufacturing disciplines; gear drawing and design, and cam and follower drawing and design. Design principles, mechanical adaptation, and their drawing practices. Mechanical assemblies, machine design, power transmission, bearings, and seals in assemblies. Shop processes involved in these mechanical designs.
Content: Drafting
Population: General

480136 - Parametric Modeling

Grade Level: 10 - 12
Credits: 1
Description: Introduces Parametric Modeling and Design of a CAD workstation in exploring the techniques associated with drafting and design using Parametric modeling software. Introduces creation of parametric models and explores associative function and flexibility of concurrent part design.
Content: Drafting
Population: General

480142 - Co-op I (CAD)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Computer Aided Drafting
Population: General

480145 - Internship (CAD)

Grade Level: 11 - 12
Credits: 1-3

Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Computer Aided Drafting
Population: General

480179 - Special Problems (CAD)

Grade Level: 10 - 12
Credits: 1
Description: Students will expand their portfolio of CAD drawings and related work specific to the occupational opportunities in specific geographical locations. Assignments and curriculum will vary as determined by the program instructor.
Content: Drafting
Population: General

480199 - Special Topics - CAD

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - CAD but not described in the above courses.
Content: Computer Aided Drafting
Population: General

Industrial Education - Printing Technology
(480300)

480301 - Co-op I (Graphic Tech)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Printing Technology
Population: General

480304 - Internship (Graphic Tech)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Printing Technology
Population: General

480321 - Press I

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the proper method of operating an offset duplicator including adjustments needed to produce quality printed products.
Content: Printing Technology
Population: General

480323 - Computer Layout and Design

Grade Level: 9 - 12
Credits: 1
Description: Students will understand and apply concepts and mechanics of page layout. This course provides practical application in the operation and development of skills in electronic publishing using software packages and operating systems.
Content: Printing Technology
Population: General

480324 - Typography

Grade Level: 9 - 12
Credits: 1
Description: This course will introduce the elements and uses of typographic design including selection of type styles, fonts, and methods of type specification.
Content: Printing Technology
Population: General

480325 - Graphic Communication

Grade Level: 9 - 12
Credits: 1
Description: This course introduces printing processes and develops graphic communication concepts and vocabulary. Includes: color applications, characteristics of paper, safety, and copyright laws.
Content: Printing Technology
Population: General

480328 - Computer Fundamentals for Visual Communication

Grade Level: 10 - 12
Credits: 1
Description: Emphasizes skills and awareness of computer applications that are specific to industry in a program area. Allows for the customization of computer-related course offerings for industry specific needs and to fulfill the computer fundamentals requirement. Must be completed with a letter grade of "C" or better. Satisfies the computer literacy requirement.
Content: Printing Technology
Population: General

480329 - Digital Production

Grade Level: 10 - 12
Credits: 1
Description: Presents principles, concepts, techniques, and materials used in the technical application of software as it relates to commercial and graphic design. Develops primary skills using software applications to digitally manipulate, enhance, and create composite photographs.
Content: Printing Technology
Population: General

480330 - Finishing and Binding

Grade Level: 10 - 12
Credits: 1
Description: Emphasizes finishing and binding operations needed to complete a printed job including handling, figuring, cutting, and using and maintaining finishing and binding equipment.
Content: Printing Technology
Population: General

Industrial Education - Welding
(480500)

480501 - Cutting Processes

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: A working knowledge of various cutting processes used by the welding industry. Will include, but is not limited to, safety, theory of operation, setup and operating techniques, troubleshooting, and making minor equipment repairs, terms and definitions, identification, evaluation, repair and prevention of discontinuities of cut surfaces. Includes oxy-fuel cutting, plasma arc cutting, exothermic cutting, air carbon arc cutting, shielded metal arc cutting, and mechanical cutting process.
Content: Welding
Population: General

480505 - Blueprint Reading for Welding

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: Provides a study of occupationally specific prints for welders. Advanced study of multi-view drawings, assembly drawings, datum dimensions, numerical control drawings, sheet metal prints, castings and forgings, instrumentation and control charts and diagrams, working drawings, geometric dimensioning and tolerancing and use of reference materials and books are included. Occupational specifics including welding drawings, symbols, joint types, grooves, pipe welding symbols, testing symbols, and specification interpretations are stressed.
Content: Welding
Population: General

480507 - Welding Certification

Grade Level: 11 - 12
Credits: 1
Description: Provides the student with a working knowledge of certification encountered in welding. The student will start with developing a WPS, qualify the WPS, and qualify personnel. Documents used in welding certification are developed and used.
Content: Welding
Population: General

480508 - Welding Certification Lab

Grade Level: 10 - 12
Credits: 0.5
Description: Provides the student with an opportunity to test to certification standards on all types of welding.
Content: Welding
Population: General

480521 - Shielded Metal Art Welding (SMAW)

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: This course provides experiences in which students acquire the manipulative skills to do groove welds in all positions with backing.
Content: Welding
Population: General

480522 - Gas Metal Arc Welding

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: This course is designed to teach students the identification, inspection, and maintenance of GMAW machines; identification, selection and storage of GMAW electrodes; principles of GMAW; and the effects of variables on the GMAW process. Theory and applications of related processes such as FCAW and SAW and metallurgy are also included.
Content: Welding
Population: General

480523 - Oxy-Fuel Systems

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: This course is designed to provide the student with a working knowledge of: oxy-fuel identification, set-up, inspection, and maintenance; consumable identification, selection and care; principles of operation; and effects of variables for manual and mechanical oxyfuel cutting, welding, brazing principles and practice, and metallurgy, shop safety and equipment use are also covered.
Content: Welding
Population: General

480524 - Basic Welding

Grade Level: 9 - 12
Credits: 0.5 - 1
Description: This class introduces the student to the art and science of welding. Students learn to prepare the equipment and to perform basic welding operations. (WEX 120/121 may be substituted for WEX 151)
Content: Welding
Population: General

480525 - Gas Tungsten Arc Welding

Grade Level: 10 - 12
Credits: 0.5 - 1
Description: This course is designed to teach students the identification, inspection, and maintenance of GTAW machines; identification, selection and storage of GTAW electrodes; principles of GTAW; the effects of variables on the GTAW process; and metallurgy. This course also teaches the theory and application of Plasma Arc Cutting.

Content: Welding
Population: General

480528 - SMAW Groove Welds with Backing Lab

Grade Level: 10 - 12
Credits: 1
Description: Provides experiences in which students acquire the manipulative skills to do groove welds in all positions with backing.
Content: Welding
Population: General

480530 - Gas Tungsten Art Welding Groove Lab (GTAW Lab)

Grade Level: 10 - 12
Credits: 1
Description: Teaches the method of operation and application of the Gas Tungsten Arc Welding process for welding groove welds in both ferrous and non-ferrous plate in all positions.
Content: Welding
Population: General

480533 - Gas Metal Arc Welding (GMAW) Groove Lab

Grade Level: 10 - 12
Credits: 1
Description: Teaches the method of operation and application of the Gas Metal Arc Welding process for welding groove welds in both ferrous and non-ferrous plate in all positions using both short circuiting and spray transfer where appropriate.
Content: Welding
Population: General

480534 - Gas Metal Arc Welding (GMAW) Aluminum Lab

Grade Level: 10 - 12
Credits: 0.5
Description: Teaches welding aluminum using GMAW process. Fillet and groove welds are made in all positions on both plate and pipe. Short circuiting and spray transfers are used where appropriate.
Content: Welding
Population: General

480535 - SMAW Open Groove Lab

Grade Level: 10 - 12
Credits: 1
Description: Designed to build upon SMAW Plate Lab I and II. Offers the student the opportunity to advance skills in the practical aspects of vee-butt plate welding using SMAW.
Content: Welding
Population: General

480536 - Shielded Metal Arc Welding Pipe Lab A

Grade Level: 10 - 12
Credits: 1
Description: Teaches the required manipulative skills to arc weld pipe using mild steel electrodes in the 2G and 5G positions including proper pipe preparations, electrodes, safety precautions, and welding sequences. Fillet welds on pipe joints are also included in 2F, 2FR, 4F, and 5F positions.
Content: Welding
Population: General

480537 - Shielded Metal Arc Welding Pipe Lab B

Grade Level: 10 - 12
Credits: 1
Description: Teaches the required manipulative skills to arc weld pipe using mild steel electrodes in the 6G position including proper pipe preparations, electrodes, safety precautions, and welding sequences.
Content: Welding
Population: General

480538 - Gas Tungsten Arc Welding Pipe Lab A

Grade Level: 10 - 12
Credits: 1
Description: Teaches the method of operation and application of the Gas Tungsten Arc Welding system for welding of both ferrous and non-ferrous pipe in 2G and 5G positions.
Content: Welding
Population: General

480540 - Gas Metal Arc Welding (GMAW) Pipe Lab A

Grade Level: 10 - 12
Credits: 1
Description: Acquaints the student with the operation and application of the Gas Metal Arc System for welding pipe in 2G and 5G positions.
Content: Welding
Population: General

480541 - Co-op I (Welding)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Welding
Population: General

480544 - Internship (Welding)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Welding
Population: General

480595 - Special Problems (for Welding)

Grade Level: 11 - 12
Credits: 1
Description: This course is designed for the student who has demonstrated a specific need for industry related skills.
Content: Welding
Population: General

480599 - Special Topics - Welding

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Welding but not described in the above courses.
Content: Welding
Population: General

Industrial Education - Wood Manufacturing Technology
(480700)

480711 - Introduction to Panel Technology

Grade Level: 9 - 12
Credits: 1
Description: This course is an overview of the terminology, materials, processing equipment and related software utilized by panel processing manufacturers of residential and commercial case work. Emphasis will be placed on the design and fabrication of frameless cabinetry to the use of panel saws, edgebanders, CNC boring equipment, and case clamps.
Content: Wood Manufacturing Technology
Population: General

480712 - Computer Applications (Wood)

Grade Level: 9 - 12
Credits: 1
Description: Students learn about the operation of the computer hardware components, PC operating systems, and software applications. Fundamentals of the Microsoft Windows operating systems are covered along with MS-DOS essentials. Students are introduced to word processing, spreadsheet, and database applications using Microsoft Office.
Content: Wood Manufacturing Technology
Population: General

480716 - Lumber Grading and Drying

Grade Level: 10 - 12
Credits: 1
Description: This course prepares an individual to master the National Hardwood Lumber Association's rules for grading hardwoods and to apply those rules in a production setting. Students will identify species and use a deductive process to grade the lumber and assign it a monetary value. Students will also be introduced to hardwood lumber drying systems. Conventional dry kilns, dehumidification, vacuum, and solar kilns are illustrated. Current theories on drying lumber to minimize defects and increase quality are demonstrated. Computer controls are explained.
Content: Wood Manufacturing Technology
Population: General

480717 - Millwork Technology

Grade Level: 10 - 12
Credits: 1
Description: Design of moulding, doors, and door frames; windows; stairs; and mantels are the focus of this course. Emphasis will be placed on construction principles, joinery, and fasteners for millwork assemblies. Each student will build one or more millwork items.
Content: Wood Manufacturing Technology
Population: General

480718 - Moulder/Grinder Operation

Grade Level: 10 - 12
Credits: 0.5
Description: This course is an introduction to the setup, operation, and maintenance of moulding and grinding equipment. The student will use tools, measuring devices, and visual inspection techniques to insure quality to customer specifications. Students will set up and operate a moulder or plane, shape and groove woodstock. Students will read work tickets and examine the pattern shape to determine moulder setup procedure and type of woodstock to be cut.
Content: Wood Manufacturing Technology
Population: General

480719 - Technical Drawing and Blueprint Reading

Grade Level: 10 - 12
Credits: 0.5
Description: Fundamentals of multiview and pictorial drafting techniques; and reading and interpreting architectural, furniture, and cabinet drawings are the focus of this course. Students will apply blueprint reading skills by preparing materials and cutting lists for actual jobs.
Content: Wood Manufacturing Technology
Population: General

480720 - Wood Finishing

Grade Level: 10 - 12
Credits: 0.5
Description: This course is an overview of contemporary spray finishing materials and processes for millwork assemblies. Each student will learn to set up and troubleshoot a variety of common finishing systems while experimenting with finishing materials and supplies.
Content: Wood Manufacturing Technology
Population: General

480721 - Furniture Technology

Grade Level: 9 - 12
Credits: 1
Description: Furniture design principles, structural considerations, joinery, fasteners, veneering, and use of specialized machines for complex operations are the focus of this course. Each student will plan and build a piece of furniture which includes at least one drawer, a door and some veneering.
Content: Wood Manufacturing Technology
Population: General

480725 - CAD for Wood Technology

Grade Level: 10 - 12
Credits: 1
Description: This course is designed for the fundamental principles and capabilities of CAD, basic drafting conventions and operations that are relative to the Wood Manufacturing Industry.
Content: Wood Manufacturing Technology
Population: General

480731 - Cabinet Making Technology

Grade Level: 9 - 12
Credits: 1
Description: This course is an overview of the cabinet and store fixture industries. Emphasis will be placed on the design and construction of face frame as well as frameless (32mm) systems. Each student will plan and build a vanity, kitchen cabinet, or store fixture which utilizes contemporary casework techniques.
Content: Wood Manufacturing Technology
Population: General

480733 - Advanced Wood Processing

Grade Level: 10 - 12
Credits: 1
Description: This course is a capstone experience for advanced wood processing technicians involving the integration of computer aided design and world-class manufacturing of wood products.
Content: Wood Manufacturing Technology
Population: General

480740 - Wood Products Manufacturing

Grade Level: 9 - 12
Credits: 1
Description: Fundamentals of wood processing and an overview of the secondary wood processing industry are covered in this course. The nature of wood, material selection, terminology, safe setup, and operation of common woodworking equipment will be discussed. Each student will fabricate a wood product while being introduced to custom woodworking techniques, as well as mass production concepts related to product engineering.
Content: Wood Manufacturing Technology
Population: General

480741 - Co-op I (Wood)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Wood Manufacturing Technology
Population: General

480744 - Internship (Wood)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Wood Manufacturing Technology
Population: General

480795 - Special Problems (for Wood Manufacturing)

Grade Level: 11 - 12
Credits: 1
Description: This course is designed for the student who has demonstrated a specific need for industry related skills.
Content: Wood Manufacturing Technology
Population: General

480799 - Special Topics - Wood Manufacturing Technology

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Wood Manufacturing Technology but not described in the above courses.
Content: Wood Manufacturing Technology
Population: General

Industrial Education - Metal Fabrication
(480800)

480801 - Industrial Maintenance for Metal Fabrication

Grade Level: 10 - 12
Credits: 1
Description: This course introduces various types of sheet metal designs, fabrication, and fastening techniques used in the sheet metal industry.
Content: Metal Fabrication
Population: General

480802 - Blueprint Reading for Construction (For Metal Fabrication)

Grade Level: 9 - 12
Credits: 0.5
Description: This course will provide a series of lectures, demonstrations, and practice exercises in the study of symbols, views, sections, details, and material lists found on architectural working drawings, building materials and specifications lists, and construction dimensioning systems and charts/schedules.
Content: Metal Fabrication
Population: General

480803 - Co-op I (Metal Fab)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.
Content: Metal Fabrication
Population: General

480806 - Internship (Metal Fab)

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A

student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).
Content: Metal Fabrication
Population: General

480811 - TQM

Grade Level: 9 - 12
Credits: 1
Description: Introduces the student to fundamental of TQM (Total Quality Management) principles and techniques as an integral part of the business environment. Teamwork and team-building strategies are discussed and are incorporated into the framework of the instruction as well as a few team-building exercises.
Content: Metal Fabrication
Population: General

480812 - Heat Load/Duct Design

Grade Level: 9 - 12
Credits: 1
Description: Introduces the fundamentals needed to calculate heat gain and heat loss, thereby determining air conditioner/furnace size. This information will be used to calculate the correct duct size. Procedures to lay out a duct system as outlined in ACCA MANUAL D are presented.
Content: HVAC Metal Fab
Population: General

480813 - Parallel Line Layout

Grade Level: 9 - 12
Credits: 1
Description: This course introduces the parallel line method of developing the pattern for an object.
Content: Metal Fabrication
Population: General

480814 - Radial Line Development

Grade Level: 10 - 12
Credits: 1
Description: Radial Line Development uses many of the procedures of parallel line development and triangulation. The student will learn to develop patterns from any centered, round or square taper, using the radial line method.
Content: Metal Fabrication
Population: General

480816 - Metal Trade Information and Metals

Grade Level: 10 - 12
Credits: 0.5
Description: A series of lectures and demonstrations of hand tools, use of machinery in the shop, and various types of metal and their uses in the metal trade will be discussed.
Content: Metal Fabrication
Population: General

480817 - Sheet Metal I - A

Grade Level: 10 - 12
Credits: 1
Description: This course introduces the student to figuring drawings of plans for a duct system and also learning how to fabricate the ducts.
Content: Metal Fabrication
Population: General

480818 - Sheet Metal I - B

Grade Level: 10 - 12
Credits: 1
Description: This course provides advanced training in designing and interpreting plans for a duct system and advanced fabrication of duct systems and precision sheet metal concepts.
Content: Metal Fabrication
Population: General

480819 - Sheet Metal II - A

Grade Level: 10 - 12
Credits: 1
Description: This course provides a series of lectures to improve skills in pattern development and fabrication of more difficult fittings.
Content: Metal Fabrication
Population: General

480820 - Sheet Metal II - B

Grade Level: 10 - 12
Credits: 1
Description: This course provides a series of advanced lectures to improve skills in advanced pattern development and fabrication of complicated fittings.
Content: Metal Fabrication
Population: General

480825 - Sheet Metal Print Reading

Grade Level: 10 - 12
Credits: 0.5
Description: This course presents basic applied math, lines, multiview drawings, symbols, various schematics and diagrams, dimensioning techniques, sectional views, auxiliary views, and sketching typical to sheet metal drawings. Safety will be emphasized as an integral part of the course.
Content: Metal Fabrication
Population: General

480826 - Triangulation

Grade Level: 10 - 12
Credits: 1
Description: This course involves working from two known points to locate a third point.
Content: Metal Fabrication
Population: General

480831 - Industrial Maintenance

Grade Level: 9 - 12
Credits: 1
Description: This course introduces various types of sheet metal designs, fabrication, and fastening techniques used in the sheet metal industry.
Content: Industrial Maintenance Technology
Population: General

480879 - Special Projects I (Metal Fab)

Grade Level: 10 - 12
Credits: 1
Description: This is a course designed for the student who has demonstrated specific special needs.
Content: Metal Fabrication
Population: General

480899 - Special Topics - Metal Fabrication

Grade Level: 9 - 12
Credits: .5-1
Description: Instruction related to Industrial Education - Metal Fabrication but not described in the above courses.
Content: Metal Fabrication
Population: General

Industrial Arts - Media Arts
(480900)

480901 - Introduction to Media Arts

Grade Level: 9 - 11
Credits: 1
Description: An introduction to and survey of the creative and conceptual aspects of designing media arts experiences and products, including techniques, genres and styles from various and combined mediums and forms, including moving image, sound, interactive, spatial and/or interactive design. Typical course topics include: aesthetic meaning, appreciation and analysis; composing, capturing, processing and programming of media arts products, experiences and communications; their transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.
Content: Media Arts
Population: General

480902 - Interactive Design

Grade Level: 10 - 12
Credits: 1
Description: The creative and conceptual aspects of designing and producing interactive media arts experiences, products and services, including reactive (sensory-based [touch, proximity, movement, etc.] devices) and interactive technologies, 3D video game animation, interface design, mobile device applications, web multimedia, social media based, augmented, and/or virtual reality. Typical course topics include: aesthetic meaning, appreciation and analysis; construction, development, processing, modeling, simulation and programming of interactive experiences; their transmission, distribution and marketing, as well as contextual, cultural and historical aspects and considerations.
Content: Media Arts
Population: General

480903 - Moving Image Animation

Grade Level: 10 - 12
Credits: 1
Description: The creative and conceptual aspects of designing and producing animated images for the variety of storytelling and multimedia presentations including: dramatic narratives, artistic and experimental presentations and/or installations, ambient, interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of animation; all processes of development including: composition and rendering, animation physics and expressions; techniques, forms and technologies; modeling and programming; pre-production planning and organization; production and post-production methods, tools and processes; animation presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.
Content: Media Arts
Population: General

480904 - Virtual Design

Grade Level: 11 - 12
Credits: 1
Description: The creative and conceptual aspects of designing and producing simulative, virtual, 3D media arts experiences, products and services, including: environments, structures, objects, architecture and ecologies, virtual and augmented reality. Typical course topics include: aesthetic meaning, appreciation and analysis; construction, development, processing, modeling, simulation and programming of experiences, structures, architecture and/or environments; their presentation, transmission, distribution and marketing, as well as contextual, cultural, and historical aspects and considerations.
Content: Media Arts
Population: General

480910 - Video Studio Fundamentals

Grade Level: 10 - 12
Credits: 1
Description: This course will expose students to the materials, processes, and artistic techniques involved in creating video productions. Students learn about the operation of cameras, lighting techniques, camera angles, depth of field, composition, storyboarding, sound capture and editing techniques. Course topics may include production values and various forms/styles of video production (e.g., documentary, storytelling, news magazines, animation, etc.) As students advance they are encouraged to develop their own artistic styles. Major cinematographers, video artists and their work may be studied.
Content: Media Arts
Population: General

480911 - Studio Directing and Performance

Grade Level: 10 - 12
Credits: 1
Description: This course explores the role of managing the production of video studio projects. Students develop knowledge and skills in studio multi-camera and field television production. Students also develop performance skills for broadcasting including interpretation of copy, news casting, and ad lib announcing. The course covers techniques of narrative and non-fiction writing and scripting, the analysis and writing of radio, television, and video materials, including storytelling and screenwriting.
Content: Media Arts
Population: General

480912 - Advanced Studio Production - Moving Images

Grade Level: 11 - 12
Credits: 1
Description: Students will explore the creative and conceptual aspects of designing and producing moving images for the variety of cinematic, film/video and multimedia presentations including: fictional dramas, documentaries, music videos, artistic and experimental presentations and/or installations, interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of moving imagery; all processes of development including: pre-production planning and organization, production and post-production methods, tools and processes; moving image presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.
Content: Media Arts
Population: General

480920 - Two-Dimensional Media Design

Grade Level: 10 - 12
Credits: 1
Description: A proficient study and production of creative and conceptual aspects of designing and producing digital imagery, graphics and photography, including techniques, genres and styles from fine arts and commercial advertising, internet and multimedia, web design, industrial and virtual design. Students use a computer as an electronic drawing tool to solve visual communications and illustration problems in designing products. This course entails the use of current software for two-dimensional illustration, creating and integrating text, using color, and importing and exporting files, including Vector and Raster Images. Typical course topics include: aesthetic meaning, appreciation and analysis; composing, capturing, processing, and programming of imagery and graphical information; their transmission, distribution and marketing; as well as contextual, cultural and historical aspects and considerations.
Content: Media Arts
Population: General

480921 - Digital Imaging

Grade Level: 10 - 12
Credits: 1
Description: An accomplished study and production of creative and conceptual aspects of designing and producing digital imagery, graphics and photography, including techniques, genres and styles from fine arts and commercial advertising, internet and multimedia, web design, industrial and virtual design. Students use a computer as an electronic drawing tool to solve visual communications and illustration problems in designing authentic products. This course entails an accomplished use of current software for two-dimensional illustration, creating and integrating text, using color, and importing and exporting files. Typical course topics include: aesthetic meaning and analysis of computer generated works; composing, capturing, processing, and programming of imagery and graphical information; their transmission, distribution and marketing; as well as contextual, cultural and historical aspects and considerations.
Content: Media Arts
Population: General

480922 - Advanced Production Design

Grade Level: 11 - 12
Credits: 1
Description: Advanced Product Design emphasizes an advanced and independent use of compositional theory, elements and principles of design, techniques and creative processes for effectively performing the function of persuasion and information through use of materials and media to create visual effects to produce original authentic works. Students will demonstrate an advanced level of creative expression to a variety of authentic design products (e.g. various print mediums such as magazines, newspapers, billboards, fictional and informational texts, product wrappers, displays etc.) through a purposeful arrangement of images and/or text and develop a strategic product presentation both independently and as a collaborative team. The course focuses on advanced computer generated designs as well as the use of various software and hardware; with an emphasis on students creating, producing, responding and connecting on/in visual art and new media. An in-depth independent study of career opportunities in media art is performed. Contemporary, cultural, and historical design may be studied.
Content: Media Arts
Population: General

480950 - Co-op (Media Arts)

Grade Level: 11 - 12
Credits: 1
Description: Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in a pathway course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements according to the Work Based Learning Guide.
Content: Media Arts
Population: General

480951 - Internship (Media Arts)

Grade Level: 11 - 12
Credits: 1
Description: Internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a pathway course. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less). All information referenced to the Work Based Learning Guide
Content: Media Arts
Population: General

Industrial Education - Multiple Pathway Courses
(499900)

Courses in this section of the state course list can be applied across multiple pathways

---

499901 - Foundations of Energy

Grade Level: 9 - 12
Credits: 1
Description: Foundations of Energy is a course in career and technical education for secondary students. The course provides an overview of renewable and nonrenewable energy resources reflecting how energy impacts the environment and the economy from regional, state, national and global perspectives. Extensive hands-on laboratory activities are vital components of the curriculum. This course can provide a basis for students working toward various career pathways in energy such as Engineering Technology, Construction, and Manufacturing Technology. Specific areas include technology, construction technology, electrical technology, and industrial electronics. NOTE: A content must be manually assigned for this course using the section tab in the SIS.
Content: None
Population: General

499910 - Industrial Education Co-op

Grade Level: 11 - 12
Credits: 1-3
Description: Cooperative Education for CTE courses indicated within the KY Department of Education provide supervised work site experience related to the student's identified career major. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements. NOTE: A content must be manually assigned for this course using the section tab in the SIS
Content: None
Population: General

499915 - Industrial Education Internship

Grade Level: 11 - 12
Credits: 1-3
Description: Internship for CTE Courses provide supervised work-site experience for high school students who have completed courses leading to a career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students receiving pay for intern experience are those participating in an experience that is a semester or longer and have an established employee-employer relationship. A non-paid internship affects those students who participate on a short term basis. NOTE: A content must be manually assigned for this course using the section tab in the SIS
Content: None
Population: General

499920 - Basic Blueprint Reading

Grade Level: 10 - 12
Credits: .5
Description: This course presents basic applied math, lines, multiview drawings, symbols, various schematics and diagrams, dimensioning techniques, sectional views, auxiliary views, threads and fasteners, and sketching typical to all shop drawings. Safety will be emphasized as an integral part of the course.
Content: Basic Blueprint Reading
Population: General

499925 - Basic Troubleshooting

Grade Level: 9 - 12
Credits: 1
Description: This course explores the science of troubleshooting and the importance of proper maintenance procedures; how to work well with others, aids in communication, and trade responsibilities; examines actual troubleshooting techniques, aids in troubleshooting, and how to use schematics and symbols; focuses on specific maintenance tasks such as solving mechanical and electrical problems, breakdown maintenance, and the how's and whys of planned maintenance.
Content: Basic Troubleshooting
Population: General

499930 - Industrial Safety

Grade Level: 10 - 12
Credits: .5
Description: This course provides practical training in industrial safety. The students are taught to observe general safety rules and regulations, to apply work site and shop safety rules, and to apply OSHA regulations. Students are expected to obtain certification in first aid and cardiopulmonary resuscitation.
Content: Industrial Safety
Population: General

Visual and Performing Arts
(500000)

Visual and Performing Arts courses provide students with the opportunity to develop artistic literacy- the knowledge and understanding required to participate authentically in the arts disciplines. Students also develop a fluency in the language(s) of the arts and develop their ability to create, perform/produce/present, respond, and connect through symbolic and metaphoric forms that are unique to the arts in general and in each of the arts disciplines. It is embodied in specific philosophical foundations and lifelong goals that enable an artistically literate person to transfer arts knowledge, skills, and capacities to other subjects, settings, and contexts. NOTE: Courses that are not fully aligned with the Kentucky Academic Standards for the Arts are not eligible to fulfill the high school graduation requirement for Arts and Humanities.

Visual and Performing Arts - General
(500100)

Courses that address the artistic processes, history, purposes and connections of the visual and performing arts disciplines.

500111 - History and Appreciation of Visual and Performing Arts Survey

Grade Level: 6 - 12
Credits: 1 HS
Description: Students are introduced to a survey of significant works, artists, and movements that have shaped the arts world and have influenced or reflected various periods of history in the arts disciplines of dance, music, theatre and visual art. Course content emphasizes the sequential evolution of art forms, techniques, symbols, and themes within those disciplines. The course covers the connections of the arts to cultural, social, political, and historical events throughout the world. Critical analysis of works from the disciplines, as they communicate and express the history, needs, and ideals of society and individuals is included. The course provides for students to experience creating, performing/presenting/producing, responding and connecting their own works as well as the works of others.
Content: Arts and Humanities/History and Appreciation of the Visual and Performing Arts
Population: General

500111 History and Appreciation of Visual and Performing Arts Survey Course Standards Document MS

500111 History and Appreciation of Visual and Performing Arts Survey Course Standards Document HS

Visual and Performing Arts - Crafts
(500200)

Crafts courses offer a hands-on approach as Visual Art courses, but with a focus on crafts. A wide range of crafts may be surveyed or the course may focus on only one type of craft. Crafts courses explore types of crafts and the materials and ways in which these objects have been created for the aesthetic, practical, religious, spiritual, and/or cultural needs of people around the world or within a specific region. Students address the artistic processes of creating, presenting, responding and connecting. High school students may be working at the proficient, accomplished, or advanced levels in the same class. Courses explore career opportunities and may also include exploration of current craft forms.

500210 - Crafts-Jewelry

Grade Level: 6 - 12
Credits: 1 HS
Description: Jewelry courses engage students in the sequential learning of jewelry and ornamental design, its media, techniques, and processes, and the fabrication of small-scale objects and individual pieces of jewelry. Students develop expressive and technical skills in creating jewelry and using art metals. Advanced design concepts in form and surface decoration may be explored. Study ranges from the early history and aesthetics of jewelry design to contemporary times. These traditional designs may be studied as a basis for students' personal design concepts. Students apply the elements of art and principles of design in creating jewelry and participate in critiques of their jewelry and metal works, the jewelry and metal works of other students, and those by professional jewelers and gemologists for the purpose of reflecting on and refining work for presentation.
Content: Art
Population: General

500210 Crafts-Jewelry Course Standards Document MS

500210 Crafts-Jewelry Course Standards Document HS

500211 - Crafts-Hand Crafts

Grade Level: 6 - 12
Credits: 1 HS
Description: Crafts courses teach the same lessons as a Comprehensive Visual Arts course, 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.
Content: Art
Population: General

500211 Crafts-Hand Crafts Course Standards Document MS

500211 Crafts-Hand Crafts Course Standards Document HS

500212 - Crafts- Ceramics/Pottery

Grade Level: 6 - 12
Credits: 1 HS
Description: Ceramics/Pottery courses engage students in learning experiences that encompasses the historical and cultural context of ceramics, critiquing their own work and the work of others, aesthetic inquiry, and creative production. They develop knowledge of ceramic techniques and processes with an emphasis on creative design and craftsmanship. Experience includes, but is not limited to, clay modeling, hand building, coil building, casting and throwing on the potter's wheel. Students develop a working knowledge of kiln firing and glazing techniques. Students balance experimentation and safety, freedom and responsibility while developing and creating artworks.
Content: Art
Population: General

500212 Crafts-Ceramics/Pottery Course Standards Document MS

500212 Crafts-Ceramics/Pottery Course Standards Document HS

500214 - Crafts- Fibers and Textile Design

Grade Level: 6 - 12
Credits: 1 HS
Description: Fibers and Textile Design courses emphasize the application of the elements of art and principles of design in creating textile and fiber works using fiber and fiber-related media, techniques, and processes. Students gain an understanding of the suitability of design to materials and intent as they create textile works of art following and breaking from traditional conventions. Students study the history of fiber and textile art from a worldwide perspective. They engage in critiques of their textile and fiber work, the work of other students, and works of textile artists.
Content: Art
Population: General

500214 Crafts-Fibers and Textile Design Course Standards Document MS

500214 Crafts-Fibers and Textile Design Course Standards Document HS

500216 - Crafts - Folk Art

Grade Level: 6 - 12
Credits: 1 HS
Description: Folk Art courses explore types of folk art and the materials and ways in which these objects have been created for the practical, religious, spiritual, and cultural needs of people around the world or to a specific locale or region. Students address aesthetic issues surrounding folk art and artists and engage in critiques of the art of folk artists. Course may also include exploration of current craft forms. The study of folk art can provide a basis for students in developing individual artistic style for creating original works of art.
Content: Art
Population: General

500216 Crafts-Folk Art Course Standards Document MS

500216 Crafts-Folk Art Course Standards Document HS

500217 - Crafts - Calligraphy/Lettering

Grade Level: 6 - 12
Credits: 1 HS
Description: Calligraphy/Lettering focusses on various styles of inscribing letters, design developments by means of lettering, the romance of lettering through the ages, and modern use of lettering in advertising and art. Students study historical and contemporary examples of calligraphy, typography. Included is an analysis of artists who practice these art forms and the relationship to the context in which they were created and used. Students engage in critiques of work including professional calligraphers and typographers.
Content: Art
Population: General

500217 Crafts-Calligraphy/Lettering Course Standards Document MS

500217 Crafts-Calligraphy/Lettering Course Standards Document HS

Visual and Performing Arts - Dance
(500300)

A group of instructional courses that address the artistic processes, choreography and performance of various kinds of dances, including but not limited to ballet, modern, jazz, ethnic, and folk dance. Students should discover the expressive elements of dance, and have a clear sense of embodying dance performance. Students address the artistic processes of creating, performing, responding and connecting and become artistically literate within the art form. High school students may be working at the Proficient, Accomplished or Advanced levels within the same class. These courses may also provide opportunities for discussion around career and post-secondary exploration and placement.

500310 - Dance- Choreography

Grade Level: 6 - 12
Credits: 1 HS
Description: Choreography courses teach students how to arrange and direct dancers' movements. Course content includes application of the elements and principles of dance, study of historical and contemporary dance from a worldwide perspective, and instruction in critique. Students apply choreographic principles and dance forms to create fully developed choreography for formal or informal presentations. The student applies knowledge of dance to create a dance with a beginning, middle, and conclusion for an audience.
Content: Dance
Population: General

500310 Dance-Choreography Course Standards Document MS

500310 Dance-Choreography Course Standards Document HS

500311 - Dance- Dance Technique

Grade Level: 6 - 12
Credits: 1 HS
Description: Dance Technique courses provide students with experience in one or more dance forms (i.e., Modern, Jazz, Ballet, and Tap). Initial classes are usually introductory in nature, while the more advanced classes concentrate on improving students' technique and may offer or require experience in Choreography and Dance Evaluation.
Content: Dance
Population: General

500311 Dance-Dance Technique Course Standards Document MS

500311 Dance-Dance Technique Course Standards Document HS

500312 - Dance- Dance Repertory

Grade Level: 6 - 12
Credits: 1 HS
Description: Students learn about choreographers' unique approaches to dance and choreography by studying and performing excerpts or complete works from a choreographer's repertoire. Dance repertory trains the dancers to capture the nuances and characteristics of the selected piece so that the artist's intent is fully expressed.
Content: Dance
Population: General

500312 Dance-Dance Repertory Course Standards Document MS

500312 Dance-Dance Repertory Course Standards Document HS

500313 - Dance Improvisation

Grade Level: 6 - 12
Credits: 1 HS
Description: Structured improvisations are presented by the teacher to develop students' ability to respond kinesthetically in the moment, understand the elements of dance, relate to each other through movement, experiment with choreographic principles, and expand the boundaries of the definition of dance. Emphasis is placed on the process of exploration, of individual investigation, and of group work.
Content: Dance
Population: General

500313 Dance-Improvisation Course Standards Document MS

500313 Dance-Improvisation Course Standards Document HS

500314 - Dance History and Appreciation

Grade Level: 6 - 12
Credits: 1 HS
Description: Students study the purposes dance serves different civilizations (recreational, social, cultural, theatrical, educational, and liturgical, etc.) to expand knowledge of and ability to critique dance as an art form. Students learn the history of dance, build an aesthetic point of view, and develop a dance vocabulary. Students view or experience a variety of dance forms, styles and choreographic approaches to provide a historical and aesthetic context.
Content: Dance
Population: General

500314 Dance-History and Appreciation Course Standards Document MS

500314 Dance-History and Appreciation Course Standards Document HS

500317 - Dance, Workplace Experience/Internship

Grade Level: 9 - 12
Credits: 1 HS
Description: Students gain work experience in a field of professional dance. Students are matched with a working professional or institution with expertise in that area of interest. Goals are typically set cooperatively between the student, teacher, and the working professional and/or institution. These courses include classroom activities and professional learning opportunities where teachers monitor progress toward meeting the goals of the experience, and require personal and professional reflection of the experience.
Content: Dance
Population: General

500318 - Dance World/Cultural Dance

Grade Level: 6 - 12
Credits: 1 HS
Description: Students learn authentic dances from other nations in the context of the people's history, culture, and customs. Courses involve creating, performing, and responding to dances of other time periods and/or cultures. This is a studio-based course.
Content: Dance
Population: General

500318 Dance-World/Cultural Dance Course Standards Document MS

500318 Dance-World/Cultural Dance Course Standards Document HS

500319 - Dance - Genre Specific

Grade Level: 6 - 12
Credits: 1 HS
Description: Genre-specific dance courses provide students with ongoing training in one specific form of dance. Genres may include ballet, contemporary, hip hop, jazz, modern, social or tap dance. Genre-specific courses concentrate on improving students' technique and high school students may be working at the proficient, accomplished or advanced levels within the same class. These courses may also provide opportunities for discussion and career and post-secondary exploration and placement.
Content: Dance
Population: General

500319 Dance-Genre Specific Course Standards Document MS

500319 Dance-Genre Specific Course Standards Document HS

500320 - Dance - Dance for Musical Theater

Grade Level: 6 - 12
Credits: 1 HS
Description: Students learn how dance can be used to advance and support a storyline by combining dance, music, songs, and spoken dialogue. Students learn the history of Musical Theater and types of dance that are typically used in American Musical Theater including Tap, Jazz, Ballet, and Contemporary Dance forms.
Content: Dance
Population: General

500320 Dance-Dance for Musical Theatre Course Standards Document MS

500320 Dance-Dance for Musical Theatre Course Standards Document HS

500321 - Dance - Technical Theater for Dance

Grade Level: 6 - 12
Credits: 1 HS
Description: Students learn the basics of lighting, sound, makeup, costuming, stage management and other aspects of dance concert production. Practical application of skills is preferred through campus or local productions.
Content: Dance
Population: General

500321 Dance-Technical Theatre for Dance Course Standards Document MS

500321 Dance-Technical Theatre for Dance Course Standards Document HS

Visual and Performing Arts - Theatre
(500500)

A group of instructional courses that address the artistic processes, theatrical performance and various aspects of theatre production. Students should discover the expressive elements of theatre; have a clear sense of embodying theatrical performance; and be able to reflect, critique, and connect personal experience to theatre. Students perform established works as well as their original work. Students address the artistic processes of creating, performing, responding and connecting; and become artistically literate within the art form. High school students may be working at the Proficient, Accomplished or Advanced levels within the same class. These courses may also provide opportunities for discussion around career and post-secondary exploration and placement.

500511 - Introduction to Theatre

Grade Level: 6 - 12
Credits: 1 HS
Description: Introduction to Theatre is designed to develop a knowledge of theatrical concepts and techniques that will enable students to create new theatre pieces (work-in-progress/complete), perform existing theatre works and respond to both studio exercises and performances. Introduction to Theatre covers multiple styles of dramatic literature and uses a variety of connections to historical and cultural contexts. Introduction to Theatre sets the stage for both a performance and a technical theatre emphasis and students engage on a basic level with skills and knowledge in and of: acting and improvisation, theatre design and technology, theatre history and appreciation, dramatic literature and critique, and theatre administration.
Content: Theatre
Population: General

500511 Introduction to Theatre Course Standards Document MS

500511 Introduction to Theatre Course Standards Document HS

500512 - Theatre-Theatre Design and Technology

Grade Level: 6 - 12
Credits: 1 HS
Description: In Theatre Design and Technology courses, students translate aesthetic concepts into theater production to communicate ideas, moods, and feelings through technical theatre methods. This includes instruction in set design, lighting design, sound effects, theater acoustics, scene painting, property management, costume design, technical direction and production, and the use of computer/media-based applications to support these functions. These courses provide a foundation for career and postsecondary placement opportunities.
Content: Theatre
Population: General

500512 Theatre-Theatre Design and Technology Course Standards Document MS

500512 Theatre-Theatre Design and Technology Course Standards Document HS

500513 - Theatre- Acting/Performance

Grade Level: 6 - 12
Credits: 1 HS
Description: Students develop experience and skill development in one or more aspects of theatrical production, concentrating on acting and performance skills. Introductory courses explore fundamental techniques. Advanced courses focus on extending and refining technique, expanding students' exposure to different types of theatrical craft and traditions from varied social/historical contexts, and increasing their participation in publicly staged productions. These courses may also provide a discussion of career and post-secondary placement opportunities.
Content: Theatre
Population: General

500513 Theatre-Acting/Performance Course Standards Document MS

500513 Theatre-Acting/Performance Course Standards Document HS

500515 - Theatre- Directing

Grade Level: 6 - 12
Credits: 1 HS
Description: Students develop skills in translating a script into a final production and are usually taken after other drama courses. Directing courses enable each student to create an artistic vision and develop a personal aesthetic. Students are exposed to different types of theatrical techniques and traditions. They direct the performances of others (either in scenes or in a full production). These courses may also provide a discussion of career and post-secondary placement opportunities.
Content: Theatre
Population: General

500515 Theatre-Directing Course Standards Document MS

500515 Theatre-Directing Course Standards Document HS

500516 - Theatre- Playwriting/Screenwriting

Grade Level: 6 - 12
Credits: 1 HS
Description: Students refine skills to create a script suitable for theatre, film and/or television production. They also study the appropriate techniques of each genre develop a personal voice, style, and aesthetic by examining various playwrights and screenwriters. Students examine the creative writing craft, scene writing, script development, stage and/or camera instructions, line and moment analysis, script reading, script editing, and the creation of a full production. Students write original scenes, one-act plays, or full scripts. These courses provide a discussion of career and post-secondary placement opportunities.
Content: Theatre
Population: General

500516 Theatre-Playwriting/Screenwriting Course Standards Document MS

500516 Theatre-Playwriting/Screenwriting Course Standards Document HS

500517 - Theatre- History and Literature of Theatre

Grade Level: 6 - 12
Credits: 1 HS
Description: History and Literature of the Theater courses explore in depth the structure, elements, and style of dramatic compositions, and, as an extension, how the dramatic literature influenced theatrical production and acting styles throughout history. Some courses may focus more on the literature component than on the theater (with increased emphasis on critique and analysis), but most courses connect these subjects, exploring their interrelationships. Major contributors (playwrights, directors, and so on) and the architecture of the theater may also be included as topics of study.
Content: Theatre
Population: General

500517 Theatre-History and Literature of Theatre Course Standards Document MS

500517 Theatre-History and Literature of Theatre Course Standards Document HS

500520 - IB Theatre Arts (Diploma Program)

Grade Level: 11 - 12
Credits: 1
Description: Students learn to apply research and theory to inform and to contextualize their work. Through researching, creating, preparing, presenting and critically reflecting on theatre, they gain a richer understanding of themselves, their community and the world. Students experience the course from contrasting artistic and cultural perspectives. They learn about theatre from around the world, the importance of making theatre with integrity, and the impact that theatre can have on the world. It enables them to discover and engage with different forms of theatre across time, place and culture, promoting international-mindedness and an appreciation of the diversity of theatre.
Content: Theatre
Population: General

500530 - Theatre- Theatre Workplace Experience/Internship

Grade Level: 9 - 12
Credits: 1 HS
Description: Students work in a theatre related field. They are matched with a working professional who has a similar area of interest. Goals are set cooperatively between the student, teacher, and the working professional. These courses include classroom activities where teachers monitor progress toward meeting the goals of the experience and include additional study of the field and personal reflection of the experience.
Content: Theatre
Population: General

500532 - Theatre -Theatrical Production and Management

Grade Level: 6 - 12
Credits: 1 HS
Description: Theatrical Production and Management courses prepare individuals to manage the planning, design, preparation, and production of plays and other theatrical performances. These courses include instruction in theatrical design, program management, dramatic production, rehearsal management, personnel management and casting, actor coaching, directing concepts and techniques, theater history, scene work, script interpretation, business management, marketing, public relations, and communications skills. These courses may also provide a discussion of career and post-secondary placement opportunities.
Content: Theatre
Population: General

500532 Theatre-Theatrical Production and Management Course Standards Document MS

500532 Theatre-Theatrical Production and Management Course Standards Document HS

500533 - Theatre - Musical Theatre

Grade Level: 6 - 12
Credits: 1 HS
Description: Students experience various aspects of musical theater, including auditioning, singing, acting, and dancing. They review the history and evolution of musical theater, its literature and artists, and styles of composition and vocal presentation. Students work collaboratively on performances, including solo, duet, and ensemble work. These courses may also provide a discussion of career and post-secondary placement opportunities.
Content: Theatre
Population: General
Content: Music
Population: General

500533 Theatre-Musical Theatre Course Standards Document MS

500533 Theatre-Musical Theatre Course Standards Document HS

Visual and Performing Arts - Creative Film and Electronic Arts (500600)

Creative Film and Electronic Arts courses address design elements and principles, language, materials, and creative processes used to produce various kinds of works. These instructional programs promote students' experience and skill in development in one or more aspects of the use of film or electronic media to create original artistic works. Students may be involved in the production and/or criticism of various kinds of videos (cinema), computer generated art and photography. Students address the artistic processes of creating, producing, responding and connecting; and become artistically literate within the art form. High school students may be working at the Proficient, Accomplished or Advanced levels within the same class. These courses may also provide opportunities for discussion around career and post-secondary exploration and placement.

500611 - Visual Art - Photography

Grade Level: 6 - 12
Credits: 1 HS
Description: Photography courses engage students in learning opportunities for applying photographic media, techniques, and processes. These courses focus on development of photographic compositions through manipulation of the elements of art and principles of design. Students learn to make meaningful visual statements with an emphasis on personal creative expression to communicate ideas, feelings, or values. The history of photography, historic movements, image manipulation, critical analysis, and some creative special effects may also be included in this course. Students engage in critiques of their photographic images, the works of other students, and those by professional photographers. Photography courses may employ traditional film processes and/or digital and other electronic processes.
Content: Art
Population: General

500611 Visual Art-Photography Course Standards Document MS

500611 Visual Art-Photography Course Standards Document HS

500612 - Visual Art - Moving Image

Grade Level: 6 - 12
Credits: 1 HS
Description: The creative and conceptual aspects of designing and producing moving images for the variety of cinematic, film/video and multimedia presentations including: fictional dramas, documentaries, music videos, artistic and experimental presentations and/or installations, interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of moving imagery; all processes of development including: pre-production planning and organization, production and post-production methods, tools and processes; moving image presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.
Content: Art
Population: General

500612 Visual Art-Moving Image Course Standards Document MS

500612 Visual Art-Moving Image Course Standards Document HS

500615 - Visual Art - Multi Media

Grade Level: 6 - 12
Credits: 1 HS
Description: The creative and conceptual aspects of designing and producing media arts experiences, products and services that combine imagery, text, sound, motion, interactivity and/or virtuality into a unified presentation. Typical course topics include: aesthetic meaning, appreciation and analysis; composition, development, processing and programming of combined physical, interactive and virtual experiences and environments; their presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.
Content: Art
Population: General

500615 Visual Art-Multi Media Course Standards Document MS

500615 Visual Art-Multi Media Course Standards Document HS

500616 - Visual Art - Animation

Grade Level: 6 - 12
Credits: 1 HS
Description: The creative and conceptual aspects of designing and producing animated images for the variety of storytelling and multimedia presentations including: dramatic narratives, artistic and experimental presentations and/or installations, ambient, interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of animation; all processes of development including: composition and rendering, animation physics and expressions; techniques, forms and technologies; modeling and programming; pre-production planning and organization; production and post-production methods, tools and processes; animation presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.
Content: Art
Population: General

500616 Visual Art-Animation Course Standards Document MS

500616 Visual Art-Animation Course Standards Document HS

500617 - Visual Art - Introduction to Creative Media Arts

Grade Level: 6 - 12
Credits: 1 HS
Description: An introduction to and survey of the creative and conceptual aspects of designing media arts experiences and products, including techniques, genres and styles from various and combined mediums and forms, including moving image, sound, interactive, spatial and/or interactive design. Typical course topics include: aesthetic meaning, appreciation and analysis; composing, capturing, processing and programming of media arts products, experiences and communications; their transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations. This course covers the conceptual, social and philosophical aspects of the variety, purposes and nature of media arts.
Content: Art
Population: General

500617 Visual Art-Introduction to Creative Media Arts Course Standards Document MS

500617 Visual Art-Introduction to Creative Media Arts Course Standards Document HS

500618 - Visual Art - Creative Game Design

Grade Level: 6 - 12
Credits: 1 HS
Description: he creative and conceptual aspects of designing and producing interactive game experiences and products, including reactive (sensory-based [touch, proximity, movement, etc.]) devices and interactive technologies, interface design, mobile device applications, web multimedia and/or virtual reality games. Typical course topics include: aesthetic meaning, appreciation and analysis; game construction and development; game theory and dynamics; processing, modeling, simulation and programming of interactive experiences; their transmission, distribution, marketing, as well as contextual, cultural and historical aspects and considerations.
Content: Art
Population: General

500618 Visual Art-Creative Game Design Course Standards Document MS

500618 Visual Art-Creative Game Design Course Standards Document HS

500619 - Visual Art - Web Design

Grade Level: 6 - 12
Credits: 1 HS
Description: The creative and conceptual aspects of designing and producing interactive, multimedia web sites and experiences, products and services, including information architecture, graphic and interface design and web-based multimedia. Typical course topics include: aesthetic meaning, appreciation and analysis; development, construction, and programming of virtual, multimedia and interactive experiences; their applications in internet communications; as well as contextual, cultural and historical aspects and considerations.
Content: Art
Population: General

500619 Visual Art-Web Design Course Standards Document MS

500619 Visual Art-Web Design Course Standards Document HS

Visual and Performing Arts - Visual Arts
(500700)

Visual Arts courses provide students with knowledge and opportunities to explore a variety of art forms and to create individual works of art. Courses address design elements and principles, language, materials, and creative processes used to produce various kinds of visual arts. As students advance they are encouraged to develop their own creative styles. Although the focus of most of these courses is on production of art, study of major artists, art movements, and styles may also be included. Students address the artistic processes of creating, presenting, responding and connecting and become artistically literate within the art form. High school students may be working at the Proficient, Accomplished or Advanced levels within the same class. These courses may also provide opportunities for discussion around career and post-secondary exploration and placement.

500710 - Visual Arts - Fundamentals of Art and Design

Grade Level: 6 - 12
Credits: 1 HS
Description: Students are introduced to the basic fundamentals of artistic expression. The course includes experiences in drawing, painting, two-and three-dimensional design, sculpture, and other art forms. The course emphasizes observations, interpretation of the visual environment, visual communication, imagination and symbolism, and an introduction to various visual arts techniques and media. The focus of the course is on application of the fundamental processes of artistic expression and application of the concepts and approaches in the symbolic aspects of art and design to two- and three-dimensional problems so that they demonstrate a range of abilities and versatility with technique, problem solving, and ideation. A study of historical and contemporary art and artists from a worldwide perspective, and instruction and practice in peer review through the critique process, presentation or their, responding to art and connecting their art to the world around them are included.
Content: Art
Population: General

500710 Visual Art-Fundamentals of Art and Design Course Standards Document MS

500710 Visual Art-Fundamentals of Art and Design Course Standards Document HS

500711 - Comprehensive Visual Arts

Grade Level: 6 - 12
Credits: 1 HS
Description: Students explore an art form, obtaining knowledge in that form to plan and create individual works of art based on such knowledge, while following and breaking from traditional conventions. Students examine the language, materials, media, and processes of that particular art form and the fundamental processes of artistic expression supporting a work. Advanced instruction encourages students to develop their own artistic styles. Although Comprehensive Visual Arts courses focus on creation, inclusion of the study and analysis of major artists, art movements, and styles is included. In completing this course, students consider various techniques, methods, venues, and criteria for analyzing and selecting their art for preservation and presentation, including evolving technologies when preparing and refining artwork for display.
Content: Art
Population: General

500711 Visual Art-Comprehensive Course Standards Document MS

500711 Visual Art-Comprehensive Course Standards Document HS

500712 - Visual Art- Drawing/Painting

Grade Level: 6 - 12
Credits: 1 HS
Description: Students focus on the blend and relationships that occur between drawing and painting. Attention is given to two-dimensional work and utilizes one or more mediums, such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, and acrylics. Students extend and refine knowledge in the creative process to visually communicate personal intent. Advanced students extend and refine knowledge in the creative process. They are encouraged to develop their own artistic styles. Students focus on making meaning by investigating and reflecting their awareness of their perceptions, knowledge, and experiences of life. The course may emphasize either drawing or painting or combine both.
Content: Art
Population: General

500712 Visual Art-Drawing/Painting Course Standards Document MS

500712 Visual Art-Drawing/Painting Course Standards Document HS

500713 - Visual Art- Sculpture

Grade Level: 6 - 12
Credits: 1 HS
Description: Sculpture courses promote creative expression through three-dimensional works. Students explore representational and abstract sculpture through subtractive (carving), additive (modeling), and assemblage techniques in one or more media. They produce representational and abstract sculptures that communicate personal ideas and messages through the application of the fundamentals of artistic expression while incorporating elements of art and principles of design. A study of historical and contemporary sculpture and sculptors from a worldwide perspective, and instruction and practice in the critique process are addressed.
Content: Art
Population: General

500713 Visual Art-Sculpture Course Standards Document MS

500713 Visual Art-Sculpture Course Standards Document HS

500714 - Visual Art- Art Portfolio

Grade Level: 6 - 12
Credits: 1 HS
Description: Art Portfolio is designed to address a variety of factors and methods including evolving technologies when preparing and refining artwork for portfolio presentation and or when deciding if and how to preserve and protect art. Students will create, select, respond to, and present work that clearly reflects newly obtained technical skills, increasing conceptual thinking and is a reflection of their personal interests and may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills. Individual critique and planned peer review will help students prepare for future endeavors. This course covers any identified Visual Arts discipline. Course may be used in conjunction with an AP or IB Studio Art course.
Content: Art
Population: General

500714 Visual Art-Art Portfolio Course Standards Document MS

500714 Visual Art-Art Portfolio Course Standards Document HS

500716 - AP Studio Art: Drawing

Grade Level: 11 - 12
Credits: 1 HS
Description: The AP Studio Art- Drawing course is designed for students who are seriously interested in the practical experience of art. Students explore drawing issues including line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth and mark-making through a variety of means, such as painting, printmaking or mixed media. Students develop technical skills and become familiar with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. College credit is earned with a qualifying score on an AP exam.
Content: AP Studio Art Drawing
Population: General

500717 - Visual Art- IB Art/Design

Grade Level: 11 - 12
Credits: 1 HS
Description: This course provides experiences that develop students' aesthetic and creative faculties, experiences in various visual art forms, offers 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. Students evidence their learning when they take the IB Art/Design exam at the end of the course.
Content: Art
Population: General

500720 - Visual Art- Visual Communication Design

Grade Level: 6 - 12
Credits: 1 HS
Description: Visual Communication Design courses emphasize the application of the elements of art and principles of design and provide study of their application in visual communications design problems through the purposeful arrangement of images, symbols, and text to communicate a message. These courses also include investigations of how use of the computer has influenced the creation of contemporary graphic and digital designs. Students analyze and use design principles in their visual communications design work and understand aesthetic issues of visual communications design. Students study visual communications designs from the history of art, contemporary visual communications design, and many world cultures. Students engage in critiques of their visual communications designs, the designs of other students, and designs by professionals. Visual Communication Design courses focus on the four artistic processes of creating, presenting, responding and connecting.
Content: Art
Population: General

500720 Visual Art-Visual Communication Design Course Standards Document MS

500720 Visual Art-Visual Communication Design Course Standards Document HS

500721 - AP Art History

Grade Level: 11 - 12
Credits: 1
Description: The AP Art History course is equivalent to a two-semester introductory college course that explores the nature of art, art making, and responses to art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the course fosters in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content. They experience, research, discuss, read, and write about art, artists, art making, responses to, and interpretations of art. College credit is earned with a qualifying score on an AP exam.
Content: AP History of Art
Population: General

500722 - AP Studio Art: 2-D Design

Grade Level: 11 - 12
Credits: 1 HS
Description: The AP Studio Art- 2D Design course is designed for students who are seriously interested in the practical experience of art. Students demonstrate mastery through any two-dimensional medium or process, such as graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting and printmaking. Students develop technical skills and become familiar with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. College credit is earned with a qualifying score on an AP exam.
Content: AP Studio Art (2-D Design)
Population: General

500723 - AP Studio Art: 3-D Design

Grade Level: 11 - 12
Credits: 1 HS
Description: The AP Studio Art- 3D Design course is designed for students who are seriously interested in the practical experience of art. Students demonstrate mastery through any three-dimensional approach, such as figurative or nonfigurative sculpture, architectural models, metal work, ceramics, glass work, installation, assemblage and 3-D fabric/fiber arts. Students develop technical skills and become familiar with the functions of visual elements as you create an individual portfolio of work for evaluation at the end of the course. College credit is earned with a qualifying score on an AP exam.
Content: AP Studio Art (3-D Design)
Population: General

500724 - Visual Art- Advertising Design/Commercial Art

Grade Level: 6 - 12
Credits: 1 HS
Description: Advertising Design/ Commercial Art courses emphasize the application of the elements of art and principles of design used in the field of advertising and commercial art. The courses offer practical experiences in generating advertisements, commercial art, and logos, executing layouts, illustration, displays, lettering, and works with a variety of media, techniques, and processes. They also include preparing artwork for reproduction. These courses provide a historical and contemporary view of advertising art and commercial art. Students engage in critiques of their work, the works of other students, and that of professional advertising and commercial designers.
Content: Art
Population: General

500724 Visual Art-Advertising Design Commercial Art Course Standards Document MS

500724 Visual Art-Advertising Design Commercial Art Course Standards Document HS

500725 - Visual Art- Printmaking

Grade Level: 6 - 12
Credits: 1 HS
Description: Printmaking courses provide experience in a variety of traditional and digital printmaking media, techniques, and processes. Students create realistic and abstract prints and communicate meaning by applying elements of art and principles of design and making cultural and historical connections. Students consider various techniques, methods, venues, and criteria for presentation, including evolving technologies when preparing and refining artwork for display. Students learn and practice the critique process in discussing their own work, that of other students, and the work of professional printmakers.
Content: Art
Population: General

500725 Visual Art-Printmaking Course Standards Document MS

500725 Visual Art-Printmaking Course Standards Document HS

500726 - Visual Art - Art Appreciation

Grade Level: 6 - 12
Credits: 1
Description: Students are introduced to historical study and basis for many forms of visual art. Students form an aesthetic framework to examine social, political and historical events in the world. Students address contemporary aesthetic issues and developments and how visual images and works express the needs and ideals of individuals and society. Students are involved in the creative process through lecture, discussion, observation, media and research.
Content: Art
Population: General

500726 Visual Art-Art Appreciation Course Standards Document MS

500726 Visual Art-Art Appreciation Course Standards Document HS

500730 - Visual Art - Workplace Experience/Internship

Grade Level: 9 - 12
Credits: 1 HS
Description: Workplace Experience courses provide students with work experience in a field related to visual arts and its elements of art and principles of design usage. Students are matched with a working professional who has a similar area of interest. Goals are typically set cooperatively between the student, teacher, and the working professional (although students are not necessarily paid). These courses include classroom activities where teachers monitor progress toward meeting the goals of the experience and include additional study of the field and personal reflection of the experience.
Content: Art
Population: General

Visual and Performing Arts - Music
(500900)

Music courses are designed to provide students the opportunity to achieve independent music literacy. Instrumental and vocal music students learn to perform established works as well as their original works. Students learn to choose their repertoire of music from a variety of musical literature. Students address the artistic processes of creating, performing, responding and connecting and become artistically literate within the art form. High school students may be working at the Proficient, Accomplished or Advanced levels within the same class. These courses may also provide opportunities for discussion around career and post-secondary exploration and placement.

500911 - Music-General Music

Grade Level: 6 - 12
Credits: 1 HS
Description: General Music courses provide students with access to a variety of musical experiences, including creating, performing, and responding to music. They include the study of the elements of music, music styles, historical and cultural contexts; including study of instrumental music (acoustic and electronic) and vocal music. Courses include instruction that 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. Although performance is a part of the course the focus is on learning about music. Public performance may be a part of the learning process.
Content: Music
Population: General

500911 Music-General Music Course Standards Document MS

500911 Music-General Music Course Standards Document HS

500912 - Music- Music History/Appreciation

Grade Level: 6 - 12
Credits: 1 HS
Description: Students develop an understanding of music and its importance in relation to the human experience. Learning experiences include guided listening, analysis, discussion and hands on experimentation including informal performance, improvisation, or composition focused on how various styles of music apply musical elements to create expressive or aesthetic impact.
Content: Music
Population: General

500912 Music-Music History and Appreciation Course Standards Document MS

500912 Music-Music History and Appreciation Course Standards Document HS

500913 - Music- General Band

Grade Level: 6 - 12
Credits: 1 HS
Description: Courses in General Band are designed to promote students' technique for playing Brass, Woodwind, and Percussion instruments and cover a variety of band literature styles (e.g., Concert, Marching, Orchestral, and Modern) primarily for performances and also include experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Band courses may be offered on multiple skill levels to accommodate student proficiency. General Band courses may include marching activities for a portion of the year.
Content: Music
Population: General

500913 Music-General Band Course Standards Document MS

500913 Music-General Band Course Standards Document HS

500917 - Music- Symphonic Band

Grade Level: 6 - 12
Credits: 1 HS
Description: Courses in Symphonic Band are designed to promote students' playing technique for brass, woodwind, and percussion instruments, and cover a variety of music styles. Literature for Symphonic Band courses is usually more advanced and incorporates orchestral literature transcribed for band. These courses emphasize rehearsal and performance experiences and also include experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Symphonic band courses are offered on multiple skill levels to accommodate proficiency.
Content: Music
Population: General

500917 Music-Symphonic Band Course Standards Document MS

500917 Music-Symphonic Band Course Standards Document HS

500918 - Music- Orchestra

Grade Level: 6 - 12
Credits: 1 HS
Description: Orchestra courses develop students' abilities to play string instruments, along with brass, woodwind, and percussion instruments, covering a variety of orchestral literature styles. Literature for Orchestra courses is usually more advanced. These courses emphasize rehearsal and performance experiences and also include experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Orchestra courses are offered on multiple skill levels to accommodate proficiency.
Content: Music
Population: General

500918 Music-Orchestra Course Standards Document MS

500918 Music-Orchestra Course Standards Document HS

500919 - Music- String Orchestra

Grade Level: 6 - 12
Credits: 1 HS
Description: Strings courses provide students an introduction to, and refine the fundamentals of, music and bowed-string instrument literature and techniques and may include more advanced techniques. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Formal and informal performances are included as part of String instrument instructional programs as well as experiences in creating and responding to music. String Orchestra courses are offered on multiple skill levels to accommodate proficiency.
Content: Music
Population: General

500919 Music-String Orchestra Course Standards Document MS

500919 Music-String Orchestra Course Standards Document HS

500920 - Music- Contemporary Band/Jazz Instrumental Ensemble

Grade Level: 6 - 12
Credits: 1 HS
Description: Students study and perform a variety of contemporary or popular styles, such as traditional jazz, jazz improvisation and rock. These courses also cultivate students' technique on instruments appropriate to the style(s) performed -- brass, woodwind, string, percussion instruments, and/or electronic. These ensembles may include both instrumental and vocal music. Coursework provides students with opportunities for growth through rehearsal and performance, improvisation, or creating and performing their own compositions and also include experiences in responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Courses are offered on multiple levels to accommodate proficiency.
Content: Music
Population: General

500920 Music-Contemporary Band/Jazz Instrumental Ensemble Course Standards Document MS

500920 Music-Contemporary Band/Jazz Instrumental Ensemble Course Standards Document HS

500921 - Music- Chamber or Small Instrumental Ensembles

Grade Level: 6 - 12
Credits: 1 HS
Description: Students study and perform a variety of traditional styles such as traditional chamber music, and contemporary or popular styles, such as jazz and rock, while also cultivating students' technique on instruments appropriate to the style(s) performed -- brass, woodwind, string, percussion instruments, and/or electronic. Courses typically range in size from 2 to 20 performers. Coursework provides students with opportunities for growth through rehearsal and performance, improvisation, or creating and performing their own compositions and also responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Courses are offered on multiple levels to accommodate proficiency.
Content: Music
Population: General

500921 Music-Chamber or Small Instrumental Ensembles Course Standards Document MS

500921 Music-Chamber or Small Instrumental Ensembles Course Standards Document HS

500922 - Music- Piano/Keyboard

Grade Level: 6 - 12
Credits: 1 HS
Description: Students explore the fundamentals of music and basic keyboard techniques such as scales, chords, melodic lines, and harmonic structure. These courses may include more advanced keyboard techniques. Formal and informal performances are included as part of piano course instructional programs. Formal and informal performances are included as part of piano/keyboard instructional programs as well as experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Courses are offered on multiple levels to accommodate proficiency.
Content: Music
Population: General

500922 Music-Piano/Keyboard Course Standards Document MS

500922 Music-Piano/Keyboard Course Standards Document HS

500923 - Music- Guitar

Grade Level: 6 - 12
Credits: 1 HS
Description: Students explore the fundamentals of music and guitar-playing techniques, such as strumming and chords. These courses may also include more advanced guitar-playing techniques. Coursework may also apply to Banjo, Bass, Dulcimer, Mandolin, Ukulele and other plucked string instruments. Formal and informal performances are included as part of the instructional program as well as experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Courses are offered on multiple levels to accommodate proficiency.
Content: Music
Population: General

500923 Music-Guitar Course Standards Document MS

500923 Music-Guitar Course Standards Document HS

500925 - Music - Chorus

Grade Level: 6 - 12
Credits: 1 HS
Description: Students develop vocal skills in the context of a large choral ensemble as a means to study and perform a variety of styles. These courses are designed to develop students' vocal techniques and their ability to sing parts and include experiences in creating and responding to music. Courses are offered on multiple levels to accommodate proficiency.
Content: Music
Population: General

500925 Music-Chorus Course Standards Document MS

500925 Music-Chorus Course Standards Document HS

500926 - Music- Vocal Ensemble

Grade Level: 6 - 12
Credits: 1 HS
Description: Students refine vocal techniques and the ability to sing parts in small ensembles. Students develop vocal techniques focusing primarily on musical literature styles such as chamber, madrigal, traditional jazz, jazz improvisation, popular, rock, barber shop, gospel, show choir and cultural. These ensembles may include both instrumental and vocal music such as a small vocal ensemble with instrumental accompaniment. Course goals include the development of solo singing ability and emphasize one or several ensemble literature styles. These ensembles include experiences in creating and responding to music. Courses are offered on multiple levels to accommodate proficiency.
Content: Music
Population: General

500926 Music-Vocal Ensemble Course Standards Document MS

500926 Music-Vocal Ensemble Course Standards Document HS

500928 - Music Theory

Grade Level: 6 - 12
Credits: 1 HS
Description: Music Theory courses provide students with an understanding of the fundamentals of music and include one or more of the following topics: melody, harmony, composition, arrangement, analysis, aural development, and sight reading.
Content: Music
Population: General

500928 Music-Music Theory Course Standards Document MS

500928 Music-Music Theory Course Standards Document HS

500929 - AP Music Theory

Grade Level: 11 - 12
Credits: 1 HS
Description: The AP Music Theory course corresponds to one or two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Musicianship skills, including dictation and other listening skills, sight singing, and harmony, are considered an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the curriculum through the practice of sight singing. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are also emphasized. College credit is earned with a qualifying score on an AP exam.
Content: AP Music Theory
Population: General

500930 - IB Music

Grade Level: 11 - 12
Credits: 1 HS
Description: 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 a historic and global awareness of musical forms and styles. Historical, theoretical, and practical studies are suggested by the IB Curriculum Board.
Content: Music
Population: General

500931 - Music- Composition/Songwriting

Grade Level: 6 - 12
Credits: 1 HS
Description: Students express themselves through creating music. These courses use conventional or non-conventional notation, and can include instrumental and vocal music. Along with musical instruments and voice, technology many be used for creating, recording, and performing music.
Content: Music
Population: General

500931 Music-Composition/Songwriting Course Standards Document MS

500931 Music-Composition/Songwriting Course Standards Document HS

500940 - Music Workplace Experience/Internship

Grade Level: 9 - 12
Credits: 1 HS
Description: Students work in a music related field. They are matched with a working professional who has a similar area of expertise. Goals are set cooperatively between the student, teacher, and the working professional. These courses include classroom activities where teachers monitor progress toward meeting the goals of the experience and include additional study of the field and personal reflection of the experience.
Content: Music
Population: General

500941 - Music - Recording and Production/Digital Sound Design

Grade Level: 6 - 12
Credits: 1 HS
Description: Students learn and apply skills in music recording techniques, music editing, mixing and creating finished musical recordings for a variety of purposes including the creative and conceptual aspects of designing and producing sound for the variety of multimedia and popular musical forms, including: artistic and experimental presentations and/or installations; soundtracks for moving image; interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of sound and music; processes of development including: composition, sound physics, programming and synthesis; techniques, forms and technologies; production and

postproduction methods, tools and processes; sound performance and presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations. These courses include classroom settings at the school or workplace/internship experiences in professional recording studios. Students will also perform compositions formally or informally and respond to music.
Content: Music
Population: General

500941 Music-Recording and Production/Digital Sound Design Course Standards Document MS

500941 Music-Recording and Production/Digital Sound Design Course Standards Document HS

500942 - Music - Technology/Electronic Music

Grade Level: 6 - 12
Credits: 1 HS
Description: Students use current technology to create, record, produce, mix, distribute, and otherwise interact with music and music media. These courses include classroom settings at the school or experience in professional recording studios.
Content: Music
Population: General

500942 Music-Technology/Electronic Music Course Standards Document MS

500942 Music-Technology/Electronic Music Course Standards Document HS

500943 - Music - Culturally Influenced Ensemble

Grade Level: 6 - 12
Credits: 1 HS
Description: Culturally Influenced Ensemble courses help students perform a variety of cultural music styles, such as Mariachi Band, Steel Drum Band, Indian Gamelan, or African Drumming Ensembles. These courses help students develop techniques on instruments appropriate to the style(s) performed - Brass, Woodwind, String, Percussion Instruments, and/or Electronic and provide experiences in creating and responding to music. Courses may emphasize instrumental music, vocal music or a combination. Coursework provides students with opportunities for growth through rehearsal and performance, improvisation, or creating and performing their own compositions and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Courses are offered on multiple levels to accommodate proficiency.
Content: Music
Population: General

500943 Music-Culturally Influenced Ensemble Course Standards Document MS

500943 Music-Culturally Influenced Ensemble Course Standards Document HS

ROTC
(580000)

The Kentucky Board of Education sets the minimum graduation requirements for all students in Kentucky based on required academic standards. Per KRS 156.160, the .5 credit Physical Education requirement may be met by taking a JROTC course. The first course taken in the Army, Navy, Marines, or Air Force JROTC series may count for this requirement as long as the Kentucky Academic Standards for Physical Education are addressed in the course. There are no substitutions allowable to fulfill the requirement of the health credit.

ROTC - Air Force Junior ROTC
(580100)

AFJROTC is an elective offering students the chance to become a better citizen and a leader - confident, self-reliant and self-disciplined. Students explore the civilian, industrial and military aspects of aerospace. College bound students may receive an Air Force Academy nomination or an Air Force ROTC scholarship, if qualified. Or, they may receive college credit for the first year of an Air Force ROTC four-year college program. Career-minded students may be able to enter the Air Force at a pay higher than most enlistees. Activities for cadets include: color guard team, drill team, field trips around the United States, flights aboard military aircraft, community service projects, opportunities for attending ROTC college days, formal social events and dances, summer leadership encampments, model rocketry club, public speaking events of middle and elementary schools, and qualified students can join the Kitty Hawk National Honor Society. Uniforms, textbooks, insignia and other equipment are provided free.

580134 - Air Force JROTC 1

Grade Level: 9 - 12
Credits:
Description: This is the first course in a four course sequence designed to develop Aerospace Science (AS), Leadership (LE) and Wellness skills in preparation for a career in the U.S. Air Force. Each course in the sequence includes a selection from the AS 100 to 500, LE 100 to 500 and Wellness education as identified in the AFJROTC Curriculum. http://www.au.af.mil/au/holmcenter/AFJROTC/Curriculum.asp
Content: Military Science (JROTC)
Population: General

580135 - Air Force JROTC 2

Grade Level: 9 - 12
Credits:
Description: This is the second course in a four course sequence designed to develop Aerospace Science (AS), Leadership (LE) and Wellness skills in preparation for a career in the U.S. Air Force. Each course in the sequence includes a selection from the AS 100 to 500, LE 100 to 500 and Wellness education as identified in the AFJROTC Curriculum.
http://www.au.af.mil/au/holmcenter/AFJROTC/Curriculum.asp
Content: Military Science (JROTC)
Population: General

580136 - Air Force JROTC 3

Grade Level: 9 - 12
Credits:
Description: This is the third course in a four course sequence designed to develop Aerospace Science (AS), Leadership (LE) and Wellness skills in preparation for a career in the U.S. Air Force. Each course in the sequence includes a selection from the AS 100 to 500, LE 100 to 500 and Wellness education as identified in the AFJROTC Curriculum.
http://www.au.af.mil/au/holmcenter/AFJROTC/Curriculum.asp
Content: Military Science (JROTC)
Population: General

580137 - Air Force JROTC 4

Grade Level: 9 - 12
Credits:
Description: This is the fourth course in a four course sequence designed to develop Aerospace Science (AS), Leadership (LE) and Wellness skills in preparation for a career in the U.S. Air Force. Each course in the sequence includes a selection from the AS 100 to 500, LE 100 to 500 and Wellness education as identified in the AFJROTC Curriculum.
http://www.au.af.mil/au/holmcenter/AFJROTC/Curriculum.asp
Content: Military Science (JROTC)
Population: General

580138 - Air Force JROTC Leadership

Grade Level: 9 - 12
Credits:
Description: This class is intended to challenge students who have completed or are in the process of completing their fourth year JROTC curriculum and desire advanced study of key aerospace subjects. The Honors course will challenge students to perform as peer leaders and to further their knowledge of air and space operations, missions of auxiliary organizations, and to be well versed on the evolving mission of the Air Force. Lesson objectives will include, but will not be limited to, the following: comprehend the role and mission of Air Expeditionary Force, comprehend the importance of understanding the dynamics of international terrorism to the modern day Air Force, explain the importance and historical value of organizations such as the Tuskegee Airmen and Civil Air Patrol, describe the value and significance to current day military operation of Joint Operations, value and demonstrate the importance of being an exemplary role-model and leader to underclassmen.
Content: Military Science (JROTC)
Population: General

ROTC - Army Junior Reserve Officer Training Corp
(580200)

Junior ROTC is a series of elective courses taught by retired military personnel with a goal to motivate, develop, and orient participants to be better Americans by educating them in leadership positions. Instructors and upper classmen are role models for students developing universal strengths like integrity, dependability and self-discipline and universal values like commitment, respect and loyalty. Students learn the rights, responsibilities and privilege of citizenship, develop personal responsibility, build life skills and rise to leadership opportunities.

580240 - Army Junior ROTC Level I

Grade Level: 9 - 12
Credits:
Description: Nine lessons in Level I cover: wear of the military uniform, military customs and courtesies, the National Anthem, the American flag, and the purpose of JROTC.
Content: Military Science (JROTC)
Population: General

580241 - Army Junior ROTC Level 2

Grade Level: 9 - 12
Credits:
Description: This course will focus on the principles of leadership and marching also known as Drill and Ceremonies
Content: Military Science (JROTC)
Population: General

580242 - Army Junior ROTC Level 3

Grade Level: 9 - 12
Credits:
Description: This course will develop their study skills, communication skills, and learn about resolving conflicts
Content: Military Science (JROTC)
Population: General

580243 - Army Junior ROTC Level 4

Grade Level: 9 - 12
Credits:
Description: This course will discuss diet, exercise, and drug awareness and introduces the cadets to first aid.

Content: Military Science (JROTC)
Population: General

580244 - Army JROTC Leadership

Grade Level: 9 - 12
Credits: 1
Description: This course provides students with an additional opportunity to hone military leadership skills.
Content: Military Science (JROTC)
Population: General

ROTC- Navy/Marines
(580300)

580310 - Navy JROTC 1

Grade Level: 9 - 12
Credits: 1
Description: To introduce students to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals; promote an awareness of the importance of a healthy lifestyle, including physical fitness, a proper diet, and controlling stress; drug awareness; provide the principles of health and first aid, geography and survival skills and an overview of Naval ships and aircraft. These elements are pursued at the fundamental level. The course includes introduction to the NJROTC program; introduction to Leadership, Citizenship and the American Government; introduction to Wellness, Fitness, and First Aid to include diet, exercise and drug awareness, introduction to Geography, Orienteering, Survival and Map Reading Skills; Financial Skills and introduction to the U. S. Navy.
Content: Military Science (JROTC)
Population: General

580311 - Navy JROTC 2

Grade Level: 9 - 12
Credits: 1
Description: To build on the general introduction provided in Naval Science 1, to further develop the traits of citizenship and leadership, and to introduce cadets to the technical areas of naval science and the role of the U. S. Navy in maritime history and the vital importance of the world's oceans to the continued well-being of the United States. The course includes ongoing instruction into Leadership; introduction to Maritime History, including the American Revolution, Civil War, the rise of the U. S. to world power status, World Wars 1 and 2, the Cold War Era and the 1990s and Beyond; introduction to Nautical Sciences to include Maritime Geography, Oceanography, Meteorology, Astronomy, and Physical Sciences.
Content: Military Science (JROTC)
Population: General

580312 - Navy JROTC 3

Grade Level: 9 - 12
Credits: 1
Description: Broaden the understanding of students in the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, and the importance of sea power and national security. Students gain a more in-depth knowledge of Naval ships and aircraft and an introduction to marine navigation and seamanship. The course includes instruction in Sea Power and National Security, Naval Operations and Support Functions, Military Law, and International Law and the Sea. Provides introduction to Ship Construction and Damage Control, Shipboard Organization and Watch Standing, Basic Seamanship, Marine Navigation, and Naval Weapons and Aircraft. Ongoing instruction in leadership, citizenship and discipline.

Content: Military Science (JROTC)
Population: General

580313 - Navy JROTC 4

Grade Level: 9 - 12
Credits: 1
Description: Focused primarily on practical leadership techniques and implementation. The intent is to assist seniors in understanding leadership and improving their leadership skills by putting them in positions of leadership, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. Seniors are mentored/guided in their preparation for life after high school to include college preparation, scholarship applications, and the variety of choices that are available to them. The course includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Students are provided access to ACT/SAT prep courses, guidance in selecting a college and pursuing available scholarships, and mentoring in establishing long range life goals.
Content: Military Science (JROTC)
Population: General

580314 - Navy JROTC Leadership

Grade Level: 9 - 12
Credits: 1
Description: This course provides students with an additional opportunity to hone military leadership skills.
Content: Military Science (JROTC)
Population: General

580320 - Marine Corps JROTC 1

Grade Level: 9 - 12
Credits:
Description: LEADERSHIP EDUCATION I (LE-I) This first year of the program provides cadets with an introduction to both leadership and citizenship. The first year also gives the new cadets exposure to personal growth and responsibility and establishes a foundation of military structure and tradition.
Content: Military Science (JROTC)
Population: General

580321 - Marine Corps JROTC 2

Grade Level: 9 - 12
Credits: 1
Description: LEADERSHIP EDUCATION II (LE-II) The second year continues the leadership and citizenship classes of LE-I. During LE-II the students receive instruction in General Military Subjects with more structure and tradition than in LE-I, as well as the introduction of civilian marksmanship training and land navigation training with the map and compass. This year also provides additional learning experiences in personal growth and responsibility, as well as citizenship.
Content: Military Science (JROTC)
Population: General

580322 - Marine Corps JROTC 3

Grade Level: 9 - 12
Credits: 1
Description: LEADERSHIP TRAINING III (LE-III) In LE-III, cadets will begin to use their leadership training as they assume positions of increased authority and responsibility within the program. In this year also, detailed instruction on personal finances is presented, as well as other preparation for life beyond high school.
Content: Military Science (JROTC)
Population: General

580323 - Marine Corps JROTC 4

Grade Level: 9 - 12
Credits: 1
Description: LEADERSHIP TRAINING IV (LE-IV) This is a year when cadets really bring together all their previous learning experiences in the MCJROTC program. Senior cadets will conduct formations and inspections, as well as supervise certain training events with younger cadets. LE-4 cadets continued to be challenged academically with requirements for research projects and independent studies and progress reports.
Content: Military Science (JROTC)
Population: General

580324 - Marine Corps Leadership

Grade Level: 9 - 12
Credits: 1
Description: This course provides students with an additional opportunity to hone military leadership skills.
Content: Military Science (JROTC)
Population: General

Special Education
(600000)

Special Education - Alternate Diploma Courses
(600100)

600120 - Middle School English

Grade Level: 6 - 8
Credits: 0
Description: Middle level English/Language Arts is designed to present a wide range of reading experiences with print and non-print text for literary, informational, persuasive, and practical purposes. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: English Language Arts
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for:
230101 English 6

230103 English 7

230105 English 8

and the Kentucky Employability and Foundational Academic Standards.

600121 - English I

Grade Level: 9 - 9
Credits: 0
Description: Special Topics: instruction for students with reading difficulties; focuses on skill acquisition and reading technique; demonstrates functional reading comprehension strategies. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: English Language Arts
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 230107 English 1 and the Kentucky Employability and Foundational Academic Standards.

600122 - English II

Grade Level: 10 - 10
Credits: 0
Description: Special Topics: instruction for students with reading difficulties; focuses on skill acquisition and reading technique; demonstrates functional reading comprehension strategies. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: English Language Arts
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 230110 English 2 and the Kentucky Employability and Foundational Academic Standards.

600123 - English III

Grade Level: 11 - 11
Credits: 0
Description: Special Topics: continued skill building; emphasis on individual deficiencies; functional literacy. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: English Language Arts
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 230113 English 3 and the Kentucky Employability and Foundational Academic Standards.

600124 - English IV

Grade Level: 12 - 14
Credits: 0
Description: Special Topics: competency test reading and writing; career reading/writing skills. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.

Content: English Language Arts
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 230116 English 4 and the Kentucky Employability and Foundational Academic Standards.

600130 - Middle School Math

Grade Level: 6 - 8
Credits: 0
Description: This course is designed so the student accomplishes the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards with a strong emphasis on real world connects and drill/practice.
Content: Mathematics
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for:
270201 Grade 6 Mathematics

270202 Grade 7 Mathematics

270203 Grade 8 Mathematics

and the Kentucky Employability and Foundational Academic Standards.

600131 - Math 1

Grade Level: 9 - 9
Credits: 0
Description: Focus given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards with a strong emphasis on real world connects and drill/practice. Special focus is given to practical math skills such as money, measurement (i.e. time/calendar skills), basic computation-number sense, and measurable goals. All materials and activities presented are differentiated to meet individual student needs.
Content: Mathematics
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standard document for 270304 Algebra 1 and the Kentucky Employability and Foundational Academic Standards.

600132 - Math 2

Grade Level: 10 - 10
Credits: 0
Description: Course to include the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards with a strong emphasis on real world connections and connections with other disciplines of study. Special focus is given to practical math skills such as money, measurement (i.e. time), basic computation-number sense, and measurable goals. All materials and activities presented are differentiated to meet individual student needs.
Content: Mathematics
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 270701 Integrated Applied Mathematics 1 and the Kentucky Employability and Foundational Academic Standards.

600133 - Math 3

Grade Level: 11 - 11
Credits: 0
Description: Course to include the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards with a strong emphasis on real world connections and connections with other disciplines of study. Special focus is given to practical math skills such as money, measurement (i.e. time), displaying/simple interpretation of sets of data (performance and progress, and measurable goals addressed through Kentucky's alternate assessment program and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Mathematics
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 270702 Integrated Applied Mathematics 2 and the Kentucky Employability and Foundational Academic Standards.

600134 - Math 4

Grade Level: 12 - 14
Credits: 0
Description: Course to include the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards with a strong emphasis on real world connections and practice opportunities in settings both in an out of school and the Kentucky Employability and Foundational Academic Standards. Special focus is given to practical

math skills such as money, measurement (i.e. time/calendar), and personal budgeting. All materials and activities presented are differentiated to meet individual student needs.
Content: Mathematics
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 270703 Integrated Applied Mathematics 3 and the Kentucky Employability and Foundational Academic Standards.

600139 - Middle School Science

Grade Level: 6 - 8
Credits:
Description: In this course, students are engaged in experiences demonstrating structure and properties of matters, motion and forces, biodiversity, Earth in the Solar System, and Earth's systems; chemical reactions, energy transfer, forces, information processing, and genetics; and students will be engaged in experiences which will connect their understandings about Life, Earth and Space, and Physical Science concepts. These connections should be related to human impact as described in the Kentucky Academic Standards for Science. The use of the science practices describes the behaviors students will engage in as they investigate the natural world. The use of the engineering practices describe behaviors students will use as they design and build models and systems. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Integrated Science (Non-High School)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for:
300166 Integrated Science 6

300177 Integrated Science 7

300188 Integrated Science 8

and the Kentucky Employability and Foundational Academic Standards.

600140 - Integrated Science

Grade Level: 9 - 12
Credits: 0
Description: This inquiry based introductory course is designed around the themes of patterns of change and systems, order, and organization. Students examine the organization of the universe by beginning with the fundamental laws that give order, continue with the way these laws affect the Earth and the organization of life, and conclude with how life responds to these laws. Special focus is

given to Kentucky Alternate Assessment Standards and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Integrated Science 1
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 303091 Integrated Science 1 and the Kentucky Employability and Foundational Academic Standards.

600141 - Life Science/Biology

Grade Level: 9 - 12
Credits: 0
Description: Students develop a conceptual understanding of life science through the use of scientific inquiry. They experience life science concepts such as heredity; biological change; interdependence of organisms; matter, energy and organization in living systems; and behavior of organisms. The scientific inquiry approach uses concrete, hands-on experiences that require students to practice skills. Special focus is given to Kentucky Alternate Assessment Standards and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Biology
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 302601 Biology 1 and the Kentucky Employability and Foundational Academic Standards.

600142 - Earth/Space Science

Grade Level: 9 - 12
Credits: 0
Description: Students develop a basic understanding of Earth/space science. They will participate in hands-on experiences of Earth/space concepts such as energy in the Earth system, formation and ongoing changes of the Earth system, and formation and ongoing changes of the universe. Special focus is given to Kentucky Alternate Assessment Standards and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Earth-Space Science
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 304611 Earth/Space Science and the Kentucky Employability and Foundational Academic Standards.

600149 - Middle School Social Studies

Grade Level: 6 - 8
Credits:
Description: "Middle level social studies uses the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Social Studies
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for:
450189 Grade 6 World Geography

450190 Grade 7 World Civilization

450191 Grade 8 American (U.S. History)

and the Kentucky Employability and Foundational Academic Standards.

600150 - Integrated Social Studies

Grade Level: 9 - 12
Credits: 0
Description: Integrated Social Studies is an introductory survey of the various areas of social studies. It is designed to give the student exposure to different topics of social studies to prepare them for participating in future courses. Special focus is given to Kentucky Alternate Assessment Standards and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Social Studies
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 459801 Integrated Social Studies and the Kentucky Employability and Foundational Academic Standards.

600151 - World History

Grade Level: 9 - 12
Credits: 0
Description: World History is a survey of the history of the world focusing on cultural and political aspects: a short study of western and non-western civilizations; and current events. Special focus is given Kentucky Alternate Assessment Standards and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: World History
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 450835 World History and the Kentucky Employability and Foundational Academic Standards.

600152 - U.S. History

Grade Level: 9 - 12
Credits: 0
Description: U.S. History is a basic overview of the history from colonial times to present; government institutions; applications to daily living. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: U.S. History
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 450812 U.S. History: Reconstruction to Present and the Kentucky Employability and Foundational Academic Standards.

600160 - History and Appreciation of Visual and Performing Arts

Grade Level: 6 - 14
Credits: 0
Description: This course is a study of the humanities through the arts (dance, drama, music, and visual art). It addresses the humanities, purposes, creative processes and interrelationships of the visual and performing arts. Career opportunities in visual art are also explored. Special focus is given to Kentucky Alternate Assessment Standards and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability

Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 500111 History and Appreciation of Visual and Performing Arts Survey and the Kentucky Employability and Foundational Academic Standards.

600170 - Health and Physical Education

Grade Level: 6 - 14
Credits: 0
Description: Health addresses the topics of mental health, drugs, alcohol and tobacco, sex education, sexually transmitted diseases, infectious diseases, safety and first aid, nutrition, consumer health and non-infectious diseases. PE addresses physical and motor fitness, fundamental motor skills and patterns and include lifetime leisure sports, individual sports and team sports. Career opportunities in the health and recreation field are also explored. Improvement of overall good health through healthy choice-making is the primary focus of the course. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Physical Education
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards document for 340290 High School Integrated Health and Physical Education and the Kentucky Employability and Foundational Academic Standards.

600175 – Daily Living Skills

Grade Level: 0 - 14
Credits:
Description: This course is designed to provide students with practical and functional skill development in the area of daily living which will improve the quality of life for them and their families. Daily living skills can include, but are not limited to, personal and self-care skills (i.e. eating, nutrition, dressing, personal hygiene, planning meals); domestic skills (i.e. household tasks, time management, money management, shopping); and community skills (i.e. travel and transportation, community participation, recreation/leisure, employment skills, community safety, citizenship responsibility).
Content: Life Skills (Special Education)
Population: Specific Learning Disability
Population: Other Health Impaired
Population: Mild Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Hearing Impaired
Population: Visually Impaired
Population: Developmentally Delayed
Population: Autistic
Population: Traumatic Brain Injury

Population: Emotional Behavior Disability
Population: Deaf/Blind

600180 - Daily Living Skills

Grade Level: 0 - 14
Credits: 0
Description: "This course is designed to provide students with practical and functional skill development in the area of daily living which will improve the quality of life for them and their families. Daily living skills can include, but are not limited to, personal and self-care skills (i.e. eating, nutrition, dressing, personal hygiene, planning meals); domestic skills (i.e. household tasks, time management, money management, shopping); and community skills (i.e. travel and transportation, community participation, recreation/leisure, employment skills, community safety, citizenship responsibility). Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

600181 - Basic Money Skills

Grade Level: 10 - 12
Credits: 0
Description: This course is designed to provide students with math concepts needed in developing sound money management skills which will help to improve the quality of life for individuals and their families. Special focus is given to common core standards addressed in the Kentucky alternate assessment program and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

600182 - Money Skills for Independent Living

Grade Level: 12 - 14
Credits: 0
Description: This course is designed to prepare students to understand and use basic financial management skills and practices contributing to financial stability, improving the quality of life for individuals and families. Decision-making, problem solving, goal setting and using technology are integrated throughout the content. Special focus is the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)

Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

600183 - Developing Career Choices

Grade Level: 6 - 8
Credits: 0
Description: Career Choices in the middle school is an exploratory course which introduces students to a broad range of career opportunities. Units of instruction focus on three areas... employability skills, career awareness, and education/career planning. The curriculum can be adapted for grade levels seven, eight or nine and various schedules as 6, 9, 12 or 18 weeks. Opportunities are provided for the career planning component to be correlated with the Individual Learning Plan (ILP). Special focus is given to the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

600184 - Developing Career Options

Grade Level: 9 - 14
Credits: 0
Description: Career Options is a course at the secondary level focusing on orientation to careers. Course content includes orientation to 16 career clusters, employability skills, self-management and work ethics. Opportunities are provided for development of problem solving, decision making and reasoning through school and work-based learning experience. Special focus is the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs. Career clusters include: Agriculture, Food & Natural Resources; Architecture & Construction; Arts, A/V Technology & Communications; Business Management & Administration; Education & Training; Finance; Government & Public Administration; Health Science; Hospitality & Tourism; Human Services; Information Technology; Law, Public Safety, Corrections & Security; Manufacturing; Marketing; Science, Technology, Engineering & Mathematics, Transportation, Distribution & Logistics
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

The 600184 Developing Career Options course standards document contains specific Kentucky Employability and Foundational Academic Standards and an appendix that details the teaching progressions for the Career Work Experience Certification.

600185 - Individualized Career Work Experience

Grade Level: 11 - 14
Credits: 0
Description: Career Work Experience is a course at the secondary level focusing on work experiences for students. This course includes a related class and work based learning experiences in the local community. Special focus is given to the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

The 600185 Individualized Career Work Experience course standards document contains specific Kentucky Employability and Foundational Academic Standards and an appendix that details the teaching progressions for the Career Work Experience Certification.

600189 - Experience in Workplace Principles

Grade Level: 9 - 14
Credits: 0
Description: Experience in Workplace Principles examine the skills needed to adapt to changing demands and expectations. The course includes, but is not limited to, problem solving, teamwork, time management, and self-management skills. Job-seeking and job-retention skills are taught through the development of resumes and job search materials. Special focus is given to the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

The 600189 Experience in Workplace Principles course standards document contains specific Kentucky Employability and Foundational Academic Standards and an appendix that details the teaching progressions for the Career Work Experience Certification.

600190 - Developing Leadership Skills

Grade Level: 9 - 14
Credits: 0
Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge. Special focus is given to the Kentucky alternate assessment aligned to the Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs. This course may apply to any of the career clusters and should be aligned to the individual students' postsecondary goal(s). Career clusters include: Agriculture; Food & Natural Resources; Architecture & Construction; Arts, A/V Technology & Communications; Business Management & Administration; Education &

Training; Finance; Government & Public Administration; Health Science; Hospitality & Tourism; Human Services; Information Technology; Law, Public Safety, Corrections & Security; Manufacturing; Marketing; Science, Technology, Engineering & Mathematics; Transportation, Distribution & Logistics.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Autistic
Population: Traumatic Brain Injury

The 600190 Developing Leadership Skills course standards document contains specific Kentucky Employability and Foundational Academic Standards and an appendix that details the teaching progressions for the Career Work Experience Certification.

Special Education - Resource and Collaboration
(600200)

Resource courses should be identified with the proper content's regular state course code. Please use the multi-subject/multi-grade codes within those program areas as needed.

600285 - Life Skills

Grade Level: 0 - 14
Credits:
Description: This is a course designed to re-enforce Life Skills for special education students. Life skills can include, but are not limited to, social skills, building relationships and organizational skills.
Content: Life Skills (Special Education)
Population: Specific Learning Disability
Population: Other Health Impaired
Population: Mild Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Hearing Impaired
Population: Visually Impaired
Population: Developmentally Delayed
Population: Autistic
Population: Traumatic Brain Injury
Population: Emotional Behavior Disability
Population: Deaf/Blind

600290 - Life Skills

Grade Level: 0 - 14
Credits: 0
Description: This is a course designed to re-enforce Life Skills for special education students. Life skills can include, but are not limited to, social skills, building relationships and organizational skills. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Life Skills (Special Education)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury
Population: Deaf/Blind

Special Education - Elementary
(670000)

Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.

670102 - Primary Language Arts

Grade Level: 0 - 3
Credits:
Description: Content is designed to build a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate learning strategies, as well as the writing process and criteria for effective writing, to develop writing in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to discover and communicate ideas and information. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: English Language Arts
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 701020 Primary Language Arts:
701020 Primary Language Arts Kindergarten

701020 Primary Language Arts Grade 1

701020 Primary Language Arts Grade 2

701020 Primary Language Arts Grade 3

and the Kentucky Employability and Foundational Academic Standards.

670103 - Primary Reading

Grade Level: 0 - 3
Credits:
Description: Focuses on skill acquisition and reading technique; demonstrates word attack skills and reading comprehension strategies. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.

Content: Reading
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

670104 - Primary Math

Grade Level: 0 - 3
Credits:
Description: Students engage in multiple experiences with mathematics utilizing the standards for mathematical practices establishing an importance of processes and proficiencies allowing students to build a balance of conceptual understanding, procedural skill/fluency, and application. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Mathematics
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards document for 701040 Primary Math:
701040 Primary Mathematics Kindergarten

701040 Primary Mathematics Grade 1

701040 Primary Mathematics Grade 2

701040 Primary Mathematics Grade 3

and the Kentucky Employability and Foundational Academic Standards.

670105 - Primary Social Studies

Grade Level: 0 - 3
Credits:
Description: The social studies program for the primary grades includes essential content from five areas of social studies: government and civics, culture and society, economics, historical perspective, and geography. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Social Studies
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards document for 701050 Primary Social Studies and the Kentucky Employability and Foundational Academic Standards.

670106 - Primary Science

Grade Level: 0 - 3
Credits:
Description: Primary level science contains the physical, earth/space, life science, and engineering core ideas as defined in the Kentucky Academic Standards for Science. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Integrated Science (Non-High School)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 701060 Primary Science:
701060 Primary Science Kindergarten

701060 Primary Science Grade 1

701060 Primary Science Grade 2

701060 Primary Science Grade 3

and the Kentucky Employability and Foundational Academic Standards.

670202 - Intermediate Language Arts

Grade Level: 4 - 5
Credits:
Description: Content is designed to build a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate learning strategies, as well as the writing process and criteria for effective writing, to develop writing in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to discover and communicate ideas and information. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: English Language Arts
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 702020 Intermediate Language Arts:
702020 Intermediate Language Arts Grade 4

702020 Intermediate Language Arts Grade 5

and the Kentucky Employability and Foundational Academic Standards.

670203 - Intermediate Reading

Grade Level: 4 - 5
Credits:
Description: Focuses on skill acquisition and reading technique; demonstrates word attack skills and reading comprehension strategies. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Reading
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

670204 - Intermediate Math

Grade Level: 4 - 5
Credits:
Description: Intermediate level problem solving, mathematical communication, connections, mathematical reasoning, and multiple representations should be a part of the mathematics curriculum. Features of the intermediate level mathematics programs include active, hands-on work with manipulatives (concrete materials) and appropriate technologies. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Mathematics
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards document for:
702040 Grade 4 Mathematics

702045 Grade 5 Mathematics

and the Kentucky Employability and Foundational Academic Standards.

670205 - Intermediate Social Studies

Grade Level: 4 - 5
Credits:
Description: Intermediate level social studies utilizes the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. For example, grade four focuses on Kentucky studies and regions of the United States through integration of all five strands. Grade five includes an integrated focus on United States history. Regardless of the grade-level context, students incorporate each of the five categories of social studies to explore the content. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Social Studies
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards document for:
702050 Intermediate Social Studies Grade 4

702055 Intermediate Social Studies Grade 5

and the Kentucky Employability and Foundational Academic Standards.

670206 - Intermediate Science

Grade Level: 4 - 5
Credits:
Description: Intermediate level science contains the physical, earth/space, life science, and engineering core ideas as defined in the Kentucky Academic Standards for Science. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world and develop solutions to problems. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Integrated Science (Non-High School)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards document for:
702060 Intermediate Science Grade 4

300155 Integrated Science 5

and the Kentucky Employability and Foundational Academic Standards.

670302 - Elementary History and Appreciation of Visual and Performing Arts

Grade Level: 0 - 5
Credits:
Description: This course is a study of significant works, artists, and movements that have shaped the arts world and have influenced or reflected various periods of history in the arts disciplines of dance, music, theatre and visual art. Course content emphasizes the sequential evolution of art forms, techniques, symbols, and themes within those disciplines. The course covers the connections of the arts to cultural, social, political, and historical events throughout the world. Critical analysis of works from the disciplines, as they communicate and express the history, needs, and ideals of society and individuals is included. Students explore career opportunities in the visual and performing arts. Special focus is given to the Kentucky Alternate Assessment aligned to Kentucky Academic Standards (KAS) and the Kentucky Employability and Foundational Academic Standards. All materials and activities presented are differentiated to meet individual student needs.
Content: Humanities (Social Studies)
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards documents for 703020 Elementary History and Appreciation of Visual and Performing Arts:
703020 Elementary History and Appreciation of Visual and Performing Arts K-3

703020 Elementary History and Appreciation of Visual and Performing Arts 4-5

and the Kentucky Employability and Foundational Academic Standards.

670307 - Elementary Health and Physical Education

Grade Level: 0 - 5
Credits:
Description: This is a PE course designed specifically for those needing modifications to their PE program
Content: Physical Education
Population: Other Health Impaired
Population: Functional Mental Disability
Population: Multiple Disabilities
Population: Orthopedically Impaired
Population: Autistic
Population: Traumatic Brain Injury

Refer to the course standards document for 703088 K-3 Integrated Health Education and Physical Education and 703089 Intermediate Integrated Health Education and Physical Education:
703088 K-3 Integrated Health Education and Physical Education

703089 Intermediate Integrated Health Education and Physical Education Grade 4

703089 Intermediate Integrated Health Education and Physical Education Grade 5

and the Kentucky Employability and Foundational Academic Standards.

Elementary
(700000)

Elementary - Preschool
(700500)

700510 - Preschool Self-Contained

Grade Level: -1 - 0
Credits:
Description: The preschool program is designed to be developmentally appropriate for young children. "Developmentally appropriate" is defined in law to mean that the program focuses on the child's physical, intellectual, social and emotional development, including interpersonal, intrapersonal, and socialization skills.
Content: Elementary Education
Population: Preschool

Elementary - Primary
(701000)

701020 - Primary Language Arts

Grade Level: 0 - 3
Credits:
Description: Content is designed to build a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate learning strategies, as well as the writing process and criteria for effective writing, to develop writing in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to discover and communicate ideas and information.
Content: English Language Arts
Population: General

701020 Primary Language Arts Kindergarten Course Standards Document

701020 Primary Language Arts Grade 1 Course Standards Document

701020 Primary Language Arts Grade 2 Course Standards Document

701020 Primary Language Arts Grade 3 Course Standards Document

701030 - Primary Reading

Grade Level: 0 - 3
Credits:
Description: Focuses on skill acquisition and reading technique; demonstrates word attack skills and reading comprehension strategies
Content: Reading
Population: General

701040 - Primary Mathematics

Grade Level: 0 - 3
Credits:
Description: In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics. In Grade 1, instructional time should focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes. In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten

notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes. In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.
Content: Mathematics
Population: General

701040 Primary Mathematics Kindergarten Course Standards Document

701040 Primary Mathematics Grade 1 Course Standards Document

701040 Primary Mathematics Grade 2 Course Standards Document

701040 Primary Mathematics Grade 3 Course Standards Document

701050 - Primary Social Studies

Grade Level: 0 - 3
Credits:
Description: The social studies program for the primary grades includes essential content from five areas of social studies: government and civics, culture and society, economics, historical perspective, and geography. The essential content descriptions for the five social studies areas are not course or grade-level descriptions. Rather, they describe a comprehensive and integrated social studies program to be completed during the primary school experience.
Content: Social Studies
Population: General

701050 Primary Social Studies Course Standards Document

701060 - Primary Science

Grade Level: 0 - 3
Credits:
Description: Primary level science contains the physical, earth/space, life science, and engineering core ideas as defined in the Kentucky Academic Standards for Science. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. Standards marked with an asterisk (*) integrate traditional science content with engineering.
Content: Integrated Science (Non-High School)
Population: General

701060 Primary Science Kindergarten Course Standards Document

701060 Primary Science Grade 1 Course Standards Document

701060 Primary Science Grade 2 Course Standards Document

701060 Primary Science Grade 3 Course Standards Document

Elementary - Intermediate
(702000)

702020 - Intermediate Language Arts

Grade Level: 4 - 5
Credits:
Description: Content is designed to build a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate learning strategies, as well as the writing process and criteria for effective writing, to develop writing in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to discover and communicate ideas and information. Course adheres to Program of Studies requirements.
Content: English Language Arts
Population: General

702020 Intermediate Language Arts Grade 4 Course Standards Document

702020 Intermediate Language Arts Grade 5 Course Standards Document

702030 - Intermediate Reading

Grade Level: 4 - 5
Credits:
Description: Focuses on skill acquisition and reading technique; demonstrates word attack skills and reading comprehension strategies.
Content: Reading
Population: General

702040 - Grade 4 Mathematics

Grade Level: 4 - 4
Credits:
Description: In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry. (1) Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Depending on the numbers and the context, they select and accurately apply appropriate methods to estimate or mentally calculate products. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. Students apply their understanding of models for division, place value, properties of

operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context. (2) Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., 15/9 = 5/3), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number. (3) Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.
Content: Mathematics
Population: General

702040 Grade 4 Mathematics Course Standards Document

702045 - Intermediate Mathematics - Grade 5

Grade Level: 5 - 5
Credits:
Description: In Grade 5, instructional time should focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume. (1) Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.) (2) Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize fluency with multi-digit addition, subtraction, multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately. (3) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of same-size units of volume required to fill the space without gaps or overlaps. They understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as decomposed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volumes to solve real world and mathematical problems.
Content: Mathematics
Population: General

702045 Grade 5 Mathematics Course Standards Document

702050 - Intermediate Social Studies - Grade 4

Grade Level: 4 - 4
Credits: None
Description: Intermediate level social studies utilizes the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. For example, grade four focuses on Kentucky studies and regions of the United States through integration of all five strands. Grade five includes an integrated focus on United States history. Regardless of the grade-level context, students incorporate each of the five categories of social studies to explore the content
Content: Social Studies
Population: General

702050 Intermediate Social Studies Grade 4 Course Standards Document

702055 - Intermediate Social Studies - Grade 5

Grade Level: 5 - 5
Credits: none
Description: Intermediate level social studies utilizes the five strands of social studies (historical perspective, geography, economics, governments and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. For example, grade four focuses on Kentucky studies and regions of the United States through integration of all five strands. Grade five includes an integrated focus on United States history. Regardless of the grade-level context, students incorporate each of the five categories of social studies to explore the content.
Content: Social Studies
Population: General

702055 Intermediate Social Studies Grade 5 Course Standards Document

702060 - Intermediate Science

Grade Level: 4 - 4
Credits:
Description: Intermediate level science contains the physical, earth/space, life science, and engineering core ideas as defined in the Kentucky Academic Standards for Science. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. Standards marked with an asterisk (*) integrate traditional science content with engineering.
Content: Integrated Science (Non-High School)
Population: General

702060 Intermediate Science Grade 4 Course Standards Document

300155 Integrated Science 5

Grade Level: 5 - 5
Credits:
Description: In this course, students are engaged in experiences related to properties and changes of matter, interaction of the Earth's systems, and energy transfer within ecosystems, as outlined in the Kentucky Academic Standards for Science. The use of the science practices describes the behaviors students will engage in as they investigate the natural world. The use of the engineering practices describe behaviors students will use as they design and build models and systems.
Content: Integrated Science (Non-High School)
Population: General

300155 Integrated Science 5 Course Standards Document

Elementary - Other
(703000)

703001 - Elementary Homeroom

Grade Level: 0 - 5
Credits: 0
Description: This course is to be used for non-self contained elementary homeroom attendance courses.
Content: Elementary Education
Population: General

703010 - Elementary Visual Art

Grade Level: 0 - 5
Credits: 0
Description: Students explore and develop knowledge and skills for traditional and new art mediums to create individual works of art, present their artworks to an audience, respond verbally and in writing to their works and the works of others, and connect their art to their experiences and the world around them. Students explore the language, materials, media, and the elements of art and principles of design supporting a work of art. Students also explore and analyze artists, art movements, and styles. Students explore career opportunities in art.
Content: Art
Population: General

703010 Elementary Visual Art K-3 Course Standards Document

703010 Elementary Visual Arts 4-5 Course Standards Document

703020 - Elementary History and Appreciation of Visual and Performing Arts

Grade Level: 0 - 5
Credits: 0
Description: Students explore significant works, artists, and movements that have shaped the arts world and have influenced or reflected various periods of history in the arts disciplines of dance, music, theatre and visual art. Course content emphasizes the sequential evolution of art forms, techniques, symbols, and themes within those disciplines. The course covers the connections of the arts to cultural, social, political, and historical events throughout the world. Critical analysis of works from the disciplines, as they communicate and express the history, needs, and ideals of society and individuals is included. The course provides for students to experience creating and performing/presenting/producing their own works, to respond to their works and the works of others and to connect their personal experiences to the arts. Students explore career opportunities in the visual and performing arts.
Content: Arts and Humanities/History and Appreciation of the Visual and Performing Arts
Population: General

703020 Elementary History and Appreciation of Visual and Performing Arts K-3 Course Standards Document

703020 Elementary History and Appreciation of Visual and Performing Arts 4-5 Course Standards Document

---

703021 - Elementary Dance/Creative Movement

Grade Level: 0 - 5
Credits: 0
Description: Students explore the purposes of and how dance serves different cultures (recreational, social, cultural, theatrical, educational, and liturgical, etc.) to expand knowledge of and ability to critique dance as an art form. Students explore a variety of dance forms, styles and choreographic approaches to create their own dance and perform dances for an audience. Students respond both verbally and in writing to their dance and the dance of others. Creative Movement courses develop students' ability to move expressively without being based on particular dance forms or on developing specific dance techniques. Students explore career opportunities in dance.
Content: Dance
Population: General

703021 Elementary Dance Creative Movement K-3 Course Standards Document

703021 Elementary Dance Creative Movement 4-5 Course Standards Document

---

703022 - Elementary Theatre

Grade Level: 0 - 5
Credits: 0
Description: Students explore and develop a knowledge of theatrical concepts and techniques that will enable them to create new theatre pieces, perform their own and existing theatre works for an audience, respond both verbally and in writing to studio exercises and their performances and the performances of others and to connect theatre to their lives and the world around them. Courses cover multiple styles of dramatic literature. Students explore acting and improvisation, theatre design (sets, costuming, etc.) and technology, theatre history and appreciation and dramatic literature. Careers in theatre are explored.
Content: Theatre
Population: General

703022 Elementary Theatre K-3 Course Standards Document

703022 Elementary Theatre 4-5 Course Standards Document

703030 - Elementary General Music

Grade Level: 0 - 5
Credits: 0
Description: Students explore various aspects of music including the elements of music, music styles, historical and cultural contexts; including study of instrumental music (acoustic and electronic) and vocal music. Students learn to create their own music, perform their music and the music of others for an audience, respond both verbally and in writing about their music and the music of others

and connect music to their lives and the world around them. Although performance is a part of the course, the focus is on learning about music. Students learn about careers in music.
Content: Music
Population: General

703030 Elementary General Music K-3 Course Standards Document

703030 Elementary General Music 4-5 Course Standards Document

---

703031 - Elementary Band

Grade Level: 0 - 5
Credits: 0
Description: Students explore and develop technique for playing brass, woodwind, and percussion instruments, and study and perform a variety of band literature styles (concert, marching, symphonic, and modern styles). Classes can be large ensemble including all three instrument families or in separate homogeneous classes according to family. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through rehearsal and performance experiences. Students learn to create their own music, perform their music and the music of others for an audience, respond both verbally and in writing about their music and the music of others and connect music to their lives and the world around them. Students learn about careers in music.
Content: Music
Population: General

703031 Elementary Band K-3 Course Standards Document

703031 Elementary Band 4-5 Course Standards Document

703032 - Elementary Chorus

Grade Level: 0 - 5
Credits: 0
Description: Students explore and develop vocal skills in the context of a large choral ensemble as a means to study and perform a variety of styles. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through rehearsal and performance experiences. Students learn to create their own music, perform their music and the music of others for an audience, respond both verbally and in writing about their music and the music of others and connect music to their lives and the world around them. Students learn about careers in music.
Content: Music
Population: General

703032 Elementary Chorus K-3 Course Standards Document

703032 Elementary Chorus 4-5 Course Standards Document

703033 - Elementary Orchestra

Grade Level: 0 - 5
Credits: 0
Description: Students explore and develop abilities to play string instruments, along with brass, woodwind, and percussion instruments, covering a variety of orchestral literature styles. Full orchestras include strings along with woodwind, brass, and percussion instruments. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through rehearsal and performance experiences. Students learn to create their own music, perform their music and the music of others for an audience, respond both verbally and in writing about their music and the music of others and connect music to their lives and the world around them. Students learn about careers in music.
Content: Music
Population: General

703033 Elementary Orchestra K-3 Course Standards Document

703033 Elementary Orchestra 4-5 Course Standards Document

703040 - Elementary Technology Competency

Grade Level: 0 - 5
Credits:
Description: This course is designed to increase technology competency through use of basic computer programs (i.e. word processing, spreadsheets, Power Point, internet, etc.)
Content: Computer Laboratory
Population: General

703040 Elementary Technology Competency Primary

703040 Elementary Technology Competency Intermediate

703045 - Elementary STEM

Grade Level: 3 - 5
Credits:
Description: This course is one designed to allow students to explore the sciences, in a STEM environment, beyond the Kentucky Academic Standards. Students should, however, explore using of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.
Content: Integrated Science (Non-High School)
Population: General

703050 - Elementary Library

Grade Level: 0 - 5
Credits:
Description: The area of Library Media emphasizes teaching students to become information literate and lifelong learners; working in collaborative partnerships to meet individual needs; and providing access to information resources and technology.
Content: Library
Population: General

703065 - Elementary Reading and ELA Intervention

Grade Level: 0 - 5
Credits: 0
Description: This course is designed for students who need additional assistance or extension beyond the grade level reading or ELA course. This course uses intervention strategies to build and support reading and ELA understanding.
Content: Reading
Population: General

703066 - Elementary Mathematics Intervention

Grade Level: 0 - 5
Credits: 0
Description: This course is designed for students who need additional assistance or extension beyond the grade level math course. This course uses intervention strategies to build and support student mathematical understanding.
Content: Mathematics
Population: General

703071 - K-3 Primary Physical Education

Grade Level: 0 - 3
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education program in accordance with the Kentucky Academic Standards for Elementary School (K-3rd Grade) Physical Education. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime. Students will be introduced to foundational movement skills and fitness related activities. Students will be introduced to how physical activity contributes to optimal development of physical, mental, emotional and social health.
Content: Physical Education
Population: General

703071 K-3 Primary Physical Education Course Standards Document

703072 - 4-5 Intermediate Physical Education

Grade Level: 4 - 5
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education program in accordance with the Kentucky Academic Standards for Elementary School (4th & 5th Grade) Physical Education. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime. Students will build upon foundational movement skills and begin to apply strategies/tactics as they participate in lead up games and activities that enhance their personal fitness. Students will learn how physical activity contributes to optimal development of physical, mental, emotional and social health.
Content: Physical Education
Population: General

703072 4-5 Intermediate Physical Education Grade 4 Course Standards Document

703072 4-5 Intermediate Physical Education Grade 5 Course Standards Document

---

703081 - K-3 Primary Health Education

Grade Level: 0 - 3
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health Education program in accordance with the Kentucky Academic Standards for Elementary School (K-3rd Grade) Health Education. The emphasis of this course is to teach students the ability to access, understand, appraise, apply and advocate for health information and services in order to maintain or enhance one's own health and the health of others.
Content: Health Education
Population: General

703081 K-3 Primary Health Education Course Standards Document

---

703082 - 4-5 Intermediate Health Education

Grade Level: 4 - 5
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health Education program in accordance with the Kentucky Academic Standards for Elementary School (4th & 5th Grade) Health Education. The emphasis of this course is to teach students the ability to access, understand, appraise, apply and advocate for health information and services in order to maintain or enhance one's own health and the health of others.
Content: Health Education
Population: General

703082 4-5 Intermediate Health Grade 4 Course Standards Document

703082 4-5 Intermediate Health Grade 5 Course Standards Document

---

703088 - K-3 Primary Integrated Health & Physical Education

Grade Level: 0 - 3
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Elementary School (K-3rd Grade) Physical Education and Health Education (K-3rd Grade) into one course.
Content: Integrated Health and Physical Education
Population: General

703088 K-3 Primary Integrated Health Education & Physical Education Course Standards Document

703089 - 4-5 Intermediate Integrated Health Education & Physical Education

Grade Level: 4 - 5
Credits:
Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Intermediate Physical Education and Health Education into one course.
Content: Integrated Health and Physical Education
Population: General

703089 4-5 Intermediate Integrated Health & Physical Education Grade 4 Course Standards Document

703089 4-5 Intermediate Integrated Health & Physical Education Grade 5 Course Standards Document

703093 - Elementary Career Studies

Grade Level: 0 - 5
Credits: 0
Description: This course develops an awareness of careers. This awareness includes the purpose of having a job, concepts of consumer decision-making, saving money, and connections between work and learning. The challenge is to empower students to make a connection between school and the world of work and to be productive citizens.
Content: Elementary Education
Population: General

703093 Elementary Career Studies Primary

703093 Elementary Career Studies Intermediate

Dual Credit Courses
(800000)

Dual Credit Courses
(800000)

Dual credit course offerings consist of college-level course of studies developed in accordance with KRS 164.098 in which a high school student receives credit from both the high school and postsecondary institution in which the student is enrolled upon completion of a single class or designated program of study. Postsecondary institution partners that are classified as public institutions must adhere to the statewide course classification system, which regulates Statewide General Education Student Learning Outcomes (SLOs), as defined and adopted through policy by the Kentucky Council on Postsecondary Education. The SLOs are divided into five categories: Quantitative Reasoning, Natural Sciences, Written and Oral Communications, Arts and Humanities, and Social and Behavioral Sciences.

800011 - Dual Credit Written Communications

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course. This course will enable the student to earn a credit at the high school and at the postsecondary institutions. This course is aligned to the Statewide General Education Transfer Policy requirements set forth by the Kentucky Council for Postsecondary Education.
Content: Writing
Population: General

800015 - Dual Credit Oral Communications

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course. This course will enable the student to earn a credit at the high school and at the postsecondary institutions. This course is aligned to the Statewide General Education Transfer Policy requirements set forth by the Kentucky Council for Postsecondary Education.
Content: Speech/Oral Communication (English)
Population: General

800021 - Dual Credit Quantitative Reasoning

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course. This course will enable the student to earn a credit at the high school and at the postsecondary institutions. This course is aligned to the Statewide General Education Transfer Policy requirements set forth by the Kentucky Council for Postsecondary Education.
Content: Mathematics
Population: General

800031 - Dual Credit Arts & Humanities

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course. This course will enable the student to earn a credit at the high school and at the postsecondary institutions. This course is aligned to the Statewide General Education Transfer Policy requirements set forth by the Kentucky Council for Postsecondary Education.
Content: Arts and Humanities/History and Appreciation of the Visual and Performing Arts
Population: General

800032 - Dual Credit Arts and Humanities - VPA

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course which can be tracked for rich curricula in the area of Visual and Performing Arts. Courses identified with this course code meet the Statewide General Education Student Learning Objectives for Arts and Humanities identified by the Council on Postsecondary Education or demonstrate a correlation to the Statewide General Education Learning Outcomes as identified by an independent, private, nonprofit, or out-of-state institution. Districts use this code once determination is made by the local school district for how the dual credit course is being counted on the high school transcript as a Visual and Performing Arts credit. This course will enable the student to earn a credit at the high school and at the postsecondary institutions.
Content: Arts and Humanities/History and Appreciation of the Visual and Performing Arts
Population: General

800033 - Dual Credit Arts and Humanities - World Language/Cultural Studies

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course which can be tracked for rich curricula in the area of World Language/Cultural Studies. Courses identified with this course code meet the Statewide General Education Student Learning Objectives for Arts and Humanities identified by the Council on Postsecondary Education or demonstrate a correlation to the Statewide General Education Learning Outcomes as identified by an independent, private, nonprofit, or out-of-state institution. Districts use this code once determination is made by the local school district for how the dual credit course is being counted on the high school transcript as a World Language or Cultural Studies credit. This course will enable the student to earn a credit at the high school and at the postsecondary institutions.
Content: Arts and Humanities/History and Appreciation of the Visual and Performing Arts
Population: General

800041 - Dual Credit Natural Sciences

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course. This course will enable the student to earn a credit at the high school and at the postsecondary institutions. This course is aligned to the Statewide General Education Transfer Policy requirements set forth by the Kentucky Council for Postsecondary Education.
Content: Dual Credit Natural Sciences
Population: General

800051 - Dual Credit Social and Behavioral Sciences

Grade Level: 11 - 12
Credits:
Description: This is a dual credit course. This course will enable the student to earn a credit at the high school and at the postsecondary institutions. This course is aligned to the Statewide General Education Transfer Policy requirements set forth by the Kentucky Council for Postsecondary Education.
Content: Social Studies
Population: General

Miscellaneous Courses
(900000)

Miscellaneous Courses
(901000)

800500 – Residential STEM Academy

Grade Level: 9 - 12
Credits:
Description: This course should be used for students enrolled at Gatton or Craft Academy. Actual courses taken at Gatton or Craft should be entered onto student transcripts.

901001 - Middle/Secondary Homeroom

Grade Level: 5 - 12
Credits: 0
Description: This course should be used for middle school or high school homeroom attendance courses.
Content: Advisor/Advisee (6-12)
Population: General

901005 - Experience-based work

Grade Level: 10 - 12
Credits: 1
Description: Work based experience provides an opportunity for students to work with a team consisting of a school advisor and potential employer to develop and improve on skills necessary to be successful in the workforce. The skills that are explored include job search, interviewing, job shadowing, communication skills, professionalism and working as a team. Career advising in an important element of this course and should take place in a real world context. The course may involve academic projects aligned to skills applied at the workplace. The code would also be used for Experienced Based Career Education course.
Content: Career Options (High School)
Population: General

901020 - Speech Therapy

Grade Level: 0 - 14
Credits:
Description: This course provides specific interventions for students receiving speech therapy.
Content: Speech Therapy
Population: Speech Impaired

902010 - Technology Competency (Computer Lab)

Grade Level: 6 - 12
Credits:
Description: This course is designed to increase technology competency through use of basic computer programs (i.e. word processing, spreadsheets, Power Point, internet, etc.)
Content: Computer Laboratory
Population: General

904010 - Study Skills

Grade Level: 6 - 12
Credits:
Description: This course is designed to introduce and reinforce specific study skills leading to student success. This course is NOT a "Study Hall"
Content: Study Skills
Population: General

904020 - Advisor/Advisee

Grade Level: 6 - 12
Credits:
Description: A time period for teachers to mentor and advise students in academic and personal matters
Content: Advisor/Advisee (6-12)
Population: General

904030 - STLP

Grade Level: 9 - 12
Credits:
Description: This course is for students participating in The Student Technology Leadership Program (STLP) as a part of their course schedule.
Content: Career Options (High School)
Population: General

905952 - Driver and Traffic Safety Education

Grade Level: 9 - 12
Credits:
Description: Driver and Traffic Safety Education provides students with experiences which enable them to make the decisions necessary to move safely and efficiently within vehicle traffic situations. Through a sequence of classroom and supported driving experiences, students are introduced to the driving skills they need to safely operate a motor vehicle.
Content: Driver and Traffic Safety Education
Population: General

906010 - Peer Tutoring

Grade Level: 6 - 12
Credits:
Description: This course is designed to train students in effective peer tutoring skills and provide experiences in peer tutoring
Content: Peer Tutoring
Population: General

908010 - Home Bound

Grade Level: 0 - 14
Credits:
Description: This course is designed for those receiving home bound instruction
Content: Varies
Population: Homebound

909020 - Office/Teacher Aide

Grade Level: 1000 - 1000
Credits: 0
Description: This course must be assigned to a certified individual
Content: Non-instructional content
Population: General

909030 - Study Hall

Grade Level: 0 - 12
Credits: 0
Description: This is a non-instruction, non-credit entry. This course number is not to be used for courses teaching and reinforcing specific study skills. This course must be assigned to a certified individual.
Content: Non-instructional content
Population: General

909040 - SAFE/ISS

Grade Level: 0 - 12
Credits: 0
Description: S.A.F.E. or In-School-Suspension must be assigned to a certified individual
Content: Non-instructional content
Population: General

909999 - School Defined Course

Grade Level: 1000 - 1000
Credits:
Description: This course number is to be used only for those courses that do not fit any of the above course descriptions. A specific content must be assigned. Please see the Guiding Principles For Using Course Code 909999 for more information.
Content: None
Population: General

950001 – Dual Credit Placeholder

Grade Level: 9 - 12
Credits:
Description: The state course code 950001 may be used only as a dual credit course placeholder within the standard day schedule of Infinite Campus to alleviate schedule gaps. State course code 950001 may be used when a student is registered for (a) dual credit course(s) that is offered by the participating postsecondary institution online or by an instructor not employed by the local school district. The student may take courses online or attend classes on a college/university's campus. Once verification of enrollment has taken place by the high school and the postsecondary institution partner, the dual credit placeholder code can be used for scheduling students during the standard day.

NOTE: 950001 will not be pulled for the Transition Readiness indicator for Kentucky's Accountability System or for KHEAA's dual credit scholarship.

960001 – Credit Recovery Placeholder

Grade Level: 9 - 12
Credits:
Description: The state course code 960001 should be used only as a credit recovery placeholder within the standard day schedule of Infinite Campus. State course code 960001 should be used when a student is attempting to make up missed or failed credit opportunities through an online provider. Once verification of enrollment has taken place by the high school and the student, the credit recovery placeholder code can be used for scheduling students during the standard day.

NOTE: State course code 960001 will not be reported for the Opportunity and Access indicator for Kentucky's Accountability System.