Holmes High School

Mission Statement:
To guide students to discover, pursue and connect to their post-secondary dreams.
Holmes High School
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# Holmes High School Graduation Requirements

All students must successfully complete 24 credits. These credits must include:

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<th>Subject</th>
<th>Credits Required</th>
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<td><strong>English</strong></td>
<td>4 Credits – English I, II, III, &amp; IV</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td>4 Credits - Algebra I, Algebra II, Geometry and a math elective (A math course must be completed each year of high school.)</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>3 Credits – including Biology, Chemistry and one additional lab-based science course</td>
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<tr>
<td><strong>Social Studies</strong></td>
<td>3 Credits - 1 must be U.S. History</td>
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<tr>
<td><strong>Physical Education</strong></td>
<td>½ Credit</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>½ Credit</td>
</tr>
<tr>
<td><strong>Visual and Performing Arts</strong></td>
<td>1 Credit – May be fulfilled by any creative and performing arts full-credit course</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>8 Electives</td>
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**Technology:** Students must demonstrate competency in technology, either through a class or passing a certification exam. Most students will fulfill this requirement through Digital Literacy.
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ENGLISH—Graduation requirement—a total of 4 English credits (English I, II, III, IV)

230107—English 1
Grade Level: 9
Credits: 1
Course Description: This course highlights the theme of Coming of Age. Students study the relationship between narrative voice and style, while analyzing literary and stylistic elements in film and literature. They develop persuasive writing skills by using rhetorical appeals. Performance and oral interpretation of literature builds students’ speaking and listening skills. Students research and evaluate social, cultural, and historical influences on texts. Students evaluate their use of strategies by embedded instruction focused on improving reading skills through small-group instruction, computer enhanced instruction and exploratory learning.

230110—English 2
Grade Level: 10
Credit: 1
Prerequisite: English 1
Course Description: This course focuses on the concept of culture and community and examines how these influences shape identity and perspective. Students read and analyze works of world literature, with emphasis on analysis of how stylistic choices and rhetorical elements shape tone in persuasive and argumentative text, both print and non-print. Students develop their independent learning skills as they respond to opportunities for self-evaluation with embedded instruction focused on improving reading skills through small-group instruction, computer enhanced instruction and exploratory learning. Students will complete the Kentucky End-of-Course Examination.

230113—English 3
Grade Level: 11
Credit: 1
Prerequisite: English 2
Course Description: English 3 focuses on American fiction and nonfiction. Students research historical and contemporary texts as they consider the impact of the American Dream on life today and on personal thinking. Students will write in a variety of modes—personal essays, opinions and editorials, credos, reflective self-evaluation, speeches, satire, dramatic scripts, surveys, literary analyses, and research projects.

230163—IB English 3 SL
Grade Level: 11
Credit: 1
Prerequisites: English 2
Course Description: This literature-based class follows the International Baccalaureate Programme curriculum. Students will be working toward successful completion of IB English World Literature and School’s Free Choice requirements along with preparing for the ACT and AP Literature and Composition tests in the spring. Students will study various works of British, American and World Literature along with completing oral, written and reading assignments. This course requires summer assignments.
230116—English 4  
Grade Level: 12  
Credit: 1  
Course Description: English IV focuses on world literature, both fiction and nonfiction. Students research historical and contemporary texts. Students will write in a variety of modes—personal essays, opinions and editorials, credos, reflective self-evaluation, speeches, satire, dramatic scripts, surveys, literary analyses, and research projects.

230164—IB English 4 HL  
Grade Level: 12  
Credit: 1  
Prerequisites: IB English 3 SL  
Course Description: This literature-based follows the International Baccalaureate Programme curriculum. Students will be working toward successful completion of IB genre study and detailed study requirements along with preparing for the IB oral commentary, internal assessment and papers. Students will study various works of British, American and world literature along with completing oral, written and reading assignments.

English Electives

231295—Reading for College Success  
Grade Level: 12  
Credit: 1  
Course Description: This course focuses on the skills necessary for success in postsecondary courses that require intensive reading and writing. Units will focus on the types of reading required for the ACT assessment with additional support in writing and grammar. Students will complete projects, write frequently and read a wide variety of nonfiction texts. This course is REQUIRED for all students who did not meet the ACT Reading benchmark score (20), regardless of whether the student is enrolled in other English courses.

230512—Creative Writing I, II  
Grade Levels: 11-12  
Credit: .5  
Course Description: Students will use mentor texts to model various forms of creative writing from poetry to creative essays.

230140—Literature of a Genre  
Grade Levels: 11-12  
Credit: .5  
Course Description: This course charts the development of the graphic novel, relates the graphic novel to other media and reflects on how images and writing function in relation to one another. Students will read graphic novels and other materials that put them into context.
239111—Journalism
Grade Levels: 10-12
Credit: 1 (may be repeated for up to two credits)
Course Description: Students will practice the basic principles of news reporting and writing by researching stories, writing and editing copy and taking related photos for print and electronic media, such as school newspaper, yearbook and documentaries.

231011—Public Speaking
Grade Levels: 10-12
Credit: .5
Course Description: Students in this course will practice a variety of speaking situations ranging from group problem-solving to formal presentations. They will develop skills in writing, evaluating and delivering personal and media presentations.

230154—Research Techniques
Grade Levels: 11-12
Credit: .5
Course Description: The research methods course will assist students in making informed real-world connections by finding, evaluating and selecting appropriate sources to answer questions to construct new understandings, draw conclusions and create new knowledge. By the end of the course, students will be able to demonstrate a self-directed process for making independent choices about resources and information in multiple formats that are appropriate for post-secondary use.
MATH—Graduation requirement—a total of 4 Math Courses (Algebra I, Geometry, Algebra II, One Elective—MUST take math each year at Holmes High School)

270304—Algebra 1  
Grade Level: 9  
Credit: 1  
Course Description: This course is the foundation for all future math courses. Topics include solving various types of equations, solving linear inequalities, proportions, graphing relations, functions, inequalities, elementary statistics and probability, solving systems of equations and polynomials. Additional topics to be covered include preliminary concepts, simplifying expressions, linear equations, quadratic equations, systems of equations, exponent rules and scientific notation and geometry.

270401—Geometry  
Grade Levels: 9-10  
Credit: 1  
Prerequisite: Algebra 1  
Course Description: This course is a study of two- and three-dimensional geometry including definitions, postulates, theorems and measurement. The coordinate plan will be emphasized with distance, midpoint and slope, plus linear equations involving parallel and perpendicular lines. Triangles will be a concentration point with congruency, similarity, special properties, angle thumb theorem and right triangle trigonometry. Special properties of polygons will be covered along with areas, perimeters of polygons and circumference of circles, volumes and transformations. Additional topics to be covered include preliminary concepts, simplifying expressions, linear equations, quadratic equations, systems of equations, exponent rules and scientific notation and geometry.

270311—Algebra 2  
Grade Levels: 10-12  
Credit: 1  
Prerequisite: Geometry  
Course Description: This course involves a review and extension of introductory algebra, graphing, writing linear equations, solving systems of equations. Students also study algebraic concepts and processes such as matrices, quadratics and complex numbers, polynomials, radicals, rational expressions, conics, logarithms and sequences and series, both arithmetic and geometric. Students will complete the Kentucky End-of-Course Examination.

270718—College/Career Readiness Math  
Grade Level: 12  
Credit: 1  
Course Description: The purpose of this course is to enable students to transition into credit-bearing college mathematics classes which require a minimum benchmark of 19 on the ACT. Topics to be covered include preliminary concepts, simplifying expressions, linear equations, quadratic equations, systems of equations, exponent rules and scientific notation, and geometry. This course is required for all students who did not reach the benchmark score of 19 on the ACT mathematics test.
270505—IB Mathematical Studies SL 1
Grade Level: 11
Credits: 1
Prerequisites: Algebra 2
NOTE: Math Studies will be taken for two years. One credit will be earned each year.
Course Description: This course is designed to build confidence in and encourage an appreciation of mathematics. Students taking this course need to be already equipped with fundamental skills and a rudimental knowledge of basic processes. The course concentrates on mathematics that can be applied to contexts related to other subjects and to the real world. The student must produce a project, in which the student carries out a mathematical investigation.

270505—IB Mathematical Studies SL 2
Grade Level: 12
Credits: 1
Prerequisites: Algebra 2
NOTE: Math Studies will be taken for two years. One credit will be earned each year.
Course Description: This course is designed to build confidence in and encourage an appreciation of mathematics. Students taking this course need to be already equipped with fundamental skills and a rudimental knowledge of basic processes. The course concentrates on mathematics that can be applied to contexts related to other subjects and to the real world. The student must produce a project, in which the student carries out a mathematical investigation.

Math Electives

270501—Pre-Calculus
Grade Levels: 11-12
Credit: 1
Prerequisites: Geometry
Course Description: Pre-calculus is designed to give students background material needed to take their first mathematics course in college. Topics include sequences and series including work with infinite geometric series and sigma notation, review of quadratics, expanded work with exponents including exponential functions and applications, work with exponents including exponential functions and applications, principles of logarithms and triangle trigonometry.

270643—Technical Mathematics
Grade Levels: 11-12
Credit: .5
Prerequisites: Geometry
Course Description: This course will take the mathematical concepts studied in Algebra I, Algebra II and Geometry and apply them to the world of construction. Practical applications will be emphasized.

060171—Financial Literacy
Grade Levels: 11-12
Credit: .5
Prerequisites: Geometry
Course 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.
170169—Medical Mathematics
Grade Levels: 11-12
Credit: .5
Prerequisites: Geometry
Course Description: This course is designed to assist students interested in health careers to understand and apply the basic mathematic principles related to dosage calculation and measurements. Students will gain proficiency and accuracy calculating drug dosages from word problems and scenarios.
SCIENCE—Graduation requirement—a total of 3 credits required (Biology, Chemistry, One Elective with lab-based science instruction)

303091—Integrated Science 1
Grade Levels: 9
Credit: 1
Course Description: This course will emphasize the concepts of earth and space science and physical science. Students will conduct experiments, research scientific trends and communicate like scientists in the real-world.

302610—Life Science/Biology 1
Grade Levels: 10
Credit: 1
Course Description: This course is designed to cover cellular and body structure, basic knowledge and functions of living organisms with an emphasis on the study of cells, their organelles, mitosis, meiosis, DNA, and genetics. Interdependence of organisms will be investigated as well as matter, energy and organization in living systems. Students will complete the Kentucky End-of-Course examination.

304521—Chemistry 1
Grade Levels: 11-12
Credit: 1
Prerequisite: Biology
Course Description: Chemistry is a study of the composition of materials, undergoing basic atomic structures, laws of chemical combination, quantum theory. Concentrated study of periodic table, atomic structure, bonding and types of reactions, and solutions.

304524—IB Chemistry SL
Grade Level: 11
Credit: 1
Course Description: This course is designed to provide students with higher-order investigative experiences and activities to promote a deeper understanding of critical concepts in Chemistry. It will also help the student to develop the ability to analyze scientific literature critically and to develop manipulative and experimental skills necessary to perform college level scientific investigations. Topics include Stoichiometry, Atomic Theory, Chemical Bonding, States of Matter, Carbon Chemistry, and the Periodic Table.

304525—IB Chemistry HL
Grade Level: 12
Credit: 1
Prerequisites: IB Chemistry SL
Course Description: This course is a continuation to provide students with higher-order investigative experiences and activities to promote a deeper understanding of critical concepts in Chemistry. It will also help the student to develop the ability to analyze scientific literature critically and to develop manipulative and experimental skills necessary to perform college level scientific investigations. Topics include Stoichiometry, Atomic Theory, Chemical Bonding, States of Matter, Carbon Chemistry, and the Periodic Table.
SCIENCE Electives

304821—Physics
Grade Level: 10-12
Credit: 1
Prerequisites: Biology and Algebra I

Course Description: This course is an Algebra-based introduction into the basic law of the universe, concentrating on concepts rather than computation. Hands-on investigation and activities drive the discussion and problem-solving. Topics covered include mechanics, electromagnetism, nuclear physics and thermal physics, with connections to earth and space science.
SOCIAL STUDIES—Graduation requirement—a total of 3 credits
(One credit MUST be US History)

459801—Integrated Social Studies
Grade Level: 9
Credit: 1
Course Description: This course focuses on the five themes of geography, the features that define the earth, the climate patterns of the earth, how to study peoples and cultures of the earth and how to use various geographic tools. Students will review the ten areas of the world from the perspective of physical features, culture, population patterns, history, government and lifestyles.

450876—AP World History
Grade Level: 9
Credit: 1
Course Description: AP World History looks at five common themes throughout the course: Interaction between humans and the environment, Development and interactions of cultures, State-building, expansion, and conflict, Creation, expansion, and interaction of economic systems, Development and transformation of social structures. Course content includes map reading, interpreting charts and graphs, and acquiring a social studies vocabulary. As an AP course, students will be expected to access, read and analyze materials independently and to write analytically. Students will be expected to take the AP exam. This course requires summer assignments.

451030—AP US Government and Politics
Grade Level: 10
Credit: 1
Course Description: The AP Government & Politics: United States course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. This course requires summer assignments.

451031—Government & Civics
Grade Level: 10
Credit: 1
Course Description: The government course focuses on the founding principles and beliefs of the United States. Students will study the structure, functions, and powers of government at the national, state, and local levels.

450812—U.S. History: Reconstruction – Present
Grade Level: 11
Credit: 1
Prerequisite: Two years of social studies
Course Description: This American studies course provides students with the opportunity to learn about history of the United States from the Reconstruction era to Contemporary times. Students will investigate how America’s political system works, what the responsibilities of citizenship include, and what makes American democracy unique. The course of study will also allow students to trace the rise of America’s economic system, examine how the geography of the United States has influenced its development, and explore how America has emerged as a diverse culture. Students will take the Kentucky End-of-Course examination.
450878—IB History of the Americas 1
Grade Level: 11
Credit: 1
Prerequisite: Two years of social studies
Course Description: IB History 1 is an extremely challenging course of study that would be equivalent to a college-level history class. IB History 1 centers on historical inquiry into various eras in American history, including American Revolution, Constitution, and Transformation of Democracy: Jefferson to Jackson, Civil war and Reconstruction, Industrialization, Immigration, and Urbanization, Progressivism, The Great Depression and New Deal. All students must take IB History of the Americas SL, AP US History or US History during the junior year in preparation for the Kentucky End-of-Course US History Test.

450879—IB History of the Americas 2
Grade Level: 12
Credit: 1
Prerequisite: IB History of the Americas SL
Course Description: International Baccalaureate History of the Americas II requires students to make comparisons between similar and dissimilar solutions to common human situations, whether they are political, economic or social. It invites comparisons between, but not judgments of, different cultures, political systems and national traditions. Topics include World War I, the rise of single party states, World War II, Cold War 1945-1979, and a special focus on Latin America.
Social Studies Electives

451121—IB Theories of Knowledge
Grade Level: 11
Credit: 1
Course Description: The TOK course encourages critical thinking about knowledge itself, to try to help young people make sense of what they have encountered in all of their IB classes. Students develop answers to questions such as: What counts as knowledge? How does knowledge grow? What are the limits of knowledge? Who owns knowledge? What is the value of knowledge? What are the implications of having, or not having, knowledge?

459902—IB Psychology
Grade Levels: 11-12
Credit: 1
Course Description: The International Baccalaureate Psychology course of study includes the study of psychology from three main perspectives: Biological perspective, learning perspective, and cognitive perspective. In addition to these three perspectives the course examines the causes and treatments of dysfunctional behaviors. This course requires summer assignments.

451121—Sociology
Grade Levels: 11-12
Credit: .5
Course Description: Students explore the concepts and theories necessary to systematic understanding of our social worlds. Topics may include considering sociology as science, the nature of large- and small-scale groups, social stratification, historical eras and social change, and race, ethnic and gender relations.
PHYSICAL EDUCATION—Graduation requirement—a ½ credit of physical education

340216—Physical Education 1
Grade Levels: 9-12
Credit: .5
Course Description: A variety of activities will be utilized to stress the development of the components of physical fitness. Basic skills, strategies, teamwork and general knowledge of team sports will also be included. Various athletic-based activities will be included in this course.

340218—Advanced Sport Skills
Grade Levels: 10-12
Credit: 1
Course Description: This course offers students the opportunity to strengthen the specific skills of different sports including team and individual sports. Elective Course ONLY

HEALTH EDUCATION—Graduation requirement—a ½ credit of health education

340133—Health Education 1
Grade Levels: 9-12
Credit: .5
Course Description: This course emphasizes the use of health values in making decisions. The course content includes alcoholism, drug abuse, personal hygiene, accident prevention, family living, sex education, environmental health, nutrition, and consumer health.
VISUAL AND PERFORMING ARTS—Graduation requirement—1 visual or performing arts credit

500111—History/Appreciation of Visual/Performing Arts Survey
Grade Level: 10-12
Credit: 1
Course Description: This course provides a historical and philosophical survey of all art forms. Students will participate in performance and hands-on activities in order to gain a richer insight into the different art forms. Students will create, perform and respond in and to the arts.

500912—Music – Music History/Appreciation
Grade Level: 11-12
Credit: .5
Course Description: This course surveys the history, aesthetics and sociology of modern music, including rock and roll, pop and rap in the United States from its origins to present day.

500928—Music Theory
Grade Level: 11-12
Credit: .5
Prerequisite: One credit in Instrumental or Vocal Music
Course Description: This class will explore the intricacies of written and aural music for all levels of student. Students will work in both individual and team settings. The objectives of the course are to promote a wider knowledge of music, offer preparation to future music majors and elementary education majors, and provide amateur musicians with an opportunity to study music theory in a classroom setting.

500914—Music – Concert/Marching Band
Grade Level: 9-12
Credit: 1
Course Description: This class involves music theory, music history, theatre, dance, literature and the correlation of music to art. Students will perform at various venues across the greater Cincinnati/Northern Kentucky area, especially in group and individual competitions. Grades will be based on daily rehearsal technique, attendance at performances and periodic assessments including a final exam.

500925—Music – Chorus
Grade Level: 9-12
Credit: 1 (may be repeated for up to two credits)
Course Description: This advanced vocal music course will focus on focus on performance techniques, vocal skills and reading music as well as tailoring performances for public concerts. Students will learn to put together an appropriate program and refine their performance techniques. Students will perform at various venues across the greater Cincinnati/Northern Kentucky area, especially in group and individual adjudicated events. Attendance at after-school practices and performances is expected.
500513—Theater – Acting/Performance
Grade Level: 11-12
Credit: 1
Prerequisite: History/Appreciation of Visual/Performing Arts
Course Description: Students will learn various methods of creatively presenting characters to audiences. They will perform in various productions for the classroom, school and community. Attendance at after-school practices and performances is expected.

500711—Visual Art – Comprehensive
Grade Level: 9-12
Credit: 1
Course Description: This class is designed to introduce the student to the discipline of visual art. It is intended to expose the student to concepts, principles and practices in two-dimensional and three-dimensional art.

500712—Visual Art – Drawing and Painting
Grade Level: 10-12
Credit: .5
Prerequisites: Visual Art - Comprehensive
Course Description: This course is a continuation of material learned in Art Foundations. Students will concentrate on two-dimensional media with emphasis on drawing and painting.

500713—Visual Arts – Sculpture
Grade Level: 11-12
Credit: .5
Prerequisites: Visual Art - Comprehensive
Course Description: This course continues the material learned in Art Foundations. Students will produce sculpture and ceramics using various media.

Visual Art – IB Art/Design
Grade Level: 11-12
Credit: 1
Course Description: As a capstone course for the visual arts sequence, emphasis will be placed on art concepts and execution. The course can be taken over a two-year period. Both studio and research aspects are included. College credit may be granted with successful completion of the end-of-term examination.
ELECTIVE COURSE OFFERINGS—Graduation Requirement—
Students must have a TOTAL of 8 elective credits

FOREIGN LANGUAGE—College Entrance Requirement to have 2 credits of Foreign Language

161108—Spanish 1
Grade Level: 9-12
Credit: 1
Course Description: Students will make introductions, tell the date and time, describe themselves and others, talk about things they like to do, talk about what they do on a daily basis, discuss classes and school events, describe family relationships and where families live, talk about food and recipes, staying fit and give advice. Students will also be exposed to various cultural topics throughout the course and become familiar with many Spanish speaking countries, their practices, products, and perspectives.

161109—Spanish 2
Grade Level: 10-12
Credit: 1
Prerequisite: Spanish 1
Course Description: Students use slightly more complex vocabulary and grammar structures than Spanish I. They will talk about things they like to do, household chores, professions, descriptions, places around town, giving directions and commands, school events, the body and getting hurt, daily routines and people and things in the past. Students will also look at a variety of cultural topics including famous celebrations and traditions and the culture of various capital cities around the Spanish-speaking world.

161124—IB Spanish 3
Grade Level: 11-12
Credit: 1
Prerequisite: Spanish 2
Course Description: Students use slightly more complex vocabulary and grammar structures than Spanish II. They will talk about saying goodbye to summer, free time activities, finding solutions to common problems, extended families, art and music, world news, hopes for the future, jobs and education, important places, and analyzing the world we live in. Also, students will be studying many grammar tenses and they will be required to produce a power point presentation on a given Spanish-speaking country.
161125—IB Spanish 4

Grade Level: 11-12

Credit: 1

Prerequisite: IB Spanish 3

Course Description: Students use slightly more complex vocabulary and grammar structures than Spanish II. They will talk about saying goodbye to summer, free time activities, finding solutions to common problems, extended families, art and music, world news, hopes for the future, jobs and education, important places, and analyzing the world we live in. Also, students will be studying many grammar tenses and they will be required to produce a power point presentation on a given Spanish-speaking country.
BUSINESS & MARKETING PATHWAY OFFERINGS

Outlined in the table below are all pathways for students interested in a future in Business & Marketing. These pathways should follow a proper course sequence. Upon completion of three credits students will be able to sit for the appropriate KOSSA certification. Additional industry certifications will be offered for some pathways. **Courses may be taken out of approved pathway as additional elective options with teacher permission ONLY.**

**BUSINESS PATHWAYS**

**Accounting Pathway:** A program that prepares individuals to practice the profession of accounting and to perform related business functions. Includes instruction in accounting principles and theory, financial accounting, managerial accounting, cost accounting, budget control, tax accounting, legal aspects of accounting, auditing, reporting procedures, statement analysis, planning and consulting, business information systems, accounting research methods, professional standards and ethics, and applications to specific for-profit, public, and non-profit organizations.

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>1st</td>
<td>060112</td>
<td>Digital Literacy</td>
</tr>
<tr>
<td>2nd</td>
<td>070743</td>
<td>Advanced Computer and Technology Applications</td>
</tr>
<tr>
<td>3rd</td>
<td>060122</td>
<td>Accounting &amp; Finance Foundations</td>
</tr>
<tr>
<td>4th</td>
<td>060170</td>
<td>Financial Literacy</td>
</tr>
<tr>
<td>4th</td>
<td>060107</td>
<td>Business Education Co-Op**</td>
</tr>
<tr>
<td></td>
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<td>[Must meet GPA, Attendance, and Behavior Guidelines; Must be enrolled in Financial Literacy during same year]</td>
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**Administrative Support Pathway:** A program that generally prepares individuals to perform the duties of administrative assistants and/or secretaries and stenographers. Includes instruction in business communications, principles of business law, word processing and data entry, office machines operation and maintenance, office procedures, public relations, secretarial accounting, filing systems and records management, and report preparation.

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</tbody>
</table>

**Medical Business Office Pathway:** A program that prepares individuals to perform the duties of special assistants and personal secretaries for practicing physicians and nurses, health care facilities and services administrators, and other health care professionals. Includes instruction in business and medical communications, medical terminology, principles of health care operations, public relations and interpersonal communications, software applications, record-keeping and filing systems, scheduling and meeting planning, applicable policy and regulations, and professional standards and ethics.

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>1st</td>
<td>060112</td>
<td>Digital Literacy</td>
</tr>
<tr>
<td>2nd</td>
<td>070743</td>
<td>Advanced Computer and Technology Applications</td>
</tr>
<tr>
<td>3rd</td>
<td>170131 &amp; 170141</td>
<td>Medical Terminology &amp; Emergency Procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[<strong>Course Descriptions located under the Health Science Offerings</strong>]</td>
</tr>
<tr>
<td>4th</td>
<td>060122</td>
<td>Accounting &amp; Finance Foundations</td>
</tr>
</tbody>
</table>
Advertising Pathway: A program that focuses on the creation, execution, transmission, and evaluation of commercial messages in various media intended to promote and sell products, services, and brands; and that prepares individuals to function as advertising assistants, technicians, and managers. Includes instruction in advertising theory, marketing strategy, advertising design and production methods, campaign methods and techniques, media management, related principles of business management, and applicable technical and equipment skills.

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<th>Year</th>
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<tbody>
<tr>
<td>1st</td>
<td>060112</td>
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<tr>
<td>2nd</td>
<td>080716</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>3rd</td>
<td>080717</td>
<td>Advanced Marketing</td>
</tr>
<tr>
<td>4th</td>
<td>081511</td>
<td>Advertising &amp; Promotions</td>
</tr>
<tr>
<td>4th</td>
<td>080718</td>
<td>Financial Literacy</td>
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</table>

Marketing Pathway: A program that generally prepares individuals to undertake and manage the process of developing consumer audiences and moving products from producers to consumers. Includes instruction in buyer behavior and dynamics, principle of marketing research, demand analysis, cost-volume and profit relationships, pricing theory, marketing campaign and strategic planning, market segments, advertising methods, sales operations and management, consumer relations, retailing, and applications to specific products and markets.

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<td>081511</td>
<td>Advertising &amp; Promotions</td>
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<tr>
<td>4th</td>
<td>081121</td>
<td>Sports &amp; Entertainment Marketing</td>
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Sports Marketing Pathway: A program that prepares individuals to apply business, coaching and physical education principles to the organization, administration and management of athletic programs and teams, fitness/rehabilitation facilities and health clubs, sport recreation services, and related services. Includes instruction in program planning and development; business and financial management principles; sales, marketing and recruitment; event promotion, scheduling and management; facilities management; public relations; legal aspects of sports; and applicable health and safety standards.

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<tr>
<td>4th</td>
<td>081121</td>
<td>Sports &amp; Entertainment Marketing</td>
</tr>
</tbody>
</table>

Business course descriptions listed below are in alphabetical order as courses cross over between multiple pathways.

060122—Accounting and Finance Foundations
Grade Level: 11-12
Credits: 1
Course 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. Technical writing will be provided through IPAC business plan curriculum and exploration of case studies. Leadership development will be provided through student organizations.
081511—Advanced Computer and Technology Applications

Grade Level: 10-12
Credit: 1

Course Description: This course is designed to provide students 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 advanced business applications using word processing, presentation, spreadsheets, database management, desktop publishing, and electronic communication. Leadership development will be provided through FBLA. Upon completion of this course, a student will be ready to take the core level tests for MOS Certification and/or the Administrative Support Skill Standard Assessment.

080717—Advanced Marketing

Grade Level: 11-12
Credits: 1

Course 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 student organizations.

081511—Advertising & Promotions

Grade Level: 12
Credits: 1

Course Description: This course is designed to provide students with a realistic “hands-on” application of techniques used in the advertising and promotion of goods and services. Students use digital media (computer-generated text, graphics, photographs, sound and video) equipment, while being exposed to all forms of media (print, web page, etc.) used by industry. 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 student organizations.

060107—Business Education Co-Op

Grade Level: 12
Credits: 1

Course 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. Specific GPA, Attendance, and Behavior requirements must be met for a student to be eligible for this opportunity.

060112—Digital Literacy

Grade Level: 9-12
Credits: 1

Course Description: Students will use a computer and application software including word processing, presentation, database, spreadsheets, internet, and email to prepare elementary documents and reports. The impact of computers on society and ethical issues are presented.
060170—Financial Literacy
Grade Level: 12
Credits: 1
Course 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. Leadership development will be provided through student organizations.

080716—Principles of Marketing
Grade Level: 10-12
Credits: 1
Course 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 student organizations.

081121—Sports and Entertainment Marketing
Grade Level: 12
Credits: 1
Course 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 student organizations.
INFORMATICS PATHWAY OFFERINGS

Outlined in the table below are all pathways for students interested in a future in Informatics. This pathway should follow a proper course sequence. Upon completion of courses students will be able to sit for the appropriate industry certifications.

<table>
<thead>
<tr>
<th>INFORMATICS PATHWAY</th>
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<tbody>
<tr>
<td>Informatics Pathway: Students will apply software systems such as Excel, Access and other industry software to acquire, collect, store and communicate data in meaningful ways to clients. Students will manage projects, work in teams, think critically, solve problems and propose solutions to design problems. Further, they will learn to apply literacy, mathematics and science concepts and use technology to effectively solve real-world challenging problems. Through project based learning, students will explore the future of informatics and learn those habits of behavior and mind unique to professionals in the field. Informatics leverages technology, data and communication by instilling in a new generation the knowledge, imagination and flexibility to tackle complex issues successfully in a data-rich digital world. It is the process of designing systems that take raw data and convert it into new knowledge that can be applied to any field while considering the impact on individuals, organizations and society.</td>
</tr>
</tbody>
</table>

| 1st year | 111001 | Computer, Networks, & Databases |
| 2nd year | 111002 | Design for Digital World |
| 3rd year | 111003 | Database in the Cloud |
| 4th year | 111004 | Developing a Cloud Presence |

111001—Computers, Networks, Databases

Grade Level: 9-12
Credits: 1

Course 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, solve problems, 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. Last, students will engage in leadership skill sets encompassing their student organization responsibilities.

111002—Design for the Digital World

Grade Level: 10-12
Credits: 1

Course Description: This project-based-learning course engages students who are interested in applying the design process to create systems such as a cloud-based digital storage system for images. Students will design a system to automatically collect and report data on highway usage. They will apply a geospatial system to map a store and develop a database that studies shopping habits. Through these projects, students will learn about data management and logic-based queries by collecting data, using the Global Positioning System (GPS) and analyzing data utilizing a geographic information system (GIS). They will learn how to automate data collection to make processes more effective and efficient. Students will work collaboratively in teams and demonstrate their knowledge and skills by presenting new and innovative ideas, techniques and solutions to business and industry partners.
111003—Databases in the Cloud
Grade Level: 11-12
Credits: 1
**Course Description:** This project-based-learning course is for students who successfully completed courses one and two and who want to tackle the 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 will develop solutions for real-world problems by designing a database for ticket sales; designing security for a database; creating a game with animation; reporting information based on population data in a community; and designing, building and testing an application for a database.

111004—Developing a Cloud Presence
Grade Level: 12
Credits: 1
**Course 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.
HEALTH SCIENCE PATHWAY OFFERINGS

Outlined in the table below are all pathways for students interested in a future in Health Science. These pathways should follow a proper course sequence. Upon completion of three credits students will be able to sit for the appropriate KOSSA certification. Additional industry certifications will be offered for some pathways. **Courses may be taken out of approved pathway as additional elective options with teacher permission ONLY.**

<table>
<thead>
<tr>
<th>HEALTH SCIENCE PATHWAYS</th>
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<tbody>
<tr>
<td><strong>Allied Health Pathway:</strong> A general, introductory, undifferentiated, or joint program in health services occupations that prepares individuals for either entry into specialized training programs or for a variety of concentrations in the allied health area. Includes instruction in the basic sciences, research and clinical procedures, and aspects of the subject matter related to various health occupations.</td>
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<tr>
<td><strong>1st year</strong></td>
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<td><strong>2nd year</strong></td>
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<td><strong>4th year</strong></td>
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| **PLTW Biomedical Pathway:** A general, program that focuses on the integrative scientific study of biological issues related to health and medicine, or a program in one or more of the biomedical sciences that is undifferentiated as to title. Includes instruction in any of the basic medical sciences at the research level; biological science research in biomedical faculties; and general studies encompassing a variety of the biomedical disciplines. |
| **1st year** | 170701 | Principles of Biomedical Services |
| **2nd year** | 170702 | Human Body Systems |
| **3rd year** | 170703 | Medical Interventions |
| **4th year** | 170704 | Biomedical Innovations |

| **Pre-Nursing Pathway:** A program that prepares individuals for admission to a professional program in Nursing. |
| **1st year** | 170111 | Principles of Health Science |
| **2nd year** | 170167 | Body Structures & Functions |
| **3rd year** | 170131 | Medical Terminology |
| **3rd year** | 170141 | Emergency Procedures |
| **4th year** | 170631 | Medicaid Nurse Aide |

*Health Science course descriptions listed below are in alphabetical order as courses cross over between multiple pathways.*

**170501—Allied Health Core Skills**

**Grade Level:** 12  
**Credits:** 1  
**Course 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, observations, and a work-based learning opportunity such as internship, shadowing, or clinical rotation. This course is designed for students not enrolled in the Medicaid Nurse Aide program.
170704—Biomedical Innovations
Grade Level: 12
Credits: 1
Course 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.

170167—Body Structures and Functions
Grade Level: 10-12
Credits: 1
Course Description: Body Structures and Functions (formerly Basic Anatomy and Physiology) 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 will be included. Laboratory activities should be a part of the course when appropriate.

170141—Emergency Procedures
Grade Level: 10-12
Credits: 1
Course Description: This course will focus on potential emergency situations. It is designed to promote an understanding of standard precautions necessary for personal and professional health maintenance and infection control. Upon successful completion of the course, the student will demonstrate the necessary skills in First Aid and Cardiopulmonary Resuscitation (CPR) and will be given the opportunity to take the completion examination as outlined by the sponsoring agency.

170702—Human Body Systems
Grade Level: 10
Credits: 1
Course 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.

170631—Medicaid Nurse Aide
Grade Level: 12
Credits: 1
Course 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. 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.
170703—Medical Interventions
Grade Level: 11
Credits: 1
Course 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.

170131—Medical Terminology 1
Grade Level: 10-12
Credits: 1
Course Description: Medical Terminology is designed to develop a working knowledge of language in all health science major areas. Students acquire word-building skills by learning prefixes, suffixes, roots and abbreviations. Students will learn correct pronunciation, spelling and application rules. By relating terms to body systems, students identify proper use of words in a medical environment. Knowledge of medical terminology enhances the student’s ability to successfully secure employment or pursue advanced education in health care.

170111—Principles of Health Science
Grade Level: 9-12
Credits: 1
Course Description: Principles of Health Science is an orientation and foundation for occupations and functions in any health care profession. The course includes broad health care core standards that specify the knowledge and skills needed by the vast majority of health care workers. The course focuses on exploring health career options, history of health care, ethical and legal responsibilities, leadership development, safety concepts, health care systems and processes and basic health care industry skills. This introductory course may be a prerequisite for additional courses in the Health Science program.

170701—Principles of Biomedical Science
Grade Level: 9
Credits: 1
Course 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 Science program and to lay the scientific foundation necessary for student success in the subsequent courses.
CONSTRUCTION PATHWAY OFFERINGS

Outlined in the table below are all pathways for students interested in a future in Construction. This pathway should follow a proper course sequence. Upon completion of three credits students will be able to sit for the appropriate KOSSA certification. Additional industry certifications will be offered as well. Courses may be taken out of approved pathway as additional elective options with teacher permission ONLY.

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<tr>
<td><strong>Carpenter Assistant Pathway:</strong> A program that prepares individuals to apply technical knowledge and skills to lay out, cut, fabricate, erect, install, and repair wooden structures and fixtures, using hand and power tools. Includes instruction in technical mathematics, framing, construction materials and selection, job estimating, blueprint reading, foundations and roughing-in, finish carpentry techniques, and applicable codes and standards.</td>
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<table>
<thead>
<tr>
<th>1st year</th>
<th>460201</th>
<th>Introduction to Construction Technology</th>
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<tbody>
<tr>
<td>2nd year</td>
<td>460212</td>
<td>Floor &amp; Wall Framing</td>
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<td>3rd year</td>
<td>460213</td>
<td>Ceiling &amp; Roof Framing</td>
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<tr>
<td>4th year</td>
<td>460214</td>
<td>Site Layout &amp; Foundations</td>
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<tr>
<td>4th year</td>
<td>460242</td>
<td>Carpentry Co-Op** [Must meet GPA, Attendance, and Behavior Guidelines; Must be enrolled in Site Layout &amp; Foundations during same year]</td>
</tr>
</tbody>
</table>

**460201—Introduction to Construction Technology**

**Grade Level:** 9-12

**Credits:** 1

**Course Description:** This course is the introduction to the construction carpentry industry. The class will emphasize safe and proper methods of operating hand tools, portable power tools, and stationary power tools in the construction industry.

**460212—Floor and Wall Framing**

**Grade Level:** 10-12

**Credits:** 1

**Course 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.

**460213—Ceiling and Roof Framing**

**Grade Level:** 11-12

**Credits:** 1

**Course 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 sheathing, and roof coverings for both commercial and residential construction.

**460214—Site Layout & Foundations**

**Grade Level:** 12

**Credit:** 1

**Course Description:** Students will prepare materials, calculate the cost for a building site, and layout 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.
460242 — Co-Op (Carpentry)
Grade Level: 12
Credits: 1

Course Description: Co-op provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Co-op Education program receive compensation for their work.
ADVANCED MANUFACTURING PATHWAY OFFERINGS

Outlined in the table below are all pathways for students interested in a future in Advanced Manufacturing. This pathway should follow a proper course sequence. Upon completion of three credit courses students will be able to sit for the appropriate KOSSA certification. Additional industry certifications will be offered as well. Courses may be taken out of approved pathway as additional elective options with teacher permission ONLY.

ADVANCED MANUFACTURING PATHWAY

<table>
<thead>
<tr>
<th>Combination Arc Welder Pathway: Combination Arc Welders set up and align materials to be joined by either the Shielded Metal Arc (SMAW) or Gas Metal Arc welding process. Welds together metal components of products in an assembly setting, such as automobiles, appliances, and aircraft, as specified by layout, blueprints, diagrams, work order, procedures, or oral instructions, using the Gas Metal Arc welding process. Welds together structural steel components in a construction setting using the Shielded Metal Arc (SMAW) process. Must be knowledgeable of the required geometry and physical properties of the materials to be welded and capable of passing required weld certifications.</th>
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<td>1st year</td>
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480501 — Cutting Processes
Grade Level: 9-12
Credit: 1
Course Description: This course will provide knowledge of various cutting processes used in the welding industry as well as safety, theory of operation, setup and operating techniques, troubleshooting and making minor equipment repairs. Also discussed will be identification, evaluation, repair and prevention of discontinuities of cut surfaces. Oxy-fuel, plasma arc, exothermic, air carbon arc, shielded metal arc and mechanical cutting processes are introduced. Using hands on learning experiences, the student with practical experiences to become proficient in the use of various metal cutting processes. Safety, setup, and operating techniques are employed. Students will troubleshoot and make repairs to equipment as well as identify and repair cut surface discontinuities.

480523 — Oxy-fuel Systems
Grade Level: 9-12
Credit: 1
Course Description: 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 mechanized oxy-fuel cutting, welding, brazing principles and practice, and metallurgy. Shop safety and equipment use are also covered.
480505—Blueprint Reading for Welding
Grade Level: 10-12
Credit: 1
Course 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 tolerance 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.

480521—Shielded Metal Arc Welding
Grade Level: 11-12
Credit: 1
Course Description: This course 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 while providing course provides laboratory experiences in which the student acquires the manipulative skills to perform fillet welds in all positions.

480522—Gas Metal Arc Welding
Grade Level: 11-12
Credit: 1
Course Description: This course covers 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. Students learn the practical application and manipulative skills of Gas Metal Arc Welding and the proper safety situations needed in this process. Both ferrous and non-ferrous metals will be covered, as well as various joint designs on plate in all positions.

480525—Gas Tungsten Arc Welding
Grade Level: 12
Credit: 1
Course Description: This course provides instruction in identification, inspection, maintenance of GTAW machines and the selection/storage of GTAW electrodes. The course will teach students the effects of variables on the GTAW process and metallurgy. Also included will be the theory and application of plasma arc cutting. Hands on activities will teach the necessary manipulative skills needed to apply the gas tungsten arc on various joint designs on plates with both ferrous and non-ferrous metals. Plasma arc cutting is included.

480541—Co-Op (Welding)
Grade Level: 12
Credits: 1
Course Description: Co-op provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Co-op Education program receive compensation for their work.
MEDIA ARTS PATHWAY OFFERINGS

Outlined in the table below are all pathways for students interested in a future in Media Arts. This pathway should follow a proper course sequence. Upon completion of three credit courses students will be able to sit for the appropriate KOSSA certification. Additional industry certifications will be offered as well. Courses may be taken out of approved pathway as additional elective options with teacher permission ONLY.

<table>
<thead>
<tr>
<th>MEDIA ARTS PATHWAYS</th>
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</thead>
<tbody>
<tr>
<td><strong>Graphic Design Pathway:</strong> This career pathway prepares students to apply Media Arts skills that focus on the general principals and techniques for effectively communicating ideas and information, and packaging products, in digital and other formats to business and consumer audiences, and that may prepare individuals in any of the applied art media, including: 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.</td>
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</tbody>
</table>

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<thead>
<tr>
<th>Year</th>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>1st year</td>
<td>480901</td>
<td>Introduction to Media Arts</td>
</tr>
<tr>
<td>2nd year</td>
<td>480920</td>
<td>Two-Dimensional Media</td>
</tr>
<tr>
<td>3rd year</td>
<td>480921</td>
<td>Digital Imaging</td>
</tr>
<tr>
<td>4th year</td>
<td>480922</td>
<td>Advanced Production Design</td>
</tr>
<tr>
<td>4th year</td>
<td>480950</td>
<td>Media Arts Co-Op** [Must meet GPA, Attendance, and Behavior Guidelines; Must be enrolled in Advanced Production Design during same year]</td>
</tr>
<tr>
<td>2nd, 3rd, 4th year ELECTIVE</td>
<td>480902</td>
<td>Interactive Design</td>
</tr>
</tbody>
</table>

**480901—Introduction to Media Arts**

**Grade Level:** 9-12  
**Credits:** 1  
**Course Description:** This course provides 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.

**480920—Two-Dimensional Media Design**

**Grade Level:** 10-12  
**Credits:** 1  
**Course 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.
480921 — Digital Imaging
Grade Level: 11-12
Credits: 1
Course Description: This course provides 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.

480922 — Advanced Production Design
Grade Level: 12
Credits: 1
Course Description: Advanced Production Design emphasizes an advanced and independent use of compositional theory, elements and principles of design, techniques and creatives 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 student of career opportunities in media art is performed. Contemporary, cultural, and historical design may be studied.

480950 — Co-Op (Media Arts)
Grade Level: 12
Credits: 1
Course Description: Co-op provides supervised on-the-job work experience related to the student’s educational objectives. Students participating in the Co-op Education program receive compensation for their work.

480902 — Interactive Design
Grade Level: 10-12
Credits: 1
Prerequisite: Introduction to Media Arts
Course 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. This course is an elective for the Media Arts Graphic Design Pathway, students in this pathway are encouraged to take this as additional support in preparation for Adobe certification exams.
LEADERSHIP EDUCATION (MCJROTC) PATHWAY OFFERINGS

Outlined in the table below are all pathways for students interested in a future in Marine Corps Junior Reserve Officer Training Corps. This pathway should follow a proper course sequence. Upon completion of three credit courses students will be able to sit for ASVAB Test.

<table>
<thead>
<tr>
<th>LEADERSHIP EDUCATION (MCJROTC) PATHWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MCJROTC Pathway:</strong> A program that introduces students to the theory and practice of naval science, life in the U.S. Marine Corps, and prepares them for cadet status (Junior ROTC or JROTC) or for service as commissioned reserve or active duty officers (senior NROTC or ROTC). Programs are offered as adjuncts to regular high school or college instructional programs.</td>
</tr>
<tr>
<td>1st year</td>
</tr>
<tr>
<td>2nd year</td>
</tr>
<tr>
<td>3rd year</td>
</tr>
<tr>
<td>4th year</td>
</tr>
</tbody>
</table>

**580320—Marines JROTC**
Grade Level: 9-12
Credit: 1
Course Description: A program that introduces students to the theory and practice of military science, life in the U.S. Marines, and prepares them for cadet status (Junior Marines ROTC or MJROTC) or for service as commissioned reserve or active duty officers (Senior MROTC or JMROTC). Programs are offered as an elective to regular high school instructional programs.

**580321—Marines JROTC 2**
Grade Level: 10-12
Credit: 1
Prerequisite: Level 1
Course Description: A program that introduces students to the theory and practice of military science, life in the U.S. Marines, and prepares them for cadet status (Junior Marines ROTC or MJROTC) or for service as commissioned reserve or active duty officers (Senior MROTC or JMROTC). Programs are offered as an elective to regular high school instructional programs.

**580322—Marines JROTC 3**
Grade Level: 11-12
Credit: 1
Prerequisite: Level 2
Course Description: A program that introduces students to the theory and practice of military science, life in the U.S. Marines, and prepares them for cadet status (Junior Marines ROTC or MJROTC) or for service as commissioned reserve or active duty officers (Senior MROTC or JMROTC). Programs are offered as an elective to regular high school instructional programs.

**580323—Marines JROTC 4**
Grade Level: 12
Credit: 1
Prerequisite: Level 3
Course Description: A program that introduces students to the theory and practice of military science, life in the U.S. Marines, and prepares them for cadet status (Junior Marines ROTC or MJROTC) or for service as commissioned reserve or active duty officers (Senior MROTC or JMROTC). Programs are offered as an elective to regular high school instructional programs.
VIDEO EDITING ELECTIVES

Identified below are two course offerings aligned to Cinematography and Production. These courses are offered as additional electives for students in their junior and senior years. Teacher recommendation is required for the courses.

480910—Video Studio Fundamentals
Grade Level: 11
Credits: 1
Course Description: Participants will learn the basics of camera operation, including both single and multiple camera set-ups. Students will learn concepts such as shot composition and camera placement. Students will learn to operate various digital video cameras, the use of microphones, and follow directions from the studio director in setting up interviews and shooting sequences. This course provides instruction and hands-on experience in video editing, basic digital video camera operation, transferring video to a computer, and editing the video using currently available editing software. Editing will include cutting slips, duplicating video clips, adding background sound, title screens, text and credits. This course includes the theory and practice of audio techniques in radio, television, film and multimedia including acoustics, audio language and terms, signal flow, use of microphones, use of mixers and related production equipment and the aesthetic aspects of sound mixing. Students will apply the learned materials to actual audio production.

480911—Studio Directing & Performance
Grade Level: 12
Prerequisite: Video Studio Fundamentals and Teacher Recommendation
Credits: 1
Course Description: This course explores the role of the director within the studio system. Students develop knowledge and skills in studio multi-camera and field television production. The course examines relationships with producers, writers and studio executives. Students learn the importance of budgets and schedules and their effect on the creative process. Students will explore the role of an agent and employment possibilities. This course focuses on the practice of announcing for broadcast, interpretation of copy, news casting, music continuity, the operation of audio equipment, acting and interviewing. Students gain practice with commercial material and ad lib announcing. Students also develop writing for electronic and film media. The course covers techniques of narrative and non-fiction writing and scripting, the analysis and writing of radio, television and film materials, including storytelling and screenwriting. Students enrolled in this course will be working on creating and editing videos for the Covington Independent Public Schools. Students in this course MUST have teacher recommendation.
**SAMPLE GRADE LEVEL SCHEDULES**

<table>
<thead>
<tr>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>English 2</td>
<td>English 3 / IB English 3</td>
<td>IB English (full IB) / English 4 / Dual Credit</td>
</tr>
<tr>
<td>Algebra 1 / Geometry</td>
<td>Geometry / Algebra 2</td>
<td>Algebra 2 / IB Math Studies</td>
<td>IB Math Studies (full IB) / Math Elective</td>
</tr>
<tr>
<td>Integrated Science</td>
<td>Biology</td>
<td>Chemistry 1 / IB Chemistry</td>
<td>IB Chemistry (full IB) / Elective (completion of IB Biology for existing class)</td>
</tr>
<tr>
<td>CTE Pathway 1 Course</td>
<td>CTE Pathway 2 Course</td>
<td>CTE Pathway 3 Course</td>
<td>CTE Pathway 4 Course</td>
</tr>
<tr>
<td>Spanish / Elective</td>
<td>Spanish / Elective</td>
<td>IB Spanish (full IB) / Elective</td>
<td>IB Spanish (full IB) / CCR Math / Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td>Theory of Knowledge / Elective</td>
<td>IB Art (full IB) / CCR English / Elective</td>
</tr>
</tbody>
</table>

**Requirements of Visual and Performing Arts, Health and PE, and Technology (Digital Literacy) should be factored in as elective credits. It is strongly recommended that students take the Digital Literacy course during their 9th grade year as it covers essential formatting skills needs for papers for all content courses.**