

# ACADEMIC COURSES 2016 - 2017

### **ENGLISH**

#### English III (1 Credit)

Students experience a literature-based comprehensive communications course through American Literature from a variety of genres and begin to develop a two-year writing portfolio focusing on reading, writing and oral communication skills.

#### English IV (1 Credit)

English IV is based in British World Literature. The areas of instruction include listening skills, speaking, viewing, observing, reading, writing and critical-thinking skills.

#### **English III for the Advanced Student** (1 Credit)

Exploration of different styles of American Literature by in-depth analysis of literature and beginning development of a two-year writing portfolio with an emphasis on skills required for college SAT and ACT testing.

### **English IV for the Advanced Student**

#### (1 Credit)

Focusing on British and World literature, students develop skills required for college SAT and ACT reading and writing.

#### College Credit+ Composition I & II

For students meeting the requirements, this class may be taken for high school (2 credits) and 6 college credits in English. College Composition I and II is thematically organized and focuses on different types of reading and writing including analytical writing, research paper, reading and interpretation of selected literary works.

#### Deadline (.5 Credit)

Students learn the fundamentals of journalism by reading and writing news stories, feature stories and editorials, and learn elements of broadcast news, along with basic elements of photography, layout, and design.

#### Speech (.5 Credit)

Students develop communication skills including effective listening and non-verbal skills, research organization, presentation style, technology incorporation, group discussion and group participation.

#### **English: Books to the Big Screen** (.5 Credit)

This course looks closely at the relationship between literature and film. Students study literature and films from a comparative perspective, exploring themes, genres, characters, and plot.

## MATH

#### Algebra II (1 Credit)

Topics include solving linear equations and systems of equations, guadratic and higherdegree equations, rational expressions, logarithms, patterns, fundamental probability, and fundamental trigonometry. Admission into this class is based upon a sound foundation of algebra and geometry.

### Functions, Statistics, Trigonometry

#### (1 Credit)

This class is designed for students who have completed Algebra II and wish to strengthen their skills in preparation for Pre-Calculus and/or college-level Algebra.

#### Pre-Calculus (1 Credit)

Topics include the analysis of conic sections, permutations and combinations with probability, sequences and series, advanced trigonometry, and the fundamentals of limits, derivatives, and integration. Admission into this class is based upon sound completion of Algebra II.

#### **Calculus** (1 Credit)

Topics include number systems and properties, limits, derivatives, and integrals. Applications of all problems will be discussed following each topic. Admission into this class requires successful completion of Pre-Calculus and teacher recommendation.

Math Analysis (1 Credit - Seniors Only) This course will reinforce student understanding of previous functions learned in Algebra II. Students will apply their knowledge of these functions to real life applications through problem solving, projects, and technology. This course is appropriate for students who have three credits of math and are going to a tech school, 2-year college, or as a transition to a four year college.

## **ELECTIVES**

#### **Personal and Professional Financial** Planning (.5 Credit)

Focus is on financial concepts for individuals and small businesses and fiscal decision making regarding long-term business goals and planning. Learn to be a savvy consumer by making wise choices!

#### **Transitions: College and Career** (.5 Credit)

Workplace subject matter and learning activities are concerned with the basic principles and processes of positive communications and leadership development; safety, personal and professional career development, the attainment of proactive decision-making and problem-solving skills, work ethic expectations, job seeking, retention, and 3 advancement skills.

#### Spanish I, II, III, IV, V (1 Credit)

Focus ranges from building a foundation of basic vocabulary, grammar, verb forms, and sentence structure through listening and speaking to reading and writing, and ultimately grammar and vocabulary fluency. An in-depth study of grammatical structures, verb forms and vocabulary is provided, in addition to gaining an understanding and appreciation of Spanish-speaking cultures in the U.S. and abroad. Students have the opportunity to prepare for placement tests to earn advanced credits and/or class placement in college.

### SCIENCE

#### Physics (1 Credit)

Introducing students to key concepts and theories that provide a foundation for further study in science and scientific literacy, physics is a systematic study of the predictive physical interactions of matter and subsequent events. Students engage in investigations in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis and communication skills with real-world applications.

#### Science of Environmental Sustainability Credits: 1

(+ College Credit Available)

Students will investigate and design solutions to solve real-world challenges related to clean drinking water, a stable food supply and renewable energy. Through both individual and collaborative team activities and projects, students will problem solve as they practice common design and scientific protocols such as project management, lab techniques, and peer review.

#### **Physics of Digital Electronics**

Credits: 1+ Three (3) Hours of College Credit - (Seniors Only)

A study of the electronic circuits that are used to process and control digital signals. The major focus of the course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

#### Anatomy and Physiology (1 Credit)

(Recommended for Diversified Medical / Optical / Public Safety / Sports Medicine/ Cosmetology)

A systematic study of the structure and function of the vertebrate body with particular reference to man and quadrupeds. Provides students with a basic knowledge of body organs and helps develop an understanding of how the "various organ systems work to make up an independent organism.

#### Health Bio-Chemistry (.5 Credit)

(Recommended for Diversified Medical / Sports Medicine / Chef)

A systematic study of the organic compounds that are used to synthesize compounds in the body and the changes and energy release that occurs during these reactions.

#### Environmental Science (1 Credit)

Students study ecosystems and the interactions that occur between the inhabitants of these ecosystems, with an emphasis on those found in Ohio and Medina County.

#### Chemistry (1 Credit)

A systematic study of the structure and composition of matter and the changes that it undergoes, with particular reference to the relationship of chemistry to mammals.

# SOCIAL STUDIES

#### American Government (.5 Credit)

American Government covers the Constitution, Legislative Branch, Executive Branch, Judicial Branch, political parties, and state and local government.

#### College Credit+ American Government

Credits: 1 American Government + (3) Hours Political Science College Credit

The course covers the nature, purpose and forms of government of the United States at the national level and focuses on relationships between structure, function, and process. The dynamics of political change, including the role and significance of the U.S. Constitution and current issues of American public policy, are addressed.

#### Economics (.5 Credit)

Students learn and use economic ways of thinking and problem solving in order to understand our changing world of commerce by studying producing, exchanging, saving, and investing.

#### Psychology (.5 Credit)

Exploration of the fundamental aspects of psychology including the history of psychology and theories of the body and mind, learning and cognition, personality, health and adjustment, and social interaction.

#### American Sociology (.5 Credit)

A sociological study of the structure of society and culture in America; this course looks at how groups are formed and organized in society with a focus on the role of the individual.

### INFORMATION

#### Accreditation

Both the Ohio Department of Education and the National Collegiate Athletic Association (NCAA) approved the Medina County Career Center technical and academic courses for athletic eligibility status.

#### **College Credit+**

Academic College Credit options exist for senior students who meet the statemandated criteria:

#### **College English**

2 credits of high school English and 6 credits of college composition.

#### **American Government**

1 credit of high school American Government and 3 credits of college political science.

#### **Articulated Credit:**

Credit awards are based on successful completion of required elements:

#### Algebra II

1 credit of high school and 5 hours of college credit.

#### Science of Environmental Sustainability

1 credit of high school and college credit available.

#### **Physics of Digital Electronics**

1 credit of high school and 3 hours of college credit.



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