

Marcellus Middle High School Course Description Guide



Marcellus
MIDDLE/HIGHSCHOOL

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English

English 7A/B (1 year)

In this differentiated literature and language program students will study short stories, classical mythology, nonfiction, drama, and poetry. Students will complete a separate vocabulary program, complete assorted creative and expository writings, respond to prompts, and maintain a journal. In addition, students will investigate the parts of speech and the parts of the sentence.

English 8 A/B (1 year)

Students will work in all strands of English/language arts curriculum: reading, writing, grammar conventions, listening, speaking and viewing. Students will actively participate in a wide assortment of genres of literature, grammar and usage conventions, vocabulary development and formal/informal forms of writing. Strategic use of films and videos will also enrich cultural and media literacy.

English 9 A/B (1 year, each semester .5 credit)

The first semester consists of the study of English grammar and usage with an emphasis on “writing to be understood.” The second semester consists of the study of literature (short stories, poetry, Shakespeare and *Romeo and Juliet*, various non-fiction articles). In addition, students may be required to make an oral book report on independent student reading.

English 10 A/B (1 year, each semester .5 credit, Prerequisite English 9 A/B)

10th grade English is a year-long literature survey class. The class covers literary terminology, vocabulary building, test taking strategies, and several literary genres.

English 11 A/B (1 year, each semester .5 credit, Prerequisite English 10 A/B)

Concentration on reading, thinking, writing, and speaking. The (English) through the Medieval Period (Middle English) to the English Renaissance (Modern English). While studying English literature, the student will read selections from classics of each time period *Beowulf*, the Venerable Bede, Sir Thomas Malory, Chaucer’s *Canterbury Tales*, Shakespeare, Christopher Marlowe. In addition, the student will make speeches on a variety of subjects and will be required to create a portfolio of academic skills, personal management skills, and teamwork skills. Students will also learn to create business letters, resumes, and other school to work related documents and learn about the job interview process.

English 12 A/B (1 year, each semester .5 credit, Prerequisite English 11 A/B)

English 12 is a yearlong required course that will enable students to become skilled readers of wide range of literature, including prose, poetry, and short stories. Students are expected to read and respond to a variety of literature, independently, in group discussion and in writing. All facets of language arts - listening, speaking, reading, writing will be covered. The study of language in use – grammar, mechanics, sentence structure, and usage will be incorporated in this yearlong course as well.

English Electives

Communications (7th grade, ½ semester)

Students will learn skills to be academically successful through the use of learning how to give presentations, readings, paraphrasing and summarizing, speech writing, vocabulary, parts of speech, punctuation, creative writing and research skills.

Great Books (½ semester, .5 credit)

Students will analyze several classic novels covering various genres. Additionally, students will learn basic terminology in order to analyze and discuss the novels. Students will hone their reading skills by engaging in classical and current texts. Presentations and assignments associated with reading material will be required. Students may analyze the same work in both the written and audiovisual medium.

Mythology (½ semester, .5 credit)

Greek myth, stories, and legends. Critical thinking; text analysis; and effective verbal and written communication. Exploration that examines Greek mythology's influence on current societal, emotional, and cultural beliefs and understanding. Report opinions and research using a variety of multimedia formats.

Mythology (7th grade, ½ semester)

This course includes a survey of Greek, Roman and Norse antiquity, including the appropriate gods, heroes, and heroines, and the stories these cultures told about them. Within the course, students examine the nature and social function of mythology. A particular focus of the course is the legacy of mythology in modern literature and popular culture.

Sociology A/B (1 year, each semester .5 credit)

This course is designed to give the student a greater awareness of his/her role within the various segments of society. The student will be made aware of the interrelationships of the various patterns and systems within society and how he/she relates to them.

Yearbook A/B (1 year, each semester .5 credit, must seek recommendation for course)

Students will complete a variety of tasks to create a quality yearbook that reflects on the activities for the present school year. Examples of what will be completed throughout the year develop a theme, design cover, end sheets and title page that will reflect the theme, create a workable ladder, determine photo ideas, organize sales and distribution of the completed book, sell advertisements, edit pages, and meet publication deadlines. Students will be using an online program and software called E-design to complete these tasks along with a digital camera.

Mathematics

Math 7 (7th grade, 1 year)

This course is designed to help students improve their computational and problem solving skills. Topics studied in this course will fall into the categories of the number system, ratios & proportional relationships, expressions & equations, geometry, and statistics & probability.

Pre-Algebra (7th and 8th grade, 1 year)

Students will gain an understanding of the number system, expressions and equations, geometry skills, statistics and probability, arithmetic with polynomials, creating equations, and reasoning with equations

Algebra (1 year, each semester .5 credit)

The course emphasizes algebraic language, structure, concepts and skills. Major topics include algebraic properties and the real number system with an emphasis on the application of basic operations, functions and their graphs, linear equations and inequalities, quadratic equations, linear regression and modeling, systems of linear equations and inequalities, polynomial and factoring, algebraic fractions and real world applications.

Geometry (1 year, each semester .5 credit, Prerequisite Algebra)

Geometry builds on a number of key geometric topics developed in the middle grades, namely relationships between angles, triangles, quadrilaterals, circles, and simple three-dimensional shapes. Students will study deductive reasoning, plane figures, trigonometry, and geometric relationships that have the goal of improving a student's mathematical thinking and problem solving skills.

Algebra II (1 year, each semester .5 credit, Prerequisite Algebra and Geometry)

Topics learned in this course include linear functions and systems, quadratic functions and their equations, polynomial functions, rational functions, rational exponents and radical functions, exponential and logarithmic functions, trigonometric functions, statistics and probability.

Pre-Calculus ((1 year, each semester .5 credit, Prerequisite Algebra, Geometry and Algebra II)

Topics learned in this course include real numbers, exponents, radicals, rational expressions, modeling and inequalities, functions, polynomial and rational functions, conic sections, advanced trigonometry, sequences and series, probability, matrices and linear systems.

Calculus (1 year, each semester .5 credit, Prerequisite Algebra, Geometry, Algebra II and Pre-Calculus)

Topics learned in this course include limits and continuity, differentiation: definition and basic derivative rules, differentiation: composite, implicit and inverse functions, contextual applications of derivation, analytical applications of differentiation, integration and accumulation of change, differential equations, and applications of integration.

Financial Literacy (1 year, each semester .5 credit, Prerequisite Algebra, Geometry and Algebra II)

During semester 1 students will learn the foundations of personal finance, personal savings budgeting, debt, consumer awareness, bargain shopping and prepare for life after high school. The second semester includes gaining understanding about Investing and retirement, insurance, money and relationships, careers and taxes, and giving.

Science**Astronomy** (7th and 8th grades, ½ semester)

This elective course will include a study of Astronomy (including planetary modiums, constellations, and laws), and basic geosciences, including weather, geology, oceans, topographic maps, and basic ecology.

Biology A/B (1 year, each semester .5 credit)

This is a two semester course where students will explore basic biological concepts including the characteristics of living things, cell structure and function, genetics, evolution, and biodiversity.

Biology II A/B (1 year, each semester .5 credit)

An advanced level biology course with a strong laboratory emphasis. The course builds on the concepts introduced in Biology I, such as microbiology, heredity, and genetics. Although not a required prerequisite, information covered in Chemistry is helpful.

Chemistry A/B (1 year, each semester .5 credit)

Students will develop the model of the atom and will use the model to explain properties of matter, energy transformation, and changes that occur within matter. Writing formulas, naming of materials, and explaining chemical equations will also be discussed. Students will use their knowledge of atomic structure and matter to discuss chemical reactions, rates of change, and changes in chemical energy that occur during these reactions. Chemical quantities and their relationships will also be explored.

Earth Science (7th grade, ½ semester)

Students will be able to grasp and expand on new concepts. Students will be required to complete reading and writing assignments, perform investigative laboratory exercises, and actively participate in classroom discussions. Additionally, an emphasis on the importance of earth science in our daily lives will be incorporated.

Physical Science A/B (1 year, each semester .5 credit)

Applied physical science is a course taken by all ninth grade students. Content for the course includes subject in physics and chemistry. Students will receive a working knowledge of basic chemistry and physics to prepare them for these two courses in high school. Students will learn about and keep an interactive journal of content they learn in class. Learning activities will include reading science articles and texts, note taking, stations labs, internet research and activities, an independent science project and whole group and small group discussions.

Physics A/B (1 year, each semester .5 credit)

The course is designed for students to explore and apply the principles of technology in a classroom setting with hands-on laboratory activities. Within each chapter are several pages that cover topics such as motion, forces, electricity, magnetism, waves, and quantum physics

Science 7A/B (1 year)

7th grade science is an integrated science course. The course is guided by the Next Generation Science Standards (NGSS). Students will learn science in the areas of biology, chemistry, physics and earth science. The course consists of the following six units (adapted from Standard's middle school NGSS curriculum):

Unit 0 - Introduction to Group Work

Unit 1 - Setting Things in Motion

Unit 2 - Extreme Living

Unit 3 - Nature via Nurture

Unit 4 - Adapt or Die

Unit 5 - Mimicking Nature's Design

Students will keep an interactive science notebook and will participate in group activities, group projects, individual projects, note taking, writing and carrying out experiments and arguing from evidence.

Science 8A/B (1 year)

8th grade science is an integrated science course. The course is guided by the Next Generation Science Standards (NGSS). Students will learn science in the areas of biology, chemistry, physics and earth science. The course consists of the following six units (adapted from Standard's middle school NGSS curriculum):

Unit 0 - Introduction to Group Work

Unit 1 - Colossal Collisions

Unit 2 - A Balanced Biosphere

Unit 3 - Matter Matters

Unit 4 - Save the Andes!

Unit 5 - Using Engineering and Technology to Sustain our World

Students will keep an interactive science notebook and will participate in group activities, group projects, individual projects, note taking, writing and carrying out experiments and arguing from evidence.

Social Studies**Social Studies 7 A/B** (1 year)

This course covers the beginnings of human civilization. Students will examine several ancient civilizations including Babylon, Egypt, Sumer, Greece, Rome, China, and Medieval Europe. Students will learn the origins and spread of Judaism, Hinduism, Buddhism, Christianity, and Islam. Focus will be applied to the development of technology, ideas, education, trade, agriculture, and the everyday lives of the people who lived during the various times.

Social Studies 8 A/B (1 year)

Students will gain an understanding of the history of the early United States through Industrialism. Students will learn how the events and politics of this time changed the course of U.S. history to the current day.

World History A/B (1 year, each semester .5 credit)

This course in the first semester covers the significant events beginning with the early river civilizations to the 13th century, with emphasis on the political, social, industrial, cultural, geographical and ideological developments which shape our world. The second semester covers the significant events beginning with the 14th to the 20th centuries with emphasis on the political, social, industrial, cultural, geographical and ideological developments which shape our world today. The purpose of the course is to help the student become more aware of how the world has developed as it has, and its relationship to what is occurring throughout the world today.

U.S. History A/B (1 year, each semester .5 credit)

Students will gain an understanding of United States history from Industrialism to the present day. Students will learn how events and politics of this time changed the course of U.S. History to the current day. This course will help students understand some of the issues of our country and how to be productive and informed members of society.

Economics (½ semester, .5 credit)

The workings of the American market economy is the major focus. Studies in the course include basic economic principles, the factors of production, economic systems, demand, supply, equilibrium, elasticity, business structures, types of competition, government involvement in the economy, sources of government revenue, and a host of other economic topics.

Government (½ semester, .5 credit)

The study of the development of the United States Government: its historical foundations and English roots, the history of the American Colonies, the American Revolution, the weaknesses of the Articles of Confederation, the creation of the United States Constitution, and the function and form of the United States Government today. The student will also learn about the form and function of the state governments and their relationship with the national government (federalism).

Social Studies Electives**Current Events A/B** (1 year, each semester .5 credit)

Students will gain a broad understanding of current events and increase media literacy. Students will study major and minor news stories and practice maps to learn where and how events occurred to present day and how the future may be affected.

Current Issues (7th grade, ½ semester)

Current Issues introduces students to various issues facing the world today. Students will explore global economic systems, human rights, world health, environmental issues, and the role of the United States and the United Nations in a changing world. This class is designed to eliminate much of the confusion surrounding these issues and allow students to form their own opinions on matters that affect their world. Students will evaluate the issues and propose solutions from a variety of perspectives.

Sociology (1 year, each semester .5 credit)

Sociology is the study of human behavior in group situations. This course covers basic sociological theory, the effect of social structure, practices, and institutions upon the individual in everyday life. Topics will include but are not limited to culture, socialization, social institutions, social deviation, the family, social inequalities, poverty and crime.

Career Preparedness**Four Core Review** (1 year, each semester .5 credit)

Four Core Review is a course designed to prepare students to take their college entrance exam (ACT/SAT). The course reviews the subjects of reading, writing for the SAT essay, academic vocabulary, math and science. Students are provided with practice test questions and complete practice tests. Students will learn basic test taking skills and specific test taking requirements for the ACT and SAT. During practice test sessions students are exposed to the timing component of the tests and will develop the necessary skill to finish the college entrance exams in the allotted time. Upon completion of the SAT in the spring of each year, the course focus changes to introduce students to the admission process for college and university admission. The students research different colleges and universities and then research a career of their choice and create presentations to give to the class.

Introduction to Research (1 year, each semester .5 credit)

Introduction to Research is a college preparatory class. Students will learn about all aspects of plagiarism and how to avoid it. The class focuses on writing college level research papers in the proper format with scholarly resources. Students will learn how to do research on the internet, how to choose reliable/peer reviewed sources and how to give credit to their sources. Citation styles explored will be APA and MLA, and a brief introduction to Chicago Manuscript Style. Students will learn how to properly create in-text citations and works cited citations in both formats. Students will work on creating brief summaries of information, reflective papers, short essays, science lab reports and a complete argumentative essay.

Health and Physical Education**Advanced Physical Education A/B** (1 year, each semester .5 credit)

This course will emphasize four fundamental areas: strength development, stretching for flexibility, speed and agility enhancement, and the fundamentals of a proper nutritional program. Students will be required to keep accurate records of their progress in the weight training phase as well as speed workouts. Proper technique and spotting procedures will be

demonstrated, explained, and practiced for each of the core weight training stations. Students will be instructed as to proper running form for speed workouts.

Human Growth and Development 7 (7th grade, ½ semester)

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. The program's learning experiences are designed to give the student's an understanding of the different body systems, along with providing them with the knowledge to make healthy nutritional choices. The program also explores how to react in emergency situations.

Health 8 (8th grade, ½ semester)

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. The program's learning experiences are designed to give the student's an understanding of the different body systems, along with providing them with the knowledge to make healthy nutritional choices. The program also explores how to react in emergency situations.

Health 9 (½ semester, .5 credit)

This is a required course that deals with the emotional, physical, social, and psychological aspects of the human body. It is intended to prepare students to enter society with the knowledge to make responsible decisions regarding their health. The units covered are mental health, tobacco, alcohol, drugs, reproduction, pregnancy, contraception, and STD/AIDS.

Lifetime Fitness A/B (1 year, each semester .5 credit)

The purpose of this course is to help students improve personal fitness and health through active participation in a variety of safe and effective health related fitness components. The class includes a variety of aerobic activities, weight lifting, core strength and flexibility exercises. Students will gain a basic understanding of the physiological foundations of weight training and fitness running as well as proper nutritional concepts.

Physical Education 7 (7th grade, ½ semester)

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. Discussions include peer recognition of potential issues, and how to access support services. Communicable and non-communicable diseases are also discussed. The students receive instruction on the importance of developing healthy eating habits and discuss decision-making skills that foster wellness.

Physical Education 8 (8th grade, ½ semester)

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. Students study the impact of steroid, alcohol, tobacco, and other chemical abuse on the body. Discussions include peer recognition of potential issues, and how to access support services. Communicable and non-communicable diseases are also discussed. The

students receive instruction on the importance of developing healthy eating habits and discuss decision-making skills that foster wellness.

Physical Education 9 (½ semester, .5 credit)

The purpose of this course is to help students improve personal fitness and health through active participation in a variety of safe and effective health related fitness components. The class includes a variety of aerobic activities, weight lifting, core strength and flexibility exercises. Students will gain a basic understanding of the physiological foundations of weight training and fitness running as well as proper nutritional concepts.

Performing/Visuals Arts Applied

Band 7&8 A/B (7th and 8th grade, ½ semester)

Middle School Concert Band is open to instrumentalists in grades seven and eight who want to further their study of instrumental music. In band, students will be studying all facets of instrumental music, including rhythmic and tonal studies, genre, style, interpretation, intonation and tone quality. This course develops additional skills necessary for students to perform in the High School Band

Band A/B (1 year, each semester .5 credit)

Band is a one year elective course open to students in grade 9-12. Prerequisites may include participation in beginning and Middle School Band. The class may be repeated. Enrolling in band entails complete participation in both concert and marching band. Complete participation includes band camp as well as all rehearsals and performances indicated by instructor. In band, students will be studying all facets of instrumental music, including rhythmic and tonal studies, genre, style, interpretation, intonation and tone quality.

Jazz Band A/B (1 year, each semester .5 credit)

Jazz Band is an elective class open to students 9-12, who are already enrolled in Band. The class may be repeated. The Jazz Band consists of trumpets, trombones, alto, tenor and baritone saxophones, percussion, piano, guitar and bass. In Jazz Band, students will be studying the many facets of Jazz including improvisation and chord study. Different styles including Blues, Latin, Rock, and Swing will all be studied and performed. Attendance at all performances is required.

Introduction to Music Theory (½ semester, .5 credit)

Designed for students who seek to enrich their knowledge of the fundamentals of music. Students will gain an understanding of how elements of music interact to create musical style and effect, students will better appreciate how music is brought to life and its ability to communicate to others.

Introduction to Guitar (½ semester, .5 credit)

This course is designed to provide a musical introduction to playing the acoustic guitar. Through in-class instruction, individual practice, and playing assignments, the student will advance in their understanding of music and guitar pedagogy. The daily objective of the course

is to foster and promote musical growth through the playing of an instrument by the student.

Art (7th and 8th grade, ½ semester)

Middle school art classes stress problem-solving skills and using one's mind to analyze, synthesize, and evaluate art. Students are introduced to art production, art history of many cultures, art criticism, and aesthetics. Major areas to be studied include painting, drawing, sculpture, textile design, printmaking and ceramics.

Art A/B (1 year, each semester .5 credit)

This course is designed to introduce students to the Elements of Art and Principles of Design, as well as Color Theory through work with a variety of media and techniques. Student will create both 2D and 3D artwork. Major Art Movements and the artists within those movements will also be studied with his course. Writing is also incorporated into this course through journal writing and artist's statements. This course is intended for those wishing to pursue art as a serious study or for those who are inexperienced and wish to investigate artistic expression.

World Language

Spanish 1A/1B (1 year, each semester .5 credit)

This course is an introduction to the language and culture of the Spanish speaking world. Through storytelling, basic vocabulary and grammatical structures will be taught as well as the fundamental speaking, listening, reading and writing skills. Paired and group activities will be used to develop speaking skills. An appreciation for cultural diversity will be presented through such activities as learning about Hispanic holidays, Spanish music, geography and history of Spanish speaking countries.

Spanish 2A/2B (1 year, each semester .5 credit, prerequisite Spanish 1A/B)

This course focuses on strengthening the skills learned in Spanish One by additional practice in speaking, listening, reading and writing. Students will increase their Spanish vocabulary and more emphasis will be placed on the grammatical structures of the language.

Business

Accounting 1A/1B (1 year, each semester .5 credit)

The first year course is designed for the business pathway student. The accounting cycle for sole proprietorships and small corporations will be studied. Opportunities to use the computer software to solve accounting activities take place throughout the course

Accounting 2A/2B (1 year, each semester .5 credit)

The second year course is designed for the business or finance pathway students. Students will study advanced/post-secondary topics in accounting and obtain hands-on experience by recording the financial information for the school store.

Advanced Business Technology and Management 1A/1B (1 year, each semester .5 credit, Prerequisite Business Technology and Management A/B)

BTM II builds upon the foundational skills in technology and management that were learned in BTM 1A/1B. Students enrolled are considered CTE-Q level, in that they are learning post-secondary skills. Students will use entrepreneurial and management knowledge to operate the school store. Additionally, students will prepare and seek clarification in Microsoft Office Expert-Word, PowerPoint, and Excel. Students enrolled in this course are required to work in the school store.

Business Technology and Management 1A/1B (1 year, each semester .5 credit)

BTM is the foundation class that gives the student a foundation of skills that will be expanded on in other classes. This course provides instruction in business management and career education. Instruction will include software concepts using a Windows based software suite, which includes word processing, spreadsheet, and presentation applications. Instruction in basic computer hardware, software and operating systems that support software application.

Digital & Multimedia Design 1A/1B (1 year, each semester .5 credit, Recommended Prerequisite Business Technology and Management 1A/1B)

This is a business course designed to allow students to develop proficiency in using industry standard software to create a variety of multimedia projects for both computer/web viewing and print. Students will incorporate the principles of design throughout the course in both print and Web publications including integration of text and graphics and use sophisticated hardware and software to develop and create quality materials. Students will incorporate the process of analyzing information and audience while choosing the appropriate visual aids to communicate the desired message effectively. Basic web page design and instruction is incorporated within this course as well as the use of photo and video editing software. Students will also have opportunities to explore basic IT through projects, which will encourage computational thinking, curiosity, creativity, and empathy.

Digital & Multimedia Design 2A/2B (1 year, each semester .5 credit, Prerequisite Digital & Multimedia Design 1A/1B)

Students will continue studying the concepts of Digital & Multimedia Design 1A/1B, but will work on advanced skills in an area of focus learned DMD 1A/1B.

Virtual /Online Courses

Virtual Partnership Course Catalog Link-

<http://.marcelluscs.org/downloads/district/onlinecourses.pdf>

Courses are available to all Marcellus Community Schools students (subject to prerequisites and eligibility requirements, if applicable).

Odysseyware Course Catalog Link-

<https://www.odysseyware.com/course-catalog?>

Statewide Online Course Catalog-

<https://micourses.org/PublicUsers/CatalogSearch.aspx?Area=S>

Vocational

Van Buren Tech Programs

AUTO MECHANICS IA/IB (grades 9-12) Auto Mechanics I is a one semester course meeting two block periods per day. Students will be expected to show proficiencies in many phases of automotive brake systems, theory, and service. The second portion of the course will involve engine operation and rebuilding. Two-thirds of the course time will be devoted to theory. The remainder will be spent in the lab. Emphasis will be placed upon classroom and practical experience in all aspects of brake systems diagnosis and repair leading to certification in that field.

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AUTO MECHANICS II/III A/B (grades 11-12)

Auto Mechanics II/III A/B is a one semester class meeting two block periods per day. The course is designed to provide students with entry level skills in the field of automotive suspension systems, including alignments. Throughout the semester, instructional material will include various components and labs related to suspension systems. Successful alignment of at least two vehicles will culminate front/rear suspension course study. The remainder of the time will be spent with basic automotive electricity, circuits, and component testing. Students will be encouraged to participate in many avenues of automotive service.

The goal of the VBTC is to provide training in vocational and technical career areas to interested students.

*Students spend one half day at the technology center and one half day at their home school. Transportation is provided to and from VBT, Interested students must see the counselor. VBT Program Guides are available in the Guidance Office. **Failure of the class, "F", will result in full tuition reimbursement of the course at the expense of the student.***

ADVANCED MANUFACTURING

Previously known as Machine Tool, this program combines high-tech machines with hands on projects. Students are engaged with brainstorming, engineering, machining and robotics. Work on Vertical Milling Machines and Engine Lathes, along with 3-axis Computer Numeric Controlled Milling and Lathe Machines is included. Build a foundation of manufacturing skills that will help you gain an engineering background.

AGRICULTURE & NATURAL RESOURCES

Learn and develop the leadership and teamwork skills necessary in the industry today. Students can test their skills in the FFA youth organization, plus help plan and implement community-based projects. First year students will learn about different aspects of plant science, animal science, and natural resource concepts. Second year curriculum includes learning concepts related to floral design, veterinary science, production agriculture, landscape management, wildlife management, and more!

ALLIED HEALTH TECHNOLOGIES

Get on track to an interesting career in one of the therapy areas taught in this program. Learn skills and terminology applicable to virtually all healthcare fields. Students can become certified in CPR and First Aid.

CADET TEACHER ACADEMY

Students receive face-to-face and online classroom instruction two days per week to learn beginning teaching skills/methodology. Three days per week, students work with a mentor teacher, gaining classroom experience, first by observing, then advancing to actual lesson development and delivery. College credit is available through local community colleges. Students also have the opportunity to participate in the "Family, Career and Community Leaders of America" (FCCLA) student organization. An enrollment packet which includes field placement information is required for the Cadet Teacher Academy. Students may also qualify to receive their "Proficiency Certificate for Teacher Assistants" and/ or Career Readiness Certificate by receiving a Silver, Gold, or Platinum rating on Work Keys and Business Writing. This would allow students to be qualified as a Classroom Paraprofessional upon graduation from High School. Participation in an orientation before the start of the school year is also required.

CULINARY ARTS & CATERING MANAGEMENT

The Culinary Arts and Catering Management program, includes segments from a variety of related industries. Students develop skills through field trips, banquets, on-and off-site food service events, textbook/workbook activities, hands-on cooking, and culinary/ cooking/ restaurant development competitions. Qualifying students can earn college credit and industry certifications. ServSafe, an internationally recognized sanitation certification, is a hospitality services industry requirement. Students who successfully complete ProStart Levels I and II are issued a certificate from the National Restaurant Association.

MARKETING & ENTREPRENEURSHIP

Learn and apply marketing skills that allow you to be successful in today's highly competitive business world. Units include management and communication skills, product demonstrations, visual merchandising, job interviewing, product planning and packaging, marketing research, and advertising. This course will also teach you how to research a business idea, write a business plan, and start your own business. Participation and competition in the national Business Professionals of America (BPA) student organization is encouraged for all students.

ENGINEERING & ARCHITECTURAL DESIGN

In this program, students will learn the foundational principles behind the fields of engineering and architecture. Working as a team, you will invent solutions to challenges, be exposed to new technologies and ideas, and learn how to benefit the world through problem solving designs. Students will sketch designs, learn Computer Aided Design (CAD) software and 3D printing technologies, as well as programming and electronics that will help make design ideas and inventions come to life. Students will also partner with colleges and real engineers and architects to learn pathways for students to make solutions to real-world problems and ideas for new creations.

FIRE SCIENCE

This program introduces students to the basic skills required by firefighters including fire control, detection, and prevention.

Certifications in this program include CPR, First Aid, and Hazardous Materials, Awareness, and Operations. Students who are at least 16 and pass the class with 70 percent or higher will be eligible to take the Michigan Firefighter I and II exams for state certification.

FUNDAMENTALS OF PATIENT CARE

The Fundamentals of Patient Care Program focuses on nursing and preparing students to pursue a Michigan Certified Nursing Assistant (CNA) license.

Classroom instruction is divided between hands-on lab and theory time. Integrated English, science and math are a part of the weekly curriculum. Students can become certified in CPR and First Aid. Second-year students can apply for a co-op position that offers paid work experience.

PHARMACY TECHNICIAN

Pharmacy Technicians help pharmacists provide medication and other health care products to patients. This college-level program prepares students to work in a pharmacy /hospital setting through classroom study and hands-on learning. Students will learn about pharmacy law and ethics, medical terminology, anatomy and physiology, pharmaceutical terminology and abbreviations, infection control procedures, pharmaceutical prescription preparation and dispensing procedures, pharmacy computer applications, insurance procedures, drug research, and patient/ customer relations.

SOFTWARE ENGINEERING

Computer software is enabling unprecedented technological innovation. Software engineering is defining the future. In this class, we cover basic computer science, software development and related career topics, and using languages such as Java, C# and C++. Students learn how to specify requirements, design, code, test and maintain computer software. After learning the fundamentals, students work in teams to create high-technology applications in areas such as robotics, simulation, computer vision, control systems and machine learning.

WELDING

Learn how to safely use the various welding equipment and do strong, professional looking welds. Apply your knowledge of various types of welds in a high-tech welding lab. Work independently while learning precise measurements and angles and a variety of welding processes including Gas Metal Arc Welding, Gas Tungsten Arc Welding, Shielded Metal Arc Welding, Flux Core Arc Welding, Resistance Welding, and more!

LAW ENFORCEMENT

In this course you will learn about basic policies and procedures of the legal system, study juvenile delinquency problems and theories, and become more familiar with the work of youth agencies, legislative involvement, and new approaches to juvenile crime prevention. Classroom participation, job shadows, and field trips are included. Qualifying first year students can earn six credits from Lake Michigan College (LMC). Second year students are placed in an intern program and application process, including background check, is required for this program.

CONSTRUCTION TRADES

Students will learn and apply the concepts of plumb, level, and square through practical on-site applications. Emphasis is placed on "hands-on" learning and correcting mistakes. Construction areas covered in this program include: safety, hand and power tool operations, masonry skills, framing, roofing, siding, drywall hanging and finishing, door/ trim applications, and estimating. Also, students gain knowledge in electrical, cabinet making and more. In both the on-site and off-site programs, students will construct a residential home.

PRINT MEDIA TECHNOLOGIES

In this class, students will learn the entire printing process, from concept to finished product. The program includes an introduction to digital photography and video editing. Students will make their own T-shirts, stationary, and business cards, as well as take their own senior picture and produce a video. In addition to their own projects, students will help with the production of printed products for the Van Buren Intermediate School District. This program can be a starting point to a college career in Graphic Arts. Western Michigan University, Ferris State University, and Kalamazoo Valley Community College all have highly regarded programs in the Graphic Arts field. Successful students should have good basic math and computer skills.

COMMERCIAL ART

Recent software developments allow individuals to create "Interactive Messages", which include spoken words, motion from video sources and animation, as well as traditional art and type-based documents. Students will learn skills required for computer usage, as well as traditional skills such as drawing and painting. Making messages is an art. Images may be created, scanned, organized, stored, and "published" such as drawing and painting. Making messages is an art. Images may be created, scanned, organized, stored, and "published" using a computer.

Self-motivation and discipline are important skills to have. Most career choices in this field require additional post-secondary education.

POLYMER TECHNOLOGIES

Learn how to operate a variety of plastics machines including injection molding, mix resins to make the plastic parts, set-up inks for stamping, and/ or engraving images on plastics.

CYBER SECURITY & COMPUTER NETWORK TECHNOLOGY

In this program, students will gain job skills and a foundation for college in PC hardware and software, network cable line, switches, routers, wireless access points, servers and network security. Learn how to build, repair, configure, manage, and secure computers and networks. This program prepares students for CompTIA A+, Security+, CISCO Certified Network Associate, and Microsoft Certified Solutions Associate (MSCA) certifications. Direct college credit is available in this program and up to 24 articulated credits are also available through various colleges and universities.

SMC DUAL ENROLLMENT

Students have the opportunity to take college classes and earn college credit through Marcellus Middle High School on the campus of Southwestern Michigan College.

Eligible Students:

To qualify for dual enrollment students must:

- 1) Meet the assessment criteria on the PSAT, SAT, and /or SMC Placement Test
- 2) Meet with the high school counselor for course scheduling
- 3) Have a signed dual enrollment contract on file
- 4) Must maintain a D- or above to continue in the Dual Enrollment Program. **Failure of the class, "F", will result in full tuition reimbursement of the course at the expense of the student.**

EARLY COLLEGE

The Early College (EC) is in an effective and efficient way for students to earn up to 62 tuition free college credits while still in high school. Students will be able to save both time and money as they pursue a college degree, and they will have an additional year of high school (13th grade) to complete their college program at Southwestern Michigan College.

This program is designed to provide all students with the opportunity to earn a high school diploma, an occupational or specific certificate/certificate of achievement or an occupational associate degree which provides up to two years of transferable college credit towards a bachelor degree.

The EC is structured so that students gradually increase their exposure to college courses over a five-year span. Initially, (9th grade and 10th grade) all of the students' schedules will be comprised of traditional high school classes. As student's progress through their educational plan, they will be exposed to more college courses. By the time they reach the 13th grade, all of their coursework will be on-site at the college campus.

Students in the EC program will receive support services to assist them in their transition from high school to college. All EC students will take a College Success Strategies seminar in 10th grade to develop their academic preparation skills, study skills development, and social maturity skills. They will also be working with an EC Mentor who will serve as a "coach" as they progress through the program. Students who consider EC must be willing, motivated, and up for the challenge to perform successfully at the college level. In addition to the college coursework, students must successfully complete all of the requirements of the Michigan Merit Curriculum.

LEWIS CASS INTERMEDIATE SCHOOL DISTRICT CAREER ACADEMIES



2019-2020

What are Career Academies?

Lewis Cass ISD Career Academies are a partnership between Lewis Cass ISD, Southwestern Michigan College and the four local districts (Cassopolis, Dowagiac, Edwardsburg, and Marcellus) in Cass County.

The academies provide 11th and 12th grade students an opportunity to earn college credit in a planned program of study while still in high school. Tuition, books and fees for academy classes are paid by the local high school.

Students in the academies attend classes at their local high school for half the school day and regular college classes taught by college instructors on either the Dowagiac or the Niles Campus of Southwestern Michigan College for the other half of the school day.

All academy students attend at least two college classes per semester in a planned academy program that directly relates to the students' chosen career pathway.

CAREER ACADEMIES

ACADEMY PHILOSOPHY

The academy philosophy emphasizes the importance of a planned program of study in a chosen career pathway for participating students.

Students attend more than one college class per semester. Students follow a sequence of classes to help prepare them for a specific pathway as they continue to post-secondary training or employment in their chosen field.

Students are provided a liaison between themselves, parents, school district, and college. Weekly attendance is reported to the local high school as well as academic warnings and midterm grades.

AUTOMOTIVE TECHNOLOGIES

This program prepares students for employment as an automotive service technician in various settings such as automobile dealerships, independent service facilities, franchised repair facilities and specialty shops.

BUSINESS

Business, management and administrative workers give the support needed to make a business run. You might check employee time records or train new employees. Or, you might work as a top executive and provide the overall direction for a company or department.

CRIMINAL JUSTICE

Criminal justice and corrections programs prepare students to study the theories and principles of correctional science, organization management, and criminal justice.

EDUCATION/EARLY CHILDHOOD

An Early Childhood Educator is a person who works with young children and their families—birth through third grade—in child care centers, school based programs, home settings or other educational settings.

GRAPHIC DESIGN TECHNOLOGY

Graphic Artists create artwork to illustrate or promote products, services and ideas, as well as to improve appearance or attract attention. They plan, design and draw illustrations for displays, billboards, brochures, catalogs, books, magazines, newspapers, TV, the internet, and packaging.

HEALTH

Health science workers promote health and wellness. They diagnose and treat injuries and disease. As a physician, dentist, or nurse, you could work directly with patients. You could also work in a laboratory to get information used in research or provide administrative support by keeping medical records.

SPORTS MANAGEMENT

Sports Management is a business degree specialized for managing sports and recreation related operations. It encompasses a variety of applications within the growing field of sports and recreation.

WELDING TECHNOLOGY

Welding is the process of combining materials usually metal, using high heat. It may also involve patching metal, plastic, glass, or other materials. Welding is used in nearly every manufacturing industry from shipbuilding and construction to pipelines, oil rigs, and automotive (including NASCAR). Building and construction to pipelines, oil rigs, and automotive (including NASCAR).

ELIGIBILITY AND ENROLLMENT PROCESS

If interested in any career academy, students should contact their high school guidance department. Students must meet eligibility requirements of both the local high school and Southwestern Michigan College.

MECHATRONICS TECHNOLOGIES

The emerging discipline of Mechatronics integrates electrical, mechanical, and computer systems, robotics, and programmable logic controllers and provides the graduate with the knowledge and skills required in today's manufacturing environment.

CONSTRUCTION
TRADES/GREEN
TECHNOLOGIES

This program will prepare students with both the theoretical and applied knowledge necessary to gain successful employment in the construction industry. Students will also develop a solid foundation in “green” building.