

Westran High School

**Course Description
Booklet**

2019-2020

Communication 2000 1 Credit Year Grade 12
Prerequisites: LA I, LA II, LA III
A practical language arts course for seniors. It includes literary reading and writing as well as technical writing, and business and industry communication skills. Some topics include literary analysis, career and college research, effectively writing resumes, successfully completing applications, and interviewing skills.

Public Speaking .5 Credit Year Grade: 12
Prerequisites: None
A communications course that explores speech and oral interpretations. The course will include planning, preparing, and presenting speeches.
Can be taken for Dual Credit

Resource Language 1 Credit Year Grade: 9, 10, 11, 12

Spanish I 1 Credit Year Grade: 9, 10, 11, 12
Prerequisites: None
An introduction to the Spanish language, including grammar, writing, reading, and a variety of cultural aspects related to Spanish.

Spanish II 1 Credit Year Grade: 10, 11, 12
Prerequisites: Spanish I
A Comprehensive study of the language and culture of the Spanish-speaking world, with emphasis on grammar, reading, writing, and conversation.

Spanish III 1 Credit Year Grade: 11, 12
Prerequisites: Spanish II (**D.C. Elementary Spanish**) (5 hrs.) MACC
Elementary Spanish will offer students insight into the culture of Spanish speaking countries through the study of the language and culture. Students will develop oral and written language skills by speaking, reading, writing and listening to instructors, students, tapes and videos. In this way students will develop an ability to communicate in all aspects of the Spanish language.

SOCIAL STUDIES

American History 1 Credit Year Grade: 9
Prerequisites: None
Required freshman course. Topics studied are values, ideals, and attitudes of Americans and significant themes in American history from reconstruction through contemporary developments.

World History 1 Credit Year Grade: 10
Prerequisites: American History
This course is a sophomore requirement. It is an overview of history of the world from the Stone Age through modern events.

Economics – .5 Credit Semester Grade: 11,12
The study of the different economic systems and aspects of the economy and how they all work and how the government is involved.

Geography .5 Credit Semester Grade: 9, 10, 11, 12
The study of the world’s geographical regions and how they have changed and affected each other.

Current Issues .5 Credit Semester Grade: 9, 10, 11, 12
The study of current governmental and social issues at all levels.

Civil War .5 Credit Semester Grade: 11,12
The study of the causes of the civil war, the generals and the battles.

American Government 1 Credit Year Grade: 11
Prerequisites: World History & Am. History
Required course describing the organization and function of our government at the local, state, and national levels. It includes the study of the national and state constitutions and how policy affects the economy.

American Government (D.C. Spring Sem.) (5 hrs.) MACC .5 Credit Sem. Grade: 11
Prerequisites: World History & Am. History
Required course describing the organization and function of our government at the local, state, and national levels. It includes the study of the national and state constitutions and how policy affects the economy.

Psychology (DC) (3 hrs.) CMU .5 Credit Sem. Grade 11, 12
Prerequisites: None
The study of human experience and behavior in reference to what psychological research and theories reveal. General psychology and the field of psychology theories are discussed.
Can be taken for Dual Credit

Sociology (DC) (3hrs.) CMU .5 Credit Sem. Grade 11, 12
Prerequisites: None
This course deals with the many aspects of sociology in our current day to day interactions with the world around us. Connections will be explored from a personal level to a global level through a variety of means. This course will look at the basics as well as more intricate global aspects.
Can be taken for Dual Credit

Development of the US I (DC) (3hrs.) .5 Credit Sem. Grade 11, 12
Prerequisites: 9th grade American History
The study of early American History using CMU course syllabus.

Development of the US II (DC) (3hrs.) .5 Credit Sem. Grade 11, 12
Prerequisites: 9th grade American History
The study of early American History using CMU course syllabus.

SCIENCE

Physical Science 1 Credit Year Grade: 9
Prerequisites: Required Course

Introductory course that covers the basics of physics and chemistry. This is a beginning course in science. A study of the structure and properties of matter including coverage of such topics as the law of motion, light, electric charges and electromagnetism.

Biology 1 Credit Year Grade: 10
Prerequisites: Physical Science

Students will acquire a solid foundation of the effects of science technology and society; ecology and biosphere stability; cellular biology; genetics, evolution; biodiversity; taxonomy and classification; and the future of biology technology and our society.

Environmental Science 1 Credit Year Grade: 11, 12
Prerequisites: Physical Science

This is a junior/senior class designed to bring current environmental issues to life with a project based approach. Students enrolled in environmental science will study environmental issues and how they pertain to humans' actions, conservation, and environmental policy. They will also examine Earth's resources and what steps may be necessary for a sustainable future.

Human Anatomy & Physiology 1 Credit Year Grade: 11, 12
Prerequisites: Physical Science & Biology

Students will be introduced to the aspects of human anatomy and physiology; which includes field history, form and function of major body systems, and medical interpretation of common ailments. In laboratory, you will be introduced to the microscope techniques, slide preparation, cell identification, and dissection techniques. The purpose of this course is to acquaint students with the aspects of the human structures and functions that contribute to a cohesive, whole organism and the continuation of life.

Zoology 1 Credit Year Grade: 11, 12
Prerequisites: Physical Science & Biology

Students will be introduced to the evolution of vertebrates; which includes taxonomy, form and function, distribution, and natural history of each major vertebrate group. In laboratory, you will be introduced to the anatomy, classification, and natural history of the vertebrates, as well as, dissection skills. The purpose of this course is to acquaint students with the identification, systematics, life history, anatomy, and adaptive strategies of the vertebrates and to expose them to species found in Missouri.

Chemistry 1 Credit Year Grade: 11, 12

Prerequisites: Physical Science & Biology (Algebra I is recommended)

Students will be exposed to information regarding chemical relationships of matter, including their basis in atomic structure, chemical properties of elements, ions, compounds, types of reactions, and types of mixtures. Students will also identify the importance of chemistry in the environment and in the construction and manufacturing of everyday materials.

Physics 1 Credit Year Grade: 11, 12

Prerequisites: Physical Science & Biology (Algebra I is recommended)

The physics curriculum includes interactions of matter and energy, velocity, accelerations, force, energy, momentum and charge. Students will be challenged to apply their knowledge of the laws of physics to solve physics related critical thinking problems as well as numerous laboratory activities.

MATH

Applied Math I 1 Credit Year Grade 9

Prerequisites: None

The beginning focus of the class is on numbers, their operations, and their algebraic representations. Topics include measurement and conversion, area, averages, and data displays. Later in the course the focus moves to integers, functions, probability, and problem solving.

Pre-Algebra 1 Credit Year Grade: 10

Prerequisites: Recommendation of Math Department and Counselor. Students will not be using calculators in this course as they reinforce arithmetic skills throughout the year. Students will learn steps to solve equations, inequalities, functions, & expressions with basic geometric shapes. In addition, they will use problem solving techniques to find solutions to real life math situations such as interest on loans, discounts, & sales mark-ups.

E O C Algebra 1 Credit Year Grade: 9-12

Prerequisites: Recommendation of Math Department and Counselor

This course is Pre-Algebra and uses a Pre-Algebra textbook. See Pre-Algebra for description.

Advanced Applied Math

Prerequisites: None 1 Credit Year Grade 11

Practical real life issues are addressed: Budgeting, gross and net pay, withholdings, banking – savings, checking, loans, housing – renters and homeowners insurance. Purchasing, operating, and maintaining a vehicle including insurance, credit cards, investments, wills and estates. Life insurance, medical insurance, income, taxes, forms and voting procedures.

Algebra I 1 Credit Year Grade: 9, 10

Prerequisites: Pre-Algebra, recommendation of 8th grade teacher, makes a minimum score on Algebra readiness test. The content of this course integrates geometry, probability, and statistics together with algebra. Pure and applied mathematics are also integrated throughout. Topics include (but are not limited to) uses of variables, multiplication, division, addition and subtraction in algebra, linear sentences, slopes and lines, exponents and powers, quadratic equations and square roots, polynomials, linear systems, factoring, and functions.

Geometry 1 Credit Year Grade: 10, 11, 12

Prerequisites: Algebra I

The course integrates algebra with geometry and uses coordinates and transformations throughout. Topics covered include (but are not limited to) points and lines, definitions and if-then statements; angles and lines, reflections, polygons, transformations and congruence, triangle congruence, measurement formulas, three-dimensional figures, surface area and volume, coordinate geometry, similarity, logic and indirect reasoning, trigonometry, vectors, & circles.

Algebra II 1 Credit Year Grade 11, 12

Prerequisites: Algebra I,

Advanced algebra contains a variety of topics, from lines to logarithms, from quadratic equations to conic sections, from systems to statistics, from matrices to trigonometry. It contains the mathematics that educated people around the world use in conversation and that colleges want or expect you to have studied. The properties of numbers, graphs, expressions, equations, inequalities, and functions are ideas which run throughout the course. Topics covered include the language of algebra, variations and graphs, linear relations, matrices, systems, parabolas and quadratic equations, functions, powers and roots, exponents and logarithms, trigonometry, polynomials, quadratic relations, series, combinations, and statistics, dimensions and space.

College Algebra (3 hrs.) (DC) 0.5 Credit Sem 1 Grade: 12

Prerequisites: Algebra I, Geometry, Algebra II

College Algebra is taught as a dual credit course with Central Methodist University. Three (3) college credits. This course is taught in accord with the syllabus provided by:

CMU and the topics covered include (but are not limited to) algebraic expressions, equations and inequalities, relations and functions, polynomial and rational functions, exponential and logarithmic functions, and systems of equations and inequalities.

The course can be taken for high school credit only.

Elementary Statistics (3 hours) (DC) 0.5 Credit Sem 2 Grade 12

An introduction to basic statistical procedures with application to all areas.

Prerequisite: Algebra I, Geometry, Algebra II, College Algebra

MA103 (College Algebra) completed with a C or better; ACT Math subscore of ≥ 21 .

The course can be taken for high school credit only.

Career & Family Leadership I .5 Credit Semester 1 Grade 9

Prerequisites: None

A first semester course with an overview of Family & Consumer sciences and an emphasis on FCCLA, Career Planning, interpersonal relationships and Personal Finances.

Family Leadership II .5 Credit Semester 2 Grade 9

Prerequisites: CFLI

A semester course that helps individuals to understand the basic principles of nutrition; the relationship of nutrition to health and well-being; the selection, preparation and care of food; meal management; optimal use of the dollar to meet the needs of the individual and family; and the exploration of housing options for young adults and the study of careers within FACS.

Family Living and Parenthood .5 Credit Semester 1 Grade: 10, 11, 12

Prerequisite: none

An instructional program that prepares individuals to understand the nature, function and significance of human relationships within the family/individual units. Includes instruction in the concepts and principles related to various family living conditions, including abuse prevention; the establishment and maintenance of relationships, the preparation for marriage, parenthood and family life, and the socialization and developmental needs of individuals and the study of careers related to FACS.

Child Development and Care .5 Credit Semester 2 Grade: 10, 11, 12

Prerequisites: Family Living

An instructional program that prepares individuals to understand children's physical, mental, emotional, and social growth and development. It includes instruction in child care and guidance as well as the basic child development theories and careers within the child development and care industry.

Clothing and Textiles .5 Credit Semester 1 Grade: 10, 11, 12

An instructional program that prepares students to understand the social, psychological and physiological aspects of clothing and textiles: the nature, acquisition and use of clothing and textile products: the selection, construction, and maintenance of clothing; and the effect of consumer choices on the individual and family, as well as the clothing and textile industry as well as basic clothing construction and careers within the clothing and textiles industry.

Interior Design .5 Credit Semester 2 Grade 10, 11, 12

Prerequisite: None

An instructional program that prepares individuals to understand the physical, psychological and social influences pertaining to the complex housing decisions required for creating a desirable living environment. Includes instruction in the human and environmental factors influencing the form and use of housing; the varied types of housing; cost, exterior and interior design, home furnishings and equipment, and the selection, used and care of available resources for achieving improved living space to meet individual and family need and careers within the housing and interior design industry.

Nutrition & Wellness

.5 Credit

Semester 1

Grade: 10, 11, 12

An instructional program that prepares individuals to understand the principles of nutrition, the relationship of nutrition to health and wellness; the selection, preparation and care of food; meal management to meet individual and family food needs and patterns of living; food economics and ecology; optimal use of the food dollar; understanding and promoting nutritional knowledge, and application of related math and science skills and careers within the foods industry.

World Foods

.5 Credit

Semester 2

Grade: 10, 11, 12

Prerequisite: Nutrition & Wellness

An instructional program that explores food customs and preparation methods for various regions around the world. The study will include geography, customs, traditions, economy and regional foods for areas around the world. This course will include safety and sanitation, food preparation skills as well as tasting foods that are native to the areas studied and the study of careers within the culinary industry.

Ag. Science I

1 Credit

Year

Grade: 9, 10

Prerequisite: none

In this course students will be introduced to the FFA Organization, learn about its history and what it means to be an FFA member. Students will also learn basic Animal Science to include; genetics, body parts of the 4 major livestock species, livestock evaluation and selection, nutritional needs, and basic animal husbandry. Students will also be introduced to financial record keeping to include; income and expense reports, inventory, depreciation, networth, and financial profit/loss statements. The students will finish up the year learning to identify and properly use hand tools and power tools, and will learn and demonstrate safe shop working procedures as they complete a woodworking project.

Ag. Science II

1 Credit

Year

Grade: 10, 11

Prerequisite: Ag. Science I

In this course of study students will learn how to identify and interpret both physical and chemical properties of the soil. They will learn how soil is formed and how to determine the most conservationally minded uses for a particular soil. Students will further learn how to determine fertilizer needs of a soil based on desired crop production and the fertility level of the soil. Students will begin to explore the world of crop science as they learn to identify forage, cereal, oil/fiber, and specialty crop seeds. Students will be trained to calculate and manage forage production in a pasture/range scenario to determine livestock capacity and grazing management practices. Students will close out the course of study learning to identify and safely use metal working power tools, and will further be able to safely operate the Oxy-Fuel cutting torch, and learn Shielded Metal Arc welding (stick) process. They will demonstrate their welding skills with the completion of a beginners welding project.

Greenhouse

1 Credit

Year

Grade: 11, 12

Prerequisite: Ag. Science I & Ag. Science II or Physical Science and Biology

This course studies the principles and practices of modern greenhouses. Students grow plants and maintain a greenhouse. Students study grasses, shrubs, flowers, and trees in landscaping and the care of tools and machinery used in turf management.

Ag Power 1 Credit Year Grade 11, 12

Prerequisite: Ag Science I and Ag Science II

In this course students will learn about the working components and how to troubleshoot, repair, and overhaul Internal Combustion Engines, both 4 and 2 stroke gas. Students will also learn how to wire electrical circuits to include outlets, light switches, 3 way switches, and GFCI protected circuits. They will also be able to determine proper load center sizes, and calculate electrical motor size.

Animal Science 1 Credit Year Grade: 11, 12

Prerequisite: Ag Science I & Ag Science II

The course utilizes knowledge gained from Ag. Science I and II and probes deeper into the study of animal science. Emphasis of this course will be on animal production, management, marketing, nutrition, breeding, production records, selection, animal health, waste management, and biotechnology.

Personal Finance .5 Credit Semester Grade 10

Prerequisites: Required for Sophomores

Understanding and managing personal finances are key to one's future financial success. This one-semester course is based on the Missouri Personal Finance Competencies and presents essential knowledge and skills to make informed decisions about real world financial issues. Students will learn how choices influence occupational options and future earning potential. Students will also learn to apply decision-making skills to evaluate career choices and set personal goals. The course content is designed to help the learner make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success.

Computer applications (high school name) or Computer Essentials CIT 101 if taken for Dual Credit 0.5 credit Semester 1 Grade

10,11,12

Prerequisites: none

Computer Essentials CIT 101-DC 3 hrs MACC (semester) Grade 11-12

Prerequisites: Junior/Senior Cum. 3.0 GPA

This course is designed to introduce students to basic and advanced computer operations. Students taking this course will become proficient with basic and advanced features of Microsoft Office for word processing, spreadsheets, database applications and computer presentations, internet usage, and software applications. If eligible, 3 hours of dual credit are available through Moberly Area Community College.

Computer Programming .5 credit Semester 2 Grade 10, 11, 12

This course focuses on converting problems into detailed plans, writing codes into computer language, testing, monitoring, debugging, documenting and maintaining computer programs. Students will also design programs for specific uses.

Computer Programming Advanced (Independent Study)

.5 credit Fall or Spring Semester Grade 11,12

Prerequisites: A grade of B or better in Multimedia

This course is a continuation of Computer Programming inseat class. You must have taken computer programming in seat before taking this class This course will be a self-study.

Accounting I 1 credit Year Grade 10,11,12

Prerequisites: students should have at least a C average

Accounting I: DC 3 hrs CMU (2nd semester/.5 credit) Grade 11,12

Prerequisites: Junior/Senior Cum. 3.0 GPA

This course is designed to build a basic understanding of manual and automated accounting principles, concepts, and procedures. Activities include using the accounting equation, completing the accounting cycle, entering transactions to journals, posting to ledgers, preparing end-of-period statements and reports, managing payroll systems, completing banking activities, calculating taxes, and performing other related tasks. If eligible, 3 hours of dual credit are available through Central Methodist University.

Accounting II 1 credit Year Grade 11,12

Prerequisites: A grade of C or better in Accounting I

This course is designed to help students acquire a more thorough, in-depth knowledge of accounting procedures and techniques utilized in solving business problems and making financial decisions. Students will develop skills in analyzing and interpreting information common to partnerships and corporations, preparing formal statements and supporting schedules, and using inventory and budgetary control systems. This course will be offered the same time as Accounting I and will be a self-study.

Multimedia .5 credit Semester Grade 10,11,12

Prerequisites: None

Students will work with multimedia software to develop electronic presentations. They will learn how to manipulate text, art and graphics, photography, animation, audio, and video for presentations in various media formats.

Multimedia Advanced (Independent Study) .5 credit Year Grade 11,12

Prerequisites: A grade of B or better in Multimedia

This course is a continuation of Multimedia's inseat class. You must have taken multimedia in seat before taking this class This course will be a self-study and mostly will consist of projects of the student's choosing.

Entrepreneurship .5 credit Semester Grade 10, 11,12
Prerequisites: none

Intro to Business-DC 3hrs MACC (1st semester/.5 credit) Grade 11-12
Prerequisites: Junior/Senior Cum. 3.0 GPA

This course is designed to provide students with the fundamental knowledge needed for organizing, developing, and implementing a business concern within the private free enterprise system. Topics of study will include learning the advantages and disadvantages of owning a business, preparing a business plan, choosing a location, securing a loan, determining organizational structure, and promoting a business. If eligible, 3 hours of dual credit are available through Moberly Area Community College.

Standards/competencies for Entrepreneurship
may be found at [http://www.entre-ed.org/Standards Toolkit/standards_detail.htm](http://www.entre-ed.org/Standards_Toolkit/standards_detail.htm).)

Desktop Publishing 1 credit Year Grade 11,12

Prerequisites: Complete Application Process

Students develop proficiency in using graphic arts/desktop publishing software to create a variety of business publications such as flyers, brochures, newsletters, etc. This course will also produce the school's yearbook.

Cadet Teaching

Semester *Restrictions-You must have passed the Algebra I EOC with Advanced or Proficient, have a GPA of 2.5 or higher, and be approved by the A+ Coordinator.

The purpose of the cadet teaching experience is to give promising high school juniors/seniors who want to acquire tutoring skills, gain AL+ eligibility and an opportunity to earn A+ tutoring hours. This class, an elective, affords junior/seniors the chance to learn tutoring strategies from an instructor for a period of two weeks and then put those strategies to use in a classroom under the supervision of an experienced teacher. They may apply those hours toward A+ tutoring.

Objectives: Cadet teachers will learn to function effectively as student educators in a school setting. Cadet teachers will discuss problems and scenarios with the classroom teacher. Cadet teachers will work with individual students or with small groups. Cadet teachers will develop effective and confident relationships with students. Cadet teachers will demonstrate effective communication skills.

Evidence: Cadet teachers will keep ongoing journals for their experiences as student educators as a record of day-to-day happenings.

Learning Strategies

Prerequisites: Approval by Special Education Teacher

A special service assigned study hall that is designed to give students strategies for studying and preparing for current courses.

FINE ART

Choir I - IV 1 Credit Year Grade: 9, 10, 11, 12

Prerequisite: None

Choir is the study and performance of many different genres of vocal music, music concepts and terminology. Special opportunities to perform will be made available through performances. May repeat for credit.

Music Appreciation 1 Credit Year Grade: 9, 10, 11, 12

Prerequisite(s): none

Music appreciation offers students an opportunity to receive a fine art credit in a non-performance setting. The class teaches students to appreciate and understand the elements of music, active listening, and critical thinking of music. The course will cover the history, performance techniques, and styles of different music.

Band I - IV 1 Credit Year Grade: 9, 10, 11, 12

This is the study and performance of instrumental music. This includes marching and concert band. Special opportunities for performance will be made available. May repeat for credit.

Art I 1 Credit Year Grade: 9, 10, 11, 12

Prerequisite: None

This course covers the basic principles of design and the elements of art; line, color, shape, texture and form.

Students will be introduced to art through the disciplines of Art Production, Art History, Art Criticism, and Aesthetics. Students will create art utilizing a wide variety of media and art techniques. Art I students will also be able to discuss and write about famous works of art and their own work as they relate to the elements and principles of design.

Art II/III/IV 1 Credit Year Grade: 10, 11, 12

Prerequisite: Art I

An intermediate art course based Art I. Areas of study emphasized include pencil, charcoal, pastel, watercolor, acrylics, and design. Students will also have the opportunity to discover their own personal artistic style as they learn about famous artists.

Ceramics I 1 Credit Year Grade: 10, 11, 12

Prerequisite: Sophomore or above

A course in basic skills in pottery making methods such as slab, coil, and wheel-thrown and sculptural techniques. Students will also learn about glazing, firing, and the many properties of clay. Students will learn about the history and importance of pottery as it relates to commerce, domestic life, aesthetics, religion and politics.

Ceramics II 1 Credit Year Grade: 10, 11, 12

Prerequisite: Ceramics 1

Continuation of skills gained in Ceramics 1.

Art History I (AR186) and Art History II (AR187) alternate each year.

(2020-2021) Art (DC) 186 Prehistoric to the Renaissance 3 Hrs./Central Methodist

University .5 Credit Semester 1 Grade: 11, 12

Prerequisite: GPA required to enroll in Dual Credit

A study of art history and methods including artists, styles, forms and eras. Students will learn about the different periods of art history. (3 hours college credit)

(2019-2020) Art (DC) 187 Renaissance to Modern Art 3 Hrs./Central Methodist University

.5 Credit Semester 1 Grade: 11, 12

Prerequisite: GPA required to enroll in Dual Credit

A study of art history and methods including artists, styles, forms and eras. Students will learn about the different periods of art history. (3 hours college credit)

Arts & Crafts .5 Credit Semester 2 Grade: 10,11, 12

Prerequisite: None

A project oriented course exploring crafts such as weaving, batik, mosaic, crochet and jewelry-making.

Drawing & Painting 1 Credit Year Grade 10, 11, 12

Prerequisite: Art I or by instructor consent.

A course in drawing and painting using watercolor, conte, oil, acrylic, pen, ink, and pastels.

Advanced Foods .5 Credit Semester 2 Grade: 10, 11, 12

Prerequisite: Nutrition & Wellness

An instructional program that prepares students to come to use advanced culinary skills for food preparation and storage. Students will explore food preparation and storage for each food group, focusing on safety and sanitation as well as various culinary skills and careers within the culinary industry.

OTHER ELECTIVES:

Academic Enrichment

Prerequisites: Approval by Tier 2 Committee

A class period set aside for students to catch up or work on current work with the help of a peer tutor in cadet teaching.

Teacher Aide (No credit earned)

Building approval: Seniors with strong attendance history and academic background may have a period to assist a teacher or secretary.

Westran High School *Career Certification Programs*

Information Technology-Microcomputer Business Applications, Graphic Arts/Desktop Publishing/Multimedia/Web Design

Business Management and Administration-Accounting I, Accounting II, Microsoft Office

Finance-Accounting I, Accounting II, Micro business Application

Agriculture Mechanics-Ag Science I, Ag Science II, Ag. Mechanics

Production Agriculture-Ag. Science I, Ag Science II, Ag. Power

Horticulture-Ag. Science I, Ag Science II, Greenhouse

Family Consumer Science-Clothing and Textiles, Housing and Home Furnishing

Classes offered through Moberly Area Technical Center:

1. ARCHITECTURAL & ENGINEERING DESIGN-Articulated college credit and embedded credit are available in this program.

Introduction to Architectural & Engineering Design

GRADE 10-12(1 credit-all year) Recommendations: Good math background with basic geometry knowledge, and basic computer skills. Enrollment is limited to a space available basis. This course is designed for students to explore the architecture or engineering fields. The course covers the basics of engineering and architecture drawing concepts through hands-on experience while using Autocad computer drafting software. Course content includes careers in drafting/engineering/architecture, use of drafting equipment, drafting techniques, lettering, geometric construction, multi-view and isometric drawings, and basic dimensioning. Students will also be instructed in residential architecture drafting techniques required to design and draft floor plans.

Architectural & Engineering Design I

GRADE 11-12(2-3 credits-all year) Recommendations: Good math background with basic geometry knowledge, and basic computer skills. This course is designed for students who are aspiring to become an architect, engineer, designer or engineering technician. The course covers the basics of architecture and engineering drawing concepts through hands-on experience while using AutoDesk computer design software. Course content includes careers in drafting/engineering, use of drafting equipment, drafting techniques, lettering, geometric construction, multi-view and isometric drawings, sectional and auxiliary views, and basic dimensioning, solid modeling, 3D printing and basic engineering concepts. Students will also be instructed in residential architecture drafting techniques required to design and draft floor plans using Architecture computer drafting software. In the event of over-enrollment, a basic visualization/math aptitude assessment which emphasizes skills needed to be successful in this course will be administered to determine final enrollment. To enroll in Engineering & Architectural Design II, students must earn a minimum of 'C-' each semester in Architectural & Engineering Design I.

Architectural & Engineering Design II

GRADE 12(2-3 credits-all year) Prerequisite: C- or better each semester of Architectural & Engineering Design I. This advanced course focuses on training students in the techniques of 3-D modeling, 3D printing, rendering, and animation on the personal computer. The course introduces the principles of visualization, which enables students to create presentation drawings for both architectural and industrial product design. The course focuses on teaching students the design of parts by using engineering software (Autodesk, Inventor, and Solidworks) in the study of mechanical designing, detail and assembly drawings, and advanced dimensioning and tolerancing techniques. Students will also learn about designing for renewable energy sources (solar, hydro, eco), basic electronics, basic physics, and robotics. Advanced drawing techniques and drafting applications will also be included. Advanced architecture in commercial design will also be taught using Autodesk Revit software. This course uses design projects to teach students about working on engineering design teams. Students will also learn techniques to obtain a drafting job. Upon successful completion, students will be able to obtain an engineering or architectural technician job and/or earn articulated college credit.

2. AUTOMOTIVE TECHNOLOGY-Articulated college credit and embedded credit are available in this program.

Automotive Technology I/II

GRADES 11-12(3 credits-all year) This program is certified by the National Automotive Technicians Education Foundation (NATEF). Recommendations - Students should have a good math and science background. The Automotive Technology program teaches students to service and repair automobiles. Course content covers development of inspection skills, diagnosis of malfunctions, disassembly, repair or replacement of automobile engines, power trains, steering, brakes, electrical systems and air-conditioning. Instruction includes proper use of diagnostic test equipment and tools used in the repair process. This course is a two-year, half-day program, open to juniors and seniors for 3 units of credit each year. In the event of over-enrollment, a basic mechanical aptitude assessment which emphasizes skills needed to be successful in this course will be administered to all Level 1 students to determine final enrollment. To enroll in Automotive Technology II students must successfully complete Automotive Technology I with a 'C-' or better each semester.

3. BUILDING TECHNOLOGY-Articulated college credit and embedded credit are available in this program.

Building Technology I/II

GRADES 11-12(3 credits-all year) Recommendations - Student should have a good math and general science background, mechanical aptitude, dexterity, balance and good hand-eye coordination. The Building Technology program teaches students the basics of carpentry, masonry, electrical wiring and plumbing as related to residential structures. Students learn how to operate hand and power tools commonly used in the construction trades. Students also receive instruction in first aid, safety, and communication skills. Second year students can specialize in estimating, supervision, layout and problem solving. The course is a two-year, half-day program open to juniors and seniors for 3 units of credit each year. To enroll in Building Technology II, students must successfully complete Building Technology I with a 'C-' or better each semester.

4. BUSINESS AND TECHNOLOGY-Articulated college credit and embedded credit are available in this program if students meet the hourly enrollment requirement.

Graphic Arts I

GRADES 10-12(1 credit-all year) Prerequisite: Computer Applications-both semesters. This is an introductory course designed to prepare students for employment in a career area, which includes graphic arts skills. Students develop proficiency in the areas of: publication set-up, typography concepts, managing images, demonstrating design concepts, and performing print processes. This course follows industry standards for professional layout and design in the world of publishing using Adobe Master Suite software Photoshop and InDesign. Students learn the basics of how to create professional looking documents in a creative graphic design atmosphere. To enroll in Graphic Arts II, students must earn a minimum of 'B-' each semester in Graphic Arts I.

Graphic Arts II

GRADES 11-12(1 credit-all year) Prerequisite: Graphic Arts 1 with a minimum grade of 'B-' for both semesters. This is an advanced course designed to prepare students for employment in a career area which includes graphic arts skills. Students develop proficiency in the areas of: publications set-up, typography concepts, managing images, demonstrating design concepts, and performing print processes. This course follows industry standards for professional layout and design in the world of publishing using Adobe Master Suite software. Students learn the basics of how to create professional looking documents in a creative graphic design atmosphere.

Digital Media

Grades 10-12 (1 credit-all year) Prerequisite: Computer Applications-both semesters. This course addresses the technical skills required of students to create effective electronic presentations for companies. Students will work with complex software to create digital collages and magazine covers, create logos and original vector art, combine audio, and create web pages. This course will use the Adobe Master Suite software Illustrator, Animation, and Adobe Premiere. To enroll in Digital Media Studio, students must earn a minimum of 'B-' each semester in Digital Media.

Digital Media Studio

Grades 11-12 (1 credit-all year) Prerequisite: Digital Media with a minimum grade of 'B-' for both semesters. This course addresses the demand for multimedia knowledge. The ability to apply it will continue to increase as businesses utilize multimedia functions such as graphics, audio, video, and electronic presentations. Students will work with multimedia software Adobe Premiere and After Effects. They will learn to manipulate text, art, graphics, photography, animation, project news broadcasting, and produce audio and video for presentation in various formats.

5. COLLISION REPAIR TECHNOLOGY-Articulated college credit and embedded credit are available in this program.

Collision Repair Technology I/II

GRADES 11-12(3 credits-all year) Recommendations – Students should have the ability to understand and apply math skills, general knowledge of the use of hand and power tools, possess good hand-eye coordination, manual dexterity and be free from allergies. Students in Collision Repair Technology will learn to repair damaged vehicles to their pre-accident condition using the same state-of-the-art equipment used in industry. Students in Collision Repair Technology I will be introduced to the different types of technology used in collision repair. They will use hand and power tools; learn to raise and support vehicles; repair sheet metal, plastic and fiberglass; use plastic body filler; replace panels; and be introduced to refinishing. In addition, first year students will learn how to complete damage reports used for estimating. Students enrolled in Collision Repair Technology II will repair panels made of plastic, metal, and fiberglass; replace whole panels; practice refinishing; learn frame repair; and repair suspension systems. Collision Repair Technology students receive practical experience in auto body repair, parts replacement, automotive painting, welding, and frame straightening. This course is a two-year, half-day program open to juniors and seniors for 3 units of credit each year. To enroll in Collision Repair Technology II, students must successfully complete Collision Repair Technology I with a 'C-' or better each semester.

SEM CERTIFIED TECHNICIAN-Students completing in-shop training can be **SEM certified** in the following areas: 1. Plastic Repair and Refinishing; 2. Interior Repair; 3. Metal Bonding; 4. Spray-on Bedliners; 5. Corrosion Protection.

PRO SPOT WELDING SYSTEMS TECHNICIAN-Students completing in-shop training can be Pro Spot certified in basic Squeeze Type Resistance Spot Welding and Weld Testing.

6. COMPUTER INFORMATION TECHNOLOGY-Articulated college credit and embedded credit are available in this program.

Computer Information Technology I/II

GRADES 11-12 (2-3 credits-all year) Prerequisite: Computer Applications and NO computer violations for school year previous to enrollment (students may appeal this decision, in writing, to the MATC director within 5 days of enrollment rejection notification). Computer Information Technology (CIT) is a course designed for students that aspire to be in the technology industry and want to be exposed to the various disciplines. This course is a two-year program open to juniors and seniors. Students will learn to design, build and troubleshoot personal computers, laptops, and network servers. Students will be introduced to operating systems with advanced study in Windows 7, Windows 8.1, Windows 10, Windows Server 2016, Ubuntu and MAC OS X. Students will learn basic network setup, network administration, local area network (LAN), wireless local area network (WLAN), and wide area network (WAN) configuration, Google Sites management, keyless door entry systems. Students will be introduced to basic robotic programming, basic soldering, and power over Ethernet cameras. Some students will have the opportunity to fix tablets and phones. Students will acquire the necessary knowledge and skills needed to pass the Microsoft MTA OS certification test and advanced students will pass the Microsoft MTA Networking test, a nationally recognized testing program that certifies the competency of entry-level computer service technicians. To enroll in CIT II students must earn a minimum of a "C-" each semester in Computer Information Technology I.

7. ELECTRONICS & ROBOTICS TECHNOLOGY-Articulated college credit and embedded credit are available in this program.

Introduction to Electronics & Robotics Technology

GRADE 10(1 credit all year) Enrollment is limited to a space available basis. Students will be introduced to the exciting field of electronics technology through a state-of-the-art lab. If you are interested in becoming an electrical engineer, electronic technician or gaining the foundational skills used in many technical fields from automotive, computers to lasers, robotics to fiber optics, this is the course for you. You will be engaged in hands-on labs that will develop your knowledge and skills in DC and AC and simple digital electronics. You will learn how these circuits are used in audio-video surveillance systems, robotics, lasers, avionics, bio-medicine, and computers.

Electronics & Robotics Technology I

GRADE 11-12(2-3 credits-all year) Electronics involves the manipulation of voltages and electric currents through the use of various devices for the purpose of performing some useful action. Students will learn the necessary skills needed to prepare for the field of electronics. From basic DC/AC electronic theory to advanced digital applications, students will design, build and test a variety of electronic circuits. A "hands-on" intense program, students will work in a progressive lab with state-of-the-art test equipment. Students will also be introduced to audio-video surveillance, robotics, and sound system installation. To enroll in Electronics & Robotics Technology, students must earn a minimum of 'C-' each semester in Electronics & Robotics Technology I.

Electronics & Robotics Technology II

Grade 12(2-3 credits-all year) Prerequisite: C- or better each semester of Electronics Technology I. Second year students can choose to specialize in robotics programming. Robots build automobiles, computers, X-Boxes, etc. Industrial robots combine multiple processes utilizing multiple tools to efficiently streamline manufacturing. Technicians who can build, program, and maintain robots are in demand. Additionally, second year students will have the opportunity to further their skills and knowledge with advanced-security systems, fiber optics and advanced sound system programming. Students also have the opportunity to become ISCET certified (see below).

INTERNATIONAL SOCIETY FOR CERTIFIED ELECTRONICS TECHNICIANS (I.S.C.E.T.)-

Recommendations: Algebra

Upon completion of Electronics Technology I, students can take the Associate-Level CET test (for technicians or students with less than four years of experience). Testing for the Journeyman-Level CET is also available.

INTERNATIONAL MUSICAL INSTRUMENT TECHNICAL ASSOCIATION (I.M.I.T.A.)-Upon completion of Electronics Technology II, students can take the test to be certified through I.M.I.T.A. as a technician.

8. MACHINE TOOL TECHNOLOGY-Dual college credit, articulated college credit, and embedded credit are available in this program.

Introduction to Machine Tool Technology

GRADE 10(1 credit-all year) Enrollment is limited to a space available basis. If you are mechanically inclined, creative, enjoy challenging work, like to fix things, like using your mind and hands to build things, then you need to enroll in Introduction to Machine Tool Technology! You will experience the excitement of producing your own projects in a state-of-the-art machining lab. While creating your projects, you will learn basic machining information and techniques. You will also have the opportunity to develop advanced machining skills and knowledge by the time you leave high school.

Machine Tool Technology I/II

GRADES 11-12(2-3 credits-all year) Students will learn to operate lathes, milling machines, grinders, computer numerical control (CNC) machines, and Omax waterjet to fabricate many different projects from steel and aluminum. Skills are taught through classroom instruction and hands-on training. Second year students learn Mastercam programming for CNC operations, metallurgy, heat treatment, and precision grinding. The Machine Tool Technology program provides students with training for the following career areas: CNC Operators, Quality Control Engineers, Production Engineers, Tool and Die Apprentice, Lathe Operation, Milling Machine Operation, Surface Grinder Operation, and Precision Measurement. Students completing the Machine Tool Program enter the job market with the potential for high employment and high wage opportunities or enter post-secondary education with a solid background in machining. The course is a two-year, half-day program open to juniors and seniors for 3 units of credit each year. To enroll in Machine Tool Technology II, students must successfully complete Machine Tool Technology I with a 'C-' or better each semester.

9. MARKETING-Articulated college credit and embedded credit are available in this program if students meet the hourly requirement.

Marketing

GRADES 10-12(1 credit-all year) Computer Applications is strongly recommended. Recommendations: math skills, communication skills. Marketing is the process of planning and executing the product, price, distribution, and promotion of goods and/or services. This course provides students with the application of marketing activities within the promotional mix: advertising, personal selling, promotional planning, and public relations. The course also provides students with a variety of projects covering a business/marketing plan. Students will use a variety of skills, attitudes and abilities needed for success in today's workplace: career planning, critical thinking, decision making, and teamwork. The application of mathematics, English, and technology will all be used to execute marketing activities and projects. This course also introduces students to the rewards and risks of owning/operating a business enterprise. Emphasis is placed on the mastery of skills needed to plan, organize, manage, and finance a small business. The students are also in charge of operating the MATC Cornerstone School Store on a rotation basis throughout the year. Participation in the work cooperative education program is an option, yet it will give students an opportunity to apply marketing skills in the workplace.

- 1 credit earned for working 10-19 hours per week
- 2 credits earned for working 20 or more hours per week

Advertising and Sales Promotion

GRADES 9-12(½ credit-semester) Recommendations: math skills, communication skills In this semester course, students will gain knowledge in the advertising and promotional components of the promotional mix. Promotion and Advertising is the key to persuasive communication. Companies use promotional techniques to enhance their public image and reputation as well as educate the public about an issue or cause. This course will educate the students in the marketing mix, promotional mix, types of promotion, display features, artistic design, advertising media, elements of advertising, and advertising layout. Students will have the opportunity to work with local patrons, businesses, and/or school officials in completing project work. As with all marketing classes, this class is also in charge of running the MATC Cornerstone School Store. They will also take on responsibilities that will advertise and promote the school store. These students are also encouraged to participate in the work cooperative education program, although it is an option, it gives students an opportunity to apply marketing skills in the workplace:

- 1 credit earned for working 10-19 hours per week
- 2 credits earned for working 20 or more hours per week

Hospitality, Travel and Tourism

GRADES 9-12(½ credit-semester) Recommendations: math skills, communication skills Students will gain insight towards the changing career opportunities in hospitality, travel and tourism—tourism is one of the top leading industries; hospitality prepares students to work in the catering and accommodation industries: from hotels and restaurants to leisure centers and hospitals. Tourism courses enable you to work in hotels, restaurants, travel companies as a tour operator or travel agent, guide, rep and manager. Another key component of this course may include (but is not required) student travel through DECA (an association of Marketing Students). As students discuss and/or participate in travel experience, they will gain a multitude of knowledge—an irreplaceable way to learn. As with all marketing classes, this class is also in charge of running the MATC Cornerstone School Store. They will also take on responsibilities that will advertise and promote the school store. These students are also encouraged to participate in the work cooperative education program, although it is an option, it gives students an opportunity to apply marketing skills in the workplace:

- 1 credit earned for working 10-19 hours per week
- 2 credits earned for working 20 or more hours per week

Advanced Marketing

GRADES 11-12(1 credit-all year) Prerequisite: Successful completion of Marketing I. Recommendation: advanced computer skills. Advanced Marketing further develops student understanding in distribution, financing, marketing-information management, and product service management. Opportunities are provided for students to apply problem-solving, information gathering, processing and reporting. Emphasis will be placed on promotional planning and public relations through community involved research projects and event planning activities. Financial considerations related to business profit/loss will be explored. Throughout the course, students are presented with problem-solving situations for which they must apply high-level, critical thinking skills. It is very important that students be able to set priorities and complete tasks independently in this course setting. There are many projects that require the student to be motivated, a self-starter, and pay attention to deadlines. As an upper level marketing course, students are given more project based work similar to a college course. As with Marketing, the students are also in charge of operating the MATC Cornerstone School Store on a rotation basis throughout the year and participation in the work cooperative education program is an option, yet it will give students an opportunity to apply marketing skills in the workplace.

- 1 credit earned for working 10-19 hours per week
- 2 credits earned for working 20 or more hours per week

Advanced Marketing II(independent study by arrangement)

GRADE 12(1 credit-all year)Prerequisite: Successful completion of Advanced Marketing and instructor approval. Advanced Marketing II continues where students finish in Advanced Marketing with emphasis on marketing research, planning, and problem-solving. Much of the work completed in Advanced Marketing II will further develop student understanding in distribution, financing, marketing-information management, and product service management. It is very important that students be able to set priorities and complete tasks independently in this course setting. There are many projects that require the student to be motivated, a self-starter, and pay attention to deadlines. As an upper level marketing course, students are given more project based work similar to a college course. All marketing students are in charge of operating the MATC Cornerstone School Store on a rotation basis throughout the year. Participation in the work cooperative education program is an option, yet it will give students an opportunity to apply marketing skills in the workplace. As with Marketing, the students are also in charge of operating the MATC Cornerstone School Store on a rotation basis throughout the year and participation in the work cooperative education program is an option, yet it will give students an opportunity to apply marketing skills in the workplace.

- 1 credit earned for working 10-19 hours per week
- 2 credits earned for working 20 or more hours per week

10. MEDICAL TECHNOLOGY- Articulated college credit and embedded credit are available in this program if students meet the hourly enrollment requirement.

Preparation for Medical Professions (Pre-med)

Grades 11-12(2 credits-all year) Recommendations—Student should have an interest in science and enjoy working with people. This two hour block course is designed for junior and senior level students who desire to pursue a medical career. The curriculum of the program will enhance students' medical career education by developing a solid foundation of knowledge and skills necessary for obtaining a medical career. The content of the program will expand students' knowledge about the multitude of job opportunities in the health care industry plus enhance their knowledge regarding the nature of work, educational requirements/training, employment, earnings, career outlook, and medical terminology. Students will learn basic skills such as how to take vital signs, cardio-pulmonary resuscitation (CPR), first aid, body mechanics, etc. Students will also have opportunities to meet and talk with current health care professionals, tour health care settings, and interact with "patients" by visiting residential and long term care facilities.

Medical Anatomy

Grades 10–12(1 credit-1st semester) This course is designed for students interested in pursuing a medical career. The curriculum of the program is designed to help students develop a solid beginning foundation in anatomy and physiology. The Anatomy in Clay curriculum emphasizes hands-on learning as students use manikins and clay to build the anatomy systems of the human body. The content of this class will enhance students' knowledge base needed for pursuing a medical career.

Medical Pathophysiology

Grade 10-12(1 credit-2nd semester) Prerequisite: Successful completion of Medical Anatomy or both semesters of high school level Anatomy and Physiology (cannot take concurrently) This course is designed to build on prior basic anatomy and physiology knowledge. The curriculum makes Pathophysiology (the changes/symptoms that accompany a particular syndrome or disease) incredibly easy to learn by using vivid graphic characters. The characters and pictures help students maximize their power of visual thinking in understanding Pathophysiology. Content includes basic descriptions of how disorders occur, what signs to look for, and if there are risk factors that contribute to disorders, all of which help prepare students pursuing medical careers.

Medical Skills

Grades 10–12(1/2 credit-semester) This course is designed to help familiarize students with some of the basic safety and health care skills a medical professional first develops. Included in the curriculum, but not limited to, is the practicing of such skills as cardiopulmonary resuscitation, first aide, vital signs, transfers, and principles of infection control.

Medical Terminology

Grade 10-12 (1/2 credit-semester) Articulated credit is available for this course This course is designed to help students acquire the medical language used by health care professionals. The curriculum is presented in an easy format which helps students break down every term into its components. By understanding how each term is formed, students can then better identify and understand new medical terms. In addition, each chapter profiles a different health profession and body system while prompting students to master each term and its pronunciation by practicing pronouncing new terms with the aid of an audio glossary.

Mental Health Issues in Health Care

Grades 10-12(1/2 credit-semester) This course is designed for students interested in pursuing a medical career and learning about mental health. Issues covered within this class include assessment, diagnosis, and treatment of mental illness (in a long term and community based setting). Diagnoses covered include, but not limited to, depressive disorders, anxiety disorders, bipolar affective disorder (manic depressive), schizophrenia, chemical dependence, and eating disorders.

Forensic Medicine

Grades 10-12 (1/2 credit-semester) We all have seen forensic science/medicine on TV programs, but how does it work? How does the healthcare field play a part in forensics? As forensic evidence becomes more common in criminal proceedings, the expertise of forensic healthcare professionals will be necessary to ensure justice. Healthcare professionals who work in the forensic medicine field help discover the cause of a person's death, injury, or disease. This class combines math, chemistry, biology, physics, and earth science. It balances medical scientific concepts with hands-on classroom and lab activities, readings, intriguing case studies, scenarios, and true-life stories. Some of the topics that are covered are crime-scene investigation: the collection, handling and analysis of trace evidence such as hair, fibers, soil, drugs, glass, handwriting; and the determination of the manner, mechanism, and cause of death and the estimation of postmortem interval. Join us as we explore the world of forensic medicine.....case closed!

11. WELDING TECHNOLOGY-Dual college credit, articulated college credit, and embedded credit are available in this program.

Welding I/II

GRADES 11-12(2-3 credits-all year) Recommendations-Good background in math and good hand-eye coordination. The Welding Technology program teaches students the various metals that can be welded and how to weld in different positions. Students learn basic blue print reading, layout skills, weld symbols and basic mathematics used by most welders. Students are taught SMAW(stick), GMAW(mig), GTAW(tig), OFC/OFW(torch cutting and welding), brazing, plasma arc cutting, carbon arc cutting, the use of semi-automatic cutting and welding equipment and are encouraged to work at their own speed. Second year students will complete projects and have on-the-job training opportunities at some of the community businesses. Students also have the opportunity to become American Welding Society (AWS) certified (see below). This course is a two-year, half-day program open to juniors and seniors for 2-3 units of credit each year. To enroll in Welding II students must successfully complete Welding I with a 'C-' or better each semester.

AMERICAN WELDING SOCIETY CERTIFICATION LEVEL I-MATC is approved by the American Welding Society (AWS) to train and certify entry-level welders. We are a Level 1 SENSE school (Schools Excelling through National Skill Standards Education). Students are pre-tested to determine

how much training is needed in order to receive certification which requires passing 8 written exams and 8 hands-on welding tests. The tests cover the following topics: safety, inspection and testing, weld symbols, SMAW (stick), GMAW (MIG), GTAW (TIG), FCAW (Flux Core MIG), PAC (Plasma Arc Cutting), CAC-A (Carbon Arc Cutting-Air) and OFC/W (Oxy-Fuel Cutting and Welding) principles, visual exams, welding terms and definitions. Records of successful applicants are maintained by AWS in a nationwide welding registry. This system allows employers to verify individual welding qualifications (easily and with confidence) without additional testing. Successful applicants are maintained on active status with the national registry for at least one year.

MATC OVER-ENROLLMENT POLICY: Each program has maximum enrollment guidelines based upon safety, supervision, and technology considerations. In case of program over-enrollment the following policies will be utilized:

1-2 hour programs: the previous year's attendance rate will be utilized to determine priority enrollment. In addition some classes have prerequisites, please see course descriptions.

Agriculture & Natural Resources
Marketing

Business Technology
Medical Technology

3 hour programs:

Architectural & Engineering Design
Automotive Technology

Computer Information Technology
Building Technology

Collision Repair Technology
Machine Tool Technology

Electronics & Robotics Technology
Welding Technology

Level I Students: (students entering program whether or not have been enrolled at MATC previously):- the previous year's attendance rate will be utilized to determine priority enrollment with the following exceptions: Architectural & Engineering Design and Automotive Technology will utilize a basic test.

Level II Students: (students returning to same program): Students must successfully complete Level 1 with a 'C-' or better each semester to continue to Level 2 regardless of enrollment.⁽¹⁰⁰⁵¹⁷⁾

Online Dual Credit Courses

Westran High School partners with both MACC and CMU for dual credit courses. Our partner schools offer dual credit online.

MACC Online Courses (availability may vary by semester)

BIO101 Biology w/ Lab (4 credit hours)

BIO205 Human Anatomy w/ Lab (4 credit hours)

BIO209 Physiology w/ Lab (4 credit hours)

ECN102 Microeconomics (3 credit hours)

EDU220 Foundations of Education (3 credit hours)

FLN101 Elementary Spanish (5 credit hours)

HSC171 Medical Terminology (3 credit hours)

HST105 American History to 1865 (3 credit hours)

HST106 American History from 1865 (3 credit hours)

LAL101 Composition I (3 credit hours)

LAL102 Composition II (3 credit hours)

LAL121 American Lit Survey to Present (3 credit hours)

MTH140 Pre Calculus ALgebra (3 credit hours)

MTH160 Elementary Statistics (3 credit hours)

MUS105 Music of America (3 credit hours)

PHI162 Intro to Ethics (3 credit hours)

PHY120 Foundations of Chemistry (4 credit hours)

PSC105 Intro to American Government (3 credit hours)

PSY101 Psychology (3 credit hours)

PSY205 Human Lifespan Development (3 credit hours)

SOC101 Sociology (3 credit hours)

SPK101 Public Speaking (3 credit hours)

YOUR CHOICES AFTER HIGH SCHOOL

On -the-Job Training:	Some occupations do not require training prior to employment.
Apprenticeship:	Apprenticeship is a three to four-year training program where you earn money while you learn, working on the job. You receive a license at the end of training. Examples of trades that use apprenticeship are bricklaying, jewelry making, electrical repair, etc.
Vocational Technical/ Trade School:	Programs at these schools are generally one month to two years in length. Examples of vocational technical/trade school programs include practical nursing, robotics, and business.
Community/Junior College:	Community colleges offer two-year “degree” vocational training, associate degree, or credit transfer to a college or university where you can pursue a bachelor’s degree. Most community colleges have an open enrollment policy for high school graduates and individuals with GEDs. They may offer remedial courses.
College/University:	A bachelor’s degree requires approximately four years of college. A master’s degree usually requires one to two years of college beyond the bachelor’s degree. A minimum of a bachelor’s degree is required for about 20 percent of the occupations in the United States. Entrance requirements depend on the desired program/major.
Job Corps:	Vocational/skill training is provided at various locations throughout the nation. Training, room and board, and sometime child care are provided free to economically disadvantaged youth, male and female, ages 17-20.
Military:	Training is available for many jobs while you are enlisted. You also receive financial assistance for college, pay room and board, and insurance benefits. High school graduation is required.

LIST OF COURSE OFFERINGS

Language Arts

Language Arts I
Language Arts II
Language Arts III
Language IV (College) DC(Comp I & Comp II)
Resource Language
Communication 2000
Public Speaking (College) DC

Foreign Language

Spanish I
Spanish II
Spanish III (College) DC

History / Social Studies

American History
World History
American Government (College Govt.) DC
Psychology (College) DC
Sociology (College) DC
Development of the US I (College) DC
Development of the US II (College) DC

Science

Physical Science
Biology
Environmental Science
Zoology
Human Anatomy & Physiology
Chemistry

Math

Applied Math I
Pre-Algebra
EOC Algebra – Pre-Algebra
Algebra I
Geometry
Algebra II
College Algebra (College) DC
Statistics (College) DC

Physical Education

Lifetime Sports
Fitness for Life

Personal Health

Fine Arts

Choir
Band
Art I
Art II
Arts & Crafts
Drawing & Painting
Ceramics I
Ceramics II
Art History (College) D.C.

Practical Arts

Industrial Technology
Industrial Woods
Tech. Problem Solving
Career & Family Leadership I
Family Leadership II
Family Living and Parenthood
Child Development and Care
Nutrition & Wellness
Advanced Foods
Interior Design
Clothing and Textiles
Ag. Science I
Ag. Science II
Greenhouse
Ag Mechanics
Conservation and Wildlife Management
Personal Finance
Computer Applications (CIT 101-DC)
Computer Programming
Accounting I (CMU – DC)
Accounting II
Multimedia
Entrepreneurship (CMU – DC)
Desktop Publishing
Cadet Teaching

Special Services Resource Courses

Learning Strategies
CBI

Other Electives

Academic Enrichment
Teachers Aide (No credit)

Moberly Area Technical Center

Computer Info Systems I

Computer Info Systems II

Automotive Tech I

Automotive Tech II

Collision Repair I

Collision Repair II

Design Drafting I

Design Drafting II

Machine Tool Tech I

Machine Tool Tech II

Building Trades I

Building Trades II

Electronics I

Electronics II

Welding I

Welding II

Prep for Medical Professions – Year 1

Medical Anatomy, Terminology, & Administration – Year 2