

# **FOWLER HIGH SCHOOL**

## **Course Registration Guide**

**2020-2021**

(2/12/20)



In compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and the Americans Disability of 1990, is the policy of Fowler Public School District that no person shall, on the basis of race, color, national origin, sex, disability, age, religion, height, weight, marital or status, military status, ancestry, genetic information or any other legally protected category, be excluded from participation in, be denied the benefits of, or be subjected to discrimination during any program or activity, or in employment.

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## GRADUATION REQUIREMENTS

1. A total of 24 credits will be required to graduate. The following are specific requirements within the 24 total required:

### Requirements for all Classes:

4	units	English Language Arts (English Language Arts 9, 10, 11, 12)
4	units	Mathematics (Algebra I, Algebra II, Geometry and another math course)
1	unit of	math must be taken during the senior year
3	units	Science (Physical Science; Biology; Physics or Chemistry, or Anatomy/Physiology)
1	unit	Physical Education/Health
1.5	units	Basic Core classes (Personal Finance, Computers 1, and another computer education course)
1	unit	US History Geography
.5	unit	Civics
.5	unit	Economics
1	unit	World Studies Geography
2	units	Foreign Language
1	unit	Visual, Performing, or Applied Arts, Vocational Education
		Online Learning Experience (incorporated into each core class)
		Participation in the Michigan Merit Exam

2. All required subjects or their substitutes must be passed. Seniors are required to pass five units to graduate.
3. Each semester grade is final. (Example: A "C" for semester II will not compensate for an "E" in a given course for semester I.) In the high school only final grades for each semester are recorded on permanent records. Students receive ½ credit for each class passed during a semester (exceptions are Voc Tech, Career Connections, dual enrollment and work based learning).

## CLASS STATUS

**Senior Status:** A student who has not earned a minimum of 17 credits by September 1 or 20-1/2 by February 1 of his/her fourth year in high school shall not be considered a senior for the purposes of any graduation activities or senior trip. This means that only those students who have earned the minimum toward completing the necessary courses to earn 24 credits by May 1 will be allowed to march with their class at Graduation, Baccalaureate, Honors Assembly, and go with their class on the senior trip. Students who are not meeting these standards may order announcements, commencement wear, and pay their class trip at the risk of not participating in the ceremony or class trip without refunds.

**Junior Status:** A student who has not earned 10 credits by September 1 shall not be considered a Junior and therefore, is not granted the privilege of participating in Junior Class activities.

**Sophomore Status:** A student who has not earned a minimum of 3 credits by September 1 shall not be considered a Sophomore and therefore, is not granted the privilege of participating in Sophomore Class

activities. A student will only be allowed to earn two (2) outside credits to make-up for deficiencies or failures in order to meet the minimum graduation requirements, unless approved by exception from the administration and Board of Education

## **BASIC CORE PROGRAM**

### **FRESHMAN BASIC CORE**

#### **COMPUTERS 1**

**Required – 9  
Semester Course**

This freshman basic core computer course is comprised of developing keyboarding and basic technological skills in the fundamental areas of computer processing. The students will gain knowledge of the history, social issues, hardware, software and Internet components associated within the technological world. An emphasis will be placed on developing skills using productivity software to create documents, spreadsheets, presentations, and databases.

#### **PERSONAL FINANCE**

**Required – 9  
Semester Course**

This class is designed to help students learn to manage their resources and to make sound financial decisions. This course will provide students with the necessary consumer information to enable them to live productive lives as consumers.

#### **PHYSICAL EDUCATION/HEALTH**

**Required - 9  
Semester Course**

The basic physical education program is designed to provide students with physical activities to develop the body and the understanding how the body works through health. It will provide instruction in skills needed for wholesome recreational activities. The program will include lifetime, competitive, individual, team, and classroom activities. These activities include: Soccer (indoor and outdoor), volleyball, football, track, basketball, bowling, softball, ping pong, physical fitness, badminton, cardiovascular activities, and health. Topics covered in Health include disease prevention and control, personal health practices, nutrition and foods, family health, growth and development, emotional and mental health, substance use and abuse, consumer health and community health. This is a good basic class that can help a student now and in making life a little better in adulthood.

### **ADDITIONAL BASIC CORE**

#### **COMPUTER EDUCATION COURSE**

**Required - 10, 11 or 12  
Semester Course**

Students can fulfill this graduation requirement by enrolling in and passing a minimum of 1 semester of any other computer education course offered at Fowler High School during any grade year. Current courses that will fulfill this requirement consist of Desktop Publishing, Web Publishing, Digital Imaging, and Advanced Media Arts.

## ART EDUCATION

### **ART 1**

**Elective - 9, 10, 11, 12**

**Prerequisite – none**

**Semester or Full Year Course**

The introductory high school art class is designed to acquaint the students with the basics of art. Art projects are selected which will allow the student to develop and build a basic understanding of the fundamentals of art. Design principles, color, basic drawing, and composition will be covered. Various two-dimensional materials will be explored such as pencil, charcoal, chalk, pen and ink, oil pastels, and paint. Assessment of student's progress is made daily through communication. Students will complete a project evaluation/critique for each assignment.

### **ART 2 / ART 3/ ART 4**

**Elective - 10, 11, 12**

**Prerequisite - Art 1 (Art 2 or 3)**

**Semester or Full Year Course**

This course is for students with a serious interest in advancing art skills. More in-depth study will need to be shown in drawing and design problem solving. Specific requirements are set with time for students to pursue various individual interests throughout the year. Community service projects are required when available. Assessment of student's progress is made daily through communication. Students will complete a project evaluation/critique for each assignment. Each student will "show" works completed during the course of the year.

### **PHOTOGRAPHY**

**Elective - 9, 10, 11, 12**

**Prerequisite - none**

**Semester Course**

This course is a semester experience in photography. The course is tailored to introduce students to photography concepts. Students will be provided with the skills and tools necessary to develop professional photographs. Students will implement the principles and elements of design, learn to control depth of field, light and speed through aperture stop and shutter speed. Students will be introduced to historical film photography, and the process of film and photo development.

## BUSINESS EDUCATION

### **PERSONAL FINANCE**

**Required – Grade 9**

**Prerequisite-none**

**Semester Course**

This class is designed to help students learn to manage their resources and to make sound financial decisions. This course will provide students with the necessary consumer information to enable them to live productive lives as consumers.

### **INTRODUCTION TO BUSINESS (NOT available 2019-20)**

**Elective – Grades 10,11,12**

**Prerequisite – none**

**Semester Course**

This course is offered on an alternate year basis. This course is designed for students interested in exploring different areas of the business world. We will study basic marketing, economics, business management, finance, and entrepreneurship. This is a one-semester class.

## **BUSINESS COMMUNICATIONS**

**Elective-Grades 10, 11, 12**

**Prerequisite-none**

**Semester Course**

This course is offered on an alternate year basis. This class will explore the many areas of business communication. Students will learn the basics of writing and speaking in the business world as well as resume, cover letter, and interview skills.

## **ACCOUNTING 1**

**Elective - Grades 10, 11, 12**

**Prerequisite – (Prefer Intro. to Business) Full Year Course**

This is an introduction to basic accounting vocabulary, principles, forms, practices, the completion of the accounting cycle, and payroll procedures. Manual and computerized (Peachtree Accounting Software) accounting problems are used to simulate real world work. Juniors and Seniors who successfully pass the course with a “C” or higher can earn articulated credit at LCC. This course meets the requirement as a math related course for Seniors.

## **ACCOUNTING 2**

**Elective - Grades 11, 12**

**Prerequisite - Accounting 1 Full Year Course**

This advanced course begins with a review of the basic principles and procedures studied in Accounting 1. Corporate accounting, financial analysis, budgeting, break-even, and cost accounting are included. Manual and computerized (Peachtree Accounting Software) accounting problems simulate real world accounting work. This Course meets the requirement for senior year math.

## **COMPUTER EDUCATION**

### **COMPUTERS 1**

**Required – 9**

**Semester Course**

This freshman basic core computer course is comprised of developing keyboarding and basic technological skills in the fundamental areas of computer processing. The students will gain knowledge of the history, social issues, hardware, software and Internet components associated within the technological world. An emphasis will be placed on developing skills using productivity software to create documents, spreadsheets, presentations, and databases.

### **DESKTOP PUBLISHING**

**Elective - 9, 10, 11, 12**

**Prerequisite - Computers 1**

**Semester Course**

This course is a semester experience in desktop publishing. The course is tailored to expand on the office suite skills learned in Computers 1 and introduce students to publishing concepts. Students will be provided with the skills and tools necessary to develop professional marketing publications including items such as logo development, business cards, advertising layouts, storyboards, posters, and brochures. Students will be introduced to graphic elements of advertising and marketing as they learn to promote their business. *Note: This course may be offered in a primarily online or blended course design format which may include class meetings and assignments outside of the regular school day.*

## **DIGITAL IMAGING**

**Elective – 9, 10, 11, 12**  
**Prerequisite – Computers 1**  
**Semester Course**

This course will introduce students to the concepts of digital imaging, basic photography, image editing and image manipulation. Students will learn how digital images are acquired, manipulated and output. Students will learn: How to scan and screen capture images; how to take professional-looking pictures with a smartphone or point and shoot camera; how to edit, manipulate, colorize images; and how to prepare photos for professional printing, slideshows and videos or multimedia production. *Note: This course may be offered in a primarily online or blended course design format which may include class meetings and assignments outside of the regular school day.*

## **WEB PUBLISHING** **(NOT available 2019-20)**

**Elective—9, 10, 11, 12**  
**Prerequisite-Computers 1**  
**Semester Course**

This course is offered on an alternate year basis. This semester-long course is designed to introduce students to 21st century web publishing concepts. Students will learn the basic elements of web design and development as they learn to create their own web pages. Student will also learn about the latest Content Management Systems (CMS), web-hosting options and template-drive web page construction. Students will create media-rich content for use on websites. Concurrently, students will be introduced to the concepts of blogging as they design, build and maintain their own blogs on a theme of their choosing. *Note: This course may be offered in a primarily online or blended course design format which may include class meetings and assignments outside of the regular school day.*

## **INTRODUCTION TO COMPUTER CODING**

**Elective – 9, 10, 11, 12**  
**Prerequisite – Computers 1**  
**Semester Course**

This course is offered on an alternate year basis. The ability to code computer programs is an in-demand skill in today's society. Research has shown that when students learn to code, they learn important strategies for solving problems, designing projects, and communicating ideas. This fully online computer science course explores the fundamentals of programming. It is a project-based course that introduces students to contemporary programming languages including Python, C++, Javascript, and Swift. Projects include creating simple code blocks, game design, and smartphone app development. *Note: This course may be offered in a primarily online or blended course design format which may include class meetings and assignments outside of the regular school day.*

## **DIGITAL MEDIA PRODUCTION**

**Elective – 11, 12**  
**Prerequisite – Computers 1**  
**Full Year Course**

This course will focus on advanced concepts in multimedia design including image editing, and digital film editing and production. These concepts will be learned through several “real-world” video projects, including the creation of a video montage (music video), PSA, mini-documentary and the Senior Video. This course will also provide students with an opportunity to work independently or in small groups on numerous creative projects incorporating their own interests and artistic design. The course may include working closely with the instructor or other teachers on projects, assisting in troubleshooting problems with equipment, testing new software, preparing presentations. *Note: This course may be offered in a primarily online or blended course design format which may include class meetings and assignments outside of the regular school day.*

## **INDUSTRIAL AND TECHNOLOGY EDUCATION**

### **INDUSTRIAL TECHNOLOGY 1**

**Elective - 9, 10, 11, 12**

**Prerequisite - none**

**Full Year Course**

1<sup>st</sup> term: Students will learn basic sketching, lettering, 1 view drawing, 3 view drawing, and isometric drawings. 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> terms: The students will learn safety procedures for all tools and how to use them properly. They will learn how to calculate the price of lumber, how to draw plans, and how to complete a plan of procedure for each project. Students will learn basic furniture construction such as joints, fasteners, and types of lumber, sanding and finishing.

### **INDUSTRIAL TECHNOLOGY 2**

**Elective - 10, 11, 12**

**Prerequisite - I. T. 1**

**Semester or Full Year Course**

Students will learn safety procedures for all tools and machines. Students will study construction, aerodynamics, structures, and other technological processes by making projects such as a bridge out of pine sticks and Co2 cars. Computers will be used for a plan design. The students must make that project in order to receive credit.

### **INDUSTRIAL TECHNOLOGY 3 & 4**

**Elective – 11, 12**

**Prerequisite– I. T. 1 & 2**

**Semester or Full Year Course**

Students will learn safety procedures for all tools and machines. Students will use prior knowledge of machines in order to build projects of their own choosing. This is an independent class. Projects will include airbrushing, metalworking, woodworking, construction, electronics, and assignments on electricity. Each student must use Auto-Sketch to design at least one project. Students will be graded on the complexity of projects and how hard they work in class.

### **ADVANCED INDUSTRIAL TECHNOLOGY**

**Elective - 12**

**Prerequisite - I. T. #1, 2, 3 &**

**Instructor's approval**

**Semester or Full Year Course**

Students will learn safety procedures for all tools and machines. This is a project-oriented class that allows the student to use skills learned in previous industrial arts classes and to further pursue interests by doing advanced, complex projects. Class members need to be self-motivated and willing to challenge themselves. Every effort will be made to get students to try new processes and skills. The student can work in one or several technology areas (woods, metals, electronics, drafting, mechanics, etc.). Each student will be required to keep a folder to show monthly progress. Students will be encouraged to plan, design, construct, finish, and display their work.

### **DRAFTING 1**

**Elective –10, 11, 12**

**Prerequisite-Industrial Arts 1**

**Semester or Full Year Course**

Students will learn how to sketch, draft, and use Auto-Sketch on the computers. The following assignments will be given: A sketch, 1 view drawings, 3 view drawings, isometric drawings, mechanical drawings, and sectional drawings. Auto-Sketch will also be used for all of the above. Assignments will also include blueprint reading, and developing a house from the floor plans of the elevations. Students will learn different types of pencils, lines, and how to dimension and letter properly.



**COMPUTER AIDED DRAFTING (CAD)****Elective – 11, 12****Prerequisite- A “B” in Drafting 1  
Semester or Full Year Course**

Students will expand on their knowledge and drafting skills by doing the following: sketching, lettering, mechanical drawings, working drawings, isometrics, 5 view drawings, and a complex drawing of their own choosing. Students will use Auto-Sketch. Students must successfully complete this course to be eligible for the Career Connections CAD course in future years.

**ENGLISH LANGUAGE ARTS****ENGLISH LANGUAGE ARTS - GRADE 9****Required - Grade 9  
Prerequisite - none  
Full Year Course**

Students will learn basic English skills. Among these will be writing, grammar & punctuation, speech and oral report organization, note taking, reading and interpreting skills, research skills, logical reasoning and internet safety.

**ENGLISH LANGUAGE ARTS - GRADE 10****Required - Grade 10  
Prerequisite - ELA 9  
Full Year Course**

Students will continue acquiring basic English skills. Among these are: essay writing, grammar and usage, punctuation, public speaking, researching, documenting, logic, literary history and reading.

**ENGLISH LANGUAGE ARTS - GRADE 11****Required - Grade 11  
Prerequisite - ELA 9, 10  
Full Year Course**

The 11th grade Language Arts Program combines the continuation of basic reading, writing, and speaking skills with more advanced literary analysis and writing methods. The program will concentrate on analysis of theme, character, and writing style. Development of MLA research skills and complete research papers will also be emphasized as well as a survey of American Literature from its earliest forms to the present.

**ENGLISH LANGUAGE ARTS - GRADE 12****Required - Grade 12  
Prerequisite - ELA 11  
Full Year Course**

English 12 is intended to prepare students planning to attend a college or university after high school, as well as those moving into training programs or the workforce. This class continues to develop the student’s reading and writing skills using contemporary novels and topics. In addition to MLA documentation, APA documentation will be taught.

**COMM 120 - DYNAMICS OF COMMUNICATION  
(LCC)****Elective: 11, 12  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

Introduction to the theory and practice of speaking and listening effectively in interpersonal, group, and public communication situations. The course utilizes readings, lectures, discussions, learning activities, and oral and written assignments to help students both understand the communication process and become more skillful interpersonal, group (team), and public communicators. A grade of 2.0 or higher fulfills the Communication Core Requirement. (LCC MTA Category - English Composition (second course) or Communications)

**ENGL 121 - COMPOSITION I  
(LCC)**

**Meets English 12 Requirement: 11  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

Composition I is the study and practice of expository discourse to help students write more effectively. It emphasizes writing process, critical thinking, content development, organization, and style. (LCC MTA Category - English Composition)

**CONTEMPORARY LITERATURE**

**Elective – 10, 11, 12  
Prerequisite- Language Arts 9  
Semester Course**

This course is offered on an alternate year basis. Students will read ideas in modern contemporary novels. Novels will be connected to personal, social, and political dilemmas facing young people in our society. These issues may include but aren't limited to: gambling, alcohol use, death and suicide, harassment, poverty, relationship issues, sports issues, prejudices, moral dilemmas, and technology use. Students will use discussion, writing and other media forms to respond to ideas in novels.

**WRITING FOR PUBLICATION  
(NOT available 2019-20)**

**Elective – 10, 11, 12  
Prerequisite – none  
Semester course**

This course is offered on an alternate year basis. It is a semester-long course that encourages students to explore a variety of writing experiences. Students may explore fiction writing forms, newsletter writing, personal narratives and essays, and other kinds of writing. While this class receives English credit, it is not intended as a college preparatory class and those intending to attend college should take Advanced English.

**YEARBOOK/PRINT MEDIA**

**Elective 11, 12  
Prerequisite - Approval of Instructor  
Full Year Course**

Students will be responsible for designing layouts, arranging picture-taking sessions, selling, advertising, and arranging fund raising activities. Skills in the above areas, as well as photography, will be taught. Photography skills are helpful, but not required. Ability to write and work independently is essential. Some time before or after school will be necessary to meet deadlines. Prior knowledge of computer based technology is expected, with opportunities to advance these skills. Previous completion of the digital imaging course is extremely helpful though not required. Layout and design techniques, using computer-based technology, will be introduced and utilized in print production.

**FOREIGN LANGUAGE**

**SPANISH 1**

**Required – 09, 10 or 11  
Prerequisite – none  
Full Year Course**

Spanish 1 is a beginning course designed to establish basic communication skills. Cultural awareness and knowledge of the geography in Spanish speaking countries will be an area of focus. A special emphasis will be placed on correct grammar and tense. Students will practice their knowledge of the language in role playing skits and other life situations.

## **SPANISH 2**

**Required – 10, 11 or 12**

**Prerequisite- Spanish 1**

**Full Year Course**

Spanish 2 is designed to encourage fluency in the language. Role-playing, oral reports, and dramas are used to enhance the student's ability to use the language in any situation. Students will learn the preterit, command form and reflexive tenses.

## **MATHEMATICS**

### **ALGEBRA 1**

**Required- 8 or 9**

**Prerequisite - none**

**Full Year Course**

This course is designed to give the student the basic fundamentals of Algebra. Topics include equations, inequalities, functions, linear functions, systems of equations, exponents and polynomials, quadratic equations, probability, exponential and radical functions, and rational functions.

### **ALGEBRA 2**

**Required – 9, 10, 11, or 12**

**Prerequisite - Algebra 1**

**Full Year Course**

Algebra II is a review and extension of Algebra 1. Topics to be included are properties and operations of real and complex numbers, radicals, operations of polynomials, factoring, binomial theorem, operations on rational expressions, coordinate geometry, functions, solving systems of equations, quadratic function, exponents, logarithms, solving equations, and probability.

### **GEOMETRY**

**Required - Grades 10, 11, or 12**

**Prerequisite - Algebra 1**

**Full Year Course**

This course is the study of different geometric figures and their properties. Topics include geometric reasoning, parallel and perpendicular lines, triangle congruence, properties of triangles, polygons and quadrilaterals, similarity, right triangles and trigonometry, perimeter, circumference, area, spatial reasoning, circles, and transformational geometry.

### **PRE-CALCULUS**

**Elective - Grade 11, 12**

**Prerequisite – Alg. 1, Alg. 2, & Geo.**

**Full Year Course**

This course is designed to prepare students for college mathematics. Topics include equations and inequalities, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometry, analytic geometry, systems and matrices, limits, and continuity.

### **STATISTICS AND PROBABILITY**

**Elective - 12**

**Prerequisite - Geometry**

**Full Year Course**

An introduction to probability theory and mathematical statistics that emphasizes the probabilistic foundations required to understand probability models and statistical methods. Topics covered will include the probability axioms, basic combinations, discrete and continuous random variables, probability distributions, mathematical expectation, common families of probability distributions, and the central limit theorem.

## **MATH FOR SCIENCE**

**Elective - 11, 12**

**Prerequisite – Teacher Approval**

**Full Year Course**

This course is designed to support students in applying the mathematical concepts included in the Chemistry or Physics courses. This includes pre-teaching the math concepts used in the science classes and reinforcing the concepts being concurrently used in the science course. The student must be enrolled in the Physics of Chemistry course simultaneously and must have the approval of the science teacher to enroll.

## **AP CALCULUS**

**Elective - 11, 12**

**Prerequisite – Pre-Calculus**

**Full Year Course**

This course deals with the basic fundamentals of calculus and trigonometry. Topics discussed will include trigonometric functions, relations, polynomial functions, limits, continuity, derivatives, and applications of the derivative and the definite integral. An AP Exam will be offered in May with the possibility of earning college credit. The exam is optional and at the student's expense.

## **MATH 120 - COLLEGE ALGEBRA (LCC)**

**Elective - 11 (May/June Session)**

**Prerequisite - See Dual Enrollment**

**Semester Course (1 unit credit)**

This course is for students who do not intend to take MATH 122 or MATH 151, but may want to continue to MATH 141. Properties and graphs of linear, quadratic, polynomial, rational, exponential and logarithmic functions, with an emphasis on applications including finance, business/industry, life and social sciences.(LCC MTA Category - Mathematics)

## **MUSIC EDUCATION**

### **HIGH SCHOOL BAND**

**Elective - 9, 10, 11, 12**

**Prerequisite - Successful previous year  
in band /permission of instructor**

**Full Year Course**

High School Band consists of marching, concert and pep bands with opportunities to be involved in extra-curricular groups such as jazz band, percussion ensemble and chamber music. The marching band performs at all home football games as well as several parades and marching festivals. Students will be evaluated in terms of musical performance, marching ability, teamwork, attendance and spirit. Attendance is required at marching band camp in July and one nightly rehearsal per week. Concert band begins immediately after marching season ends. Students will have opportunities to play high quality band literature and will be evaluated in terms of musical performance, attendance at performances and spirit. The concert season consists of performances in December, February and May. The pep band performs at half of several varsity basketball games throughout the season. Music consists of a range of popular music and cheers.

## **PHYSICAL AND HEALTH EDUCATION**

### **PHYSICAL EDUCATION/HEALTH**

**Required - 9**

**Full Year Course**

The basic physical education program is designed to provide students with physical activities to develop the body and the understanding how the body works through health. It will provide instruction in skills needed for wholesome recreational activities. The program will include lifetime, competitive,

individual, team, and classroom activities. These activities include: Soccer, volleyball, football, track, basketball, bowling, softball, physical fitness, badminton, & cardiovascular activities. Topics covered in health include disease prevention and control, personal health practices, nutrition and foods, family health, growth and development, emotional and mental health, substance use and abuse, consumer health and community health.

## SCIENCE

### **PHYSICAL SCIENCE (NOT available 2019-20)**

**Required – 9, 10  
Prerequisite - none  
Full Year Course**

This course is offered on alternate year basis. This is a specialized course going into more detail about some of the physical sciences that were introduced in the junior high. This course is a preparation course for all students interested in Chemistry or Physics. Topics include chemistry and the study of the characteristic properties of matter, physics with force and motion, heat, sound, and light, electricity and forms of energy. Students will be introduced to the basic techniques of laboratory usage.

### **BIOLOGY**

**Required – 9, 10  
Prerequisite - None  
Full Year Course**

This course is offered on alternate year basis. The course focuses on four important topics in biological science: ecology, cell biology, heredity, and bio-diversity. In ecology, students will learn the basic ecological principles that apply to all living things in our world and investigate a topic of current concern in which those principles are shown. Investigation of cell structure, function, and reproduction will concentrate on relating cell processes to those of the entire organism. Our study of heredity will focus on the role of DNA in genetics and the evolutionary process. A study of the diversity of living things will incorporate laboratory and field observation, identification & dissection.

### **ANATOMY & PHYSIOLOGY**

**Required/Elective - 11, 12  
Prerequisite - B or better in Biology or  
Instructor approval.  
Full Year Course**

This course explores human anatomy and physiology. Structure and function of each body system is elaborated and relationships of each within the body are discussed. Emphasis is placed on achieving an understanding of normal body function for maintenance of personal health, as well as early preparation for those interested in careers in the health professions. This course fulfills the 3rd year Science requirement. This course is a pre-requisite for AP Biology in the senior year.

### **ENVIRONMENTAL CONSERVATION**

**Elective - 10, 11, 12  
Prerequisite – Phys. Sci. or Biology  
Full Year Course**

This course surveys the natural resources of our nation and the world, discussing the ways in which we manage and mismanage those resources and the resulting effects. Topics covered include forestry, fisheries and wildlife, water and air quality, and soils. Special attention is given to current concerns such as waste management and energy conservation. Student participation in school recycling programs is required.

**CHEMISTRY**  
**(NOT AVAILABLE 2019-20)**

**Required/Elective - 11, 12**  
**Prerequisite-Phys. Science & Biology**  
**Full Year Course**

This course is offered on alternate year basis. Seniors are required to take this class or LCC PHYS 120 if they did not take and pass Physics or Anatomy/Physiology in their junior year. Juniors who do not take Physics will be required to take and pass Chemistry in their senior year. This course deals with the composition and behavior of substances, and the interactions between two or more substances. Topics discussed will include chemical bonding, control of chemical reactions, common compounds in the home, chemicals used in industry and agriculture, fuels, foods, plastics, and radioactivity.

**PHYSICS**

**Required/Elective – 11, 12**  
**Prerequisite-Phys. Science & Biology**  
**Full Year Course**

This course is offered on alternate year basis. Seniors are required to take this class or LCC PHYS 120 if they did not take and pass Chemistry in their junior year. Juniors will be required to take Chemistry in their senior year if they do not take and pass Physics or Anatomy/Physiology in their junior year. This is a specialized course going into more detail about some topics discussed in physical science as well as college preparatory material. Topics discussed will include motion, force, gravitation, energy, momentum, sound, heat, thermodynamics, electricity, magnetism, light, radioactivity, and lasers.

**CHEM 125 - BASIC CHEMISTRY**  
**(LCC)**

**Meets Chem/Physics Req. - 12**  
**Prerequisite - See Dual Enrollment**  
**Semester Course (1 unit credit)**

Intended for students who have not had high school chemistry or who require a refresher course. Measurement, problem solving, chemical formulas, chemical equations, stoichiometry, atomic structure, chemical bonding, gas laws, solutions, and acids and bases are emphasized. (LCC MTA Category - Natural Sciences)

**SOCIAL STUDIES**

**UNITED STATES HISTORY/ GEOGRAPHY**

**Required: Grade 10**  
**Prerequisite - none**  
**Full Year Course**

Survey course of historical concepts occurring from 1876 – present with an emphasis on the grade level content expectations for United State History as outlined by the Michigan Department of Education (MDE) as well as geographical concepts applied to historical content of the United States. Students will be responsible for demonstrating knowledge in written and verbal format as well as projects, and formal assessments (test, quizzes, exams).

**CIVICS / ECONOMICS**

**Required: 11**  
**Prerequisite - none**  
**Full Year Course**

This course is a combination of civics and economics concepts spanning a semester each. In civics students will cover the foundations of government, foundational governmental documents, beginnings of the United States, comparative governmental systems, branches of government, and government in action. In Economics students will cover fundamental economic concepts, apply fundamental concepts in a macroeconomic and microeconomic focus, compare economic systems, and explore economics in action.

**POLS 120 - AMERICAN POLITICAL SYSTEM  
(LCC)**

**Meets Civics Requirement: 11  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

This course is designed to develop objective consideration of economic issues and provides information and understanding of how resources are allocated by prices. Topics for study include price theory, consumer demand, cost and market structure, the role of government in the market, resource pricing, and international trade. (LCC MTA Category - Social Sciences)

**ECON 201 - PRINCIPLES OF ECONOMICS-MICRO  
(LCC)**

**Meets Economics Requirement: 11  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

A comparative study of ancient and modern economic and political systems and theories in different parts of the world. An emphasis will be placed on the evolution of economic and political organizations and the impact these have on societies and individuals. (LCC MTA Category - Soc Sci)

**WORLD STUDIES / GEOGRAPHY**

**Required: 12  
Prerequisite – none  
Full Year Course**

Survey course of historical concepts from around the world occurring from 8000 B.C.E. – present including the beginnings of civilizations through contemporary civilizations as well as geographical concepts applied to historical concepts of the world. Comparative economic and governmental systems explored, religious formations, and critical thinking of the impact of world events. Students will be responsible for demonstrating knowledge in written and verbal format on projects and exams.

**HUMS 213 WESTERN CIVILIZATION TO 1600  
(LCC)**

**Meets World Studies Requirement: 12  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

Surveys the literature and art, science and technology, and the social and political systems of major civilizations in Africa, Asia, Europe, and the Americas to approximately the 17th century. Emphasizes the contributions of early civilizations to the creativity, richness, and diversity of the human condition. (LCC MTA Category - Humanities and Fine Arts)

**GEOG 221 - PHYSICAL GEOGRAPHY  
(LCC)**

**Elective: 12  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

Emphasizes landforms, flora and fauna, weather and climatic elements, landforms, mass wasting, hydrology, and soils. Offers an extensive study of these forces and phenomena through lecture and laboratory exercises. This study notes the environmental and ecological interrelationships between flora and fauna, and between the physical world and human society. (LCC MTA Category - Natural Sciences - lab course)

**PHIL 151 - INTRO TO LOGIC & CRITICAL THINK  
(LCC)**

**Elective: 11, 12  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

Introduction to modern logic and elements of reasoning, with special attention given to the roles of language in reasoning, distinguishing deductive from inductive arguments, recognizing levels of meaning and differing world views (Weltanschauungen), analyzing truth-functional relations, avoiding fallacious reasoning or misleading language, and using logical skills in everyday life. (LCC MTA Category - Humanities and Fine Arts)

**PSYC 200 - INTRODUCTION TO PSYCHOLOGY  
(LCC)**

**Elective - 11, 12  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

The basic orientation to the field of psychology, designed as a general survey and as preparation for advanced courses in the field. Topics include methods, nervous systems, intelligence, development, learning, memory, personality, abnormality, therapy, and social behavior. (LCC MTA Category - Social Sciences)

**SOCL 120 - INTRODUCTION TO SOCIOLOGY  
(LCC)**

**Elective - 11, 12  
Prerequisite - See Dual Enrollment  
Semester Course (1 unit credit)**

A survey of major theoretical perspectives, concepts, and methods of sociology. Emphasis is placed on societal transformation, social organization, culture, cultural diversity, socialization, social stratification, social institutions, and social change within a global context. (LCC MTA Category - Social Sciences)

**ACADEMIC ASSISTANCE**

**LINKS**

**Elective - 9, 10, 11, 12  
Application & Principal Approval**

**Req.**

**Semester or Full Year Course**

The LINKS course teaches and supports students as peer role models, mentors, tutors and friends. They primarily mentor students with Autism Spectrum Disorders (ASD) in both academic and social settings, with adult supervision. The LINK curriculum benefits assisting students and students with a disability in reciprocal manner. The LINK student learns, through participation in the curriculum, to act as an advocate and a mentor for a student with a disability as they master content standards. The interactive nature of instruction enables the LINK to consistently broaden the range of opportunities for the student who has a disability. LINK students are engaged with students who have disabilities in the classroom as well as environments outside of the classroom. They are trained, assisted and coached by the building special education staff and staff from CCRESA.

**CONTENT READING**

**Elective - 9, 10, 11, 12  
Principal & Counselor Approval Req.  
Semester or Full Year Course**

The Content Reading course uses the research based Rewards Reading intervention program to help students improve reading fluency and comprehension across all content areas. This course is designed for students who might benefit from improving their reading speed and comprehension to manage assigned readings in English, Math, Science and Social Studies classes. Test scores, grades, and teacher recommendations will determine which students will be allowed into the class. Individual and group techniques are used in the class to help students improve their reading skills with the intent of improving their performance in all classes.

**SPECIAL EDUCATION SUPPORT**

**Elective – 9, 10, 11, 12  
Determined by IEPC  
Full Year Course**

Placement in the Support Room is determined by an Educational Planning and Placement Committee which includes the building principal, a diagnostician (psychologist or social worker), special education teacher, and the student's parents. To qualify for Support Room assistance, a student must be certified



by the committee, that is – he/she must have special needs.

Individualized instruction may be provided in language arts, math, and general academic support. In addition, students may receive instruction in basic daily living skills, such as; vocational training, banking, goal setting, problem solving, etc.

### **COLLEGE, ONLINE AND CAREER EDUCATION PROGRAMS**

The dual enrollment and vocational education programs provide an opportunity for students to take additional classes not offered at Fowler High School that promote successful experiences in post secondary education or the workforce. Vocational education classes can be taken in the junior and/or senior year if students have taken the appropriate prerequisite coursework and meet program requirements. Dual enrollment courses can be taken in the freshman and sophomore years by meeting testing requirements and all school requirements. Juniors and seniors are eligible for the enhanced dual enrollment program by meeting the program requirements. Work based education is available only to seniors. Students interested in participating in vocational education, dual enrollment, or work based education should be aware that a greater amount of responsibility is required of them to successfully complete the program.

Students in grades 6-12 may take up to two (2) allowable online courses, as stated in Section 21f of the State School Aid Act. Requirements are as follows. At the consent of the pupil's parent or legal guardian, a district shall enroll an eligible pupil in up to 2 online courses per semester. Courses must be chosen from the following link to the Statewide Online Course Catalog – [www.micourses.org](http://www.micourses.org). Districts will look at each request on an individual basis, and after review and pending approval, will enroll students in the online classes. Please note that our FHS courses have proven to be of the highest rigor, proven both by State standardized testing results, and college/career readiness feedback. That being stated, it is necessary to verify that an online course meets the depth of knowledge, intensity, and level of support provided in FHS courses. Traditional, dual enrollment, and vocational education courses provided at FHS are designed to match or exceed the quality, rigor, and benefits of 21f courses. The cost for an online class can not exceed 1/14 of the amount of per pupil state funding received by the school. The course must be pre-approved by the counselor and/or principal. The course must be rigorous and help to fulfill graduation requirements or grade level requirements. Online classes through the 21f program must be scheduled during 1<sup>st</sup> hour and/or 7<sup>th</sup> hour of our school day. Transportation, facilitation, support, and equipment will not be provided for said online courses by the school, but rather, will be the sole responsibility of the student. Scheduling changes will not be made to accommodate online courses. Enrollment in an online course under 21f requirements must be completed at least 30 days prior to the start of each semester, and may not be commenced part way through a semester.

#### **DUAL ENROLLMENT**

**Elective – 10, 11, 12**

**Prerequisite - Qualifying test scores,  
Admission to the college.**

**Principal & Counselor Approval Req.**

Dual enrollment enables a student to take college classes along with the regular classes at Fowler High School. Students must be online to graduate and have shown success in content similar classes, if available, at FHS before taking a similar course at a college. Scores on the PSAT, SAT, Aspire, EXPLORE, PLAN, ACT, and Accuplacer tests, attendance records and academic ability in college preparatory courses are considered before permitting a student to dual enroll. The student can receive college credit for the classes. Classes are offered through Lansing Community College in a coordinated

program program that fulfills the Fowler High School graduation requirements and the

LCC Michigan Transfer Agreement requirements needed to transfer to most state colleges and universities. Students are responsible for providing their own transportation and parking for any off site classes.

### **FHS/LCC ENHANCED DUAL ENROLLMENT PROGRAM**

Overview: The FHS Enhanced Dual Enrollment Program is offered in partnership with Lansing Community College, and is built around the Michigan Transfer Agreement (MTA) requirements. It will allow students to substantially complete the MTA during their last two years at FHS. The MTA is recognized by virtually all colleges and universities across the state as the equivalent of their general education requirements. Most, if not all, of the dual enrollment classes taken by students at FHS will transition into the LCC MTA. Participating students can earn up to 42 college credits during their sophomore, junior and senior years, effectively completing their Freshman year of college while still at FHS. These 42 credits will transfer under the MTA to virtually all other Michigan colleges and universities with the exception of U of M Ann Arbor, fulfilling the majority of that school’s general education requirements.

Eligibility: To be eligible to participate in the program, students must meet both LCC’s minimum requirements, and the FHS criteria for recommendation to participate in the program. These are designed to assure we set students up for success. For that reason, a specific emphasis is placed on student performance in the core academic areas of Math, Science, English, Social Studies, and Foreign Language as good indicators of student readiness for college coursework. Also incorporated are the specific standardized test scores recommended by the Michigan Department of Education for participation in dual enrollment courses. Students who meet all of the criteria will be admitted first to the program and will be eligible for all courses. Students who do not meet the criteria in all areas will be considered for enrollment in subject areas where they meet the requirements on a case by case basis and as room allows. The current requirements are as follows:

	<b>Sophomores</b>	<b>Juniors</b>	<b>Seniors</b>
<b>LCC Requirements</b>	<ul style="list-style-type: none"> <li>• Accuplacer: 5 Reading 6 Writing</li> <li>• PSAT: 480 Evid Based R/W</li> </ul>	<ul style="list-style-type: none"> <li>• Accuplacer: 4 Math 5 Reading 6 Writing</li> <li>• PSAT: 480 Evid Based R/W 520 Math</li> </ul>	<ul style="list-style-type: none"> <li>• Accuplacer: 5 Math 5 Read 6 Writing</li> <li>• PSAT: 480 Evid Based R/W (SAT) 520 Math</li> </ul>
<b>FHS Criteria</b>	<ul style="list-style-type: none"> <li>• 3.5 GPA in core classes</li> <li>• B or better in previous subject area coursework</li> <li>• Meet MDE eligibility standards on SAT: Evid Based R/W 460 Math 510</li> <li>• No unexcused absences</li> <li>• Less than 3 unexcused tardy</li> <li>• Good discipline record</li> </ul>	<ul style="list-style-type: none"> <li>• 3.0 GPA in core classes (2.8 for PSYC/SOCL)</li> <li>• B or better in previous subject area coursework</li> <li>• Meet MDE eligibility standards on SAT: Evid Based R/W 460 Math 510</li> <li>• No unexcused absences</li> <li>• Less than 3 unexcused tardy</li> <li>• Good discipline record</li> </ul>	<ul style="list-style-type: none"> <li>• 3.0 GPA in core classes (2.6 for PSYC/SOCL)</li> <li>• B or better in previous subject area coursework</li> <li>• Meet MDE eligibility standards on SAT: Evid Based R/W 480 Math 520</li> <li>• No unexcused absences</li> <li>• Less than 3 unexcused tardy</li> <li>• Good discipline record</li> </ul>

Courses: 5 courses will be offered each semester and will be coordinated with Junior and Senior year course requirements. Each eligible sophomore can take 1 course, and each eligible junior and senior can take up to 2 courses per semester. To fulfill both Fowler High School Graduation Requirements and the LCC MTA requirements, the following is the proposed slate of courses:

Semester	Grade	LCC Course	Fowler Credits	LCC MTA
<b>Fall</b>	Junior	POLS 120 - American Political System	Civics (11)	Social Sciences
	Junior	PHIL 151 - Intro Logic & Critical Thinking	Elective (11,12)	Humanities/Fine Arts
	Senior	ENGL 121 - Composition I	English (12)	Eng Comp/Comm
	Senior	CHEM 125 - Basic Chemistry	Chemistry (11, 12)	Natural Sciences
	Either	SOCL 120 - Introduction to Sociology	Elective (10, 11, 12)	Social Sciences
<b>Spring</b>	Junior	ECON 201 - Principles of Econ - Micro	Economics (11)	Social Sciences
	Junior	COMM 120 - Dynamics of Communication	Elective (11, 12)	Eng Comp/Comm
	Senior	HUMS 213 - World Civilizations to 1600	World Hist/Geo (12)	Humanities/Fine Arts
	Senior	GEOG 221 - Physical Geography (Lab)	Elective (11, 12)	Natural Sciences
	Either	PSYC 200 - Introduction to Psychology	Elective (10, 11, 12)	Social Sciences
<b>Summer</b>	Junior	MATH 120 - College Algebra	Elective (11)	Mathematics

Format: Courses will be offered through a blended instructional model that consists of 2 or 3 face to face sessions along with online coursework. Face to face sessions will meet at Fowler High School in the evening or on Saturdays, and students will be assigned time in their regular school day to complete the online component.

**CAREER CONNECTIONS  
(CLINTON COUNTY RESA)**

**Elective – 11, 12  
Prerequisite - FHS Sequence Courses  
Principal & Counselor Approval Req.**

The Clinton County RESA Career Connections programs are organized to prepare students for 10 different careers. CCRESA students take classes at various locations in Clinton County and can receive college credit for the training. Some of the training may lead to apprenticeships or certificates of completion/achievement upon completion of the program. Auto I & II, Computers Support Systems I & II, Business Management and Entrepreneurship, Early Childhood Education, TV/Radio Broadcast/Digital Media Production I & II, Construction I & II, Allied Health I & II, Teacher Prep, Criminal Justice, Emergency Medical Services/Fire Science & Welding are available through CCRESA. Students attend classes five days a week for two to two and a half hours each day. Students are responsible for providing their own transportation and parking.

**VOCATIONAL TECHNOLOGY (VOC TECH)  
(EATON COUNTY ISD)**

**Elective – 11, 12  
Prerequisite - FHS Sequence Courses  
Principal & Counselor Approval Req.**

The Eaton Intermediate School District Vocational-Technical programs (Voc Tech) are organized to prepare students for numerous different careers. Eaton ISD Voc Tech courses may be taken if a comparable program is not available through the CCRESA Career Connections Program. Voc Tech students take classes at Lansing Community College (downtown and/or at LCC West) and can receive college credit for the training. Some of the training may lead to apprenticeships or certificates of

completion/achievement upon completion of the program. Automotive body Repair I & II, Residential Wiring & Electrical Technology, Heavy Equipment Operation & Maintenance and Welding are a few of the programs available at Voc Tech. Students attend classes five days a week for two to two and a half hours each day. Students are responsible for providing their own transportation and parking.

**CAPITAL REGION TECHNICAL EARLY COLLEGE  
(CCRESA/LCC)**

**Elective – 11, 12**

**Prerequisite - FHS Sequence Courses  
Principal & Counselor Approval Req.**

The Capital Region Technical Early College is a three year program that consists of the junior and senior years followed by a 5th year in high school during which students complete a program of study that results in a Fowler High School diploma and an associates degree or technical certificate from Lansing Community College. The program currently available offers an Information Technology certification. Students attend class primarily at Fowler High School and CCRESA in the first two years, and at LCC in the third year. Students are responsible for providing their own transportation and parking.

**WORK BASED LEARNING EXPERIENCE**

**Elective - 12**

**Principal & Counselor Approval Req.**

This program allows students to participate in a Work Based Learning Experience as provided for under the Michigan School Code and is coordinated through the CCRESA Career Connections Program. There are two program formats. The first is a traditional 1 - 2 hour a day program in which students arrange their own placements. The second is a manufacturing based program where students work 3 - 4 hours of the school day and must apply and be hired by the manufacturing employer through the CCRESA coordinated process. Students have to apply, meet all of the criteria for participation, and complete all required paperwork, including that of the prospective training station supervisor (employer). First consideration will be given to those applicants that apply first and prior to May 1 of the school year before that in which the placement is requested. Special education students may qualify for a similar work based learning experience under the parameters of their IEP.

Applicants must meet all of the requirements for such placement as described in the Michigan Department of Education Pupil Accounting Manual, and any other requirements of the district that might exceed those of the state. These include but are not limited to:

1. Must be a senior in good standing to graduate
2. Must arrange for a work experience for up to a maximum of two class periods of the school day.
3. Must be enrolled in a related course as is consistent with MDE CTE requirements.
4. Must have an EDP on file that is consistent with the work based learning experience placement.
5. Must complete and submit all required forms including the Training Agreement, the Training Plan, and the employers verification of workers disability compensation and general liability.
6. Must have the performance elements/job skills required in the Training Plan approved by the principal/counselor before submitting the application packet.
7. Must submit a 2-page letter of application with a resume that supports the proposed job placement.