## OGEMAW HEIGHTS HIGH SCHOOL



# COURSE DESCRIPTION HANDBOOK

2023-2024

Ogemaw Heights High School, unified in partnership with parents and community, provides high quality education. Offering rigorous and relevant programs along with diverse opportunities, we prepare students to become productive, responsible and resourceful members of the 21<sup>st</sup> century.

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## COURSE OF STUDY HANDBOOK OGEMAW HEIGHTS HIGH SCHOOL

Principal	Ms. Trisha Ziegler
Assistant Principal	
•	
Counselor students last name A-K	Mr. Craig Williams
Counselor students last name L-Z	Mrs. Louisa Hofar

This handbook of course descriptions has been compiled as an aid to students and parents in selecting a tentative course of study for the four years students are enrolled at Ogemaw Heights. A four-year plan will be developed in accordance with the student's academic background and interests. Planning for four years will help students develop a balanced schedule. Counselors and teachers are available to make recommendations as students develop and update their Education Development Plans (EDPs), which include their four-year education plans. The final decision will be made by the student, parent and counselor.

#### PLEASE CHECK THE GRADUATION REQUIREMENTS ON PAGE 2

#### NOTICE

The West Branch-Rose City Area School District will not discriminate against any person based on race, religion, color, national origin, sex, age, handicap, disability, height, weight, or marital status in its educational programs, services or activities. The Board reaffirms its long-standing policy of compliance with all applicable federal and state laws and regulations prohibiting discrimination.

Inquiries or complaints by students and/or their parent(s)/guardian(s) related to all complaints associated with discrimination should be directed to:

Mailing Address: Superintendent of Schools

West Branch - Rose City Area Schools

P.O. Box 308

West Branch, MI 48661

Phone: 989.343.2000

Physical Address: 960 S. M-33, West Branch, MI 48661

Each institution is a reflection of the society in which it exists. So, it is with Ogemaw Heights High School. Serving the students and parents of Ogemaw County, our high school reflects the needs and values of our community. It is with these needs and values in mind that the philosophy of education at Ogemaw Heights High School has been developed.

#### PHILOSOPHY OF EDUCATION OGEMAW HEIGHTS HIGH SCHOOL

It is the aim of Ogemaw Heights High School to provide the best educational opportunity possible for the students of the community. It is realized that the school must serve all of the pupils by offering programs of interest and value giving the best possible preparation to all students as they pursue education beyond the high school level. In meeting the needs of its pupils, the school shall strive to:

Educate each individual toward the limit of his or her capacity and take recognition of individual differences

Develop in each pupil a recognition of moral, social and ethical values

Instill the principles of democratic ideals, democratic responsibility, democratic processes of government, as well as the rationale underlying the need for educated citizens in a democracy

Develop the ability to think and plan independently

Establish a friendly and cooperative relationship between home, student, school and community

Establish a proper environment for the development of the health and welfare of each student.

Assist every student to believe in oneself, to see a worthwhile, competent and self-directed person within

Prepare our graduates to adapt to changing technology, provide a solid foundation for further academic pursuits and/or job market and enrich the probability of a personally rewarding and satisfying life

Provide learning experiences that stress problem solving, analytical thinking and higher-level questioning techniques

#### OGEMAW HEIGHTS GRADUATION REQUIREMENTS CLASS of 2023 AND BEYOND

#### **Credit Requirements**

- 4 credits English
- 4 credits Mathematics
- 3 credits Science
- 3 credits Social Studies
- ½ credit Health
- ½ credit Physical Education

Beginning with the class of 2020, students who have successfully completed two or more years of Marching Band will be credited with having satisfied the Michigan Merit Curriculum requirement of ½ credit of Physical Education.

- 1 credit Visual, Performing, Applied Arts
- 2 credits World Language

The world language requirement may be met prior to entering high school through successful completion of a combination of Spanish language and culture instruction in middle school. This route allows students to meet the world language requirement, but they do not receive high school credit towards their 22 credit graduation requirement.

A student may partially or fully fulfill 1 credit of World Language requirements by completing a department-approved formal career and technical CTE education program.

#### Online Learning Experience

The Online Learning Experience can be met before high school in Instructional Technology 8 or by taking a course meeting this requirement as indicated in the course description handbook.

#### **Credits Required for Graduation = 22**

Any student who has lost more than two (2) credits is not on track for graduation.

All courses that meet the Michigan Merit Curriculum requirements must be aligned with the subject area content expectations or the credit guidelines developed by the Michigan Department of Education (MDE).

#### SCHEDULING AND SCHEDULE CHANGE REQUESTS

Students enrolled at Ogemaw Heights will develop a four-year plan in accordance with their academic background, career pathway and interests. Planning for four years will help students develop a balanced schedule. Counselors and teachers are available to make recommendations as students develop and update their Education Development Plans (EDPs), which include their four-year education plans. The final decision will be made by the student, parent and counselor.

Selecting classes is a very important process. The classes selected should help prepare the student for life beyond high school as well as help reach requirements for graduation. Please choose classes wisely. Take advantage of the opportunity to talk with parents, teachers and counselors about specific class choices. The classes requested will be the classes that will be scheduled into the next year. **Schedule changes will be rare and based only on extenuating circumstances. Please choose classes wisely!** 

#### ARTICULATION

Students who successfully complete the following courses with a "B" or better **may** receive college credit through Delta College. Check the course descriptions for further details.

Building Trades Machine Tool Health Care Provider Medical Basics

#### ADVANCED PLACEMENT COURSES

The national AP exam is offered in May for the following courses. The fee for taking the exam will be paid by the school.

AP Biology AP Literature & Composition

AP Calculus AP Physics
AP Chemistry AP U.S. History
AP Language & Composition AP World History

Note: Any student taking a full year advanced placement class must complete the class to receive credit on a 5-point scale. If a student drops the class at semester, the student's grade point average will be recalculated using a 4-point scale for the first semester.

#### **DUAL ENROLLMENT**

Students in grades 9-12 are provided the opportunity to be enrolled in both high school and post-secondary (college) courses at the partial expense of the school district. The post-secondary credit may be counted for high school and college credit. To qualify for dual enrollment, students must meet the eligibility requirements established by the state and the post-secondary institution. For details regarding the eligibility requirements, refer to the student handbook or contact your counselor.

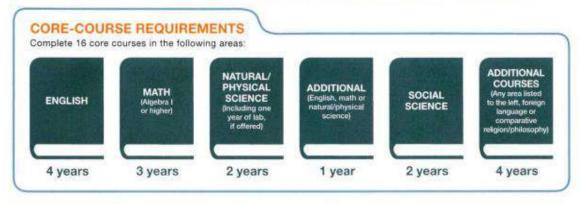
Note: Any student taking a dual enrollment class must complete the class to receive credit on a 5-point scale. If a student drops the class at semester, the student's grade point average will be recalculated using a 4-point scale for the first semester.

#### ONLINE LEARNING

Current Michigan legislation allows students who are enrolled in a Michigan public school district and who have consent from their parent or guardian to enroll in up to two online courses each semester. Students should read the Online Learning Center Readiness Resource and Policies and Procedures to determine whether taking an online course is a good fit. Students must select the online course(s) when they meet with their counselor <u>in the spring</u> to complete their Educational Development Plans (EDPs) and register for courses. Students may select courses from the statewide catalog of online courses that contains courses published by district course providers statewide, including Michigan Virtual School courses. See the district website for a link to the statewide catalog.



## DIVISION I ACADEMIC REQUIREMENTS



#### **FULL QUALIFIER**

College-bound student-athletes enrolling at an NCAA Division I school need to meet these academic requirements to practice, compete and receive an athletics scholarship in their first year of full-time enrollment.

- · Complete 16 core courses in the appropriate areas.
  - Ten of the 16 core courses must be completed before the seventh semester (senior year) of high school.
  - Seven of the 10 core courses must be in English, math or natural/physical science.
- Earn a core-course GPA of at least 2.300.
- Earn an SAT combined score or ACT sum score matching the core-course GPA on the Division I sliding scale.
- Submit proof of graduation to the Eligibility Center.

#### ACADEMIC REDSHIRT

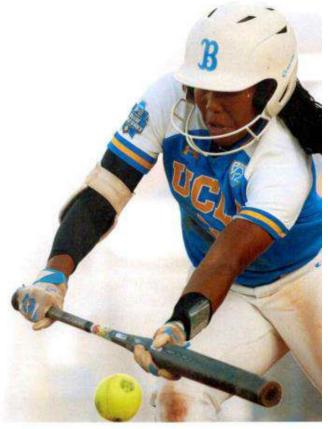
All Division I academic redshirts may receive an athletics scholarship and practice during their first year of full-time enrollment at a Division I school, but may NOT compete.

- · Complete 16 core courses in the appropriate areas.
- · Earn a core-course GPA of at least 2.000.
- Earn an SAT combined score or ACT sum score matching the core-course GPA on the Division I sliding scale.
- Submit proof of graduation to the Eligibility Center.

#### INTERNATIONAL STUDENTS

Please review the international initial-eligibility flyer for information and academic requirements specific to international student-athletes,

For information on Division II, view the Division II academic requirements flyer.





## **DIVISION II ACADEMIC REQUIREMENTS**



ENGLISH

MATH (Algobra I or higher) NATURAL/ PHYSICAL SCIENCE (Including one year of lab, if offered)

ADDITIONAL (English, math or natural/physical science)

SOCIAL SCIENCE ADDITIONAL COURSES (Any see listed to the left, foreign language or comparative religion/philosophy

3 years

2 years

2 years

3 years

2 years

4 years

#### **FULL QUALIFIER**

College-bound student-athletes enrolling at an NCAA Division II school need to meet these academic requirements to practice, compete and receive an athletics scholarship in their first year of full-time enrollment.

- Complete 16 core courses in the appropriate areas.
- . Earn a core-course GPA of at least 2.200.
- Earn an SAT combined score or ACT sum score matching the core-course GPA on the Division II full qualifier sliding scale.
- Submit proof of graduation to the Eligibility Center,

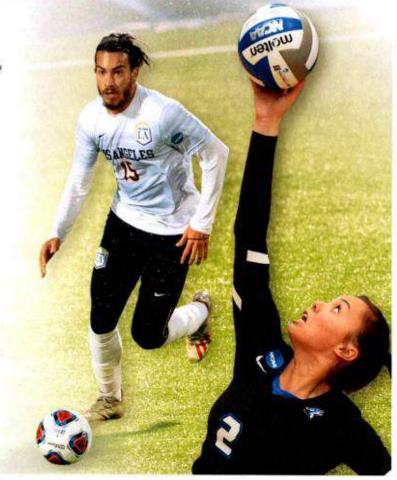
#### PARTIAL QUALIFIER

College-bound student-athletes that do not meet Division II full qualifier standards will be deemed a partial qualifier. All Division II partial qualifiers may receive an athletics scholarship and practice during their first year of full-time enrollment at a Division II school, but may NOT compete.

#### INTERNATIONAL STUDENTS

Please review the international initialeligibility flyer for information and academic requirements specific to international student-athletes.

For information on Division I, view the Division I academic requirements flyer.



#### **COLLEGE RECOMMENDATIONS**

College admissions officers consider various factors when making an admission decision. The top three factors, according to the 2019 NACAC Admissions Trend Survey, are shown below.

		Considerable	Moderate
		<b>Importance</b>	<b>Importance</b>
1.	Grades in All Courses	74.5%	15%
2.	Grades in College Prep Courses	73.2%	16.8%
3.	Strength of Curriculum	62.1%	21.9%

Colleges and universities also recommend the following minimum high school credits:

English 4 years Social Studies 3 years
Mathematics 4 years World Language 2 years
Science 4 years

#### **ENGLISH DEPARTMENT**

COURSE	GRADE	CREDIT	PREREQUISITE
English 9	9	1	
English 10	10	1	English 9
Pre-AP English	10	1	B or better in English 9 (or teacher approval)
English 11	11	1	English 10 or Pre-AP English
English 12	12	1	English 11
AP Language and Composition	11-12	1	B or better in English 9 and English 10 or Pre-AP English
AP Literature	11-12	1	B or better in English 9 and English 10 or Pre-AP English
English Comp 1 & 2 (KCC)	11-12	1	Existing college prerequisite/admission requirements.  Must pass English Comp 1 with a C or better.
Yearbook	11-12	1	Instructor approval
Creative Writing	11-12	1	English 9 and 10
Introduction to Theatre & Performance	9-12	1	
Advanced Theatre & Performance	10-12	1	B or better in Introduction to Theatre & Performance or Instructor Approval

#### SOCIAL STUDIES DEPARTMENT

COURSE	GRADE	CREDIT	PREREQUISITE
World History/Geography	9-12	1	
U.S. History/Geography	10-12	1	
Government	11-12	1/2	
Economics	11-12	1/2	
Introduction to Psychology	11-12	1/2	
Developmental Psychology	11-12	1/2	Introduction to Psychology
AP U.S. Government & Politics	11-12	1	B or better in any previous high school level social studies course
AP U.S. History	10-12	1	B or better in any previous high school level social studies course
AP World History	10-12	1	B or better in any previous high school level social studies course

## MATHEMATICS DEPARTMENT

COURSE	CREDIT	PREREQUISITE
Algebra 1	1	
Geometry	1	Algebra 1
Algebra 2	1	Geometry or teacher recommendation
Algebra 2A	1	Geometry
Algebra 2B	1	Algebra 2 A
Statistics and Probability	1	Geometry
Pre-Calculus	1	Algebra 2
AP Calculus	1	Pre-Calculus
AP Statistics	1	Algebra 2
Intermediate Algebra KCC	.5	Algebra 1 (C or better) and PSAT/SAT Score and transcript review
College Algebra KCC	.5	Math 12000 Intermediate Algebra and requisite placement test scores

## SCIENCE DEPARTMENT

COURSE	CREDIT	PREREQUISITE
Animal and Wildlife Biology	1	
Plant and Environmental Biology	1	Animal and Wildlife Biology
Biology	1	
Advanced Science and Technology I	1	Algebra 1
Advanced Science and Technology II	1	Advanced Science and Technology I
AP Biology	1	B or better in Biology or Animal Biology and Plant Biology
Anatomy/Physiology	1	B or better in Biology or Animal Biology and Plant Biology
Environmental Science	1	2 semesters of successfully completed Biology or Animal Biology and Plant Biology
Physical Science	1	Successful completion of Algebra 1
Physics	1	2 semesters of successfully completed Physical Science 4 semesters of successfully completed math coursework, including Geometry.
AP Physics 1	1	4 semesters of successfully completed math coursework, including Geometry. Successful completion of Physical Science
Chemistry	1	Successful completion of Algebra 1 (Class of 2020 & 2021) Successful completion of Physical Science (Class of 2022 & beyond)
AP Chemistry	1	B or better in Chemistry (or teacher approval)

## BUSINESS, MANAGEMENT, AND TECHNOLOGY

COURSE	GRADE	CREDIT	PREREQUISITE
Workplace Accounting	10-12	1/2	
General Accounting	11-12	1/2	
Fundamentals of Business	9-12	1/2	
Business Entrepreneurship	10-12	1/2	
Everyday Finance	11-12	1/2	
Computer Applications NOT CURRENTLY OFFERED	9-12	1/2	
Advanced Computer Applications NOT CURRENTLY OFFERED	9-12	1/2	Computer Applications

## VISUAL PERFORMING, AND APPLIED ARTS

These courses meet the graduation requirement for Visual, Performing, and Applied Arts.

DEPARTMENT	COURSE TITLE
English	Intro and Advanced Theatre/Performance
Music	Symphonic Band
Music	Concert Choir
Art	Art 1
Art	Art 2
Art	Art 3
Other Electives	Media
Machine Tool/Machine Shop	General Metals
Machine Tool/Machine Shop	Machine Tool 1
Machine Tool/Machine Shop	Machine Tool 2
Machine Tool/Machine Shop	CAD CAM
Construction Trades	Introduction to Building Trades
Construction Trades	Building Trades

#### **ENGLISH**

Graduation Credit Requirement: 4 credits
Course Requirements: English 9

English 10 or Pre-AP English English 11 or AP Language English 12 or AP Literature

English 9 (Required) Grade: 9 1 credit

English 9 is a student-centered learning environment where students will analyze text, respond critically, and cite evidence about their learning. Each unit of study will include selections from different genres that relate to relevant and essential questions. Students will engage in activities that inspire critical thinking and thoughtful discussion. Students will be formulating and defending their own perspectives. Students will be working on increasing their comprehension skills and increasing their academic vocabulary. Students will also be working to further develop their writing proficiency in many different forms or genres of writing. Career Development will also take place throughout the year. Students will start developing a career portfolio.

English 10 (Required)	Grade: 10	1 credit
Prerequisite: English 9		

English 10 is a continuation of a student-centered learning environment where students will analyze text, respond critically, and cite evidence about their learning. Each unit of study will include selections from different genres that relate to relevant and essential questions. Students will continue to engage in activities that inspire critical thinking and thoughtful discussion. Students will be formulating and defending their own perspectives. Students will continue working on increasing their comprehension skills and increasing their academic vocabulary. Students will also be working to further develop their writing proficiency in many different forms or genres of writing. Career Development will also continue. Students will continue to develop their career portfolio.

Pre-AP English (meets English 10 Requirement)	Grade: 10	1 credit	
Prerequisite: B or better in English 9 (or teacher approval)			

This accelerated course is for the self-motivated learner. Following the Common Core State Standards, Pre-AP English offers a thematic study of British and World Literature and it will continue to build a solid foundation of strategies, knowledge, and skills that will be refined, applied, and extended as students engage in more complex ideas, texts and tasks. Students in Pre-AP English will further develop their proficiency in different forms of writing such as argumentative, compare/contrast, descriptive, and analytical. Additionally, in Pre-AP English, students will become increasingly skilled readers of works written in a variety of periods and genres, including various narrative and informational texts. Students will connect with and respond to texts through critical response and stance. They will learn to evaluate for validity and quality, to balance and expand their perspectives promoting empathy, social action and appropriate use of power. The course will culminate in a literary research/position paper which will reflect the materials studied earlier in the school year.

Skills and reading selections taught in Pre-AP English will help prepare students to take Advanced Placement English courses later in high school.

English 11 (Required) American Lit.	Grade: 11	1 credit
Prerequisite: English 10 or Pre-AP English		

English 11 is a comprehensive study of American authors and their works as well as foundational documents. The curriculum follows the Common Core State Standards. Students will enhance and expand the writing skills developed in English 9 and 10. Emphasis will be placed on argumentative papers in preparation for standardized tests along with timed writings to streamline their thought process. Development of vocabulary, grammar, and writing skills needed for English 12 are included. The research component will culminate in a speaking project.

English 12 (Required)	Grade: 12	1 credit
Prerequisite: English 11		

English 12 is the culmination of the Ogemaw Heights English Program. Following the Common Core State Standards and the requirement that the students be exposed to literature, students in the class will demonstrate proficiency in higher lever thinking, listening, reading, speaking, research and writing skills. **Emphasis will be placed on technical reading and writing**. **The focus throughout this course will be on activities that are relevant to each student's career pathway**. Exploration of colleges, college applications, portfolios, scholarship searches and career information will also encompass part of this class.

AP Language and Composition (meets English 11 Requirement)	Grade: 11, 12	1 credit
Prerequisite: B or better in English 9 and English 10		

Students earn high school credit and may also earn college credit by taking the national exam offered in the spring. The course is a study of rhetoric, which is the art of writing. In this class, students will focus on nonfiction writing in the form of rhetorical analysis, argument, and synthesis. Students will be introduced to various rhetorical strategies, and will be expected not only to use them in their writing, but to recognize these strategies in the writings of other authors. This rigorous class focuses on non-fiction readings, but will also include American authors covered in English 11. The skills learned in this class will not only help students across the curriculum, but also at the collegiate level, regardless of major. The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.

AP Literature (meets English 12 Requirement)	Grade: 11, 12	1 credit
Prerequisite: B or better in English 9 and English 10		

Students earn high school credit and may also earn college credit by taking the national exam offered in the spring. The course is a comprehensive study of literature and composition. The course, divided into six thematic units, entails a rigorous load: outside novels from an approved reading list will be required each semester in addition to the course load of specific required reading and composition assignments. Students commit to maintaining a portfolio that shows a development of their writing skills. Vocabulary will be taught in the context of the readings. A research paper is required. The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.

Yearbook (Elective) Grade: 11, 12 1 credit		
Prerequisite: Instructor approval		
This course does not count as an English credit requirement for graduation.		

Yearbook will be responsible for publishing the school yearbook. Students will learn to write concise, interesting news stories. Emphasis will be placed on planning the yearbook. Students will explore yearbook issues, gathering news, writing copy, interviewing, editing, proofreading, photography, and selling advertising. Knowledge of English grammar and good writing skills are necessary to this class. **Extra-curricular time is required and grades may be affected by these requirements**. This class may be taken more than once.

Introduction to Theatre & Performance (Elective) Grade: 9, 10, 11, 12 1 credit			
This course meets the graduation requirement for Visual, Performing, Applied Arts.			
This course does not count as an English credit requirement for graduation.			

Students in this class will begin to explore the basics of drama and theatre. Students will be learning about the basic elements of dramatic technique such as movement, facial expression and improvisation while at the same time participating in various in-class on stage activities that will enhance understanding of the aforementioned concepts and allow students to explore creative and dramatic expression in informal performances. They will also learn basic design and technical elements and explore theatre related careers. Both class work and stage work will be graded elements in this course. This course may only be taken once.

<b>Advanced Theatre &amp;Performance (Elective)</b>	Grade: 10, 11, 12	1 credit
Prerequisite: B or better in Introduction to Theat	tre and Performance or In	structor
Approval.		
This course meets the graduation requirement for Visual, Performing, Applied Arts.		
This course does not count as an English credit requirement for graduation.		

Students taking this course will delve more deeply into the elements taught at the Introductory level and also work on the more technical design aspects of dramatic productions. They will explore the multiple genres of theatre including improvisation, drama, comedy, melo-drama, commedia del'arte and musical theatre. The class will require two public performances. One will be in late December, the second will be in May – participation in these performances is mandatory. Extra-curricular time is required and grades may be affected by these requirements. Additionally, students in this course will work to demonstrate leadership skills and help to guide Intro students. Students taking this course will also have the option of preparing pieces for competition at the state level. This class may be taken more than once with teacher approval.

#### **SOCIAL STUDIES**

**Graduation Credit Requirement: 3 credits** 

Course Requirements: World History/Geography

U.S. History/Geography

**Government Economics** 

#### World History/Geography (Required) Grade: 9, 10, 11, 12 1 credit

World History/Geography is more than a chronology of facts. It is an exploration of big ideas across time and place. Using the concepts of history, culture, geography, government, economics, science, and technology will help you understand and enjoy the study of World History/Geography by connecting with the drama and meaning of the human experience. Emphasis will be placed on using skills to interpret information and solve problems while looking for connections to the real world and society today.

#### U.S. History/Geography (Required) Grade: 10, 11, 12 1 credit

This course surveys the important people, events, and developments in US history from 1870 to the present day. Topics included are: Industrial and Urban America, American Imperialism, the Progressive Era, World War I, the Roaring Twenties, the Great Depression, World War II, the Cold War, McCarthyism, the Korean War, the Civil Rights Movement, Vietnam, Watergate, the Reagan Era and the role of the United States in a post-cold war world.

Government (Required)	Grade: 11, 12	1/2 credit

This course is a study of the structure and operation of the federal government and its relationship to the individual citizen. State and local government is also examined.

Economics (Required)	<b>Grade: 11, 12</b>	1/2 credit
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Students will analyze and study economic concepts necessary for the understanding of individual and household choices, personal finance issues, business and entrepreneurial decisions, and public policy. Students will study economic concepts and principles focused around four content areas: The Market Economy, The National Economy, the Global Economy, and Personal Finance.

introduction to 15 choice,	Introduction to Psychology	Grade: 11, 12	1/2 credit
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This course is an introduction to psychology, the study of the individual. The emergence of psychology as a science, behavioral theories, and structure of the brain, and sensation are among the topics studied. Students with an average grade below a "B" may have difficulty in the class.

Developmental Psychology	Grade: 11, 12	1/2 credit
Prerequisite: Introduction to Psychology		

This course continues in the study of psychology, concentrating on the development of the individual. This class studies the physiological and environmental, nature vs. nurture, development of a person from infancy through adulthood. Students with an average grade below a "B" may have difficulty in the class.

AP U.S. Government and Politics	<b>Grade: 11, 12</b>	1 credit
Prerequisite: B or better in any previous high school level social studies course		

This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students can earn college credit through a successful completion of the AP examination. The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.

AP U.S. History	Grade: 10, 11, 12	1 credit
Prerequisite: B or better in any previous high school level social studies course		

AP U.S. History covers the spectrum of American history from pre-Columbian days to the present. Using chronological and thematic approaches to the material, the course exposes students to extensive primary and secondary sources and to the interpretations of various historians. Class participation through seminar reports, discussions, debates, and role-playing activities is required; special emphasis is placed on critical reading and essay writing to help students prepare for the AP examination scheduled in May. Students can earn college credit through a successful completion of the AP examination. *The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.* 

AP World History	Grade: 10, 11, 12	1 credit
<b>Prerequisite</b> : B or better in any previous high school level social studies course		

This course is recommended for students who are interested in expanding on their earlier exposure to world history. It focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — focusing on the environment, cultures, state-building, economic systems, and social structures — provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. Special emphasis is placed on critical reading and essay writing to help students prepare for the AP examination scheduled in May. Students can earn college credit through successful completion of the AP examination. The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.

## **MATHEMATICS**

Graduation Credit Requirement: 4 credits
Course Requirements: Algebra 1

Geometry

Algebra 2 (or Algebra 2A and Algebra 2B) Math or math-related course in the final year

Prerequisite	Math-related Courses
	Accounting 1 and/or 2
Animal Biology and Plant Biology	Agriculture Leadership
Animal Biology and Plant Biology and Agricultural Leadership or Biology and	Agriculture Entrepreneurship
Agriculture Leadership with Instructor Approval	
B or better in Chemistry (or teacher approval)	AP Chemistry
Intro to Building Trades	Building Trades
	Business Technology 1 and/or 2
	CAD CAM
Medical Basics	Health Care Provider
General Metals	Machine Tool 1, Machine Tool 2
	Everyday Finance
2 semesters of successfully completed Physical Science	Physics
4 semesters of successfully completed math coursework, including Geometry	
2 semesters of successfully completed Physical Science	AP Physics 1
4 semesters of successfully completed math coursework, including Geometry	
Algebra 1	Advanced Science & Technology
Advanced Science and Technology 1, Algebra 1	Advanced Science & Technology II
	Data Science and Social Media
Teacher approval	Algebra 1A

Algebra 1A	Grade: 9	1 credit
Prerequisite: Teacher recommendation		

This course is designed to prepare students to be successful in Algebra 1. Topics that will be covered include: integers, fractions, square roots, step equations, linear equations, the use of variables, and decimals.

Algebra 1 (Required)	Grade: 9, 10	1 credit
Prerequisite: Teacher recommendation		

This course uses collaborative learning to present all Algebra 1 content expectations. Topics that are covered **in depth** include: number systems, expressions, equations, inequalities, and linear, quadratic, and absolute value functions. Topics that are introduced include exponential and polynomial functions.

Geometry (Required)	Grade: 9, 10, 11	1 credit
Prerequisite: Algebra 1		
Geometry may be taken concurrently with Algebra 2 only upon teacher recommendation.		
Consideration will be given to students with a B+ or better average in Algebra 1.		

This course uses collaborative learning to review algebra 1 content and develops logical reasoning which includes extensive work in two- and three-dimensional figures, forming conjectures, and deductive proofs.

Algebra 2 (Required)	Grade: 10, 11, 12	1 credit
Prerequisite: Geometry or teacher recommendation		

This course uses collaborative learning to review the fundamentals developed in Algebra 1 and Geometry, followed by advanced work in systems of equations, matrices, polynomials, relations, families of functions, sequences, quadratic equations, conic sections, logarithms, and introductory trigonometric functions.

Algebra 2A	Grade: 11	1 credit*
Prerequisite: Geometry		
* Students will earn one math credit if they complete both Algebra 2A and Algebra 2B.		

This full-year course covers the first semester content of Algebra 2.

Algebra 2B	Grade: 12	1 credit *
Prerequisite: Algebra 2A		
* Students will earn one math credit if they complete both Algebra 2A and Algebra 2B.		

This full-year course covers the second semester content of Algebra 2.

\*Note: Students will earn one math credit for each course if they complete both Algebra 2A and Algebra 2B. Allowing students to earn two credits over two years provides students more time to master the content of Algebra 2. If a student intends to take Algebra 2 over two years for two credits, but completes just one of the two years, he or she has demonstrated mastery in half the Algebra 2 content and will be awarded only 1/2 credit in Algebra 2.

Statistics and Probability	Grade: 11, 12	1 credit
Prerequisite: Geometry		

This class is an introductory course covering the concepts and methods of statistics, including topics such as variability, data analysis, probability, estimation and hypothesis testing. Many jobs or professions require you to make objective decisions based upon statistical data. To help you make these kinds of decisions, this course shows you how to collect, analyze, and interpret data correctly. The course also shows you how to present data to other people in ways that are clear and accurate.

Pre-Calculus	Grade: 11, 12	1 credit
Prerequisite: Algebra 2		

The purpose of this course is to provide a solid and intense algebraic and trigonometric background for students. Topics include analytic trigonometry, discrete math, complex numbers, analytic geometry, exponential/logarithmic functions, vectors, and parametric equations.

AP Calculus	Grade: 12	1 credit
Prerequisite: Pre-Calculus		

This course introduces differentiation and integration, with an emphasis on applications in the fields of engineering and physics. Calculus extends your ability to solve problems beyond Algebra. *The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.* 

AP Statistics	Grade: 11, 12	1 credit
Prerequisite: Algebra 2		

AP Statistics is a college-level course that introduces students to the concepts and tools used to collect, analyze and draw conclusions from data. This course is aligned to the Advanced Placement curriculum for statistics. The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.

#### **SCIENCE**

**Graduation Credit Requirement: 3 credits** 

Course Requirements: Biology, Physical Science & one additional science course

or completion of a CTE Program

Students who plan to attend a four-year college should take at least four full year science courses to prepare for the general science requirements that most colleges have for all their students to graduate, no matter what the student's selected major might be.

Animal and Wildlife Biology	Grade: 9	1 credit
This course counts as a science credit.		

Animal and Wildlife Biology focuses on the scientific principles that underlie the breeding and husbandry of domesticated farm animals. It includes instruction in genetics, health and nutrition, reproduction, husbandry, comparative animal systems as well as growth and development of domesticated farm animals. Natural resources fundamentals such as wildlife and aquaculture are also included. A service learning project is required that will focus on scientific and social implications of agriculture. This project will have research, written and oral presentation components. FFA membership is strongly encouraged.

Plant and Environmental Biology	Grade: 10, 11, 12	1 credit
Prerequisite: Animal and Wildlife Biology		
This course counts as a science credit.		

Plant and Environmental Biology focuses on the chemical, physical, and biological relationships of crops and the soil nurturing them. It includes instruction in the growth and behavior of agricultural crops and the scientific management of soils and nutrients for maximum plant growth, health, and productivity. Environmental and energy systems as well as natural resources fundamentals such as forestry and water resources are also included. A service learning project is required that will focus on scientific and social implications of agriculture. This project will have research, written and oral presentation components. The research and presentation skills learned in Animal and Wildlife Biology will be expanded. FFA membership is strongly encouraged.

Biology	Grade: 9	1 credit

This course satisfies the life science graduation requirement. It will begin with a comprehensive look into the cellular function and homeostatic conditions of cells. We move on to genetics and inheritable patterns. A comprehensive comparison of the animal and plant kingdom comes next and we then conclude with the human systems.

AP Biology	<b>Grade: 11, 12</b>	1 credit
Prerequisite: B or better in Biology or Animal Biolo	gy and Plant Biology	

The AP Biology course is designed to offer students a solid foundation in introductory college —level biology. By structuring the course around the four big ideas, enduring understandings, and science practices we assist students in developing an appreciation for the study of life and help them identify and understand unifying principles within a diversified biological world. What we know today about biology is a result of inquiry. Science is a way of knowing. Therefore, the process of inquiry in science and developing critical thinking skills is the most important part if this course. At the end of the course, students will have an awareness of the integration of other sciences in the study of biology, understanding how the species to which we belong is similar to, yet different from, other species, and be knowledgeable and responsible citizens in understanding biological issues that could potentially impact their lives. *The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.* 

Advanced Science & Technology I	Grade: 10, 11, 12	1 credit
Prerequisite: Algebra 1		
May be taken as Science elective or Math related course (12th grade).		

Advanced Science and Technology is a S.T.E.M. (Science, Technology, Engineering and Math) class. This class is a multidisciplinary, integrative problem-solving inquiries that foster critical and computationally driven thinking. It is about engaging students with real data in real problems that are approached creatively and collaboratively like the way professional need to work. Students will use GIS (Geographic Information Systems), Robotics and Underwater Drones (ROV) and coding as tools to solve local and worldly problems. Students will work collaboratively using these tools to work through scenarios while learning how to solve problems using the engineering design model. This class will count as a math related course for seniors.

Advanced Science and Technology II	Grade: 11, 12	1 credit
Prerequisite: Advanced Science and Technology 1, Algebra 1		
May be taken as Science elective or Math related course (12th grade).		

Advanced Science and Technology II is a S.T.E.M. (Science, Technology, Engineering and Math) class and a continuation of Advanced Science and Technology 1. STEM 2 is a multidisciplinary, integrative problem-solving, inquiry-based class that fosters critical and computationally driven thinking. It engages students with real data in real problems that are approached creatively and collaboratively in the way professionals need to work. Students will use GIS (Geographic Information Systems) and Remote Sensing, Robotics and Underwater Drones (ROV), 3D Printing, and coding (Simplify 3D, C++, Arduino) as tools to solve local and worldly problems. Students will collaborate using these tools to work through scenarios while learning how to solve problems using the engineering design model. This class can count as a math related course for seniors.

Anatomy and Physiology	Grade: 11, 12	1 credit
Prerequisite: B or better in Biology or Animal Biology and Plant Biology		

Human Anatomy and Physiology is a laboratory-based course that investigates the structure and function of the human body. Topics covered will include the basic organization of the body; biochemical composition; and the major body systems along with the impact of disease on certain systems. Students will engage in many topics and competencies related to truly understanding the structure and function of the human body. Working from the topics of basic anatomical terminology to the biochemical composition of the human body, all the way into great detail of each of the major systems of the body, student will learn through reading materials, study guides, unit worksheets, group work, projects, and labs. High levels of achievement will be in effect. Students will be responsible for proper use of the lab equipment, lap reports, and projects assigned throughout each unit. One of the goals of this course is to prepare students with the skills necessary to be successful in future science classes in college.

<b>Environmental Science</b>	Grade: 11, 12	1 credit
Prerequisite: 2 semesters of successfully completed Biology or Animal & Plant Biology		

Environmental science is the study of the interaction between the physical and biological environment. Emphasis is placed on the formation of the solar system and Earth, and the processes that shaped and formed our Earth as we see it today. The Earth as a whole will be broken down into a series of systems (Carbon/Climate/Water...) that are constantly changing, influencing, and interacting. Students will explore human's dependence on, technological control of, and interaction with these systems.

Physical Science	Grade: 9, 10	1 credit	
Prerequisite: Successful completion of Algebra 1. This course counts as required science			
credit starting with the Class of 2022.			

This course is designed to introduce scientific inquiry processes and physical science principles that meet the essential Next Generation Science Standards (NGSS) curriculum in preparation for SAT standard assessment. This course will address the following topics: experimental design, measurements and ratios, graphical analysis, particle nature of matter, particles in motion, energy, constant velocity, uniform acceleration, and forces.

Physics	Grade: 11, 12	1 credit
Prerequisite: 2 semesters of successfully completed Physical Science		
4 semesters of successfully completed math coursework, including Geometry		
This course meets the graduation requirement for a math-related course in the final year.		

This course is designed for those who wish to develop critical thinking and problem-solving skills through exploring physical systems. Students will be expected to examine physical systems and develop reliable ways of thinking (basic models) that allow them to interpret and predict outcomes for physical systems. Students will be expected to represent their thinking through graphs, maps, diagrams, symbolic relationships, and linguistic interpretations. Through reliable evaluation techniques and interpretation strategies, students can develop a deep conceptual understanding of the concepts. In addition, students will be asked to explore the history and philosophy of the concepts they learn in order to develop views related to the Nature of Science. This will be achieved through the study of motion, forces, and energy.

AP Physics 1	<b>Grade: 11, 12</b>	1 credit
Prerequisite: 2 semesters of successfully completed Physical Science		
4 semesters of successfully completed math coursework, including Geometry		
This course meets the graduation requirement for a math-related course in the final year.		

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound. *The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.* 

Chemistry	Grade: 10, 11, 12	1 credit
Prerequisite: Successful completion of Algebra 1 and Physical Science		

This course is designed for those who wish to develop critical thinking and problem-solving skills through exploring Chemistry. Students will be expected to examine matter and its interactions and develop reliable ways of thinking (basic models) that allow them to interpret and predict outcomes. Students will be expected to represent their thinking through graphs, maps, diagrams, symbolic relationships, and linguistic interpretations. Through reliable evaluation techniques and interpretation strategies, students can develop a deep conceptual understanding of the concepts. In addition, students will be asked to explore the history and philosophy of the concepts they learn in order to develop views related to the Nature of Science. This will be achieved through the study of matter, states of matter, energy, atoms, molecules and chemical compounds and reactions.

AP Chemistry	Grade: 11, 12	1 credit
Prerequisite: B or better in Chemistry (or instructor approval)		
This course meets the graduation requirement for a math-related course in the final year.		

The course is a continuation of Chemistry for those students contemplating college work in the medical fields, sciences, engineering-related majors, and any other area requiring any college chemistry courses. There is an emphasis on electron configurations, bonding, the periodic table, solutions, kinetics, thermodynamics, equilibrium, acids and bases, electrochemistry, and oxidation and reduction. The national AP test and Chemistry CLEP test enable students with high scores to receive free college credit in chemistry at most colleges around the nation. The fee for taking the national AP exam in May will be paid by the school, and taking the test is optional.

#### WORLD LANGUAGE

**Graduation Credit Requirement: 2 credits** 

Spanish 1	Grade: 9, 10, 11, 12	1 credit

This course is an introduction to the Spanish language and culture. It will cover extensive work on the grammatical aspects of the language as well as building a working vocabulary. Students will practice listening, speaking, reading and writing in the target language. This course is designed for, but not limited to, college-bound students.

Spanish 2	Grade: 10, 11, 12	1 credit
Prerequisite: C- or better in Spanish 1		

This course is a continuation of Spanish grammar and vocabulary with the emphasis on oral communication. Students will also develop their reading, writing and listening skills through a variety of activities using authentic media sources and projects to show proficiency.

Spanish 3	Grade: 11, 12	1 credit
Prerequisite: C+ or better in Spanish 2		

Spanish 3 provides students an opportunity to deepen their knowledge base of Spanish vocabulary and grammar as well as use their Spanish skills in both real-life and academic situations. Students will prove their competencies in reading, writing, speaking and understanding the target language using varied time frames and grammatical concepts appropriately (past, present, future, conditional, etc.). This course is designed to prepare students for college level Spanish coursework and is offered as an independent study. To be successful, students must be self-motivated and disciplined.

#### **BUSINESS, MANAGEMENT, AND TECHNOLOGY**

**Graduation Credit Requirement: 1/2 credit** 

Course Requirements: Information Technology 1 -or- Business Technology 1

General Accounting	Grade: 10, 11, 12	1/2 credit
This course may meet the graduation requirement for a math-related course in the final		
vear.		

This course is for students who have a variety of career objectives—beginning vocational preparation for careers in accounting, acquiring accounting knowledge and skill needed for careers in related business fields, or building a foundation on which to continue studying business and accounting at the college level. Students should like to work with figures. The course is designed for students with average and better-than-average grades.

Workplace Accounting	Grade: 10, 11, 12	1/2 credit
This course may meet the graduation requirement for a math-related course in the final		
year.		

This course is designed for students who want an accounting position upon graduation from high school or want to go to college and major in accounting or some phase of business.

The material in the course is designed to help students broaden and improve their knowledge, understanding, and application of accounting competencies. The course includes the use of a computerized approach to solving advanced accounting applications and a hands-on approach to learning how automated accounting systems and spreadsheets function.

Fundamentals of Business	Grade: 10, 11, 12	1/2 credit

This course is recommended for all students considering a career in business. The course includes basic business skills important to all business occupations. These skills are also essential adult life skills. The course is designed to cover the following Business, Management, and Administration segments:

Segment 1: Essential Business Skills (including Word and PowerPoint)

Segment 2: Essential Employment Skills

Segment 3: Microsoft Office Segment 5: Google Suite

Segment 6: Information Management

A teacher facilitated career planning and exploration unit is presented online, which fulfills the state required online learning experience.

<b>Business Entrepreneurship</b>	Grade: 10, 11, 12	1/2 credit
This course may meet the graduation requirement for a math-related course in the final		
year.		

This course is recommended for students considering a business career and those interested in acquiring the necessary skills to operate their own business. This course is designed to enhance the knowledge and skills learned in Business Technology 1 and to introduce students to the concept of entrepreneurship. Students will learn more advanced features of the various computer applications, including the Windows operating system, Windows Explorer, Microsoft Office, and Internet research skills. Students will establish a mock business, which they will use to apply many course topics.

During second semester, students will use business simulation software to gain additional practice with business management, planning, marketing and promotion strategies, financial management, accounting, record keeping and ethical business practices. Students will also examine the steps necessary to create a business plan based on their mock business, which would be used to obtain the necessary financing to start a business.

The course is designed to cover the following Business, Management, and Administration segments:

Segment 4: Professional Development

Segment 7: Entrepreneur

Segment 8: Advanced Computer Applications Segment 9: Financial Analysis and Economics Segment 10: Operations and Business Processes

Segment 11: Business Law

Segment 12: Strategic Management

<b>Everyday Finance</b>	Grade: 9, 10, 11, 12	1/2 credit
This course may meet the graduation requirement for a math-related course in the final		
year.		

This course is designed to provide students with a basic knowledge of several areas of finance that will directly affect their personal lives. Financial literacy teaches students the basics of money management, budgeting, saving, debt, investing, giving and more. That knowledge lays a foundation for students to build strong money habits early on and avoid many of the mistakes that lead to lifelong money struggles.

<b>Computer Applications</b>	Grade: 9, 10, 11, 12	1/2 credit
NOT CURRENTLY OFFERED		
This course fulfills the computer science graduation requirement and the online learning		
experience credit required by the State of Michigan.		

This course is designed to improve students' computer skills and prepare them with the skills to succeed in college and the work force. The course will be taught utilizing teacher-facilitated online learning utilizing the Microsoft Imagine Academy curriculum and will cover the following programs: Microsoft Word, Excel, Access, PowerPoint, and the Internet. The students will participate in the following learning experiences: (1) have the opportunity to interact with other students in authentic online learning activities; (2) use technology tools for online research or online projects; (3) have an opportunity for interactive discussion with an instructor or expert; (4) communicate via threaded discussions with other students inside their school.

Advanced Computer Applications	Grade: 9, 10, 11, 12	1/2 credit
NOT CURRENTLY OFFERED		
<b>Prerequisite: Computer Applications</b>		

In this course students will utilize various software programs as they explore the ever-changing world of technology. Students will also have the opportunity to receive industry level certification utilizing the Microsoft Imagine Academy curriculum (formerly the Microsoft IT Academy). This class is a project oriented independent study class. Students can work toward an MTA or MCSA certifications, which are the core certifications for Information Technology careers. The skills learned in this class will help students better utilize the computer as a tool to create professional looking documents and projects to be used in all aspects of their business and personal lives. Students will be required to complete a research report relevant to the information they are studying. Students can choose to focus on several areas of IT Certification in the following areas: Server, Desktop, Application, Database, or Developer each with several focus and exam areas to concentrate on. This class may be repeated by students in order to earn additional Microsoft Certifications or if students wants to study another area of computers.

#### HEALTH AND PHYSICAL EDUCATION

Graduation Credit Requirement: 1/2 credit Health Education

1/2 credit Physical Education

Course Requirements: Health

**Introduction to Personal Fitness** -or- Swimming

Health (Required) Grade: 9 1/2 credit

Health is a required course for graduation. The course deals with decisions that we make and how they affect our physical, mental and social health. The course covers personal health and wellness, safety skills, nutrition, and substance abuse. Human Reproduction and Sexually Transmitted Infections is an optional section within the health course. Students can be removed from the reproductive unit upon parental request.

Introduction to Personal Fitness Grade: 9, 10, 11, 12 1/2 credit

This course meets the graduation requirement for physical education.

This class is a prerequisite for Advanced Personal Fitness, Athletic Conditioning and Leisure sports and Strength and Conditioning.

In this course, students will learn to assess their present fitness level. Using sound principles of training, each student will follow the established weight training program. This class will use the weight room, as well as other methods of training to increase muscular strength and endurance, cardiovascular endurance, flexibility and body composition. This class is a prerequisite for all other PE classes except swimming.

Advanced Personal Fitness Grade: 10, 11, 12 1/2 credit

Prerequisite: "C" or better in Introduction to Personal Fitness

May NOT take at the same time as Athletic Conditioning

This course is designed for non-athletes or retired athletes who want to continue training. It will take an in-depth look at the components of fitness and nutrition. Other fields of study could include consumer fraud, stress, and weight loss. Students will develop and follow their own weight training program that is approved by the instructor. Other class group workouts will occur, such as; sprints, jump rope, ladders, dot drill, stadium stairs, exercise videos, mini hurdles, ply boxes, core workouts, steppers, cardio runs, etc.

Athletic Conditioning G	Grade: 10, 11, 12	1/2 credit
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Prerequisite: "B" or better in Introduction to Personal Fitness May NOT take at the same time as Advanced Personal Fitness.

Students must be participating in a high school sport or with instructor approval.

This course focuses on building muscular strength and endurance through free weights, machine weights, and strength building activities. Proper lifting technique, safety, and spotting will be emphasized. Cardiovascular fitness activities will also be incorporated. The class is designed for athletes interested in achieving healthy levels of fitness and have a desire for Ogemaw Athletics to be successful. Students will follow a weight and fitness program to improve cardiovascular fitness, muscular strength/endurance, body composition, and flexibility. Students train according to the skills required for successful participation in all interscholastic athletics at Ogemaw Heights.

Leisure Sports	Grade: 10,11, 12	1/2 credit
Prerequisite: Must pass Introduction to Personal Fit	ness with a D+ or better.	

There will be a strong emphasis placed on team and individual competition. Students will be introduced to more post high school leisure time activities. There will be a two-week <u>physical testing</u> period at the <u>beginning and end of the semester</u>. Team sports include; flag football, soccer, basketball, floor hockey, volleyball, badminton, dodgeball, ultimate Frisbee, softball, as well as variations to the listed sports. Student participation is mandatory in all class activities.

Beginning Swimming	Grade: 9, 10, 11, 12	1/2 credit
This course meets the graduation requirement for physical education.		

This course is for the individual with little or no swimming ability, but a great deal of desire to learn. Red Cross learn to swim program will be used.

Advanced Swimming	Grade: 9, 10, 11, 12	1/2 credit
This course meets the graduation requirement for physical education.		

This course is geared toward the <u>confident</u> swimmer with <u>moderate to advanced</u> swim ability. The course will include stroke technique and conditioning as well as safety and rescue techniques.

Sports Officiating	Grade: 11, 12	1/2 credit
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Students will work toward gaining MHSAA officiating certification in a variety of sports. Employment opportunities are possible. Sports may include but not limited to: football, basketball, volleyball, wrestling, softball, and baseball.

## **MUSIC**

Graduation Credit Requirement: 1 credit Visual, Performing, Applied Arts

Course Requirements: All music courses meet the graduation requirement

Symphonic Band Grade: 9, 10, 11, 12 1 credit

Symphonic band plays a variety of music ranging from baroque, classical and romantic transcriptions to modern pop and art music for band. The band year begins with band camp the first week of August. Students are expected to attend band camp. The band plays as a marching band during football season and several other marching events. Attendance at all home football games, parades, performances, and concerts is mandatory. The band performs at evening and weekend concerts, band festivals, graduation and several concerts during the school day each year, all of which are mandatory. Upon occasion, the band will have extra after-school rehearsals which are mandatory. Students' grades are often based on attendance to band events. There is a home practice requirement.

 Jazz Band
 Grade: 9, 10, 11, 12
 1 credit

The Jazz Band will participate in instrumental performances at various events throughout the school year. Students will perform music from various styles including swing, blues, Latin jazz, rock, funk, and brass band. Students enrolled in this class will learn the basics of the jazz style, sound, balance and terminology. Students will be introduced to jazz improvisation and its relationship with scales and chord progressions. Basic proficiency on instrument is required. This is a performance class; therefore, students are expected to attend all rehearsals, sectionals and performances.

Concert Choir Grade: 9, 10, 11, 12 1 credit

This course is offered to students interested in developing their vocal abilities. This group works with four different vocal sections: soprano I, soprano II, Alto and baritone. Emphasis will be on developing good vocal techniques, basic sight-reading skills, basic music theory and developing musicianship both individually and as a group. Music from all different kinds of venues will be covered including classical and popular. There are mandatory performances throughout the year. These include the Christmas concert, choral festival and the spring concert along with after school rehearsals required to prepare for these events.

In addition, students have the opportunity to audition for Chamber Singers. Chamber Singers is an advanced choral group within the concert choir that is selected by auditions in April. This group includes soprano, alto, and baritone singing parts. Emphasis is placed on developing good vocal technique, sight reading skills, and music theory. Chamber Singers performs in a variety of community events, especially during the month of December. Required performances include Christmas and spring concerts, solo ensemble, and choral festival.

#### **ART**

Graduation Credit Requirement: 1 credit Visual, Performing, Applied Arts
Course Requirements: All art courses meet the graduation requirement

Art 1 Grade: 9, 10, 11, 12 1 credit

Art 1 is a full year class where students learn and explore a variety of both two- and three-dimensional art media and techniques. Areas of study may include drawing, color theory, traditional graphic design, papier Mache, group installation, relief print and more. Students will learn to look at and understand both historical and contemporary art works as they learn the four steps of art criticism along with the elements of principles of art. Each lesson is designed with specific criteria, but allows for students creative thinking skills to flourish. A visual journal will be made in class and will have weekly themed assignments. There will be both mid-term and final projects and/or portfolios in conjunction with the exams for completion of the class.

Art 2	Grade: 10, 11, 12	1/2 credit
Prerequisite: Art 1		

Art 2 is a full year class where students have the opportunity to build upon both their two- and three-dimensional media and skills experiences. Students will learn a variety of new media and techniques which may include charcoal, oil pastels, water color paints, colored pencils, printmaking, clay, sculpture, installation and more. Units of study will include more references to art history so that students will begin to make connections between history, culture and the arts. Students will also continue focus on art elements, principles and criticism by looking at and understanding their own art in comparison and contrast with art throughout the ages. Each lesson is designed with specific criteria, but allows for students creative thinking skills to flourish. A visual journal will be made in class and will have weekly themed assignments. There will be both mid-term and final projects and portfolios in conjunction with the exams for completion of the class.

Art 3	Grade: 10, 11, 12	1/2 credit
Prerequisite: "C" or better in Art 2 or teacher approval		

Art 3 is a full year class designed for students to add to their skills and knowledge through the eyes of an artist. Students will continue to enhance their two- and three-dimensional skills throughout the year while studying an artist's habit of mind by researching artists, coming up with their own idea, selecting materials, creating the artwork by engaging and persisting, reflecting and meeting a deadline so the artwork can be shared. Group critiques and portfolio development will be ongoing throughout the year. Each lesson is designed with specific criteria, but allows for students creative thinking skills to flourish. There will be final projects and portfolios in conjunction with the exams for completion of the class.

Ceramics	Grade: 9,10,11, 12	1/2 credit
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Ceramics provides students with the opportunity to develop a basic knowledge of ceramics, hand building, and an introduction to wheel work. The course encompasses all ceramics related skills. Activities will be individualized according to the ability level of each student.

Photography	Grade: 10, 11, 12	1/2 credit
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This course will help the students become well rounded in the fundamentals of digital photography. Four areas of instruction will be emphasized: How cameras work, how composition works, how lighting works, how to use photo editing software. Students will, generally, receive basic instruction, demonstration, and see samples of the desired outcomes, at the beginning of each period. Perhaps the most useful part of classroom instruction will be daily reviews of photos students have shot the previous day(s). They will see what makes a successful photo and what does not.

#### CTE ARTICULATION AGREEMENTS

Students who successfully complete the following courses with a "B" or better **may** receive college credit through Delta College.

Building Trades Machine Tool Health Care Provider Medical Basics

#### Conditions and requirements at **Delta College**:

Credit will be granted only for the Delta College course(s) upon successful completion of the course at Ogemaw Heights High School. This is validated by achieving a minimum grade of "B" or better in the course and the Ogemaw Heights High School teacher should feel confident that the student can successfully complete subsequent courses at Delta College. For more information visit Delta College at <a href="https://www3.delta.edu/artic/?HighSchoolArticulations.html">www3.delta.edu/artic/?HighSchoolArticulations.html</a>.

#### Michigan State Wide Articulation Agreements:

The state of Michigan has articulation agreements with several Michigan colleges for earning college credit in CTE. Visit <a href="https://www.michigan.gov/mde/0,4615,7-140-2629\_68426---">www.michigan.gov/mde/0,4615,7-140-2629\_68426---</a>,00.html for more information.

#### MACHINE TOOL/MACHINE SHOP

Graduation Credit Requirement: 1 credit Visual, Performing, Applied Arts

Course Requirements: All machines courses meet the graduation requirement

General Metals Grade: 9, 10, 11, 12 1 credit

In this a full year course, students will learn the introductory skills in machining and welding including proper operation of engine lathes, vertical mill, drill press, wire feed welding, arc welding, plasma cutting, and oxyacetylene welding. Each student will be given one semester in welding and one semester in machining. Students who take this course will have a basic concept of the manufacturing process as a whole. Upon the proficient completion of this course students will be able to enter into the more advanced Machine Tool 1 and Machine Tool 2 courses.

Machine Tool 1	Grade: 10, 11, 12	2 credits
Prerequisite: C- or better in General Metals or instructor approval		
Articulation: Delta College (see page 29)		
This course meets the graduation requirement for a math-related course in the final year.		

The Machine Tool 1 course is a continuation of the prerequisite General Metals. This course is designed to give students who are going into any manufacturing or engineering field the advanced skills needed in the machine tool environment. The curriculum is based on the National Institute of Metalworking Skills curriculum and Michigan Machine Tool Segments. During the class areas of advanced study will be engine lathe, vertical mill, CNC programming, blueprint reading, and part inspection. Students will be producing parts that fit within a given tolerance.

Machine Tool 2	Grade: 11, 12	2 credits
Prerequisite: C- or better in Machines 1 or instructor approval		
Articulation: Delta College (see page 29)		
This course meets the graduation requirement for a math-related course in the final year.		

The Machine Tool 2 course is based on the exit skills needed for industry or college studies in engineering. Students will be working on projects that are applicable to the level of industry today. The studies will continue to follow the NIMS and Michigan Machine Tool Segments curriculum, with emphasize on a work study the last month of class. Each student who completes the class with a proficient grade will be placed in a local industry for a hands-on experience where they will be using the skills they have gained.

#### **CONSTRUCTION TRADES**

Graduation Credit Requirement: 1 credit Visual, Performing, Applied Arts

Course Requirements: All construction courses meet the graduation requirement

Introduction to Building Trades	Grade: 9, 10, 11, 12	1 credit

This is an entry level course that will prepare individuals with the technical skills and knowledge to lay out, cut, fabricate, erect, install, and repair wooden structures and fixtures, using hand and power tools. Students will learn measurement, safety, project planning, and material identification and use. All students will complete projects in the shop facility and be introduced to the field of residential construction. This course will serve as a pre-requisite for the Building Trades class.

Advanced Wood Technology	Grade: 10, 11, 12	1 credit
Prerequisite: C or better in Intro to Building Trades or instructor approval		
NOT CURRENTLY OFFERED		

This course will cover the field of woodworking in greater detail. Students will learn more advanced joinery and woodworking techniques. Students will be required to incorporate both a door face and a drawer in a project. Student projects will be of a larger scale. Career opportunities in this field will be covered in more detail with a short career research paper being required.

<b>Building Trades</b>	Grade: 10, 11, 12	2 credits
Prerequisite: C+ or better in Intro to Building Trades and instructor approval		
Articulation: Delta College (see page 29)		
This course meets the graduation requirement for a math-related course in the final year.		

This course is an in-depth exploration of residential and light commercial construction. It will prepare individuals to apply technical knowledge and skills in the building and maintaining of residential and light commercial structures and related properties. It will include instruction in masonry, carpentry, electrical, plumbing, HVAC, painting and drywall installation, finish carpentry and other construction related fields through work on a residential home or light commercial building. Career exploration in the construction industry will be included. Job-site safety will be practiced at all times.

Membership in Skills USA is strongly encouraged.

#### DRAFTING AND DESIGN TECHNOLOGY

Graduation Credit Requirement: 1 credit Visual, Performing, Applied Arts

Course Requirements: All CAD courses meet the graduation requirement

CAD CAM
Grade: 10, 11, 12
1 credit
Pre-requisite: Basic computer proficiency recommended or permission of instructor
This course meets the graduation requirement for a math-related course in the final year.

This course introduces 3D parametric modeling and design techniques. Students will learn skills needed to create parametric models and designs of basic to moderately complex parts and assemblies. Students will learn how to then generate technical drawings from these models.

### **AGRICULTURE**

**Graduation Credit Requirement: 3 credits (Science)** 

Course Requirements: Biology - or - Animal and Wildlife Biology and

**Plant and Environmental Biology** 

Animal and Wildlife Biology	Grade: 9	1 credit
This course counts as a science credit.		

Animal and Wildlife Biology focuses on the scientific principles that underlie the breeding and husbandry of domesticated farm animals. It includes instruction in genetics, health and nutrition, reproduction, husbandry, comparative animal systems as well as growth and development of domesticated farm animals. Natural resources fundamentals such as wildlife and aquaculture are also included. A service learning project is required that will focus on scientific and social implications of agriculture. This project will have research, written and oral presentation components. FFA membership is strongly encouraged.

Plant and Environmental Biology	Grade: 10, 11, 12	1 credit
Prerequisite: Animal and Wildlife Biology		
This course counts as a science credit.		

Plant and Environmental Biology focuses on the chemical, physical, and biological relationships of crops and the soil nurturing them. It includes instruction in the growth and behavior of agricultural crops and the scientific management of soils and nutrients for maximum plant growth, health, and productivity. Environmental and energy systems as well as natural resources fundamentals such as forestry and water resources are also included. A service learning project is required that will focus on scientific and social implications of agriculture. This project will have research, written and oral presentation components. The research and presentation skills learned in Animal and Wildlife Biology will be expanded. FFA membership is strongly encouraged.

Agricultural Leadership	Grade: 11, 12	1 credit
Prerequisite: Animal and Wildlife Biology and Plant and Environmental Biology		
(or Biology with Instructor Approval)		
This course meets the graduation requirement for a math-related course in the final year.		
This course does not count as a science credit.		

This course focuses on scientific and social implications of agriculture and natural resources as well as leadership, and career success. It also covers modern business and economic principles involved in the organization, operation, and management of agricultural enterprises. Agricultural Business is the coordination of all activities that contribute to the production, processing, marketing, distribution, financing, and development of agricultural commodities and natural resources. Two service learning projects are required that will focus on scientific and social implications of agriculture. The projects will have research, written and oral presentation components. FFA membership is strongly encouraged.

Agricultural Entrepreneurship	Grade: 12	1 credit
Prerequisite: Animal and Wildlife Biology, Plant and Environmental Biology and		
Agricultural Leadership -or-		
Biology and Agricultural Leadership with Instructor Approval		
This course meets the graduation requirement for a math-related course in the final year.		
This course does not count as a science credit.		

This course focuses on entrepreneurial aspects of agriculture and natural resources as well as leadership, and career success. It also covers modern business and economic principles involved in the organization, operation and management of agricultural enterprises in greater depth than Agricultural Leadership. Two service learning projects are required that will focus on entrepreneurship in agriculture. The projects will include business management records as well as written and oral presentation components. The second semester of this course will involve a work-based learning component. FFA membership and a quality SAE are required.

# Work Based Learning (Formerly known as Cooperative Education Co-Op)

Work Based Learning	Grade: 11, 12	1 credit	
This course counts as an elective. Work-site placement must be related to a course a			
student is currently taking or has successfully taken prior to enrolling in work based			
learning.			

Work Based Learning (WBL) is an experiential method of learning that formally integrates academic study and classroom theory with practical experience at a work site in the community. The program is based on a partnership between school and the community, and involves the participation of students, teachers, employers and employees. Work Based Learning (WBL) provides students with the opportunity to enhance their in-school learning while developing a greater awareness and understanding of the world of work. It also provides the time to explore a number of occupational areas and to develop skills, knowledge and attitudes needed to become productive and satisfied members of society.

### **HEALTH SCIENCE**

Medical Basics	Grade: 10, 11, 12	1 credit
Articulation: Delta College (see page 29)		

How do you choose a health career? This OHHS class has been designed to give students a practical and academic foundation upon which to make a sound decision. **Health care professions offer many opportunities. There is a great demand nationally for skilled medical professionals.** 

#### Students will:

- ◆ Learn basic medical terminology and its application to oral and written communication skills
- Receive instruction related to infection control and safe work practices
- Learn how to interpret medical information from a patient perspective
- Gain knowledge of the structure and functions of the human body as well as diseases and disorders
- Receive instruction in health maintenance and disease prevention
- Receive instruction in basic medical math
- ♦ Obtain certification in CPR/AED for Professional Rescuers and First Aid

Students who plan to take Health Care Provider are required to pass this course, which is designed to provide an academic foundation relative to *all* health professions.

Health Care Provider	<b>Grade: 11, 12</b>	2 credits
Prerequisite: Medical Basics		
Articulation: Delta College (see page 29)		
Uniforms are required at a cost of approximately \$50.00 per set.		
Students are also required to wear athletic shoes with their uniforms.		
A watch with a second-hand is recommended.		
This course meets the graduation requireme	ent for a math-related course in	the final year.

This is an excellent program for students desiring to continue their education in the medical field. Throughout the course students will receive classroom and clinical instruction and experience that will prepare them to take the Michigan Nurse Aide Competency Evaluation Program. A forty-eight-hour clinical experience is provided in a local nursing home. Students must sign a Clinical Student Disclosure Statement. Bussing is provided for the clinical experience. Certified Nursing Assistants can work in a variety of settings throughout their college experience while earning above the minimum wage.

### Students will:

- Recognize and apply various communication skills
- Gain experience as a member of a healthcare team
- Practice legal and ethical behaviors in the healthcare setting
- Gain an understanding of information technology in the healthcare setting.
- Obtain basic knowledge about home health care and hospice.
- Gain competency in personal care skills of the elderly

The culminating activity for this course will provide students with an opportunity to participate in career exploration of local agencies. Students will collectively list and explore the medical related careers our community offers. Transportation will again be provided and students can shadow or learn from local experts on their field and what it entails. The goal of this experience is to enable students to:

- ♦ Explore career options and gain job-specific skills
- Apply academic knowledge and learn employability and technical skills
- Foster work-oriented relationships with adults and develop a sense of personal responsibility

### **OTHER ELECTIVES**

Communications/Media	Grade: 9, 10, 11, 12	1/2 credit
This course meets the graduation requirement for Vi	sual, Performing, Applied	Arts.

This course explores intrapersonal and interpersonal communication. Improvement of self-concept is stressed through knowledge and application of communication skills. Topics covered in this course include a variety of communication tools such as by paper, video, writing, and graphic design. Students will develop interviews and collaboration skills by working in teams for areas such as newsletter, news cast, and mini assignments. Finally, the course will begin to explore careers within the world of communications including radio and television broadcasting, advertising and drama.

Peer to Peer Support (LINKS)	Grade: 9, 10, 11, 12	1/2 credit
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The LINKS class is a peer-to-peer support class where LINK students receive training that will allow them to facilitate positive outcomes in the school experience of a peer with specific learning needs. Regular attendance is vital to being successful in this program.

SAT Prep	<b>Grade: 10, 11</b>	1/2 credit
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The course consists of a mix of lectures and exercises in each session, with ample time allotted for answering sample questions and receiving personalized attention from the instructors. The course is structured so that both the novice and expert test-takers will learn valuable techniques for eliminating wrong answers and choosing correct ones. Each question is discussed in-depth with a step-by-step analysis of the thought processes required to arrive at the correct solution.

Proud Future Michigan Educator	Grade: 11, 12	1/2 credit
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The Proud Michigan Educator is designed to recruit possible "future teachers" by providing experiences and course work that reflects the field of education. Through this experience, the goal is to provide an authentic awareness of educational practices and strategies, along with a thorough overview of the profession. Students will be part of classroom communities where they will be able to observe teacher/student interactions and analyze teaching styles. They will also receive professional mentorship from classroom hosts and committee members. As students' progress through the program, they will obtain a broader vision of teaching by taking on leadership roles in the classroom which will enable them to prepare for their secondary educational program.

<b>Current Events</b>	Grade: 9,10,11, 12	1/2 credit
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This class is designed to provide students with the opportunity to discuss, understand, and explore local, national, international, political economic and social issues in a respectful, meaningful, and active way. Throughout the term, students will stay up to date on current issues and trends. Because the subject of this class is "contemporary," topics will vary considerably depending on the current news cycle. Students will be challenged to defend their opinions on many different issues.

College and Career Readiness	Grade: 11, 12	1/2 credit
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This course is an elective course designed to provide students with the information and skills they need to identify and pursue the college and/or career of their dreams. This course will accomplish those goals via the instruction of organizational skills, decision-making, time management, citizenship, and ethical behavior. Among the various activities in this course, students will engage in learning about themselves, research and present a project on a college/university or technical training program, write a personal mission statement, research potential careers, learn to write resumes and cover letters, fill out job applications, conduct interviews, manage personal finances as well as create a transition portfolio.

Creative Writing	Grade: 10, 11, 12	1/2 credit
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This semester-long course focuses on writing in a variety of genres: creative nonfiction, children's stories, plays, short fiction, and poetry. The purpose for this class is to encourage students to cultivate the habits, attitudes, and flexibility of a professional writer within a supportive environment and professional learning community. Students will practice writing like a reader and reading like a writer. Students will be expected to write with an open mind every day. Students will confer with the instructor, participate in writer response groups, read published authors as models, critically analyze published works, participate in class discussions, keep and regularly write in a writer's notebook, create and update a blog, critique the work of fellow classmates, and reflect on and revise their own writing routinely.

Yearbook	Grade: 11, 12	1 credit
Prerequisite: Instructor approval		

Yearbook will be responsible for publishing the school yearbook. Students will learn to write concise, interesting news stories. Emphasis will be placed on planning the yearbook. Students will explore yearbook issues, gathering news, writing copy, interviewing, editing, proofreading, photography, and selling advertising. Knowledge of English grammar and good writing skills are necessary to this class. **Extra-curricular time is required and grades may be affected by these requirements**. This class may be taken more than once.

Introduction to Theatre &Performance	Grade: 9, 10, 11, 12	1 credit
This course meets the graduation requirement for Visual, Performing, Applied Arts.		

Students in this class will begin to explore the basics of drama and theatre. Students will be learning about the basic elements of dramatic technique such as movement, facial expression and improvisation while at the same time participating in various in-class on stage activities that will enhance understanding of the aforementioned concepts and allow students to explore creative and dramatic expression in informal performances. They will also learn basic design and technical elements and explore theatre related careers. Both class work and stage work will be graded elements in this course. This course may only be taken once.

Advanced Theatre & Performance	Grade: 10, 11, 12	1 credit
Prerequisite: B or better in Introduction to Theatre and Performance or Instructor		
Approval.		
This course meets the graduation requirement for Visual, Performing, Applied Arts.		

Students taking this course will delve more deeply into the elements taught at the Introductory level and also work on the more technical design aspects of dramatic productions. They will explore the multiple genres of theatre including improvisation, drama, comedy, melo-drama, commedia del'arte and musical theatre. The class will require two public performances. One will be in late December, the second will be in May – participation in these performances is mandatory. Extra-curricular time is required and grades may be affected by these requirements. Additionally, students in this course will work to demonstrate leadership skills and help to guide Intro students. Students taking this course will also have the option of preparing pieces for competition at the state level. This class may be taken more than once with teacher approval.

Introduction to Music	Grade: 9, 10, 11, 12	1/2 credit
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Students will be introduced into the technical details of music such as musical notation, intervals, basic harmony, meter, and rhythm. Familiarity with basic music theory will enable students to read and perform at sight as well as to compose melodies with chordal accompaniment.

### Data Science and Social Media Grade: 9, 10, 11, 12 1/2 credit

How did that post grow so popular? Why did it present the data the way it did? How did that impact the way the audience understood the information? How do we get the data to show what we want it to show? This course will introduce concepts and approaches to mining social media data. It focuses on obtaining and exploring those data, mining networks, and mining text from social platforms. Students will learn how to apply previously learned math and data mining concepts to a domain that will likely be familiar to all of them: social media. Students will learn to question, explore, model, represent, and predict with network and textual data from existing social platforms.

<b>Computer Science Principles</b>	Grade: 9, 10, 11, 12	1/2 credit
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CS Discoveries is an introductory course for 9-12th grade students mapped to CSTA standards. The course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user-centered design, and data, artificial intelligence, and machine learning, while inspiring students as they build their own websites, apps, games, and physical computing devices.

### C.O.O.R. CAREER AND TECHNICAL COURSES

Automotive Technology I	Grade: 11, 12	2 credits
This course meets the graduation requirement for a math-related course in the final year.		

This program is mainly a hands-on course designed to familiarize the student with the automotive service and repair industry. The first semester will concentrate on design, production, operation, testing, service, basic hand tools, technical reference materials, cooling systems, lubrication systems, charging and starting system parts, and performance of basic service procedures.

The second semester provides instruction in basic electricity, automotive electrical systems, theory and service. Technician certification on the state and national levels, general work ethics and employment preparation are also addressed. Certificate of completion in Fundamentals, electricity and Automotive Service Excellence (ASE) can be earned by the successful student.

Enrollment at C.O.O.R.'s Career and Technical Education Center offers three educational options for the following college credit: (4<sup>th</sup> year math may also be applied upon successful completion of the program)

- 1. Successfully pass the Accuplacer placement test prior to the beginning of C.O.O.R.'s CTE Automotive Class and earn concurrent credit which is directly transcripted college credit.
- 2. Enroll in C.O.O.R.'s CTE Automotive Class without taking or passing the Accuplacer placement test and earn articulated credit in that class with a "B" or better grade.
- 3. Early-Middle College (pending Accuplacer test)

Second year students have the opportunity to continue their career choice by directly enrolling at Kirtland Community College or expanding their educational options by enrolling in a different program at the C.O.O.R. Career Tech Center.

Cosmetology	Grade: 11, 12	2 credits
This course meets the graduation requirement for a math-related course in the final year.		

This program demonstrates all aspects an individual would need to pursue a career as a cosmetologist/hairstylist. Practical work would include: shampoos, haircuts, styles, straightening, hair color, permanent waves, manicures, facial treatments, wigs, and hairpieces. Theory will prepare the student for state board exam and college level cosmetology. Students who successfully complete the course may earn up to 350 hours of State required "floor time". Throughout the year, students will test their skills in a hair show competition, attend the Michigan Beauty Hair Show and visit a spa. This program also covers career exploration and employability skills.

Enrollment at C.O.O.R.'s Career and Technical Education Center offers two educational options for the following college credit: (4th year math may also be applied upon successful completion of the program)

- 1. Successfully pass the Accuplacer placement test prior to the beginning of C.O.O.R.'s CTE Cosmetology Class and earn concurrent credit which is directly transcripted college credit.
- 2. Enroll in C.O.O.R.'s CTE Cosmetology Class without taking or passing the Accuplacer placement test and earn articulated credit in that class with a "B" or better grade.

Second year students have the opportunity to continue their career choice by directly enrolling at Kirtland Community College or expanding their educational options by enrolling in a different program at the C.O.O.R Career Tech Center.

<b>Public Safety and Corrections</b>	Grade: 11, 12	2 credits
This course meets the graduation requirement for a math-related course in the final year.		

The first semester gives the student an in-depth look at the job and skill sets of a law enforcement officer, including court appearances, patrol, arrest, and a total overview of the responsibilities of a police officer. The 2nd semester moves onto Careers & Juvenile Justice, featuring multiple guest speakers from all aspects of the industry. Throughout the year students will have the opportunity to write police reports along with analyzing the working budget, crime scene investigation, and math problems associated within the law enforcement field. As part of the course students will also receive CPR / First Aid Certification and (AED) Automatic Electronic Defibrillator training.

Enrollment at C.O.O.R.'s Career and Technical Education Center offers three educational options for the following college credit: (4th year math may also be applied upon successful completion of the program)

- 1. Successfully pass the Accuplacer placement test prior to the beginning of C.O.O.R.'s CTE Public Safety Class and earn concurrent credit which is directly transcripted college credit.
- 2. Enroll in C.O.O.R.'s CTE Public Safety Class without taking or passing the Accuplacer placement test and earn articulated credit in that class with a "B" or better grade.
- 3. Early-Middle College (pending Accuplacer test)

Second year students have the opportunity to continue their career choice by directly enrolling at Kirtland Community College or expanding their educational options by enrolling in a different program at the C.O.O.R. Career Tech Center.

Welding	Grade: 11, 12	2 credits
This course meets the graduation requirement for a math-related course in the final year.		

C.O.O.R. CTE Welding program is located at Houghton Lake High School and open to any local high school junior or senior. This program offers a variety of skills including welding, machining and computer aided drafting. After completing this course, a student will have a diversity of entry-level industrial arts employment skills. Students will be eligible for a certificate of completion from C.O.O.R. in Welding & Fabrication along with multiple AWS (American Welding Society) certifications along the way. Students may also choose to participate in American Welding Society National Institute of Metal Working Skills certification testing. Outstanding students will even have the opportunity to compete in a Welding Competition at Ferris State University.

### KIRTLAND COMMUNITY COLLEGE DUAL ENROLLMENT

Beginning with the Class of 2023, all Ogemaw Heights High School on-site dual enrollment course offering from Kirtland Community College will be graded on a 5-point scale.

English Composition I ENG 10303 – Semester 1	Grade: 12	1/2 credit
Location Ogemaw Heights High School		
Prerequisite: Existing college prerequisite/admission requirements. (Accuplacer Test)		

Composition I teaches the writing skills necessary to succeed in communicating in career, college or life. Students will write and revise four formal, structured essays, two impromptu essays, and many informal composition works. The course will introduce students to research skills through a short research project applying writing and computer skills. This course is 3 Kirtland Community College credits.

English Composition II ENG 10403 – Semester 2	Grade: 12	1/2 credit
<b>Location Ogemaw Heights High School</b>		
Prerequisite: Satisfactory (C or better) completion of English Composition I (English		
10303)	_	

A continuation of English Composition I, this course emphasizes writing analytical, critical, and argumentative essays and developing effective thinking skills. The course provides practice in library methods, research techniques, and the documented research essay. This course is 3 Kirtland Community College credits.

Math 12000 Intermediate Algebra – Semester 1	Grade: 11, 12	1/2 credit
Location Ogemaw Heights High School		
Prerequisite: Algebra 1 (C or Better) and (Accuplacer Test/PSAT, SAT Score)		

This course includes the study of the properties of real numbers, basic concepts of algebraic operations, solving and graphing linear and nonlinear functions, systems of equations, complex numbers, quadratic functions, factoring, rational expressions, and basic interpretations of tables and graphs of data. A graphing calculator is required. Prerequisite: MTH 07300 or Algebra 1 (C or better). This course is 4 Kirtland Community College credits.

Math 13000 College Algebra – Semester 2	Grade: 11, 12	1/2 credit
Location Ogemaw Heights High School		
Prerequisite: Math 12000 or requisite met and requisite placement test scores		

This is a one-semester course designed to prepare students for the study of calculus. The topics to be covered include a review of the fundamentals of algebra, relations, functions, solutions, of first- and second-degree equations and inequalities, systems of equations, determinants, binomial theorem, mathematical induction, polynomial functions, and theory of equations, analytic geometry and conic sections, geometric and arithmetical sequences, and series, and miscellaneous topics. Calculators will be used for selected topics. Prerequisite: MTH 12000 or requisite met (Math Credit). This course is 4 Kirtland Community College credits.

<b>Introduction to Psychology PSY 10100 – Semester 1</b>	Grade: 11, 12	1/2 credit
Location Ogemaw Heights High School		
Prerequisite: Met with placement testing (Accuplace	r Test/PSAT, SAT Score)	

This course is a study of human and animal behavior with reference to perception, learning memory, thinking, emotions, intelligence, aptitude, and personality. The need for scientific investigation of behavior is stressed throughout the course. In addition, the behavioral neuroscience, psychodynamic, social/behavioral, cognitive, and humanistic viewpoints are considered for analysis of psychological phenomena.

<b>Interpersonal Communications SPE 11401</b>	Grade: 11, 12	1/2 credit
Location Ogemaw Heights High School		
Prerequisite: Met with placement testing (Accuplacer Test/PSAT, SAT Score)		

Interpersonal Communication is a course aimed at the study and application of interpersonal communication concepts with a focus on perception, verbal and nonverbal messages, listening, empathy, conflict management, and relationships. Students will practice skills to improve their communication competence in their personal, civic, and professional lives.

The American Civil War HIS 20400	Grade: 11, 12	1/2 credit
Location Ogemaw Heights High School		
Prerequisite: Met with placement testing (Accuplacer Test/PSAT, SAT Score)		

This course examines the origins and outcomes of the sectional conflict that split the United States in Two from 1861 to 1865. Emphasis is given to social, political, and military events from the 1840s to the end of Reconstruction.

The Individual and Society HUM 20500	Grade: 11, 12	1/2 credit
Location Ogemaw Heights High School		
Prerequisite: Met with placement testing (Accuplacer Test/PSAT, SAT Score)		

This course examines the perspectives of many social sciences and cultures in order to appreciate the mosaic of American and other societies from a variety of points of view. As several key current social issues and controversies are studied, students will work to illuminate the understanding of their own place in their communities, the larger society, and the modern world.

### SPECIAL SERVICES PROGRAM

Placement in the Special Services program is determined through the Individual Education Planning Team process (IEP). **Students must have a current IEP to access courses in this program.** 

Students must take courses that are aligned to the Michigan Merit curriculum (MMC) to earn a diploma. Some courses offered through the Special Services program count toward a Certificate of Attainment but not toward a diploma.

Courses that do not require a prerequisite can be taken in any order.

Language 3	Grade: 9, 10, 11, 12	1 credit
This course does not count as an English credit requirement for the MMC.		

This course satisfies an English credit for students following a Certificate Curriculum. Emphasis is on improving the language arts skills of basic reading, reading comprehension, writing and communication. Social skills such as listening, taking turns, working together in a positive manner, participating, and minimizing inappropriate behaviors also are addressed in this class.

Language 4	Grade: 9, 10, 11, 12	1 credit
This course does not count as an English credit requirement for the MMC.		

This course satisfies an English credit for students following a Certificate Curriculum. Students with an IEP who are following a Diploma Curriculum may take this class as an English supporting elective, but it does not satisfy diploma requirements for English. Emphasis is on improving the language arts skills of basic reading, reading comprehension, writing and communication. Social skills such as listening, taking turns, working together in a positive manner, participating, and minimizing inappropriate behaviors also are addressed in this class.

Math 1	Grade: 9, 10, 11, 12	1 credit
This course does not count as a math credit requirement for the MMC.		

This course will focus on practical math applications, from balancing a checkbook to getting the best price at a grocery store. Students will explore budgets, including skills required for future independence. This course will also address fractions, decimals, and measurements (both metric and us customary), telling time, identification of money and making change based on individual student needs. Access is based on IEP recommendation. This course does not count as a math credit requirement for the MMC.

Math 2	Grade: 9, 10, 11, 12	1 credit
This course does not count as a math credit requirement for the MMC.		

This is a full year course designed for students who need remediation before taking Algebra. This course will focus on computation of whole numbers, fractions, decimals and integers. The student will also be introduced to exponents and square roots. Access is based on IEP recommendation. This course does not count as a math credit requirement for the MMC.

Math 5 - Geometry Concepts	Grade: 10, 11	1 credit
This course is designed for students with a current IEP.		
Prerequisite: Math 3 and Math 4 (Algebra Concepts A and B) or Algebra 1		

This course uses an integrated math approach to teach the essential geometry content expectations. This will fulfill the Geometry graduation requirement.

Science 1—Biology	Grade: 9, 10, 11, 12	1 credit
This course does not count as a science credit requirement for the MMC.		

This course focuses on the study of living things, how they relate to one another, and how they affect the well-being of people. Content includes: Cells and energy; genetics; simple to complex organisms; the recycling of substances needed for life (oxygen, carbon dioxide, nitrogen, water); environments and resources; evolution; and human body systems.

Science 3—Earth Science	Grade: 10, 11, 12	1 credit
This course does not count as a science credit requirement for the MMC.		

This course looks at the relationship between earth and space. Students will study the basics of geology, oceanography, meteorology and astronomy. Emphasis will be on how changes and interactions of the Earth's land, water and air affect our lives. Chemistry and physical science units are included.

Social Studies 1 – World History/Geography	Grade: 9, 10, 11, 12	1 credit	
This course does not count as a social studies credit requirement for the MMC.			

This course satisfies a social studies credit for students following a Certificate Curriculum. Students with an IEP who are following a Diploma Curriculum may take this class as an elective. Emphasis is on improving academic skills through the awesome content of World History and Geography including the physical features and variety of cultures in our world.

Social Studies 2 – U.S. History/Geography	Grade: 9, 10, 11, 12	1 credit
This course does not count as a social studies credit requirement for the MMC.		

This course satisfies a social studies credit for students following a Certificate Curriculum. Students with an IEP who are following a Diploma Curriculum may take this class as an elective, but it does not satisfy diploma requirements for social studies. Emphasis is on improving academic and social skills, while supporting IEP goals through the awesome content of US History and Geography. We begin with the first Americans who arrived thousands of years ago and will continue through history to the here and now, including a focus on current events. We will study the physical and cultural geography of our great nation. US Government content, including the Core Democratic Values and Taxation, will be examined in this class.

<b>Community Based Instruction (CBI) Work Experience</b>	Grade: 11, 12	2 credits
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The CBI experience is a partnership between local business and school personnel to facilitate community-based work experiences for students to assist them in evaluating potential career options. Students will draw upon real life experiences in the work environment to acquire authentic skills necessary for post-secondary transition.

Life Centered Career Education 1 (LCCE1)	Grade: 11, 12	2 credits	
This course counts as an English and Math credit requirement for a Certificate of Attainment.			

This course is designed to assist students in becoming productive workers and independent adults. This will be accomplished through collaboration with parents, other educators, community service personnel and the business community. It is comprised of three curricular domains: Daily living skills, personal social skills, and career preparation.

<b>Life Centered Career Education 2 (LCCE2)</b>	Grade: 11, 12	2 credits	
This course counts as an English and Math credit requirement for a Certificate of Attainment.			

This course is designed as a continuation of Life Centered Career Education (LCCE1)

Academic Strategies	Grade: 9, 10, 11, 12	1 credit

Academic Strategies is designed to provide students with a current IEP the opportunity to seek additional help and time to complete general education coursework. Students also will be required to complete assigned curriculum intended to improve academic study skills, organizational skills, work habits, career planning and self-management.

### **EDUCATION DEVELOPMENT PLAN (EDP)**

An Education Development Plan (EDP) provides ongoing documentation of an individual's career and educational decisions and a plan of action that guides the learner in accomplishing these goals. As middle school and high school students develop their EDPs, they learn a decision-making process. They will continue to use these same career decision-making strategies as they progress in the education/training process, enter employment, and change careers throughout their lifetime.

The following general principles are important to consider in defining EDPs.

- The primary emphasis of the EDP is the learner's statement of career goals and a plan of action for reaching them.
- The EDP is learner-centered with each learner taking an interactive role in its development.
- EDPs require updating at least annually and provide for a progression of planning activities as the learner advances through the grades.
- All learners may benefit from participating in an EDP process.
- To be effective, EDPs are dependent upon a larger career development process that includes career pathways, career awareness and exploration, and career assessment.

These basic elements are recommended to be part of all EDPs:

- 1. Career Goal(s): Each learner identifies a career pathway goal(s). As students mature, they will also identify specific job titles.
- 2. Education/Training Goal(s): The learner identifies the level of educational preparation he or she wants to attain. Options include on-the-job training, military service, apprenticeship programs, trade and technical education programs, certificate programs or 2-year associate degree programs offered by community colleges, 4-year university programs, and advanced university degree or professional preparation programs.
- Assessment Results: The learner analyzes assessments and summarizes the
  results in a few words, highlighting the information that is relevant to making career
  decisions. Students can use results of assessments such as PSAT or WorkKeys or
  online assessments to guide them.
- 4. Plan of Action: The learner lists career awareness and career exploration activities along with work-based learning activities, which may include volunteer or work-related experiences, job shadowing, or mentorship programs. The learner also makes course selections that will prepare him or her for continuing education and achievement of career goals. The student may indicate plans to apply to colleges, universities, or other training facilities and to secure financial assistance.
- 5. Parent Consultation and Endorsement: Parents of high school students should have the opportunity to review and endorse their child's EDP. Parents may request information regarding employment trends and the education and skill requirements needed to prepare for successful employment.



# OGEMAW HEIGHTS HIGH SCHOOL FOUR-YEAR EDUCATIONAL PLAN

N	AME CAREE	R GOAL _	
C	AREER PATHWAY		
	9 <sup>th</sup> GRADE – FRESHMAN YEAR	<u>Credit</u>	Graduation Requirements Class of 2025 & Beyond
1.	English 9	1	English 4 credits Social Studies 3 credits
2.	World History/Geography	1	Math 4 credits
3.	Algebra 1 <b>or</b> Geometry	1	Science 3 credits
4.	Biology <b>or</b> Animal/Wildlife Biology	1	Physical Education ½ credit Health ½ credit
5.	Health Intro Personal Fitness <b>or</b> Swir	n ½ + ½	Visual/Applied Arts 1 credit
6.			World Language 2 credits Elective Credits 4 credits
			On-line Learning Experience
	10 <sup>th</sup> GRADE – SOPHOMORE YEAR	<b>0</b> II.	
,	Francisk 40 on Day AD Francisk	<u>Credit</u>	Credits required for graduation 22
1.	3	1	Compile a list of the
2.	U.S. History/Geography <b>or</b> AP U.S. History	1	alternate courses you
3.	Geometry or Algebra 2	1	would like to take if your first choices are not
4.	Physical Science <b>or</b> Plant/Environmental Biology	1	available. List these
5.			courses in priority order.
6.			It may be necessary to substitute one of these
	11th GRADE – JUNIOR YEAR		courses for a course
		<u>Credit</u>	you selected if there are
1.	English 11 or AP Language	1	schedule conflicts.
2.	Government Economics	1/2 + 1/2	Alternates (in priority order)
3.	Algebra 2 or Algebra 2A or Pre-Calc. or AP Stats or KCC Alg.	1	Alternates (in priority order)
4.	Physical Science or Elective Science	_ 1	
5.			
6.			
	40th OD ADE OF WORKER		
	12 <sup>th</sup> GRADE – SENIOR YEAR	<u>Credit</u>	
1.	English 12 <b>or</b> AP Literature or KCC Comp.	1	
2.	Math <b>or</b> Math-Related	1	
3.		- '	
<ol> <li>4.</li> </ol>			
<del>4</del> . 5.			
6.			

Universities recommend a minimum of 3 core academic courses in Grade 12.

### CAREER DEVELOPMENT CHECKLIST FOR PARENTS

- ✓ Learn what your child likes to do. Identify hobbies, interests, favorite academic subjects, and after school activities. Think about careers that would fit.
- ✓ Discuss results of aptitude tests and career interest inventories with your child.
- ✓ Discuss the things that you enjoy about your career with your child.
- ✓ Provide a positive role model by sharing your personal career experiences.
- ✓ Arrange for your child to talk to people working in career fields he or she is interested in exploring.
- ✓ Be supportive of your child's decisions and choices and realize they may change. Think of career development as a life-long process.
- ✓ Suggest that your child explore career opportunities in non-traditional career fields those that were once considered only for males or females.
- ✓ Find out what Career Preparation activities and information are available at your school and in your community.
- ✓ Ask a school counselor or teacher where you can find additional career information.
- ✓ Ask a school counselor how you can use Xello.
- ✓ Attend career-oriented events with your child.
- ✓ Start a career folder and collect all kinds of information on careers from newspapers, magazines, the Internet, conferences, etc. Visit the library to learn what resources are available there.
- ✓ Help your child prepare a four-year course plan that includes a variety of academic courses, career and technical education courses, and other electives. Be sure technology skills are included in the courses selected.
- ✓ Consider internships, mentorships, job shadowing, cooperative education, on-the-job training, career consultations, and volunteer activities as part of your child's career preparation.
- ✓ Help your child maintain a career portfolio. Include documentation of academic skills, personal management skills, and teamwork skills, attendance records, achievement test scores, work samples, a resume, awards, certificates, etc.
- ✓ Discuss how your child can develop and document employability skills. Point out the importance of a good academic record and attendance record. Help your child learn responsibility by assigning household chores and encouraging participation in neighborhood cleanups and community volunteer activities.
- ✓ Discuss the benefits of participating in a variety of school or community activities.
- Explore a variety of training opportunities available to high school graduates including university training, community college training, and on-the-job or specialized training.

### **CAREER PATHWAYS**

In 1998 the Michigan Department of Education and the Michigan Department of Career Development introduced the Career Preparation System. The System was enacted with the simple belief that sooner or later all students will seek employment. Economic independence should be a goal for all students and certainly a goal for all parents.

Career Pathways, like Education Development Plans (EDPs), are key components of the larger Career Preparation System. The State of Michigan has adopted the concept of six different Career Pathways. These are six broad groupings of careers that share similar characteristics and whose employment requirements call for many common interests, strengths, and competencies. The groupings encompass the entire spectrum of career options, providing opportunities for all students and all ability levels.

Use of the Career Pathways allows the learner to map out the relationships between course offerings, in-school activities, out-of-school experiences, and additional training following high school graduation. Career Pathways allow students to project the necessary training for different clusters of jobs. Career Pathways are not to be viewed as tracks or trenches but as a means of looking at the aligned steps and experiences that are appropriate in developing the learner's education and employment plan.

- Career Pathways provide a plan for all students, regardless of their interests, abilities, talents, or desired levels of education. All pathways have equal dignity.
- Career Pathways provide all students with areas of focus, along with flexibility and a variety of ideas to pursue as they make decisions regarding course selections.
- Career Pathways allow students to see greater relevance between their selected classes and their future careers and help them understand the transfer of skills and experiences from school to the workplace. These connections result in improved student achievement and greater student interest.
- Career Pathways help parents and other adults with parenting responsibilities provide better assistance to students as they discuss careers and select classes.
- Integrating Career Pathways into the curriculum improves student attendance, retention, achievement, career decision-making, and career goal attainment.
- Career Pathways help students become aware of the broad range of career options available and of the need to continue learning throughout their adult lives to be prepared for career opportunities in a rapidly changing workplace.



# ARTS AND COMMUNICATIONS

Are you artistic? musical? a creative thinker? Are you imaginative, innovative, and original? Do you like to communicate ideas? Are you skilled in writing? Do you seek opportunities for self-expression through singing, dancing, or acting? Do you like making crafts, drawing, or taking photos? This may be the career pathway for you!

### Careers in this pathway are related to the arts and entertainment including:

- humanities
- communications
- the performing arts
- visual, literary, and media arts

### Personal characteristics for this pathway include the ability to:

- play a musical instrument
- demonstrate good writing skills
- entertain others through singing or acting
  - seek opportunities for self-expression
    - find multiple solutions to a problem
      - do oral reports or speeches well

- Art Club
- art lessons
- music lessons
- dance classes
- Student Council
- photography classes
- school plays and musicals
- volunteer work at the Victorian Art Fair
- 4-H sewing, knitting, crocheting, basket weaving
- 4-H dance, performing arts, cake decorating, ceramics
- volunteer work for the Kirtland Performing Arts program







# ARTS AND COMMUNICATIONS

**Arts and Communications** careers are related to the humanities, the performing, visual, literary, and media arts. Samples of careers in this pathway are listed below. To find out more about these careers, use Career Cruising www.careercruising.com or the *Occupational Outlook Handbook* <a href="https://www.bls.gov/oco/">www.bls.gov/oco/</a> or the *Occupational Information Network* O\*NET Online http://online.onetcenter.org/.

Actor/Actress

Advertising Agent

Advertising Copywriter

**Animation Artist** 

Archeologist

**Archivist & Curator** 

Audiovisual Technician

Author

Bookbinder

**Broadcast Technician** 

College Administrator

College Instructor

Commercial Artist

Dancer

Draftsman

Elementary School Teacher

**Fashion Designer** 

Floral Designer (Florist)

**Graphic Designer** 

Illustrator

Interior Designer

Interpreter & Translator

Journalist

Manufacturing Painter

Merchandise Displayer

Model

Musician & Composer

Painter & Sculptor

Paperhanger

Photo Process Worker

Photographer

Potter

**Printing Occupations** 

Proofreader

**Public Relations Specialist** 

Radio & Television Announcer

Radio Operator

Secondary School Teacher

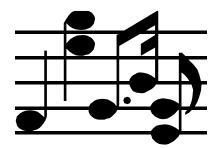
Sports Professional

**Technical Writer** 

**Telecommunications Analyst** 

Web Developer









# BUSINESS, MANAGEMENT, MARKETING AND TECHNOLOGY

Do you enjoy being a leader, organizing people, planning activities, and talking? Do you like to work with numbers or ideas? Do you enjoy carrying through with an idea and seeing the end product? Do you like things neat and orderly? Would you enjoy balancing a checkbook, following the stock market, holding an office in a club, surfing the Internet? Can you convince others to buy or use a product or service? This may be the career pathway for you!

### Careers in this pathway are related to all aspects of business including:

- · economics
- entrepreneurship
- human resources
- marketing and sales
- business administration
- finance and accounting
- computer and information systems

### Personal characteristics for this pathway include the ability to:

- enjoy being the leader
- · use computer programs easily
- · demonstrate good skills in math
- be comfortable asking others to buy products to help with fundraising
- enjoy helping others to plan events for a school, church, or neighborhood

- join Business Professionals of America (BPA)
  - read business magazines and newspapers
    - · work in an office or retail business
      - · serve as an officer of a club
        - join the Octagon club

          - join an athletic team
          - join Student Council
            - join FFA







# BUSINESS, MANAGEMENT, MARKETING AND TECHNOLOGY

Business, Management, Marketing, and Technology careers are related to all aspects of business including accounting, business administration, finance, information processing, and marketing. Samples of careers in this pathway are listed below. To find out more about these careers, use Career Cruising www.careercruising.com or the Occupational Outlook Handbook www.bls.gov/oco/ or the Occupational Information Network O\*NET Online http://online.onetcenter.org/.

Accountant & Auditor

Actuary

**Advertising Agent** 

Advertising Copywriter

Airport Manager

Air-Traffic Controller

Assessor

Audiovisual Technician

Auto Parts Service Clerk

Auto Salesperson

Bank Teller

Bill & Account Collector

Billing Clerk

Bookkeeper

**Brokerage Clerk** 

**Building Manager** 

Casino Industry Occupations

City Manager

Clerical Supervisor

College Administrator

Controller

**Computer Operator** 

Computer Programmer

Computer Security Professional

Computer Service Technician

Computer Systems Analyst

Counter Clerk

Court Administrator

Court Reporter

Data Entry Clerk

Dispatcher

Duplicating Machine Operator

E-Commerce Manager

**Economist** 

File Clerk

Financial Analyst

Financial Institution Manager

Food Service Manager

Health Administrator

Hotel/Motel Manager

Human Resource Manager

Information Systems Manager

Insurance Adjuster Insurance Agent

Insurance Claims Clerk

Legal Assistant

Loan & Credit Clerk

LAN Administrator

Manufacturers' Representative

Manufacturing Inspector

Market-Research Analyst

Mathematician

Medical Records Personnel Merchandise Displayer

Merchant Marine Officer

Messenger

Meter Reader

Microcomputer Specialist

Office Machine Operator

Office Machine Repairer

Payroll Clerk

Personnel Clerk

Photo Process Worker

Placement Specialist

Political Scientist

Postmaster & Mail Supervisor

**Production Coordinator** 

Purchasing Agent

Railroad Conductor

Real Estate Agent

Real Estate Appraiser

Receptionist

Retail Buyer

Retail Sales Agent Retail Sales Manager

Sales Engineer

School Administrator

Secretary

Shipping & Receiving Clerk

Statistician

Stock Clerk

Stockbroker

Survey Worker

Tax Preparer

Telephone Operator

Telephone Installer & Repairer

Travel Agent

Underwriter

Wholesale Buyer

Wholesale Sales Manager

Word Processor







# ENGINEERING/MANUFACTURING AND INDUSTRIAL TECHNOLOGY

Are you mechanically inclined and practical? Do you like reading diagrams and blueprints and drawing building structures? Are you curious about how things work? Can you use tools with exactness and accuracy? Do you enjoy building, fixing, or repairing things? Do you like to discover, research, or solve problems? Would you enjoy painting a house, repairing cars, wiring electrical circuits or woodworking? This may be the career pathway for you!

# Careers in this pathway are related to technologies necessary to design, develop, install or maintain physical manufacturing systems:

- construction trades and related industries
  - engineering and related areas
    - manufacturing technology
      - mechanics & repairers
      - precision production
        - electronics

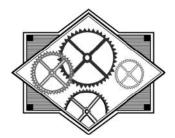
### Personal characteristics for this pathway include the ability to:

- be familiar with geometry, algebra and some physics
- want to see immediate results from the work performed
- use tools and mechanical equipment with little help from others
  - enjoy activities that involve using tools, machinery
    - like to find solutions to difficult problems

- join Skills USA
- MITES Competition
- · build or refinish furniture
- Habitat for Humanity Volunteer
- repair small electrical appliances
- Delta Technology Solutions Competition
- read mechanical or automotive magazines
- do home repairs including plumbing and electrical wiring







# ENGINEERING/MANUFACTURING AND INDUSTRIAL TECHNOLOGY

**Engineering/Manufacturing and Industrial Technology** careers are related to technologies necessary to design, develop, install, or maintain physical systems. Samples of careers in this pathway are listed below. To find out more about these careers, use Career Cruising <a href="www.careercruising.com">www.careercruising.com</a> or the Occupational Outlook Handbook <a href="www.bls.gov/oco/">www.bls.gov/oco/</a> or the Occupational Information Network O\*NET Online <a href="http://online.onetcenter.org/">http://online.onetcenter.org/</a>.

Aircraft Pilot Air-Traffic Controller Alarm Service Technician Architect Assembly Line Worker Auto Body Repairer Auto Mechanic Auto Service Advisor Biomedical Engineer Brickmason & Stonemason **Building Maintenance** Cabinetmaker Carpenter Carpet Installer Cement Mason Chemical Engineer Chemist Civil Engineer Climate Control Mechanic Construction Inspector Construction Laborer Crane & Hoist Operator **Cutting Machine Operator** Drafter Dry Wall Installer Electrical Engineer

Freight & Material Handler Furnace Operator Furniture & Wood Finisher Grinding Machine Operator Heavy Equipment Operator Highway Maintenance Worker Industrial Engineer Industrial Truck Operator Institutional Housekeeper Insulation Worker Jeweler and Watch Repairer LAN Administrator Laser Technician Lathe Operator Locksmith Logging Worker Machine Tool Setter Machinist Marine Engineer Manufacturers' Representative Manufacturing Engineer Manufacturing Inspector Mechanical Engineer Metal Heater Metallurgical Technician Metal Roller & Finisher Millwriaht Miner Mold Maker/Coremaker

**Nuclear Engineer** Oil & Gas Drilling Worker Packaging Machine Operator Paperhanger Patternmaker & Model Maker Petroleum Technician Plumber and Pipe Fitter Polisher & Buffer Power Station Operator Printing Press Operator **Production Coordinator** Punch-Press Operator Railway Equipment Repairer Rigger Robot Technician Roofer Safety Engineer Sailor and Deckhand Sawver Sheet Metal Worker Small Engine Repairer Software Engineer Stationary Engineer Structural Iron Worker Surveyor Telephone Installer & Repairer Tile Setter Tool and Die Maker Truck Driver Upholsterer **Utilities Lineperson** 



Electrician

Floor Layer

Flight Engineer

**Electronics Technician** 

Farm Equipment Mechanic



Network Engineer



Welder



## **HEALTH SCIENCES**

Do you enjoy helping people? Do you like to care for people or animals that are sick? Do you want to help them stay well? Are you interested in diseases and in how the body works? Do you read books or watch programs about medicine or science? Would it be fun to learn first aid, volunteer at a hospital or veterinary clinic? This may be the career pathway for you!

# Careers in this pathway are related to the promotion of health and the treatment of injuries, conditions, and disease including:

- nursing
- dentistry
- medicine
- physical fitness
- diet and nutrition
- veterinary sciences
- therapy and/or rehabilitation
- research, prevention, and treatment

### Personal characteristics for this pathway include the ability to:

- · be interested in health issues
- demonstrate ease when working with people
- care about the well-being of people and animals
  - be interested in learning how the body works
    - demonstrate good skills in science

- HOSA (Health Occupation Students of America)
  - volunteer for a community service program
    - participate in physical fitness programs
      - do volunteer work for the Red Cross
      - read medical or scientific magazines
        - volunteer at a health care facility
          - 4-H food and nutrition club
            - participate in athletics
            - be an athletic trainer







## **HEALTH SCIENCES**

**Health Sciences** careers are related to the promotion of health as well as the treatment of injuries, conditions, and disease. Samples of careers in this pathway are listed below. To find out more about these careers, use Career Cruising <a href="https://www.careercruising.com">www.careercruising.com</a> or the Occupational Outlook Handbook <a href="https://www.bls.gov/oco/">www.bls.gov/oco/</a> or the Occupational Information Network O\*NET Online <a href="https://online.onetcenter.org/">https://online.onetcenter.org/</a>.

**Animal Caretaker** 

**Biochemist** 

Biological Scientist Biomedical Engineer

Biomedical Equipment Technician

Chiropractor

Clinical Laboratory Worker

Dental Assistant Dental Hygienist

**Dental Laboratory Technician** 

**Dentist** 

Diagnostic Medical Sonographer

Dietetic Technician

Dietitian

**Dispensing Optician** 

Electrocardiograph Technician

Electroencephalograph Technician

**Emergency Medical Technician** 

Health Administrator Home Health Aide Industrial Hygienist Laser Technician

Licensed Practical Nurse

Medical Assistant

Medical Records Personnel

Medical Special Procedures Technologist

Mortician

**Nuclear Medicine Technologist** 

Nurse Aide/Orderly Nurse Anesthetist

Nursing Home Administrator

Occupational Therapist

Occupational Therapy Assistant

Optical Laboratory Technician Optometric Assistant

Optometrist

Orthotist & Prosthetist

**Pharmacist** 

Pharmacy Technician Physical Therapist

Physical Therapist Assistant & Aide

Physician Physicist

Physician's Assistant

Podiatrist Psychiatrist Psychologist

Radiologic Technician

Registered Nurse

Respiratory Therapist and Technician

Speech-Language Pathologist &

Audiologist

Surgical Technician

Veterinarian

Veterinary Assistant







### **HUMAN SERVICES**

Are you friendly, open, outgoing, understanding, and cooperative? Do you like to work with people to solve problems? Is it important to you to do something that makes life better for other people? Do you enjoy communicating new ideas to others? Do you like to help friends with family problems? Do you like reading, storytelling, traveling, or tutoring young children? This may be the career pathway for you!

### Careers in this pathway are related to economic, political, and social systems including:

- military
- education
- hospitality
- government
- · social services
- leisure and recreation
- child and family services
- religion and related careers
- · law enforcement and legal education

### Personal characteristics for this pathway include the ability to:

- demonstrate good writing skills and good speaking skills in front of a group
  - be interested in helping people solve their problems
    - · interact with people in a friendly manner
      - enjoy helping people learn new skills
      - do several things at the same time
        - prefer working with people

- · tutoring students
- being a scout leader
- · serving as a peer counselor
- coaching children in sports activities
- volunteering for recreational programs
- being an athletic team member, manager, or trainer
- volunteering for Ogemaw County Services programs
  - volunteering at the library or for reading programs
    - volunteering as a counselor at a youth camp
    - babysitting or providing child care services

      - planning family recreational activities
        - · officiating athletic events





### **HUMAN SERVICES**

**Human Services** careers are related to child care, education, hospitality, and the economic, political, and social systems. Samples of careers in this pathway are listed below. To find out more about these careers, use Career Cruising <a href="www.careercruising.com">www.careercruising.com</a> or the Occupational Outlook Handbook <a href="www.bls.gov/oco/">www.bls.gov/oco/</a> or the Occupational Information Network O\*NET Online <a href="http://online.onetcenter.org/">http://online.onetcenter.org/</a>.

Activities Therapist Administrative Law Judge Amusement Park Attendant

Anthropologist

Baker Bank Teller Barber Bartender

Bellhop & Baggage Porter

Bicycle Repairer Building Manager

Bus Driver Cannery Worker Child Care Worker

Clergy

College Administrator College Instructor Compliance/Enforcement

Inspector
Cook & Chef
Corrections Officer
Cosmetologist
Court Administrator
Custom Clothing Maker

Dispatcher

Driver/Sales Worker
Driving Instructor

Elementary School Teacher Employment Counselor Equipment & Vehicle Cleaner

F.B.I. Agent Fire Fighter

Fire Fighting Supervisor

Fire Inspector Flight Attendant

Floral Designer (Florist)

Food Drier & Roaster Food Preparation Worker Food Service Manager Guard

Halfway House Manager

Historian

Hotel/Motel Manager Human Resource Manager Industrial Sewing Machine

Operator

Industrial Traffic Manager Institutional Housekeeper

Interior Designer

Interpreter & Translator Jeweler & Watch Repairer

Judge

Laundry/Dry Cleaning Worker

Lawyer Librarian

Library Technician & Assistant

Locksmith Mail Carrier Mail Clerk

Marriage Counselor

Meat Cutter

Merchant Marine Officer

Meter Reader

Nursing Home Administrator Packaging Machine Operator Parking Enforcement Officer

Parking Lot Attendant Personnel Clerk

Placement Specialist
Police Officer and Detective

Police Supervisor

Polygraph Examiner

Postal Clerk

Postmaster & Mail Supervisor

Private Investigator

Probation & Parole Officer

Psychiatric Aide & Technician

Psychiatrist Psychologist

Public Relations Specialist

Recreation Worker Refuse Collector Religious Worker School Administrator School Counselor

Secondary School Teacher

Sheriff & Bailiff Shoe Repairer Social Service Aide Social Worker Sociologist

Special Education Teacher

Speech-Language Pathologist &

Audiologist Sports Professional

Substance Abuse Counselor

Taxicab Driver Teacher Aide Travel Agent Truck Driver Upholsterer

Urban & Regional Planner

Usher

Vocational Education Teacher Vocational Rehabilitation

Counselor Waiter/Waitress

Welfare Eligibility Worker







# NATURAL RESOURCES **AND AGRISCIENCE**

Are you a nature lover? Are you practical and curious about the physical world? Are you interested in plants and animals? Do you like to be physically active? Are you concerned about the environment? Do you like to participate in outdoor activities? Do you enjoy hunting or fishing? Do you like to garden or mow the lawn? This may be the career pathway for you!

### Careers in this pathway are related to nature and agriculture including:

- wildlife
- forestry
- fisheries
- horticulture
- earth sciences
- natural resources
- agriculture & agriscience
- · environmental conditions

### Personal characteristics for this pathway include the ability to:

- demonstrate interest in the care of our environment
  - enjoy working with animals
    - prefer working outdoors
  - · be interested in nature and animals
  - · work in very cold or very hot weather conditions

- 4-H swine, rabbits, goats, beef, dairy, horses, sheep, and poultry
- outdoor activities including camping, hiking, fishing, and hunting
  - participate in activities to control air or water pollution
    - 4-H gardening and 4-H food and nutrition
    - study plants in gardens, parks, or forests
    - read farm or environmental magazines
      - · participate in recycling projects
        - · study the habits of wildlife
          - - · care for animals
              - join FFA







## NATURAL RESOURCES AND AGRISCIENCE

Natural Resources and Agriscience careers are related to natural resources, agriculture, and the environment. Samples of careers in this pathway are listed below. To find out more about these careers, use Career Cruising <a href="https://www.careercruising.com">www.careercruising.com</a> or the Occupational Outlook Handbook <a href="https://www.bls.gov/oco/">www.bls.gov/oco/</a> or the Occupational Information Network O\*NET Online <a href="http://online.onetcenter.org/">http://online.onetcenter.org/</a>.

Agricultural Engineer

Agricultural Journalist

Agricultural Sales

Agricultural Scientist

Agriculture Teacher

**Animal Caretaker** 

**Animal Scientist** 

Astronomer

**Biochemist** 

**Biological Scientist** 

**Botanist** 

**Cannery Worker** 

Chemical Technician

**Conservation Officer** 

Cooperative Extension Service Worker

Dairy Herdsman

**Ecologist** 

**Environmental Public Relations** 

Farm Equipment Mechanic

Farm Supervisor

Farm Worker

Farmer & Farm Manager

Field Inspector

Fish and Game Warden

Food Drier & Roaster

Forester & Conservationist

Forestry Technician

Gardener

Geographer

Geologist

Geophysicist

Grain & Feed Miller

Groundskeeper

Horse Trainer

Horticultural Nursery Worker

Hydroponics Technologist

Landscape and Nursery Manager

Landscape Architect

Logging Worker

Marine Biologist

Meteorologist

Miner

Oceanographer

Occupations in Hazardous Waste

Industry

Ornamental Horticulturist

Pest Controller

**Physicist** 

Soil Conservationist

Sports/Commercial Turf Manager

Tree Surgeon

Water/Wastewater Plant Operator

Weather Observer

Zoologist



