# TABLE OF CONTENTS

## 2020-2021 COURSE SELECTION GUIDE

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>0</td>
</tr>
<tr>
<td>Dear Ferndale High School Student</td>
<td>1</td>
</tr>
<tr>
<td>What is a Ferndale Graduate?</td>
<td>5</td>
</tr>
<tr>
<td>Career Pathways Introduction</td>
<td>6</td>
</tr>
<tr>
<td>Visual &amp; Performing Arts Pathway</td>
<td>7</td>
</tr>
<tr>
<td>Visual Arts Electives</td>
<td>8</td>
</tr>
<tr>
<td>Performing Arts Course Electives</td>
<td>9</td>
</tr>
<tr>
<td>STEM Pathway</td>
<td>15</td>
</tr>
<tr>
<td>STEM Course Electives</td>
<td>16</td>
</tr>
<tr>
<td>Entrepreneurship Pathway</td>
<td>19</td>
</tr>
<tr>
<td>Entrepreneurship Electives</td>
<td>19</td>
</tr>
<tr>
<td>Humanities Pathway</td>
<td>23</td>
</tr>
<tr>
<td>Humanities Electives</td>
<td>23</td>
</tr>
<tr>
<td>Humanities Course Descriptions - English Electives</td>
<td>23</td>
</tr>
<tr>
<td>Humanities Course Descriptions - Visual, Performing and Applied Arts Electives</td>
<td>24</td>
</tr>
<tr>
<td>Humanities Course Descriptions - Social Studies Electives</td>
<td>24</td>
</tr>
<tr>
<td>Humanities Course Descriptions - World Language Electives</td>
<td>25</td>
</tr>
<tr>
<td>Additional Course Offerings</td>
<td>27</td>
</tr>
<tr>
<td>Health and Physical Education Course Descriptions</td>
<td>27</td>
</tr>
<tr>
<td>Graduation Requirements</td>
<td>30</td>
</tr>
<tr>
<td>Core/Required Classes</td>
<td>31</td>
</tr>
<tr>
<td>English Language Arts</td>
<td>31</td>
</tr>
<tr>
<td>Mathematics</td>
<td>33</td>
</tr>
<tr>
<td>Social Studies</td>
<td>37</td>
</tr>
<tr>
<td>Science</td>
<td>39</td>
</tr>
<tr>
<td>Science Electives</td>
<td>42</td>
</tr>
<tr>
<td>World Languages</td>
<td>43</td>
</tr>
<tr>
<td>Oakland Schools Technical Campus (OSTC)</td>
<td>45</td>
</tr>
<tr>
<td>Early College Programs - Oakland Technical Early College (OTEC) - Southeast Campus</td>
<td>46</td>
</tr>
<tr>
<td>Early College Programs - Oakland Schools Accelerated College Experience (ACE)</td>
<td>47</td>
</tr>
<tr>
<td>The Center for Advanced Studies and the Arts (CASA)</td>
<td>48</td>
</tr>
<tr>
<td>General Information</td>
<td>49</td>
</tr>
<tr>
<td>Compliance Information</td>
<td>52</td>
</tr>
<tr>
<td>Ferndale High School and Ferndale Public Schools Administration</td>
<td>53</td>
</tr>
</tbody>
</table>
Dear Ferndale High School Student

Our goal is to provide each student with a world-class high school experience designed to foster success upon graduation. In order to accomplish this goal we provide:

**High Quality Instruction** – We ensure that each class experience is built upon best practices in learning that provide deep learning experiences, collaboration with peers, hands on digital technology, and work that is based on your individual needs. We will embed essential character traits of grit, tenacity, perseverance, and resilience; into everyday school and classroom experiences.

**School Culture** – We ensure that our school family takes pride in being here day in and day out. Having specific values, expectations and standards of practice for both students and staff. We know that school culture has an impact on each student’s success. We want each person who walks through our doors to know they are welcomed, valued and part of the Ferndale High School way.

**Intervention & Enrichment** – Each student comes with different strengths and needs. We have designed time during the school day to focus on either intervention of skills needing support and/or enrichment that will move your learning to the next level.

**Assessment & Results** – We want to ensure that each students knows where they are, what courses are best for your specific field, and what assessments need to be completed to offer you the best possibilities for college or career success. Taking each assessment seriously is essential for post high school success.

We have career pathway guides to enhance course selection. Each pathway is designed around a broad based career focus. The electives are designed to support learning more about specific skills needed. Your counselors will help you make the decisions that are best for you now and in your future. There is more detailed information about each pathway in this course catalog. Please make your course selections based on what is best for YOU. Talk with your parents, a teacher, administrator or counselor to make selections that are going to excel your vision.

Our counselors will meet with students in large groups and individually based on student need. Parents are welcome and encouraged to email or call for an appointment to meet with the counselors regarding any questions or concerns.

Sincerely,

**The Ferndale High School Administration**
What is a Ferndale Graduate?

When students graduate from Ferndale Public Schools we want each to be ready to excel and flourish in today’s global world. With that in mind:

A Ferndale education is based on The Deep Learning Competencies, better known as the 6 C’s, which are the skill sets each and every student needs to achieve and excel in, in order to flourish in today’s complex world. These competencies form the foundation for the New Pedagogies for Deep Learning (NPDL). Teachers combine these competencies with information about student achievement, interests, and aspirations to get a clear understanding of what each student needs to learn.

Ferndale has taken the 6 C’s from NPDL and modified them for what we expect our students to graduate with:

- **CREATIVITY**: Being able to think independently and have creative visions that have impact in our daily lives.
- **COMMUNICATION**: Communicating effectively with a variety of styles, modes, and tools (including digital tools), tailored for a range of audiences.
- **CITIZENSHIP**: Being a person who looks out for others and have a deep understanding of diverse values, people and cultures.
- **CRITICAL THINKING**: Critically evaluating information and arguments, seeing patterns and connections, constructing meaningful knowledge, and applying it in the real world.
- **CHARACTER**: Learning to deep learn, armed with the essential character traits of grit, tenacity, perseverance, and resilience; and the ability to make learning an integral part of living.
- **COLLABORATION**: Work interdependently and in teams. Have strong interpersonal and team-related skills including effective management of team dynamics and challenges, making substantive decisions together, and learning from and contributing to the learning of others.
Career Pathways Introduction

Ferndale High School has 4 curricular pathways for students that will support their course selection. The pathways are Entrepreneurship, Humanities, Performing and Visual Arts, and STEM (Science, Technology, Engineering, and Mathematics). The goal behind these pathways is to offer students course choices that suit their interests and career goals.

In addition to the pathways, Ferndale High School has relationships with outside organizations that provide area high school students with non-traditional courses of study. These include the Oakland Schools Technical Campus and Oakland Community College.
The Visual and Performing Arts pathway will appeal to students who are interested in pursuing a career in music, dance, theater, or visually artistic pursuits. Our award-winning Ferndale music department is home to accomplished music teachers who are musicians in their own right. Our visual arts electives offer students a wide variety of courses that will lead them through a strong basis for the creation and understanding of art. Ferndale’s dance and theater programs allow our students to showcase their exceptional talents in physical performance.

Visual Arts Electives

<table>
<thead>
<tr>
<th>1 Semester (1/2 credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Art Foundations</td>
</tr>
<tr>
<td>● Design</td>
</tr>
<tr>
<td>● Drawing &amp; Painting</td>
</tr>
<tr>
<td>● Jewelry</td>
</tr>
<tr>
<td>● Photography</td>
</tr>
<tr>
<td>● Sculpture 1</td>
</tr>
<tr>
<td>● Sculpture 2</td>
</tr>
</tbody>
</table>

Visual Arts Course Descriptions

Art Foundations

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Art Foundations is a great class to take if you want to try a little bit of every media. Students will have an opportunity to work with drawing, painting, sculpture, and more. This course encourages care in the creative process, experimentation, and growth. Students will get a chance to make art, as well as look at it to try to discover meaning.

Recommended for students who are interested in trying a variety of materials and for those looking to express themselves in a creative way. Please note, this is a prerequisite for all other art courses except for Photography.
Design

.5 VPA or Elective Credit

 Grades Taught: 9, 10, 11, 12

 Are you a problem solver? Someone who has an eye for well-designed products? This class is for you! During the Design course, students will examine social, economic, and market needs and brainstorm ways to create the best possible solutions in the form of products. Students will design products based on aesthetics, function, and branding. Projects will include, but are not limited to, shoe design, automotive design, interior design, and product design.

 Recommended for students interested in fashion (shoe, clothing) design, architecture, and more.

 Prerequisite: Art Foundations or teacher recommendation

Drawing & Painting

.5 VPA or Elective Credit

 Grades Taught: 9, 10, 11, 12

 If you have a knack for detail and color, then this class is a great choice! During your time in Drawing/Painting, you will build skills that will allow you to draw precisely and with confidence. Mixing colors and understanding how different colors work together will also be a large part of this class. This class will give you just enough challenge to be interesting, but not too much to be stressful.

 Recommended for students interested in illustration, makeup art, architecture, and more.

 Prerequisite: Art Foundations or teacher recommendation

Jewelry

.5 VPA or Elective Credit

 Grades Taught: 10, 11, 12

 Jewelry will introduce students to the art of making jewelry. Students will use a variety of materials including clay and metals to create their work.

 Recommendation for students interested in fashion design.

 Prerequisite: Art Foundations or teacher recommendation
**Photography**

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This class is for aspiring photographers, cinematographers, and for those who simply want to take amazing photos! During the semester, students will learn how to utilize their cell phone to create stunning and meaningful photographs. Do you have a DSLR camera? Do not worry! You can learn how to use that, too! Students will learn how to use Adobe Photoshop to edit their photos and bring their imagination to life.

Prerequisite: None

**Sculpture 1**

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Do you enjoy working with your hands? Creating something out of nothing? This class is for you! In Sculpture 1, students will have an opportunity to create sculptures out of paper, cardboard, clay, and fibers. After trying a variety of materials, students will have an opportunity to choose which material they would like to continue working with. This course encourages problem-solving, student choice, and personal expression.

Recommended for students interested in architecture, set design, and more!

Prerequisite: Art Foundations or teacher recommendation

**Sculpture 2**

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Sculpture 2 is for any student who has a desire to continue working with a sculpture medium of their choice. During the first couple of months, students will receive teacher-chosen themes to create art based off of. The second half of the semester, students will have an opportunity to create a series of pieces centered around a theme of their choosing.

Prerequisite: Art Foundations, Sculpture 1, or teacher recommendation
Performing Arts Course Electives

<table>
<thead>
<tr>
<th>1 Semester (1/2 credit)</th>
<th>1 Year (1 credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduction to Dance</td>
<td>• Bel Canto Choir</td>
</tr>
<tr>
<td>• Theater</td>
<td>• Concert Choir</td>
</tr>
<tr>
<td></td>
<td>• Concert Orchestra</td>
</tr>
<tr>
<td></td>
<td>• Symphony Band</td>
</tr>
<tr>
<td></td>
<td>• Symphony Orchestra</td>
</tr>
<tr>
<td></td>
<td>• Theatrical Dance 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>• Wind Ensemble</td>
</tr>
</tbody>
</table>

Performing Arts Course Descriptions

**Introduction to Dance**

.5 Physical Education, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This course is designed as an introduction to jazz, ballet and modern forms of dance. Components include flexibility, endurance, rhythm and dance technique. Physical Conditioning will be a part of the daily coursework. A combined performance will provide a challenging conclusion. Personal dance attire will be required daily.

**Theater**

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Theatre 1 is an acting class that involves pantomime, improvisation, interpretive scenes and discussions and performances in order to satisfy the aesthetic, intellectual and emotional needs of both participant and spectator. Personal growth is assured as students gain confidence and poise from activities in teamwork, analysis, organization and presentation. Communication skills are developed. Appreciation of Theatre and the art of acting will also be encouraged. Students will develop memorization skills as they prepare for scene presentations. Students will have three major scenes to present, an original script and script analysis. There will be a performance and written final. Daily participation is vital to learning and developing skills for performance, group work and class success.
Bel Canto Choir

1.0 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Bel Canto Choir is a choral group for experienced singers who have had at least one year of high school level performing and sight-reading or exhibit acceptable proficiency. Instructional emphasis is placed upon intermediate to advanced level sight reading, improvement of vocal technique, and preparation for school and community concerts. Performances include Fall, Winter, All-City and Spring concerts at Ferndale High School as well as Michigan School Vocal Music Association events. Achieving high standards of performance of fine choral literature is a tradition of this choir. This course requires extra-curricular activities. Students may repeat this course for credit.

Prerequisite: Recommendation of the instructor through audition

Concert Choir

1.0 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Concert Choir provides a choral experience for students of any ability level. Instructional emphasis includes developing and improving sight reading skills, part-singing, vocal technique, and ensemble performing skills. Public performances include appearances in the Fall, Winter, All-City, and Spring Concerts. This course does require extra-curricular activities. Students may repeat this course for credit.

Prerequisite: Recommendation of the instructor through audition.

Concert Orchestra

1.0 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

An intermediate orchestra experience available to any student grades 9-12. Any student who needs further instruction and string pedagogical development that possesses a strong desire for self-improvement is welcome. This class will focus on the individual development of stronger skills including how to practice, sight-reading, individual playing technique, ear training, and music theory. Success will be measured by the continued improvement of all skills and the development of individual musicianship. Concert Orchestra is a performance ensemble that participates in MSBOA Orchestra Festival and may also perform as an addendum to the Symphony Orchestra. Members are required to attend outside of the school day rehearsals, sectionals, and performances. Students may repeat this course for credit.

Prerequisite: Recommendation of teacher following an audition
**Symphony Band**

1.0 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Symphony Band is a wind/percussion group for experienced musicians who have had 2-5 years of previous performing and sight-reading experience on a band instrument. This is the second band at Ferndale High School, and the level of performance proficiency and work ethic of all students in the group must be appropriate to the moderate level of difficulty and sophistication of the music the ensemble will play. Instructional emphasis is put on performing high quality wind literature, and on developing stronger skills in sight-reading, rhythm counting, technique and ensemble skills. Each student will also be expected to participate in at least one small ensemble. Symphony Band will perform multiple concerts per year, including MSBOA Band Festival. All band members are required to attend outside of the school day rehearsals, sectional, and performances. Membership in Jazz Band and Marching Band will generally require participation in Symphony Band or another band, orchestra, or choir class. Students may repeat this course for credit.

Prerequisite: 2-5 years of previous middle school or elementary level band experience, or demonstrated proficiency through an audition

**Symphony Orchestra**

1.0 VPA or Elective Credit

Grades Taught: 10, 11, 12

Symphony Orchestra is an advanced performing ensemble consisting of students who have mastered more than the basics on their instrument. Symphony Orchestra students should thrive on challenge, have a strong sense of musicianship, have established for themselves a successful practice routine, understand how to problem solve in their individual practice sessions, have excellence as a goal, and wish to pursue advanced literature on a day to day basis. This group combines with wind players to form the full Symphony Orchestra. Chamber Orchestra and Pit Orchestra (for the Musical) are also selected from this ensemble. The Symphony Orchestra is the top performing orchestra in the Ferndale Public Schools, and as such will be held to the highest standards in performance and excellence. The Symphony Orchestra will pursue advanced literature that will require the best efforts from all members involved. The Symphony Orchestra will compete yearly in the MSBOA District and State Festivals, as well as other events and competitions as they arise. Members are required to attend outside of the school day rehearsals, sectionals, and performances. Students may repeat this course for credit.

Prerequisite: Recommendation of teacher following an audition
Theatrical Dance 1 & 2

1.0 Physical Education, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This performance based yearlong course is designed as a continuation of Introduction to Dance. Jazz, ballet, modern, theatrical and lyrical styles of dance will be taught. Technique and skills are more advanced than those taught in the introductory class. Elements of choreography will be explored. Literal forms of choreography (movement which tells a story) will be explored through a study of choreographic elements and evident in student choreography. Physical Conditioning will be part of the daily coursework. Participation in the culminating performance is required. Personal dance attire will be required daily. Students may repeat this course for additional credit.

Prerequisite: Introduction to Dance or teacher recommendation.

Wind Ensemble

1.0 VPA or Elective Credit

Grades Taught: 10, 11, 12

Wind Ensemble is a wind/percussion group for experienced musicians who have had at least one year of high school level performing and sight-reading experience. This is the top band at Ferndale High School, and the level of performance proficiency and work ethic of all students in the group must be high.

Instructional emphasis is put on performing the highest quality wind literature, some of which would be appropriate for collegiate and professional ensembles. Each student will also be expected to participate in at least one small ensemble. Wind Ensemble will perform multiple concerts per year, including MSBOA Band Festival, and may be called upon to travel to perform from time to time. Membership in Orchestra Winds and Pit Orchestra will be from members of Wind Ensemble, which will mean additional performances. All band members are required to attend outside of the school day rehearsals, sectional, and performances. Membership in Jazz Band and Marching Band will generally require participation in Wind Ensemble or another band, orchestra, or choir class. Students may repeat this course for credit.

Prerequisite: Recommendation of teacher following an audition AND one year of previous high school level band experience.
STEM Pathway

STEM refers to the idea of educating students in four specific disciplines — science, technology, engineering and mathematics — in an interdisciplinary and applied approach. Rather than solely teach the four disciplines as separate and discrete subjects, STEM integrates them into a cohesive learning paradigm based on real-world applications. Students in the STEM pathway should take challenging math and science courses as well as at least one STEM elective. The STEM pathway will help to prepare students for exciting careers in expanding, innovative industries like computer engineering, computer science, & robotics as well as traditional fields like medical science and engineering.

STEM Course Electives

<table>
<thead>
<tr>
<th>1 Semester (1/2 credit)</th>
<th>1 Year (1 credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ecological Issues</td>
<td>• AP Computer Science Principles</td>
</tr>
<tr>
<td>• Intro to Forensic Science</td>
<td>• Introduction to College Biology Honors</td>
</tr>
<tr>
<td>• Intro to Programming 1-Coding</td>
<td>• Introduction to Programming 2--Mobile Computer Science Principles</td>
</tr>
<tr>
<td></td>
<td>• Movie Making and Broadcasting 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>• Physics</td>
</tr>
<tr>
<td></td>
<td>• PLTW - Introduction to Engineering Design</td>
</tr>
</tbody>
</table>

STEM Electives Course Descriptions -1 Semester

Ecological Issues

.5 3rd Science or Elective Credit
Grades Taught: 11, 12

This science course will introduce students to ecological concepts, environmental problems, their effect on us, and possible solutions. Making decisions based on stewardship and sustainability in order to protect our environment and its resources will be stressed. This interdisciplinary course will involve concepts from biology, chemistry, physical science, and other science disciplines. Students will learn by a variety of methods, including readings outside class, the Internet, laboratory experiments, group work, discussion, and student projects. Topics covered will include, but are not limited to, the global environmental picture, biodiversity, population dynamics, food production and distribution, ecosystems, water and air pollution, ozone depletion, and global warming. Local environmental issues will be emphasized.

Prerequisite: Biology 1 and 2
**Introduction to Forensic Science**

.5 3rd Science or Elective Credit

Grades Taught: 11, 12

This is an interdisciplinary science course where students will learn how the many branches of science apply to the field of Forensic Science and solving crimes. It will involve concepts from biology, anatomy, chemistry, genetics and other scientific disciplines. Students will learn by a variety of methods, including (but not limited to): readings outside class, the Internet, laboratory experiments, group work, discussion and student projects. A student’s communication skills writing skills, critical thinking and problem solving skills are important for their success in this class. Topics covered include a history of Forensic Science, physical evidence, trace evidence and microscopy, documentation, psychology of criminals, biology, DNA evidence, toxicology, serology, and careers in Forensic Science.

Prerequisite: Biology 1 and 2

**Intro to Programming 1 - Coding**

.5 Computer, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This course teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills. Once students complete this course, they will be able to program in JavaScript.

*Completion of this course will satisfy the student’s online learning experience requirement.*

**STEM Electives Course Descriptions - Full Year**

**AP Computer Science Principles**

1.0 Computer, Senior Math or Elective Credit

Grades Taught: 9, 10, 11, 12

The AP Computer Science Principles course is designed to be equivalent to a first semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world.

Prerequisite: Successful completion of Algebra I (B or higher)
Introduction to College Biology Honors

1.0 3rd Science or Elective Credit

Grades Taught: 11, 12

The course offers an in-depth study of biology, anatomy and physiology (the major systems of the human body). The text and materials used to support the student’s learning are college level. Several topics of Biology I and II will be reviewed with additional depth of understanding as students make new connections to previous knowledge. Students will be performing many hands on activities and upper level laboratory research. Students are expected to maintain an orderly and thorough notebook as well as journals of long term experiments. Grades are based on the traditional paper and pencil types of assessment: quizzes, tests and lab reports. Research papers, multi-media presentations and model building are additional means of assessing student learning. We will be observing and studying life in its unique variety. Be prepared to draw and dissect!

Prerequisite: Successful completion of Honors Biology and Honors Chemistry recommended

Introduction to Programming 2 – Mobile Computer Science Principles

1.0 Computer, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This course provides an introduction to basic principles of computer science (CS), including programming in App Inventor, a graphical programming language for Android mobile devices. This is a projects-based course. Students will learn CS principles by building socially useful mobile apps and reflecting on the impacts of their work. This course involves a strong writing component. Students will maintain a portfolio of their work, which will include several performance tasks in the areas of programming, data analysis, and the impact of computing technology.

Prerequisite: Middle School Coding or Intro to Programming 1
*Completion of this course will satisfy the student’s online learning experience requirement.

Movie Making and Broadcasting 1 & 2

1.0 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This is an introductory course to the many facets of film, broadcasting and related media practices. Basic video, audio and editing practices are taught along with emphasis on journalistic, technical and performance-based skills associated with the various formats of multimedia production. The class operates in dual capacities; both as a video production facility for live and pre-recorded broadcast formats, along with film study and analysis. Those who are interested in production, on-camera talent, film study and other aspects of video/film production are encouraged to take this course. Writing, performing, editing, running of filmmaking equipment, and other related activities are part of daily/weekly coursework. Previous experience in courses such as theatre and computer technology is highly encouraged. A professional attitude and aptitude are expected at all times. This course can be repeated for credit multiple years.
**Physics**

1.0 3rd Science, Senior Math, or Elective Credit

Grades Taught: 11, 12

This course will describe how objects move and how forces affect their motion along both straight and curved paths. This will lead to the prediction of how much and what kinds of energy can be transferred to other bodies. The general properties of mechanical and electromagnetic waves are discussed along with their relation to sound and light. The basic ideas of electricity and magnetism are also investigated.

Prerequisite: STEM, Algebra 2 and Chemistry or Teacher Approval

**Project Lead The Way: Introduction to Engineering Design**

1.0 Computer, 3rd Science, Senior Math, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Students are introduced to the engineering design process, applying math, science, and engineering standards to identify and design solutions to a variety of real problems. They work both individually and in collaborative teams to develop and document design solutions using engineering notebooks and 3D modeling software.

*Completion of this course will satisfy the student's online learning experience requirement.*
Entrepreneurship Pathway

Do you want to start your own business one day? Do you have or want to deepen your capacity and willingness to develop, organize and manage a business venture? Entrepreneurial spirit is characterized by innovation and risk-taking, and is an essential part of a nation’s ability to succeed in an ever changing and increasingly competitive global marketplace. The Entrepreneurship Pathway will provide you with knowledge and experience necessary to be a successful entrepreneur.

Entrepreneurship Electives

<table>
<thead>
<tr>
<th>1 Semester (1/2 credit)</th>
<th>1 Year (1 credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Business Management 1</td>
<td>● Movie Making and Broadcasting 1 &amp; 2</td>
</tr>
<tr>
<td>● Business Management 2</td>
<td>● School Store Operations</td>
</tr>
<tr>
<td>● Computer Applications</td>
<td></td>
</tr>
<tr>
<td>● Going Pro! Preparing for life after high school (Pending Board Approval)</td>
<td></td>
</tr>
<tr>
<td>● Marketing 1</td>
<td></td>
</tr>
<tr>
<td>● Marketing 2</td>
<td></td>
</tr>
</tbody>
</table>

Entrepreneurship Elective Course Descriptions - 1 Semester

Business Management 1

.5 Computer, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This course is Ferndale High Schools’ State-approved Business Administration, Management and Operations (BAMO) program. Students will learn business management skills used in everyday life within industry. Throughout the semester we will continue looking at business happenings in our local community and nation. Units include: Information Technology; Data Management and Administration; Operations and Quality Management; Financial Analysis and Economics; Communications in Business; and Career and Professional Development.

Prerequisite: Computer Applications recommended

Completion of this course will satisfy the student’s online learning experience requirement.
Business Management 2

.5 Computer, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Business Management 2 is the 2nd semester of the Ferndale High Schools' State-approved Business Administration, Management and Operations (BAMO) program. In this course students learn advanced business management skills driven by studying the trends of business in our immediate community and throughout the nation. Units include: International business; Business planning and entrepreneurship; Human resource management; Business management and leadership skills; Law; Ethics; Government regulations; Project management.

Prerequisite: Computer Applications recommended

Completion of this course will satisfy the student's online learning experience requirement.

Computer Applications

.5 Computer, VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This class is designed to train students in the multiple facets of Google Docs, Google Sheets and Google Slides. These applications will be taught online. Essential employment skills as well as professional development skills are an important part of this curriculum.

Completion of this course will satisfy the student's online learning experience requirement.

Going Pro! Preparing for Life After High School (Pending Board Approval)

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

High Skills = High $$$$ . Find out what everyone is Michigan is talking about. You are the future. Learn from industry experts in this very hands-on class. This course is offered to any student interested in gaining pre-apprenticeship skills in the areas of carpentry, plumbing, energy, HVAC, electrical, information technology, advanced manufacturing, CAD, and skilled or labor trades. Students will gain valuable transferable skills leading to industry certification, college credit and certification as well as preferred and potential direct entry into a professional apprenticeship. High school students will learn alongside leaders in the profession, offering higher engagement in real-world career focused instruction. Students will spend each class learning and working on projects allowing for deeper levels of understanding and experiential learning.
Marketing 1

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

Marketing is the study of how goods and services get from the producer to the consumer. Business firms engaged in marketing must decide what the consumers would like to buy and how to go about distributing the product or service in a way that will earn the largest profit possible. The topics that will be studied include marketing, research, purchasing, selling, advertising, finance and storage.

Prerequisite: Computer Applications recommended

Marketing 2

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This is the introductory course in selling. The basic principles of effective selling are presented and applied to various types of sales activities. Emphasis is placed upon the various types of wholesale, retail and service selling. Students take part in sales demonstrations, sales presentations, role playing and research projects. This course is recommended for all students interested in selling, especially those who plan a future in a retail field.

Prerequisite: Computer Applications recommended.

Entrepreneurship Elective Course Descriptions - Full Year

Movie Making and Broadcasting 1 & 2

1.0 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This is an introductory course to the many facets of film, broadcasting and related media practices. Basic video, audio and editing practices are taught along with emphasis on journalistic, technical and performance-based skills associated with the various formats of multimedia production. The class operates in dual capacities; both as a video production facility for live and pre-recorded broadcast formats, along with film study and analysis. Those who are interested in production, on-camera talent, film study and other aspects of video/film production are encouraged to take this course. Writing, performing, editing, running of filmmaking equipment, and other related activities are part of daily/weekly coursework. Previous experience in courses such as theatre and computer technology is highly encouraged. A professional attitude and aptitude are expected at all times. This course can be repeated for credit multiple years.
School Store Operations

1.0 VPA or Elective Credit

Grades Taught: 11, 12

This class is designed to provide students with the opportunity to operate a retail store. Students will become involved with all aspects of the operation which include: customer service, management, purchasing, inventory control, sales, cash handling, advertising, and merchandising in preparation of the world of work. There are two parts to this class: The classroom and the school store. In the classroom you will be given the information, tools and knowledge to run and operate a retail store. The Dale Den is Ferndale High School’s own convenience store. This is the place you will be using the knowledge and skills that you learned in the classroom. Students are responsible for operating the store during lunch on a scheduled basis.

Prerequisite: 1 of the following sequences--Business Management 1 & 2, Marketing 1 & 2, Digital Media 1 & 2, or teacher recommendation. Students will submit an application to be selected for enrollment into the course.
Humanities Pathway

What does it mean to be human? Are people generally good or evil? Does history teach us that humans contribute to the world positively or negatively? These are all questions that will be tackled in the Humanities pathway. This pathway was designed for students who have an interest in understanding the diverse yet universal human experience. Courses in this pathway give students an opportunity to learn about history, literature, politics, and other contributions that allow us to investigate how humans interact with each other and help society evolve. Typically, those who study or are interested in the humanities pursue careers such as law, politics, philosophy, arts and literature, education, and psychology.

Humanities Electives

<table>
<thead>
<tr>
<th>1 Semester (1/2 credit)</th>
<th>1 Year (1 credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Creative Writing</td>
<td>● AP Psychology</td>
</tr>
<tr>
<td>● Detroit History</td>
<td>● Spanish 1</td>
</tr>
<tr>
<td>● Practical Law</td>
<td>● Spanish 2</td>
</tr>
<tr>
<td>● Speech</td>
<td>● Spanish 3</td>
</tr>
<tr>
<td></td>
<td>● Spanish 4</td>
</tr>
<tr>
<td></td>
<td>● Spanish 5</td>
</tr>
</tbody>
</table>

Humanities Course Descriptions - English Elective

Creative Writing

.5 English Elective

Grades Taught 9, 10, 11, 12

This course will allow the English student with an interest in writing to experiment with personal expression and short creative forms such as descriptions, narratives, dialogues, character sketches, and poetry. Students will also be required to read independently and to write two major book reviews. In addition, students must be willing to share their work with classmates and the teacher. Students will be expected to come to class prepared and willing to write every day. Students will utilize the workshop model when drafting, revising, and publishing.
Humanities Course Descriptions - Visual, Performing and Applied Arts Elective

Speech

.5 VPA or Elective Credit

Grades Taught: 9, 10, 11, 12

This is an activity course in which the student will become acquainted with public speaking as a tool for expressing ideas. The student will be expected to give speeches, participate in small group discussions and critique other speeches. Emphasis is on clear organization of ideas and communication of these ideas through public speaking.

Humanities Course Descriptions - Social Studies Electives

AP Psychology

1.0 Elective

Grades Taught: 10, 11, 12

AP Psychology will introduce students to the fascinating discipline of psychology from classical conditioning to the biology of psychology, from motivation and cognition to visual perception, personality theory and psychological disorders and therapies. The class will provide students with the opportunity to acquire the knowledge and skills necessary to succeed on the AP Exam in May, which can provide students with college credit.

Detroit History

.5 Elective

Grades Taught: 10, 11, 12

Detroit History takes a local approach to studying American History, using local events to develop a greater understanding by making comparisons to national trends. By focusing first on local events, and then telescoping out to find similar issues on a national scope, we will be able to use our prior knowledge of the region to understand history more thoroughly. Geography is integrated throughout. The time period covered is from 1701 to the present. Units of Study include Early Detroit and the Birth of the Motor City 1701 – 1920, the Great Migration and the Arsenal of Democracy, 1920 –1945, Boom and Burst, Post World War II to 1967 and the Coleman Young Era, Post-1967.
Practical Law

.5 Elective

Grades Taught: 9, 10, 11, 12

The purpose of this course is to impart practical knowledge of the legal system. Its design fosters responsible citizenship, including duties and rights under the law, and respect for the rule of law. Emphasized are both the civil and criminal justice systems, legal procedures, and citizens’ civil rights. The course promotes proficiency in discussion and writing skills including constructing arguments, analyzing conflict, and resolving conflict. Critical thinking concerning justice, fairness, and the need for order in society is developed.

Humanities Course Descriptions - World Language Electives

Spanish 1

1.0 World Language

Grades Taught: 9, 10, 11, 12

The Spanish 1 high school curriculum introduces students to the Spanish language and culture. Emphasis is placed on developing meaningful authentic communication in Spanish in a variety of contexts. To develop language proficiency, students communicate verbally and in writing through familiar topics focusing on themselves and the world in which they live, including family, school, and friends. Students broaden their cultural knowledge by exploring the regions of the world where Spanish is spoken. Through new information and insights into cultures, customs and traditions of the Spanish-speaking world, students begin to demonstrate respect for other cultures and begin to recognize differences and similarities between their own culture and other cultures. Throughout the year, students continue learning how to communicate effectively in Spanish and demonstrate a curiosity about the language and culture of Spanish speakers.

Spanish 2

1.0 World Language

Grades Taught: 9, 10, 11, 12

The Spanish 2 high school course is designed for students who have successfully completed Spanish 1, its equivalent, or the Ferndale elementary and middle school Spanish program. Students review and expand their knowledge of Spanish language and culture on topics focusing on: people and places in the community, school, home, ordering food, transportation, taking care of health concerns, workplaces and professions, and leisure activities. Students expand their cultural understanding through comparing and contrasting their life in Ferndale and life in Spain and Mexico. As students broaden and deepen their insights into culture and language, they learn to demonstrate respect for other cultures.

Prerequisite: Spanish 1
Spanish 3

1.0 World Language

Grades Taught: 10, 11, 12

Spanish 3 is designed so that students develop a more fluent and elaborate use of Spanish. At this level, emphasis is placed on the student’s production of oral and written Spanish to satisfy personal needs and requests, such as cooking and eating, starting the day, shopping for clothes, party planning & social etiquette and planning a vacation. This course offers students an opportunity to apply the Spanish language skills they know and to collaborate with others to complete group projects.

Prerequisite: Spanish 2

Spanish 4

1.0 World Language

Grades Taught: 11, 12

This is a continuation course for students who have successfully completed Spanish 3. The course will be conducted primarily in Spanish and students will be expected to speak Spanish in the course. Emphasis will be placed on improving the student’s ability for extended discourse in speaking and writing Spanish. Students will be exposed to a variety of authentic materials to improve their listening comprehension, reading and cultural proficiency. Students are required to actively participate in class, maintain a class notebook, and complete various written and oral assignments, quizzes and tests.

Prerequisite: Spanish 3

Spanish 5

1.0 World Language

Grades Taught: 12

This is a continuation course designed for students who wish to continue to develop their ability to communicate orally and in writing in the foreign language. The course will be conducted primarily in Spanish and students are expected to speak Spanish in the course. Emphasis will be on improving accuracy in use of the basic language structures and increasing working vocabulary. Authentic reading selections will include magazine and newspaper articles on current events, issues and trends in Spanish speaking countries. Students are required to actively participate in class, maintain a class notebook, and complete various written and oral assignments, quizzes, tests and projects.

Prerequisite: Spanish 4
Additional Course Offerings

Health and Physical Education Course Descriptions

Health

.5 Health Credit

Grades Taught: 9, 10, 11, 12

Learning the skills and acquiring the knowledge to live and maintain a healthy lifestyle is the goal of the class. The presentations, discussions and activities during the semester will center around the following issues: emotional health, self-respect, sexuality, chemical abuse issues, dietary concerns, cardiovascular fitness and disease transmission and prevention as well as other pertinent issues. Discussions related to all of these critical topics will focus on self-esteem, refusal skills and decision making.

Physical Education

.5 Physical Education Credit

Grades Taught: 9, 10, 11, 12

Physical Education helps students develop knowledge, fitness levels, motor skills, social skills to obtain the ultimate goal of a lifetime of physical activity and high level of wellness. This class will focus on individual person growth through a variety of fitness related activities. The units may include cardiovascular fitness such as yoga, Zumba, Pilates, weight training, basketball, flag football, volleyball, softball, floor hockey and soccer. Emphasis will be on personal goal setting and building positive self-esteem and confidence. Daily participation will be essential. This course may be repeated for credit.

Swim

.5 Physical Education Credit

Grades Taught: 9, 10, 11, 12

Emphasis is placed on a high level of water safety, treading water, buoyancy, and an introduction to basic swim strokes. Introduction to basic swim strokes includes; front crawl (freestyle), back crawl (backstroke), breaststroke, sidestroke, and elementary backstroke. Individual safety skills and survival swimming are introduced and continual reinforcement and use of these skills is a requirement. This course may be repeated for credit.
Physical Conditioning

.5 Elective Credit

Grades Taught: 10, 11, 12

Physical Conditioning is an elective class for students that has successfully completed their basic physical education requirement and has a strong interest in improving their physical condition. Emphasis is placed on improving cardiovascular fitness levels through endurance training, speed work agility and flexibility routines. Strength training will be introduced and incorporated into workouts to increase muscular endurance. Activities will be varied and may be strenuous at times. Students must be prepared for daily participation. This course may be repeated for credit.

Prerequisite: Physical Education, Swim or P.E./Swim waiver

Team Sports

.5 Elective Credit

Grades Taught: 10, 11, 12

This is an elective course for students who have completed their basic physical education requirement and have an interest in competitive activities in an intramural setting. This co-ed class places emphasis on quality of individual skill for evaluation. Respect for classmates, rules, equipment, and demonstration of good sportsmanship and safety should be present in all activities. These activities include basketball, volleyball, floor hockey, wiffle ball, softball, soccer, speedball, pickle ball and touch football. This course may be repeated for credit.

Prerequisite: Physical Education, Swim or P.E./Swim waiver

*Waiver Policy: A student may receive a waiver from the basic physical education requirement by successfully completing one of the following:

• Two seasons (in two different school years) of an FHS sport
• Two seasons of marching band in high school

AVID 9

1.0 Elective Credit

Grades Taught: 9

AVID 9 is an elective course that prepares students for entrance into four-year colleges. There is an emphasis on analytical writing, preparation for college entrance and placement exams, study skills and test taking, note-taking, and research. These skills are all supported through WICOR (Writing, Inquiry, Collaboration, Organization, and Reading) strategies used throughout the AVID elective, as well as their core curriculum.

Prerequisite: Students MUST complete an application and an interview prior to placement into AVID 9.
PEER TO PEER 1 & 2

2 Semesters/1.0 Elective Credit

Grades Taught: 10, 11, 12

LINKS is an accredited class that pairs a student with special needs with a LINK for one scheduled class hour each day. This class focuses on assisting special needs students with socialization, independence, age appropriate behavior, and life skills. The class teaches general information about autism facts, behavior, myths, and stereotypes. Our goal is to spread awareness not only to students in the LINKS course but the whole community. The student enrolled in LINKS will be a mentor, role model, and friend to a student with a special need. In this role, the LINK student will be with their assigned student a minimum of one class period per day. In addition to being a mentor, role model, and friend, they will assist the student in such things as appropriate classroom behavior, organization of assignments and supplies, and focusing on what the teacher is saying. The LINK student will attend LINK case-conferences to discuss the progress of their student, and contribute ideas on how to more effectively help the student progress toward his/her goals. Students may repeat this course for credit. This is a yearlong class.

Impact Hour

.25 Elective Credit

Grades Taught: 9, 10, 11, 12

Impact is dedicated time to build relationships and support a positive school culture. Students will build social, emotional and academic skills empowering them to take ownership of their actions and become a positive contributor to our school family.

Ferndale High School Impact Hour’s Purpose:

- Build Positive Relationships (student to student, students to staff)
- Focus on Social Emotional Competencies
- Promote Executive Functioning Skills
- Strengthen Personal Responsibility
- Develop a Sense of Community/Ownership
- Strengthen, Understand, and Manage Emotions
- Reflection on grades, intent, and focus
In accordance with Ferndale Public Schools graduation requirements, students are required to complete 24 credits to be eligible to graduate from Ferndale High School. Graduation must be earned by passing all required subjects, and earning total units required for a diploma. The required courses are listed below*:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language Arts</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>0.5**</td>
</tr>
<tr>
<td>Health Education</td>
<td>0.5</td>
</tr>
<tr>
<td>Art (Includes visual, performing, and applied arts)</td>
<td>1</td>
</tr>
<tr>
<td>World Language</td>
<td>2***</td>
</tr>
<tr>
<td>Computer Education</td>
<td>0.5</td>
</tr>
<tr>
<td>Electives</td>
<td>5.5</td>
</tr>
<tr>
<td>Online Learning Experience</td>
<td>A 1 semester computer course fulfills the state requirement for online learning.</td>
</tr>
</tbody>
</table>

*PA – 141 allows some modifications to the above courses through a personal curriculum. See your counselor for additional information.

**Students may earn physical education credits through participation in athletics or marching band. Successful completion of two FHS athletic seasons in different school years or two marching band seasons is required.

***One year of World Language credit may be swapped for completion of a Career Focused Education program if it supports the career pathway of the student. Some math, science, computers and world language requirements may be fulfilled by successful completion of programs at OSTC.
Core/Required Classes

All core classes are yearlong and 1.0 credit unless otherwise noted.

English Language Arts

Students may self select regular, honors, or Advanced Placement (AP) as applicable, in all subject areas.

English 9

Grade Taught: 9

This course is designed to build skills in reading and writing. Students will be exposed to a variety of novels as well as short stories that will assist them in increasing their reading proficiency. Students will be taught literary devices such as theme and symbolism, as well as story and plot elements. Although reading is emphasized, attention is also given to essay writing as well as language skills such as spelling, punctuation, sentence/paragraph structure, and word usage, as well as strategies for improving writing skills.

Honors English 9

Grade Taught: 9

This program is an Honors English class for those 9th grade students reading well above grade level and exhibiting proficiency in writing. The course will integrate writing techniques, literary experiences, research, and listening skills to promote critical thinking and effective communication. Since this is designed for the highly motivated student, challenging assignments and enrichment activities will be an essential part of the program and will prepare students for subsequent AP English classes. It uses a thematic approach to literature that provides an understanding of the various literary genres: short story, poetry, novel, non-fiction, and drama.

English 10

Grade Taught: 10

The goal for English Language Arts Grade 10 is to continue building on the 9th grade Language Arts experience. During the course of the year, students will study the various movements of American Literature and by the end of the year, students will be keenly knowledgeable about these issues: the American Dream, American values, abuse of power, “a dream deferred”, the diverse voices of American culture, and what attracts immigrants to the United States. Short stories, poems, plays, novels, and non-fiction works will be analyzed. Students are expected to complete study questions, use graphic organizers, engage in a variety of study and test-taking skills, and pass exams. They will write papers on subjects dealing with the above issues as they come up in the various reading selections. The course will integrate writing techniques, literary terms, research, listening and speaking skills to promote critical thinking and effective communication.
Honors English 10

Grade Taught: 10

This program is an Honors English class for those 10th grade students reading well above grade level and exhibiting proficiency in writing. Skills mastered in grade 9 will be reinforced. Thus the course will promote critical thinking, effective communication in reading, listening, writing, and research. Since the course is designed for the highly motivated student, challenging assignments and enrichment activities will be included.

English 11

Grade Taught: 11

Through the study of various non-fiction (including expository, narrative, persuasive, informational, and argumentative texts), this course prepares students to understand the everyday functions of language and literature. Students practice analysis of language, style, and rhetorical choices while simultaneously increasing their written abilities in those areas. Along with intensive SAT preparation, this course offers students training to meet the various demands of their world with the ability to think, reason, and communicate powerfully about written, visual, and multi-media texts.

Advanced Placement English Language and Composition English 11

Grades Taught: 11

This course is offered to college bound juniors who are academically motivated, reading well above grade level, possess an extensive vocabulary and are competent writers. It provides the superior college bound student with a more solid understanding of non-fiction writing. The course is designed to prepare the students for the Advanced Placement English Language Examination given in May of junior or senior year. It also prepares the student for the Advanced Placement Literature Course in the 12th grade. Emphasis is on the in-depth study of selected essays, biographies, journals, and other prose works with critical perception. Students will engage in a rigorous analysis of grammar, diction, and stylistic techniques used by famous writers and will be required to write meaningful essays about their works. Students are required to write timed in-class impromptus and a research paper. Successful performance on the three-hour Advanced Placement examination can make it possible to earn college credit and eliminate beginning English courses on the college level depending on the policy of the particular institution.

English 12

Grade Taught: 12

This course will focus on the study of literature and composition. It is a year long course which will be comprised of classic and contemporary literature, British literature, Holocaust literature, and African American literature. Students will engage in broad reading and writing experiences to encompass literary texts, nonfiction literary texts, and other informational texts. The goal for English 12 students will be to refine, apply, and extend the solid foundation of knowledge, skills, and strategies developed in English Language Arts 9 through 11. Twelfth graders will synthesize information, ideas, and themes to understand the past, the present, and to think innovatively about the future.
Advanced Placement English Literature and Composition English 12

Grade Taught: 12

Advanced Placement English Literature is a first year college course designed to prepare the superior college bound student for the Advanced Placement English Examination given in May each year. Students should have a fairly wide reading experience that extends far beyond the titles studied in previous English courses. The emphasis is on the in depth study of selected novels, short stories, dramas, poems and essays with critical perception. The conclusions will be expressed in clear expository prose. Critical and analytical reading and thoughtful, mature writing are stressed. Previous Advanced Placement materials are used as the basis for analytical and thoughtful writing. There is a term paper each semester on prose criticism. Successful performance on the optional three-hour Advanced Placement examination can make it possible to earn college credit and eliminate beginning English courses at the college level depending on the policy of the particular institution. There is an additional fee for this national exam.

ELL English 9-12

Grades Taught: 9, 10, 11, 12

ELL English is specifically designed for ELL students. This course follows the Michigan WIDA standards of mastering English in the contexts of society & instruction, math, science, social studies, & Language Arts. The content focuses on the four main components of English: Reading, Writing, Speaking, and Listening. Units of study include grammar conventions, English literature, reading & writing strategies, cross-content focused units, and vocabulary acquisition. Using WIDA Access data, NWEA Reading and Language tests and student-centered learning, lessons are tailored to fit the needs of the students. This smaller class size allows for a more intimate instructional setting, offering students a better opportunity for individualized instruction and assistance. Students are placed in this class based on eligibility and may not select this course unless they qualify.
Mathematics

Students may self-select regular, honors, or Advanced Placement (AP) as applicable, in all subject areas.

Algebra 1

Grades Taught: 9, (10, 11, 12 by teacher recommendation)

The students will enhance their quantitative literacy by thinking theoretically about real number operations. The number domain will be expanded from real to complex. The students will also develop variable literacy by constructing, interpreting, and manipulating expressions, and solving equations. The idea of functions, which began in middle school will be expanded. Families of functions including linear, quadratic, exponential, and power, will be investigated. Students will build linear and exponential equations related to real-world models. Students will also solve linear equations and inequalities, and literal equations. In algebra 1-2, students will be solving linear systems of equations and inequalities. Students will evaluate powers and simplify expressions using properties of powers. Work with functions families will be expanded to include polynomials. Students will build quadratic functions related to real-world models and solve quadratic equations using a variety of methods. Work with bivariate data and regression will be used to reinforce the primary methods for representing data: value table, equation, and graph. Connections between Algebra and Geometry will be made.

Geometry

Grades Taught: 9, 10, 11 (12 by recommendation)

Geometry 1 builds on geometric concepts developed in middle school – angles, triangles, quadrilaterals, circles and simple 3-dimensional shapes. The student will apply analytic and spatial reasoning to these concepts. The study of formal logic and proof will also be studied as it relates to the basic geometric figures. In Geometry 2, the student will continue to study logic and proof. The student will develop deductive reasoning skills as it applies to geometry and the real-world problems as well as continue their study of linear functions and coordinate graphing as it leads to coordinate geometry. They will apply what they know about 2-dimensional figures to 3-dimensional figures in real-world contexts such as lateral area, surface area and volume. Right triangle trigonometry will be introduced.

Prerequisite: Algebra 1

Algebra 2

Grades Taught: 9, 10, 11, 12

Algebra 2 builds on concepts learned in Algebra and Geometry. The student will study linear, quadratic, polynomial, trigonometric, exponential and logarithmic functions and the continuation of function families. Students will also study matrix operations that will be used to solve systems of equations and perform geometric transformations. Algebra 2 continues the study of function started in Algebra 1. The study of the conic section shows how Algebra and Geometry are linked. The knowledge of univariate and bivariate statistical application will also be studied.

Prerequisite: Geometry
**Extended Algebra 1-1 and 1-2**

Grade Taught: 9

These courses cover the content from the first semester of Algebra 1. The students will review properties of real numbers, solving one-variable equations and inequalities, and solving and graphing linear functions. In Extended 1-2, the students will solve linear systems of equations and inequalities, study piecewise functions and work with properties of exponents.

Prerequisite: Teacher recommendation only

**Extended Algebra 1-3 and 1-4**

Grade Taught: 10

The students will study exponential functions and quadratic functions, and solve quadratic equations. In Extended 1-4, the students will continue working with quadratic equations, they will expand their idea of a function using multiple methods of representation, and finish with the study of statistics.

Prerequisite: Extended Algebra 1-2 or teacher recommendation

**Precalculus**

Senior Math

Grades Taught: 10, 11, 12

Pre-calculus prepares students for Calculus. The class will deepen the students’ understanding of algebra. They will use their skills at a higher conceptual level. Higher order equations and inequalities, absolute value, logarithmic, exponential and rational functions are explored. In Pre-calculus 2, students will continue to deepen their understanding of algebra. Trigonometric functions, identities, equations, polar coordinates and sinusoids are introduced. Vectors, limits and non-linear systems are also explored.

Prerequisite: Algebra 2

**Introduction to Calculus**

Senior Math

Grades Taught: 11, 12

Basic concepts include limits, continuity, differentiation, and integration. In this course we use the Calculus to find instantaneous velocity, instantaneous acceleration, areas of regions bounded by curves, slopes of curves, tangents to curves, maximum and minimum values of functions, and to sketch the graphs of higher degree functions. Introduction to Calculus II is a continuation of Introduction to Calculus I. We will continue our discussion of derivatives as well as develop the idea of an antiderivative and an integral. Applications of the integral will be studied extensively, including finding areas of regions bounded by curves, volume, and distance.

Prerequisite: Pre-calculus or Honors Pre-calculus
Honors Geometry

Grades Taught: 9, 10

Geometry builds on geometric concepts developed in middle school – angles, triangles, quadrilaterals, circles and simple 3-dimensional shapes. The student will apply analytic and spatial reasoning to these concepts. The student will develop deductive reasoning skills as they apply to geometry and real-world problems and the study of formal logic will be stressed.

In Honors Geometry 2, the student will continue to study logic and proof. They will apply what they know about 2-dimensional figures to 3-dimensional figures in real-world contexts such as lateral area, surface area and volume. Right triangle trigonometry and vectors will also be studied. The student will continue their study of linear functions and coordinate graphing as it leads to coordinate geometry.

Prerequisite: Algebra 1

Honors Algebra 2

Grades Taught: 9, 10, 11

Honors Algebra 2-1 builds on concepts learned in College Preparatory Algebra and College Preparatory Geometry. The student will study linear (including absolute value) and quadratic functions, and the continuation of function families. Students will expand their ability to statistically analyze univariate data by investigating measures of variance. The relationship between normal distribution and probability will be established. The student will also study matrices as a means to organize information. Properties of real numbers, as they relate to matrices, will be explored, and matrices will be used to solve systems of equations. Honors Algebra 2-2 continues the study of functions: exponential, logarithmic, rational, and trigonometric. The unit on trigonometric functions will be extended to explore basic trigonometric identities and equations. A unit on conic sections shows how Algebra and Geometry are linked. The student will also contrast sequences and series and work with arithmetic and geometric patterns. The student will also expand on their knowledge of probability and counting principles. The course also begins to relate concepts in Algebra to Pre-Calculus.

Prerequisite: Honors Geometry 2 or Geometry 2

Honors Precalculus

Senior Math

Grades Taught: 10, 11, and 12

Honors Pre-calculus 1 is intended to prepare students for Calculus. The class will deepen students’ understanding of algebra and develop skills to be used at a higher conceptual level. Modeling and solving real-world problems will be incorporated throughout. Specific concepts will include but are not limited to: functions, function analysis, domain, range, continuity, boundedness, extrema, symmetry, asymptotes, limits, end behavior, composite functions, inverse functions, transformations, “The Twelve Basic Functions”, monomial functions, polynomial functions, power functions, rational functions, real zeros, complex [conjugate] zeros, long division of polynomials, synthetic division, the rational zeros theorem, and upper and lower bounds. In Honors Pre-calculus 2, specific concepts will include but are not limited to: exponential functions, logistic functions, logarithmic functions, mathematics of finance, basic trigonometry, trigonometric functions, analytic trigonometry and trigonometric identities, vectors, and parametric equations.
Prerequisite: Honors Algebra 2
**Advanced Placement Calculus AB**

Senior Math

Grade Taught: 11, 12

Advanced Placement Mathematics consists of a yearlong study of topics taken from analytical geometry, differential calculus, and integral calculus. Topics such as the slope of a line, absolute value, and the idea of function are reviewed and expanded. The students then move into a study of limits, derivatives of algebraic functions, and some applications of the derivative to velocity, rates, maxima, minima, and curve plotting. The integral and the applications of the definite integral to finding area, volume, and distance are also studied in the course. Successful performance on the optional three-hour Advanced Placement examination can make it possible to earn college credit in Calculus I at the college level depending on the policy of the particular institution. There is an additional fee for this national exam.

Prerequisite: Honors Pre-Calculus 2

**Personal Finance 1 & 2**

Senior Math

Grade Taught: 12

Personal Finance 1 & 2 are independent semester-long courses designed to stand alone. Students will be exposed to topics such as life insurance, car loans, stocks, bonds, income taxes, housing costs, savings accounts, comparative and internet purchasing, and excise taxes. In addition to learning these concepts from a consumer’s point of view, students will explore concepts from the point of view of the businessperson, retailer, wholesaler, or manufacturer. Learning day-to-day application of these math concepts prepares students to become educated consumers and successful workers. A hallmark of the Personal Finance 1 & 2 curricula is its relevance to everyday applications. Students will be offered multiple opportunities to develop, use, and integrate mathematics’ skills into personal finance, accounting, career development, and basic consumer education. A focus will be placed on the acquisition of mathematics’ skills needed to help students solve business and consumer-related problems.
Social Studies

Students may self select regular, honors, or Advanced Placement (AP) as applicable, in all subject areas.

Advanced Placement Government - Civics Requirement

Grades Taught: 11, 12

This year-long course deals with all aspects of the American political system: philosophy and origins, organizations and structure of the national government; the role of parties, pressure groups and the press, the legislative and judicial processes, the presidency, and United States foreign policy. Readings, in addition to the text, and numerous papers are required. Successful performance on the optional three-hour Advanced Placement examination can make it possible to earn college credit and eliminate beginning English courses at the college level depending on the policy of the particular institution. There is an additional fee for this national exam.

Advanced Placement Microeconomics - Economics Requirement

Grades Taught: 11, 12

The purpose of an AP course in microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. This is a 1 semester class. Successful performance on the optional three-hour Advanced Placement examination can make it possible to earn college credit and eliminate beginning English courses at the college level depending on the policy of the particular institution. There is an additional fee for this national exam.

Advanced Placement U.S. History

Grade Taught: 9, 10, 11, 12

Advanced Placement U.S. History is a college-level introductory course which examines the nation’s political, diplomatic, intellectual, cultural, social, and economic history from 1491 to present. Students are challenged to see American history through a variety of historical themes while developing thinking skills that will help them contextualize specific periods of American history. A college level textbook is supplemented by primary and secondary sources throughout this course. Successful performance on the optional three-hour Advanced Placement examination can make it possible to earn college credit and eliminate beginning English courses at the college level depending on the policy of the particular institution. There is an additional fee for this national exam.
Advanced Placement World History

Grade Taught: 10, 11, 12

AP world history is a yearlong course designed to build a foundation of understanding of world history from 8000 BCE to the modern era. AP world history is a college level course that focuses on sophisticated analytical, comparison, contrast, and writing skills necessary to achieve at the college level. We will approach the development of these skills through the research of primary and secondary sources, analysis of major historical themes, essay writing, and class discussion. A large percentage of the year will be spent on activities specifically designed to increase student’s ability to achieve on the College Boards AP World History Exam in May. Successful performance on the optional three-hour Advanced Placement examination can make it possible to earn college credit and eliminate beginning English courses at the college level depending on the policy of the particular institution. There is an additional fee for this national exam.

Civics

Grades Taught: 11, 12

This course reviews the historic influences upon the American political system and studies the structure, function and process of the executive, legislative, and judicial branches of government at the national, state and local levels today. The American Presidential system will be compared and contrasted with other political systems. This course will study the Constitution and individual rights and responsibilities.

Economics

Grade Taught: 11, 12

The major purpose of this course is to impart a practical working knowledge of economics. It is designed to prepare students to be productive members of a free market economy. As a result of this course students become more informed consumers, knowledgeable citizens and responsible decision-makers on public issues and personal problems relating to our economy. The emphasis is on the application of economic principles to the solution of consumer and societal problems. The course promotes proficiency in discussion and writing skills applied to economic issues.

U.S. History & Geography

Grade Taught: 9

This course emphasizes the history of our country from 1900 to 1950 and covers the historical events that have had the most influence upon later history of the country. U.S. History & Geography 2 emphasizes the history of our country from 1950 until the present and covers the historical events that have had the most influence on the country.
World History & Geography

Grade Taught: 10

World History & Geography takes a global and comparative approach to studying the world and its past to develop a greater understanding of the development of worldwide events, processes, and interactions among the world’s people, cultures, societies, and the environment. Our students will examine both time and space, thus engaging students in cross-temporal and cross-regional studies. Geography is integrated throughout. By examining history at the regional, interregional, and global levels we will understand the world’s history more thoroughly. The time period covered in World History & Geography 1 is from prehistory to 1815. World History & Geography 2 covers the time period from 1800 to present date.
Science

Students may self select regular, honors, or Advanced Placement (AP) as applicable, in all subject areas.

STEM - 3rd Science

Grade Taught: 9 (10-12 with teacher approval)

STEM is a freshman-level introductory science course. Students will experience many hands-on opportunities and apply scientific methods as they explore the physical world in which they live. Key topics include the nature of science, measurement and graphing, motion, forces, energy, waves, light, electricity and magnetism. Students will also learn introductory chemistry relating to atoms, molecules and bonding. Students will develop their problem solving, critical thinking and evidenced-based reasoning skills. Each student’s grade is determined by a variety of assessment strategies including quizzes, tests, notebooks, laboratory work and reports, class presentations and projects.

Biology

Grades Taught: 10, 11, 12

This required course teaches students to learn more about the scientific process as students make sense of biological phenomena. As students continue to develop their problem solving, critical thinking and evidence-based reasoning, they will learn how the biological world is characterized by both unity and diversity. The topics of study from the Michigan Science Standards include applications of the scientific methods, ecology, heredity, evolution and energy as it relates to the biological world. During the semester current topics and research will be integrated into the course. Each student’s grade will be determined by a variety of assessment strategies including but not limited to: quizzes, tests, notebook, laboratory work, reports, class presentations and projects.

Honors Biology

Grades Taught: 9, 10

This class will challenge students as they investigate the living world. Specific topics of study include: ecology, genetics, cell biology, evolution, biochemistry, classification and scientific methods. Students will design and complete their own experiments, work cooperatively on class projects, and develop creative thinking skills while building a curiosity about the world in which we live. Students will cultivate skills in analysis and problem-solving as we study current events in the world of science. A home computer with Internet access is desirable but not mandatory. Nightly homework, supplementary reading and multiple creative projects are to be expected by students. Also, students must maintain an organized folder.

Assessment strategies include: laboratory reports, papers, tests, quizzes, models, computer assignments and inventive, imaginative projects.
Global Chemistry

Grades Taught: 11, 12

Global Chemistry is an introductory chemistry course that explores chemistry concepts through the lens of societal and environmental issues. The course is designed to provide an opportunity to earn the Chemistry graduation credit for students who intend to pursue a non-STEM pathway. In addition to the chemistry concepts outlined in the Next Generation Science Standards, the course will also explore related Earth Science concepts. Topics include Fuel Sources (Petroleum, Nuclear, and alternates), Food as Energy and Human Impact, Using Chemical Reactions in Industry, Water Purification, and Atmosphere and Human Impact on Air Quality.

Prerequisite: Teacher recommendation only

Chemistry

Grades Taught: 11, 12

Chemistry is the study of the interactions of matter and energy. These topics are explored both quantitatively and qualitatively, with a focus on problem solving and data analysis. This course covers the Chemistry content expectations of the Michigan Science Standards. Chemistry 1 content includes scientific measurement and problem solving, classifying matter and energy, atomic structure, nuclear chemistry, electron configuration, organization of the periodic table and its trends, intramolecular forces (bonding patterns), intermolecular forces, nomenclature, and chemical reactions. Chemistry 2 content includes mole calculations, stoichiometry, thermochemistry, gas laws, solutions, reaction kinetics, chemical equilibrium, acids and bases, electrochemistry, and organic chemistry. Both Chemistry 1 and 2 involve a laboratory component. Both Chemistry 1 and Chemistry 2 are recommended for students planning to earn a 4 year college degree.

Honors Chemistry

Grades Taught: 10, 11, 12

Chemistry is the study of the interactions of matter and energy. These topics are explored both quantitatively and qualitatively, with a focus on problem solving and data analysis. This course covers the core and essential Chemistry content expectations of the Michigan Merit Curriculum, as well as the recommended and pre-AP Chemistry expectations. This course is designed for the motivated learner with a strong understanding of Algebra (as Algebraic skills are used frequently throughout the course), developed problem-solving skills, and an attention for detail. This course differs from Chemistry 1 and 2 in that it moves at a faster pace, incorporates additional projects, covers more content—both in breadth and depth—and requires more quantitative analysis of information. A student who earns an A or B in Honors Chemistry will be well-prepared to enter AP Chemistry or any college-level Chemistry course.

Honors Chemistry 1 content includes scientific measurement and problem solving, classifying matter and energy, atomic structure, nuclear chemistry, electron configuration, organization of the periodic table and its trends, intramolecular forces (bonding patterns), intermolecular forces, nomenclature, and chemical reactions. Honors Chemistry 2 content includes mole calculations, stoichiometry, thermochemistry, gas laws, solutions, reaction kinetics, chemical equilibrium, acids and bases, electrochemistry, and organic chemistry. Both Honors Chemistry 1 and 2 involve an extensive laboratory component.

Prerequisite: Recommended that students have earned an A or B in advanced math courses, or an A in grade level math.
Science Electives

Ecological Issues - 3rd Science

Grades Taught: 11, 12

This science course will introduce students to ecological concepts, environmental problems, their effect on us, and possible solutions. Making decisions based on stewardship and sustainability in order to protect our environment and its resources will be stressed. This interdisciplinary course will involve concepts from biology, chemistry, physical science, and other science disciplines. Students will learn by a variety of methods, including readings outside class, the Internet, laboratory experiments, group work, discussion, and student projects. Topics covered will include, but are not limited to, the global environmental picture, biodiversity, population dynamics, food production and distribution, ecosystems, water and air pollution, ozone depletion, and global warming. Local environmental issues will be emphasized.

Prerequisite: Biology 1 and 2

Intro to College Biology Honors - 3rd Science

Grades Taught: 11, 12

The course offers an in-depth study of biology, anatomy and physiology (the major systems of the human body). The text and materials used to support the student’s learning are college level. Several topics of Biology I and II will be reviewed with additional depth of understanding as students make new connections to previous knowledge. Students will be performing many hands on activities and upper level laboratory research. Students are expected to maintain an orderly and thorough notebook as well as journals of long term experiments. Grades are based on the traditional paper and pencil types of assessment: quizzes, tests and lab reports. Research papers, multimedia presentations and model building are additional means of assessing student learning. We will be observing and studying life in its unique variety. Be prepared to draw and dissect!

Prerequisite: Successful completion of Honors Biology and Honors Chemistry strongly recommended

Introduction to Forensic Science

3rd Science

Grades Taught: 11, 12

This is an interdisciplinary science course where students will learn how the many branches of science apply to the field of Forensic Science and solving crimes. It will involve concepts from biology, anatomy, chemistry, genetics and other scientific disciplines. Students will learn by a variety of methods, including (but not limited to): readings outside class, the Internet, laboratory experiments, group work, discussion and student projects. A student’s communication skills writing skills, critical thinking and problem solving skills are important for their success in this class. Topics covered include a history of Forensic Science, physical evidence, trace evidence and microscopy, documentation, psychology of criminals, biology, DNA evidence, toxicology, serology, and careers in Forensic Science.

Prerequisite: Biology 1 and 2
Physics

3rd Science

Grades Taught: 11, 12

This course will describe how objects move and how forces affect their motion along both straight and curved paths. This will lead to the prediction of how much and what kinds of energy can be transferred to other bodies. The general properties of mechanical and electromagnetic waves are discussed along with their relation to sound and light. The basic ideas of electricity and magnetism are also investigated.

Prerequisite: STEM, Algebra 2 and Chemistry.
World Language

Spanish 1

Grades Taught: 9, 10, 11, 12

The Spanish 1 high school curriculum introduces students to the Spanish language and culture. Emphasis is placed on developing meaningful authentic communication in Spanish in a variety of contexts. To develop language proficiency, students communicate verbally and in writing through familiar topics focusing on themselves and the world in which they live, including family, school, and friends. Students broaden their cultural knowledge by exploring the regions of the world where Spanish is spoken. Through new information and insights into cultures, customs and traditions of the Spanish-speaking world, students begin to demonstrate respect for other cultures and begin to recognize differences and similarities between their own culture and other cultures. Throughout the year, students continue learning how to communicate effectively in Spanish and demonstrate a curiosity about the language and culture of Spanish speakers.

Spanish 2

Grades Taught: 9, 10, 11, 12

The Spanish 2 high school course is designed for students who have successfully completed Spanish 1, its equivalent, or the Ferndale elementary and middle school Spanish program. Students review and expand their knowledge of Spanish language and culture on topics focusing on: people and places in the community, school, home, ordering food, transportation, taking care of health concerns, workplaces and professions, and leisure activities. Students expand their cultural understanding through comparing and contrasting their life in Ferndale and life in Spain and Mexico. As students broaden and deepen their insights into culture and language, they learn to demonstrate respect for other cultures.

Prerequisite: Spanish 1.

Spanish 3

Grades Taught: 10, 11, 12

Spanish 3 is designed so that students develop a more fluent and elaborate use of Spanish. At this level, emphasis is placed on the student’s production of oral and written Spanish to satisfy personal needs and requests, such as cooking and eating, starting the day, shopping for clothes, party planning & social etiquette and planning a vacation. This course offers students an opportunity to apply the Spanish language skills they know and to collaborate with others to complete group projects.

Prerequisite: Spanish 2
Spanish 4

Grades Taught: 11, 12

This is a continuation course for students who have successfully completed Spanish 3. The course will be conducted primarily in Spanish and students will be expected to speak Spanish in the course. Emphasis will be placed on improving the student’s ability for extended discourse in speaking and writing Spanish. Students will be exposed to a variety of authentic materials to improve their listening comprehension, reading and cultural proficiency. Students are required to actively participate in class, maintain a class notebook, and complete various written and oral assignments, quizzes and tests.

Prerequisite: Spanish 3.

Spanish 5

Grades Taught: 12

This is a continuation course designed for students who wish to continue to develop their ability to communicate orally and in writing in the foreign language. The course will be conducted primarily in Spanish and students are expected to speak Spanish in the course. Emphasis will be on improving accuracy in use of the basic language structures and increasing working vocabulary. Authentic reading selections will include magazine and newspaper articles on current events, issues and trends in Spanish speaking countries. Students are required to actively participate in class, maintain a class notebook, and complete various written and oral assignments, quizzes, tests and projects.

Prerequisite: Spanish 4.
Oakland Schools Technical Campus
(OSTC)

Ferndale High School junior and senior students are offered opportunities to explore career areas, prepare for specific college/advanced training majors and to acquire the skills to go directly into the job market. A number of the programs at the center qualify students for advanced standing or college credit. Students may elect to attend OSTC for one or two years or finish a program as a postgraduate (see articulation agreements chart). The second year of a program is designed to provide advanced work, specialization and a certificate of completion.

Students may complete a program or attend the center after graduation on a tuition basis. Students will be transported in the morning or afternoon via bus provided by the Ferndale School District. All students will be expected to ride the bus, which will leave from and return to Ferndale High School at a specific time:

- Session 1- 7:50 am – 10:20 am - Bus leaves at 7:10 am
- Session 2 - 12:00 pm – 2:30 pm - Bus leaves at 11:20 am

The programs are offered to juniors or seniors on a selective basis. Students attending OSTC will receive 1.75 high school credits and a grade each semester. Remaining credits will be earned at the student’s respective home high school. Courses may be selected within the following programs.

- Automotive Technology
- Collision Repair and Refinishing
- Construction Technology
- Computer Programming - iTEAM
- Cosmetology (Pontiac Campus Only)
- Culinary Arts/Hospitality
- Entrepreneurship & Advanced Marketing - iTEAM
- Energy-Electrical Technologies
- Engineering, Robotics & Mechatronics
- Health Sciences
- Homeland Security - Criminal Justice
- Homeland Security - Cyber Security Networking
- Machining
- Visual Imaging
- Welding

1. Transportation is provided to OSTC Royal Oak campus for both AM and PM programs.
2. Transportation is provided to the Pontiac Campus ONLY for AM Cosmetology, 1st year students.
3. Completion of the two year cosmetology program may NOT meet the required number of hours needed for licensure. Students will need to participate in summer programming. Students may have to enroll at a post-secondary program at their own cost to complete the licensure program.
EARLY COLLEGE PROGRAMS - Oakland Technical Early College (OTEC) - Southeast Campus

OTEC is an early college program beginning in 11th grade. Students have the opportunity to earn an associate’s degree related to the technical program the student is taking at Oakland Schools Technical Center (OSTC). Oakland Schools Technical Campuses have partnered with OCC to bring Early College opportunities to our students. In 11th and 12th grade students take college courses along with their home high school and OSTC coursework. Students attend OCC full time during an added 13th year potentially earning both their associate’s degree and high diploma. There is no student cost related to college tuition or books.

Available Programs

- Collision
- Machining
- Mechatronics
- Welding
- Computer Programming
- Computer Networking
- Web Development
- Visual Imaging

Eligibility

Students interested must have at least a 2.0 GPA and have completed their MMC requirements: Algebra, Geometry, ELA 9, ELA 10, and 9th and 10th grade Science requirements. Each student will be required to take the Accuplacer Placement Test administered by OCC. They begin the program junior year and apply that fall.
EARLY COLLEGE PROGRAMS -
Oakland Schools Accelerated College Experience (ACE)

Oakland ACE offers students the opportunity, guidance, and support to earn an associate degree, or up to 60 transferable credits, while still in high school. Students who meet the eligibility criteria apply during the 10th grade year and commit to a three-year program spanning grades 11, 12, 13 (an added fifth year of high school). Splitting time between courses at their home high school and college classes at Oakland Community College (OCC), students work simultaneously toward their diploma and an associate’s degree. There is no cost to the students for tuition, fees, or books.

The ACE Program focuses on transferable degrees at OCC. The three degree options are:

- Associate in Arts
- Associate in Science
- Associate in Business Administration

Your high school counselor as well as a representative from Oakland ACE can help you select a specific program and courses.

Eligibility

All students interested in applying must have at least a 2.0 GPA and have completed their MMC requirements: Algebra, Geometry, ELA 9 and 10, and 9th and 10th grade Science requirements. Each student will also be required to take and pass the Accuplacer Placement Test administered by OCC.
The Center For Advanced Studies And The Arts (CASA)

CASA is a seven-school consortium. Students from Berkley, Clawson, Ferndale, Lamphere, Madison, Oak Park and Pontiac High Schools attend CASA in the afternoon. CASA courses are both challenging and rewarding and are designed to engage students in higher levels of thinking. Students may attend CASA in grades 10 through 12, however, typically, students do not attend in 10th grade. CASA currently offers 16 Advanced Placement courses. Students taking Advanced Placement exams may earn college credit upon successful completion of the optional national exam. There is an additional fee for the exam.

Please visit: casa-online.org for current offerings, online application information, course descriptions and policies.
General Information

This collection of course descriptions has been compiled as an aid to students and parents in selecting a high school course of study. Actual course selections should be made in light of each student’s background interests, aptitude and aspirations. Final decisions should involve the student, parent, teacher and counselor.

Nondiscrimination

It is the policy of Ferndale High School District not to discriminate on the basis of race, color, national origin, sex or handicap in its educational programs, activities, or employment as required by Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973.

The Importance of Course Selection

During the second semester of each school year many plans and procedures are made in preparation for the following year. None is of greater importance than scheduling. From student course selections, the number of classes offered is determined, teachers are hired and budget allocations made. IT IS, THEREFORE, ESSENTIAL THAT CAREFUL PLANNING MUST BE EXERCISED BY BOTH PARENTS AND STUDENTS PRIOR TO MAKING COURSE SELECTIONS. Each student is asked to review this booklet thoroughly and to consult with his/her counselor on special problems or concerns in arriving at final decisions. Once submitted, the selection sheet constitutes the basis for all future planning. Subsequent changes in course selections may not be possible. Choosing honors or AP classes should be done thoughtfully and carefully as most of these are year-long decisions and may not be able to be changed at the midway point of the school year. The student may be placed in an alternate class than selected to fulfill a specific graduation requirement as necessary or if a class is cancelled.

Course Selections and Prerequisites

Grade levels at which each course may be taken are indicated with each course description. Prerequisites, if any, are also listed. The prerequisites are intended to prepare a student for that level of coursework and should be carefully considered.

Summer School

Students who wish to recover lost credit due to failure may enroll in summer school. Credits earned will become part of the high school transcript for any student who has completed the eighth grade prior to enrolling in summer school. Counselor approval is required for all students. Applications are available online or in the Counseling Center in May.

Honors/Advanced Placement Courses

Honors and Advanced Placement courses are intended for students who have demonstrated superior skills in the subject area. Students and parents should be aware that grade transcripts prepared for colleges and universities specifically identify honors and Advanced Placement courses. Often colleges do take into account the comparative difficulty of honors courses and AP courses, although there is no guarantee that individual institutions will make such allowances. These courses are weighted at FHS. Colleges sometimes accept weighted gpas, but not always. Honors courses taken at FHS are weighted an additional .5 for a grade of C or higher. AP courses are weighted an additional 1.0 for a grade of C or higher.
Dual Enrollment

Dual enrollment is a post-secondary enrollment option that allows qualified students to enroll in Michigan post-secondary institutions and earn college credit before graduating from high school. These post-secondary institutions must be a state-assisted and degree-granting college or university and any other nonprofit educational institution certified to operate in Michigan. Students must be eligible to take courses based on the criteria in the listed document below. Ferndale Public Schools will pay for tuition, books and mandatory course fees up to a specified amount. Applications for dual enrollment are available in the Counseling Center and must be approved by the principal and counselor. For more information, please go to: https://www.michigan.gov/documents/mde/9_12_dual_enrollment_FAQs_397781_7.pdf

Testing Out

Any high school student is permitted to take the testing out option for any course in which credit has not already been earned. Once credit is earned via testing out, a student may not receive credit thereafter for a course lower in sequence in the same subject area. A passing grade of at least 78% must be achieved on one or more assessments in order to earn credit. Any credit earned by testing out is not computed into the grade point average but is indicated on the transcript with the letter “G” for credit. Students will be provided with the learning objectives for the course, the course study or syllabus and a description of the examination/assessment in order to prepare. Students will be required to submit the required application by the date established by the principal and to fulfill the requirements for those individual assessments by the testing date. Applications for testing out are available in the Counseling Center and takes place 1-2 times per year.

Credit Recovery

Students have a number of ways to recover lost credit. They are encouraged to attend summer school. Students may retake the class during the school day online and will receive a grade for the retaken class. Students can also take online courses if credit deficient outside of the school day for credit only--no grade will be given for this credit recovery. Once a student passes a previously failed course, the E will be replaced with an S and the new grade will be added to the transcript. We utilize E2020 which do not qualify currently for NCAA eligibility. Please see the counselor for more information.

Virtual/Internet Study Options

In addition to regular classroom-based instruction, students may earn credit through virtual/online courses. Students taking such courses must be enrolled in the district if credit is to be used towards graduation. Each virtual/online student approved for such study shall be assigned a mentor teacher responsible for supervision and monitoring. Attendance is required. Typically, students are enrolled in E2020 for credit recovery online and Michigan Virtual High School for advanced academic enrichment classes. Students may need to work online at home or after school in order to successfully complete their online courses in the given time-frame. Students who do not complete an online class by the end of the semester will earn an E. Completion of any virtual/online course offering must not exceed twelve (12) months from the beginning date of the course.

Early College

Ferndale Schools partners with Oakland Community College to offer students an Early Middle College program that allows them to obtain up to an associate degree within one year after their senior year. This free program offers 3 options: Associate in Arts, Associate in Science, and Associate in Business Administration. Under each of these programs, there are several areas of study. Students must commit to a 13th year which is a 5th year of high school to complete the program. For more information, please contact the counselors or Tom Maes at tom.maes@ferndaleschools.org.
Advanced Placement International Diploma

Ferndale High School will assist students in scheduling for and pursuing the Advanced Placement International Diploma (APID). A student is eligible for the APID if s/he takes and receives a 3 or higher on five or more AP tests and sends his or her scores to at least one university outside of the U.S. FHS teachers and counselors will help students prepare their schedules so that they ensure their eligibility for the APID. For more information, please contact Tom Maes at tom.maes@ferndaleschools.org.

NCAA Eligibility

Any student planning to participate in a Division I or Division II college sport must be academically eligible and registered with the NCAA Eligibility Center. Please see your coach, the athletic director or counselor for more information. You must have qualifying grades and test scores. See www.eligibilitycenter.org for information about the process, eligibility and registration. For more information, please contact Shaun Butler at shaun.butler@ferndaleschools.org.
Compliance Information

Compliance with Title VI, IX, Section #504

It is the policy of the Ferndale School District that no person shall, on the basis of race, color, national origin, sex, or handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program, activities, or employment, as required in Title VI of the Civil Rights Act of 1964, in Title IX of the Educational Amendment of 1972 Section 504 of the Rehabilitation Act of 1973 and P.L. 101-476 Individuals with Disabilities Education Act (IDEA).

Questions regarding Title VI of the Civil Rights Act of 1964 concerning discrimination in employment should be directed to:

Teresa Vulcano, Director of Human Resources
Ferndale Public Schools
871 Pinecrest
Ferndale, MI 48220
(248) 586-8661

Questions concerning the discrimination of student in programs and activities covered under Title VI of the Civil Rights Act of 1964 should be directed to:

Dina Rocheleau, Assistant Superintendent of Instruction & Curriculum
Ferndale Public Schools
871 Pinecrest
Ferndale, MI 48220
(248) 586-8658

Questions concerning the Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of gender, should be directed to:

Teresa Vulcano, Director of HR
Bill Good, Director of Enrollment & Pupil Services
Title IX Coordinators
713 E. Nine Mile Rd.
Ferndale, MI 48220
(248) 545-0222

Inquiries related to Section 504 of the Rehabilitation Act of 1973, or IDEA, which prohibits discrimination on the basis of handicap, should be directed to:

Natalie Kulikowski, Director of Special Education
Ferndale Public Schools
871 Pinecrest
Ferndale, MI 48220
(248) 586-8694
# Ferndale High School and Ferndale Public Schools Administration

## High School Administration

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>Lisa Williams</td>
</tr>
<tr>
<td>Executive Assistant Principal</td>
<td>Eric Bruner</td>
</tr>
<tr>
<td>Executive Assistant Principal &amp; Athletic Director</td>
<td>Shaun Butler</td>
</tr>
<tr>
<td>Counselors</td>
<td>Kim Ellis</td>
</tr>
<tr>
<td></td>
<td>Kathy Wiley</td>
</tr>
</tbody>
</table>

## Board of Education

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Mike Davisson</td>
</tr>
<tr>
<td>Vice President</td>
<td>Sandra N. Dukhie</td>
</tr>
<tr>
<td>Secretary</td>
<td>Anna Ibrahim</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Jennifer LaTosch</td>
</tr>
<tr>
<td>Trustee</td>
<td>Jackie Hart</td>
</tr>
<tr>
<td>Trustee</td>
<td>Nancy Kerr-Mueller</td>
</tr>
<tr>
<td>Trustee</td>
<td>Jim O’Donnell</td>
</tr>
<tr>
<td>Superintendent</td>
<td>Dania Bazzi</td>
</tr>
</tbody>
</table>