

Rochester Community Schools 2025-2026 Course Description Book

HIGHSCHOOL



ADAMS

3200 Tienken Rd.
(248) 726-5200

ROCHESTER

1361 Walton Blvd.
(248)726-5400

STONEY CREEK

6755 Sheldon Rd.
(248) 726-5700



Rochester Community Schools Mission Statement

To provide a quality education in a caring atmosphere for students to attain the necessary skills and knowledge to become lifelong learners and contribute to a diverse, interdependent and changing world.

GENERAL INFORMATION

This booklet of high school course descriptions has been compiled as an aid to students and parents/caretakers in selecting a high school course of study. Actual school programs and schedules of classes should be made in consideration of each student's academic background, interests, aptitudes and aspirations. Please refer to the next two pages for typical course pathways. Final decisions should involve the student, parent, counselor, and teacher.

These descriptions are not intended to be complete listings of the specific objectives of each course. More complete information, including specific terminal performance and course objectives, is available from individual teachers and departments.

The general education courses described herein are approved or are scheduled for Board of Education approval during the current school year.

Courses listed as 1 credit (40 weeks) are full-year courses.

Courses listed as 1/2 credit (20 weeks) are semester courses.

While choosing courses, check the page outlining graduation requirements in the Registration Brochure carefully. Each student is responsible for selecting courses that will meet these requirements. Questions regarding course selections should be directed to the appropriate counselor. When selecting courses, attention should be paid to the prerequisites and eligible grade levels for each course.

**Volume XXXVIII
2025-2026
Revised: January 2025
Online Version Update: January 2025**



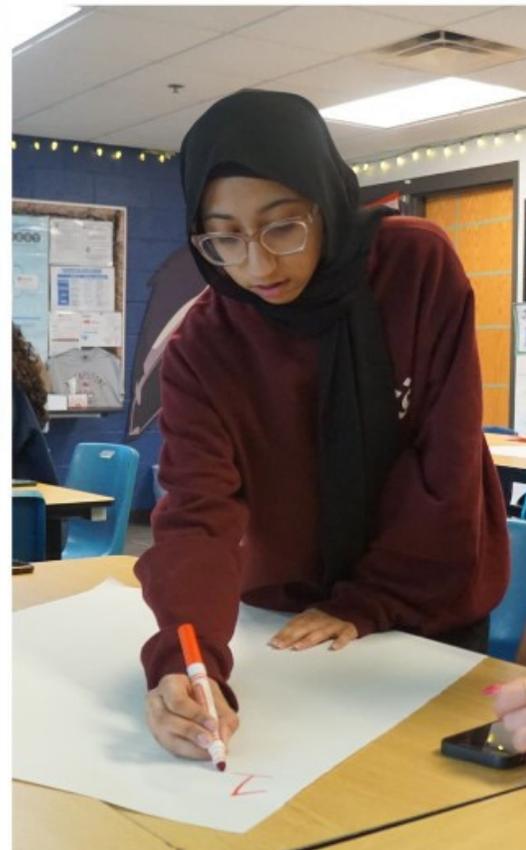
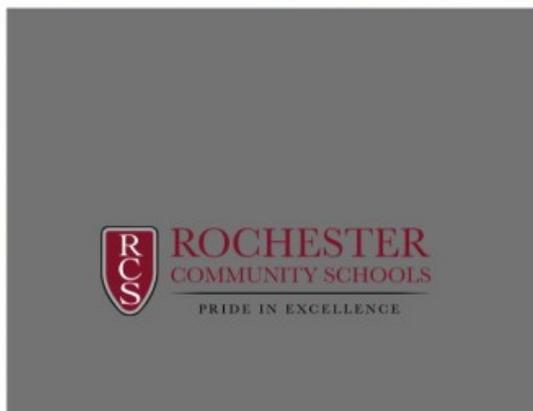
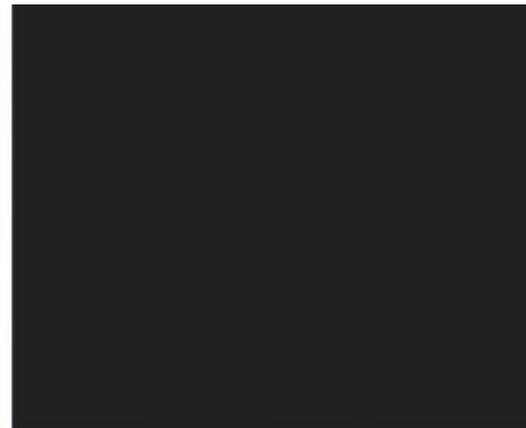
TABLE OF CONTENTS

Registration Information	4
Synergy Instructions	15
Course Descriptions	
AP Program	19
Art	21
Business Services & Technology	25
Computer Science	29
Design and Technology	30
Educational Careers	34
English/Language Arts	35
Family and Consumer Sciences	40
Mathematics	42
Music	46
Performing Arts	50
Physical Education	51
Science Department	54
Social Studies	60
World Languages	64
English Language Learners	67
Special Education	68
Additional Educational Programs	
Oakland Schools Technical Campus	71

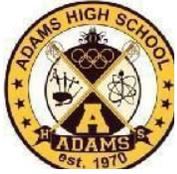
This course description book is also located at:
<http://www.rochester.k12.mi.us>

On the "District" site, click on the "Academic" tab, then click on "Curriculum" and select "Secondary Education". Click on the "High School" tab. Click on "HS Course Description Booklet 2025-2026".

REGISTRATION INFORMATION



High School Information



Adams High School

3200 W. Tienken Rd.
248-726-5200

Principal: Luke Swanson
Asst. Principals: Susan Demeniuk, Andrea Noel
Counselors: Jessica Bellomo, Christy Clement, Sarah Falkowski,
Janice King, Allison Parliament, Derek Trottier



Rochester High School

1361 Walton Blvd.
248-726-5400

Principal: Joshua Wrinkle
Asst. Principals: Megan Pasquale
Counselors: Christopher Green, Melissa Kinney, Katie Martin, Jennifer
O'Toole-Seyka, Dianna Sorentino



Stoney Creek High School

6755 Sheldon Rd.
248-726-5700

Principal: Brian Shelson
Asst. Principals: Jason Kluzak, Elizabeth Tocco
Counselors: Nichole Allen, Philip Beach, Carter Collins, Shannon Donnellon,
Brooke Govern, Shelby Muir



ROCHESTER COMMUNITY SCHOOLS

PRIDE IN EXCELLENCE

INTRODUCTION

This brochure has been developed for students to use in conjunction with the course description book available on Rochester Community Schools website located at:

<http://www.rochester.k12.mi.us>

- On the "District" site, click on the "Academic" tab
- Then click on "Curriculum" and select "Secondary Education"
- Click on the "High School" tab
- Click on "HS Course Description Booklet 2024-25"

Students are encouraged to work with their counselors when planning which courses they will register for each year.

Minimum Graduation Requirements (Grades 9-12)

A minimum of 22 credits must be earned to graduate from Rochester Community Schools, and all students must participate in all State Mandated Tests during high school. The credits identified below are aligned with the Michigan Merit Curriculum (MMC) and include required and elective courses. The MMC also provides for personal modifications and some flexible options as noted below.

ENGLISH/LANGUAGE ARTS

Including:	Language Arts 9	(1 credit)	4.0 Credits
	Language Arts 10	(1 credit)	Grade 9
	Language Arts 11 (Composition/Literature)	(1 credit)	Grade 10
	Language Arts 12 (Composition/Literature)	(1 credit)	Grade 11
			Grade 12

SOCIAL STUDIES

Including:	World History	(1 credit)	3.0 Credits
	US History	(1 credit)	Grade 9
	Government	(1/2 credit)	Grade 10
	Economics (Recommended for Grade 11)	(1/2 credit)	Grade 11
			Grades 11-12

SCIENCE

	Biology	(1 credit)	3.0 Credits
	Chemistry, Physics, and Earth Space	(1 credit)	Grade 9
	Science		Grades 10-12

MATHEMATICS

4.0 Credits

The typical course sequence to fulfill the MMC mathematics requirement is Algebra 1 (1 credit), Geometry (1 credit), Algebra 2 (1 credit), and a mathematics or mathematics-related course(s) (1 credit) in the student's final year of high school.

- High school equivalent math course(s) taken in middle school may be applied to the 4.0 credits required in mathematics and counted toward the minimum 22 credits to graduate from high school. High school math credits earned in middle school are not calculated into the high school Grade Point Average GPA.
- The grade and credit for high school courses taken in middle school and repeated in high school will be reflected on the high school transcript and will only count for credit once. The grade for the repeated course(s) will be calculated into the high school GPA.
- A math or math-related credit must be taken in the final year of high school.
- Students must minimally complete coursework through Algebra 2 or Algebra 2B.
- Math-related credit has been approved for the following courses:
Accounting 1, 2, 3, and 4, all Design & Technology classes, AP Chemistry, Chemistry, Fundamentals of Chemistry, AP Computer Science, AP Computer Science Principles, Computer Programming 1 and 2, Personal Finance, AP Physics, Fundamentals of Physics, Physics, Woodworking, Advanced Woodworking and Oakland Technical Center (OTC) clusters.
- Personal Curriculum modifications may only be considered after a student has completed one semester of Algebra 2 or a year of Algebra 2A.
- All other exceptions must be approved by the principal.

WORLD LANGUAGES

2.0 Credits

Students must earn 2.0 credits in a World Language. The two credits must be in the same language.

- High School equivalent World Language course(s) taken in middle school may be applied to the 2.0 credits required in World Languages and counted toward the minimum 22 credits to graduate from high school. High school credit earned in middle school is not calculated into the high school Grade Point Average (GPA). It is strongly recommended by most colleges that students obtain at least 2 years of world language study while in high school. College-bound students should contact the schools they are interested in attending for specific language requirements.
- The grade and credit for high school courses taken in middle school and repeated in high school will be reflected on the high school transcript and will only count for credit once. The grade for the repeated course(s) will be calculated into the high school Grade Point Average (GPA).

VISUAL, PERFORMING, and APPLIED ARTS

1.0 Credits

Courses that are included in this area are identified below:

2D Art Exploration	Ceramics	Foods and Nutrition	Printmaking
3D Art Exploration	Chamber Choir	Fund. of Digital Art Media	Robotics 1 & 2
Advanced Ceramics	Child Development	Guitar	Sculpture
Advanced Digital Design	Chorale	Independent Living	Small Business Management & Entrepreneurship
Advanced Drawing and Painting	Computer Operations in Business	Interior Design	Student Council
Advanced Marketing	Computer Modeling and Animation	Jazz Band	Summer Music Theater
Advanced Multimedia Communication (10 & 11)	Computer Programming 1 & 2	Jewelry/Metals	Symphony Band
Advanced Photography	Concert Band	Journalism and Multimedia Communications	Symphony Orchestra
Advanced Video Production	Concert Choir	Marching Band	Tenor/Bass Choir
Advanced Woodworking	Concert Orchestra	Marketing and Advertising	Theater 1 & 2
AP Capstone	Creative Writing	Mechanical Drafting/Design 1 & 2	Treble Choir
AP Computer Science A	Cuisines of the World	Medical Careers	Video Production
AP Computer Science Principles	Digital Design	Men's Choir	Virtual Enterprise Capstone
AP Research	Drawing/Painting	Merchandising Lab/School Store	Web Design & Social Media
AP Seminar	Educational Careers	Music Theory	Wind Ensemble
AP Art & Design	Engineering Design 1 - 4	Oral Communications	Woodworking
Architecture 1-4	Exploring Music	OSTC	Yearbook
Business Functions and Operations	Fashion Design	Photography	

HEALTH AND PHYSICAL EDUCATION**1.0 Credits**

Students take a .5 Health class with a .5 PE activity course (i.e. PE Sports Activities, Personal Fitness) to fulfill the 1.0 credit requirement.

PERSONAL FINANCE**0.5 Credits**

Beginning with the graduating class of 2028, all RCS students must fulfill a 0.5-credit Personal Finance requirement, which can be satisfied through the Economics course, or by taking the Personal Finance elective. Subsequently, the total credit requirement for graduation will increase to 22.5 credits.

ONLINE LEARNING EXPERIENCE**No Credit**

Online course or 20 hours of online experience embedded within Rochester Community Schools curriculum.

STATE MANDATED ASSESSMENTS (PSAT, SAT, M-STEP, etc.)**No Credit**

REQUIRED CREDITS:	18.0
ELECTIVES:	4.0
TOTAL Minimum Credits Required	22.0

ADDITIONAL EDUCATIONAL OPPORTUNITIES

ALTERNATE CLASSROOM DELIVERY MODELS

- **Credit Recovery Program** Students who are at risk of not fulfilling their graduation requirements will be offered a unique atmosphere to fulfill credit recovery opportunities.
- **Blended Learning** Students may have the opportunity to take one or more Blended Learning courses. Students divide their time between face-to-face interactions with the instructor and classmates, coupled with a flexible learning environment. A flexible learning environment may be off-campus and may entail online learning, service learning, internships, site visits, lab work, groupwork, workshops, or research.
- **Online Learning** Students have the opportunity to take up to two courses online per semester. Information and applications are available in the counseling office. *Note: NCAA may not recognize credits earned in online learning classes toward eligibility.*

AP CAPSTONE DIPLOMA

The College Board's AP Capstone is an innovative college-level program based on two new courses – AP Seminar and AP Research – that complement and enhance discipline-specific AP courses. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma™. See collegeboard.org for more information.

CREDIT BY EXAM

Students may apply to take a test-out exam for courses in the Rochester Community Schools' curriculum. Testing out will occur twice each year, once at the end of the school year for placement during the following school year and once in January. Testing in January will be limited to single-semester courses, and only one test can be taken on the January test date. Students receive a list of course content expectations to use in preparation for the exam. In order to receive credit, students must attain a score of 77% or better on one or more assessments that measure the student's understanding of the course content expectations. The exam may be taken only once for any course. All exams will remain the property of Rochester Community Schools and will not be returned to the student. *Note: NCAA does not recognize credits earned by exam toward eligibility.*

EARLY GRADUATION

High school is a four-year program requiring a minimum of 22 credits for graduation. Students who wish to graduate in less time must carefully coordinate their program with their counselor to ensure all requirements are met. A student who wishes to be considered for early graduation must submit his/her request to the building principal prior to the start of his/her last year of high school.

EARNING COLLEGE CREDIT WHILE IN HIGH SCHOOL

Students are eligible for early college credit opportunities; however, some courses may have prerequisites. Because early college credit opportunities differ from student to student, check with your high school guidance counselor to see which options may be available.

- **Advanced Placement (AP)** Advanced Placement courses provide students with the opportunity to take college-level courses in high school, taught by high school teachers. The course requirements for these programs may differ from class to class, so check with your counselor. Some AP courses will require that you complete a lower-level course in the same subject prior to taking the AP class. AP class grades are factored into the student's GPA with a multiplier of 1.25.
- **Articulation Agreements** The Rochester Community Schools has articulation agreements with certain colleges to earn college credit for identified CTE high school courses. Please see your high school counselor for a list of specific courses.
- **Dual Enrollment** This option allows students in grades 9-12 to take classes in high school and one or more college courses. These are courses not offered by Rochester Community Schools. See Dual Enrollment information on the counseling website for eligibility.

FLEX CREDIT EXCHANGE OPTIONS

In some curricular areas, students may elect to exchange a credit for a credit in another curricular area. There are flex options in the curricular areas of Physical Education, Science, and World Language. In each case, there are specific courses that students may exchange for those listed in the graduation requirements. The chart below shows the options available for exchanges. Students need to obtain a FLEX form from the counseling office, complete the form with the plan for exchange, and turn it in to the counseling office with the scheduling card.

FLEX Options	
Requirement	Potential Replacements
Half credit Physical Education	Two seasons of MHSAA sport or marching band
3 rd Science Credit	Computer science or CTE program
2 nd year World Language	Additional VPAA credit or CTE program

GLOBAL AWARENESS ENDORSEMENT

Students of Rochester Community Schools have the opportunity to earn a special global awareness endorsement to recognize their cultural initiatives, community service, and global citizenship. Students who complete three out of four requirements will receive a certificate upon high school graduation. Students in grades 7-12 are eligible, and they may complete the program at their own pace. Students are encouraged to customize projects to suit their interests and passions.

Global Awareness Supports College Readiness

Post-secondary institutions are looking to attract students who value diverse perspectives and cultures while working collaboratively to make a positive impact on the world. A Rochester Community Schools

global awareness endorsement provides an advantage for college applicants who can certify their personal efforts and commitment to cultural initiatives.

Program Requirements

Students in grades 7-12 may participate in the program. Students may choose three of the four requirements, which must be completed prior to high school graduation.

1. **Coursework (Mandatory):** Students must take a minimum of six courses in areas of global focus, which may include world languages, Current Issues, AP Geography, World Cuisines, Myths, AP Art History, AP Capstone, and World Religions. All courses will be taken during high school, with the possible exception of world languages, which may begin in middle school. Students with an IEP should work with their learning consultant to customize a plan.
2. **International exchange:** Students may participate in an RCS international travel experience or host a long-term or short-term foreign exchange student or Amity Scholar.
3. **Community service:** Students may complete 60 hours of community service. This can include tutoring, volunteering for RCS international exchange initiatives, or other projects that are granted prior approval from the global awareness G6 team.
4. **Global presentation:** Students may share a global experience with a real-world audience. This may be achieved through a published story, a digital video, a live presentation, or another format approved by the global awareness G6 team.

How to apply

Applications will be considered twice each year—in October and February. Interested students should send an email to the global awareness G6 team at ga6@rochester.k12.mi.us. It is NOT necessary to wait until senior year to apply for the global awareness endorsement. Students are encouraged to work closely with the team in advance.

INDEPENDENT STUDY

Independent study is for advanced students who wish to pursue a course of study in more depth. To be eligible for an independent study, a student must be in the 11th or 12th grade. Students should consult with their counselor for information regarding the application process and deadlines for application.

NON-DISTRICT SPONSORED CREDIT OPPORTUNITIES

Students must obtain permission prior to taking any course outside of RCS. If approved, the grade for the class will not be factored into the student's GPA, and a "G" will be included on the transcript. Non-district-sponsored credit opportunities, such as homeschooling, must be accredited through AdvancEd (formally NCA) or an equivalent accrediting association.

OAKLAND SCHOOLS TECHNICAL CAMPUS (OSTC)/CAREER TECHNICAL EDUCATION (CTE)

Oakland Technical Centers provide students with a way to develop skills and competencies in a variety of careers and potentially earn college credit while in high school. Students usually begin a two-year program in their junior year; however, the length of the program can vary. OSTC students divide their time between high school and OSTC. See more at OSTCOnline.com.

PERSONAL CURRICULUM MODIFICATION GUIDELINES (PC)

The Personal Curriculum (PC) is a documented process that modifies certain requirements of the Michigan Merit Curriculum (MMC) legislated by the state of Michigan. A request for consideration of a personal curriculum may be made by a parent, legal guardian, teacher, counselor, or emancipated student.

The use of a Personal Curriculum (PC) modification is allowed by State statute for students when:

1. There is a request to modify the mathematics, physical education, or VPAA requirement.
2. There is a request to go beyond the academic credit requirements by adding more advanced math, science, English language arts courses, or a formal CTE program.
3. A student transfers in from out of state or a non-public school.
4. A student has an Individualized Education Plan (IEP) and requires a Personal Curriculum (PC).

A Personal Curriculum (PC) for a student without an Individualized Education Plan (IEP) is intended to increase the rigor and relevance of a student's educational experience based on the Education Development Plan's (EDP) goals; it is not intended to modify the Michigan Merit Curriculum (MMC) based on personal preference for one content area over another. The additional course work in science, math, English language arts, World Language, or formal CTE program must be higher level/Advanced Placement (AP) courses that align with the student's Education Development Plan (EDP), as opposed to additional electives in those areas. The Personal Curriculum (PC) modification should only be considered if the student is unable to fit required courses into the four-year plan. Personal Curriculum (PC) Modifications must follow the Michigan Merit Curriculum (MMC) PersonalCurriculum Guidelines and be approved by the Superintendent/designee.

There are specific requirements to qualify for a Personal Curriculum (PC) in each of these situations. Consult your counselor for further details and for a Personal Curriculum Request Application.

STUDENT COUNCIL

Student Council is a year-long course that teaches leadership skills and acts as the student government. It is the umbrella that serves as a liaison to all student clubs and activities. Students are elected from all four grades. Specific goals for this course include developing an understanding of how a democracy works, parliamentary procedure, constitutional change, planning and organizing school events, running school elections, public speaking, and leadership training opportunities. Another aspect of the course includes community service and working with local elementary and middle schools.

SEAL OF BILITERACY

The Seal of Biliteracy is an award given to graduating seniors by Michigan Department of Education (and the student's district) in recognition of students who have attained proficiency in English and another language by high school graduation.

Qualified students have:

- Met graduation requirements
- Demonstrated Intermediate High proficiency in reading, writing, speaking, and listening on world language assessment(s) or through a non-traditional pathway
- English Language Learners (ELLs) must have earned a level 2.5 or higher on the ACCESS 2.0 assessment

The Michigan Seal of Biliteracy is designed to:

- Provide potential future employers with a method of identifying people with language and biliteracy skills
- Provide colleges and universities with a method to recognize and give credit to applicants for the attainment of high-level skills in multiple languages
- Prepare students with 21st-century skills that will benefit them in the labor market and the global society

VIRTUAL CAMPUS

Students who select the virtual option will be expected to complete the entire year with the virtual campus. The Virtual Campus follows Rochester Community Schools' core curriculum with an expanded offering of electives.

IMPORTANT INFORMATION TO CONSIDER WHEN CHOOSING COURSES

ACADEMIC RECOGNITION for SENIORS

Scholars of Highest Distinction	Scholars of Distinction	Scholars of Achievement
GPA: 3.9 – 4.0	GPA: 3.8 – 3.899 or higher	GPA: 3.500 – 3.799 or higher
AP: 4 or more courses	AP: 3 or more courses	AP: 2 or more courses

CLASS CHANGES

Every attempt is made during the survey process to make sure students are appropriately placed in their classes. However, if a change is needed, due to an error or misplacement, counselors endeavor to make all changes prior to the start of the semester as class allotments will allow. Any requests made after that time will be referred to the building principal and/or designee.

Students enrolling in Advanced Placement (AP) courses make a commitment for the entire school year. **Students may not drop AP courses in the summer, during schedule adjustment time before the start of school, at semester, or at any other time during the school year. Enrolling in an AP course should be carefully considered.**

COURSE AVAILABILITY

Courses listed in the *Course Description Book* have been approved or are pending approval by the Board of Education. However, all courses may not be offered at all of the high schools because of staff availability, lack of student requests, or facilities. If there is sufficient interest, courses will be offered at least once each year.

GRADING SCALE

A = 100-93	B- = 82-80	D+ = 69-67
A- = 92-90	C+ = 79-77	D = 66-63
B+ = 89-87	C = 76-73	D- = 62-60
B = 86-83	C- = 72-70	E = 59 and below

While grades in AP courses use this same scale, the AP grade is factored into the GPA with a higher multiplier (1.25).

LENGTH OF COURSES

Courses in high school are of two types:

- Semester courses last 20 weeks and grant 1/2 credit.
- Year courses last 40 weeks and grant 1 credit.

Students who enroll in Year courses are expected to complete the full course. A student will receive 1/2 credit per semester.

REPEATING CLASSES

Refer to individual department descriptions for courses that can be repeated for credit, located at www.rochester.k12.mi.us. (On the District website, click on "Curriculum" and then click on "Secondary Education" in the drop-down menu. Click on "High School". Click on "HS Course Description Book (by department)". Occasionally a student may wish to repeat a course for an improved grade. Students should talk with their counselor regarding this option.

GENERAL RECOMMENDATIONS FOR FURTHER EDUCATION

Students interested in pursuing a career requiring additional training beyond high school should view their Educational Development Plan (EDP) and involve their counselor, teachers, and parents in planning toward their goal.

Students should begin thinking about career and college plans as early as possible to ensure that courses taken in high school meet the basic requirements of the college or career chosen. While ninth grade may seem early to make a final decision about a career, it is not too early to investigate the various kinds of post-secondary school or training opportunities available and their requirements. In the Career Resource Center and through online resources, students are able to investigate a variety of careers and the educational background needed for these careers. With the help of their counselors, students plan their high school program through work on their EDP. The plan may be updated yearly.

Colleges and universities generally consider success in core courses to be a vital component of the admissions process. In addition to required and/or recommended courses, grade point average, rigor, grade trends, depth of study, and test scores are reviewed when a student is being considered for admission to a college. Students should start preparing early if they hope to attend a highly competitive school or enter a field with very specific entrance requirements. It is also important to know that the proper high school courses will help student to become college ready, career ready, and life ready.

NCAA (NATIONAL COLLEGIATE ATHLETIC ASSOCIATION) REGISTRATION AND ELIGIBILITY

Students intending to participate in Division I or Division II athletics as a college freshman must do the following:

1. Consult the official NCAA website for detailed initial eligibility requirements <http://eligibilitycenter.org>.
2. Register for NCAA at <http://eligibilitycenter.org> and be certified by the NCAA Initial-Eligibility Clearinghouse.
3. Review Academic Eligibility Requirements and check the list of approved NCAA courses against your courses. The list of NCAA approved courses is available at <http://eligibilitycenter.org>.
4. Provide NCAA with your transcript at the end of your Junior and Senior year. Transcript requests can be made at www.parchment.com.
5. Request ACT/SAT scores to be sent directly from the testing agency.

The NCAA Eligibility Center may do a preliminary certification for a student, provided that the student has registered, has an ACT or SAT score on file, and has a six-semester transcript on file.

Important! Neither the Rochester Community Schools nor its staff are affiliated with the NCAA and cannot be responsible for interpreting NCAA requirements.* It remains the sole responsibility of the student at all times to make sure that he/she is satisfying the necessary NCAA requirements for Division I or Division II. Please contact the NCAA directly with any questions concerning the NCAA eligibility requirements.

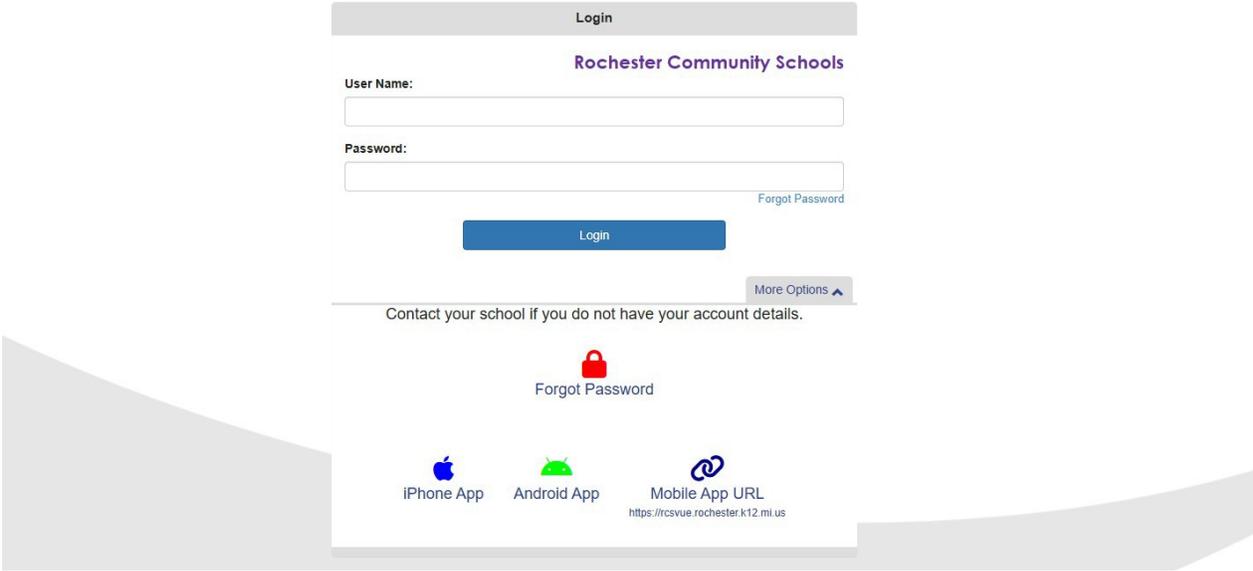
**Rochester Community Schools' graduation requirements are not the same as NCAA requirements.*

Rochester Community Schools does not discriminate on the basis of race, color, religion, national origin, creed or ancestry, age, sex, marital status, or handicap including but not limited to Title II, Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendment Act of 1972 and Section 504 of the Rehabilitation Act of 1973. In addition, individuals will not be excluded from, or be denied, the benefits of participation in any program or activity for which the Board is responsible. Rochester Community Schools has designated the following individual as Compliance Coordinator: Title IX, Section 504, Title II, Assistant Superintendent for Instruction, 52585 Dequindre Road, Rochester, Michigan 48307. 248-726-3106

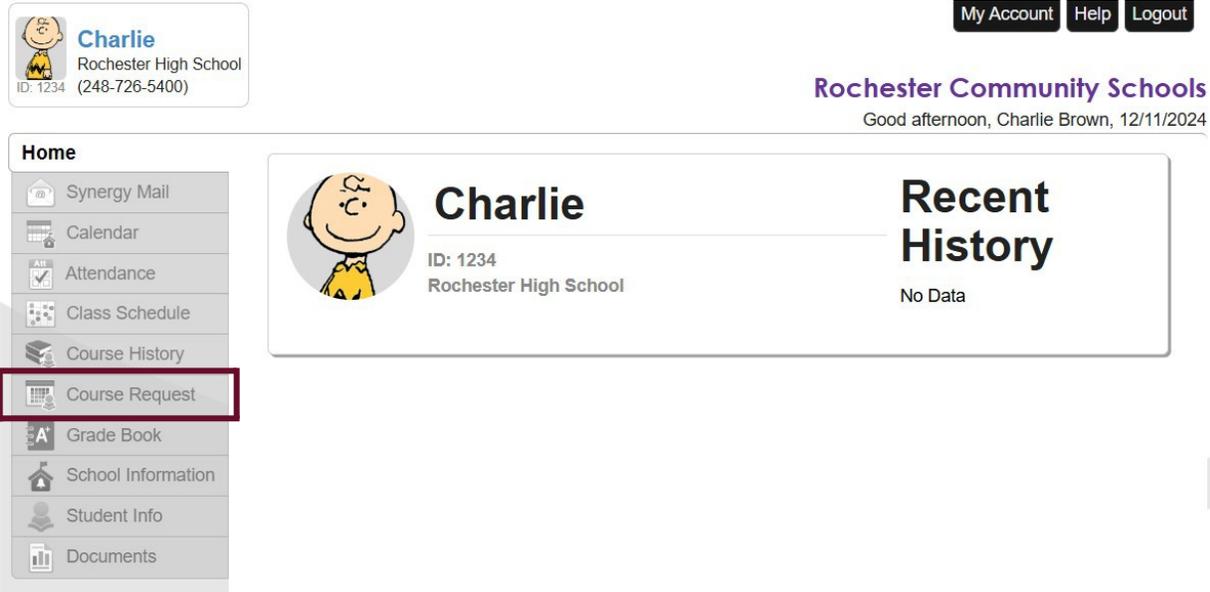
SYNERGY INSTRUCTIONS

1. Go to URL: <https://rcsvue.rochester.k12.mi.us>
2. Login to StudentVUE (Use your school computer username and password to login).

StudentVUE Account Access



3. Enter Course Requests by selecting the Course Requests Tab on the left side. The Course Request window will display.

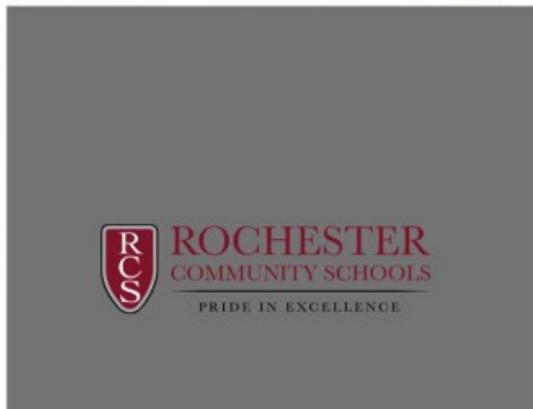
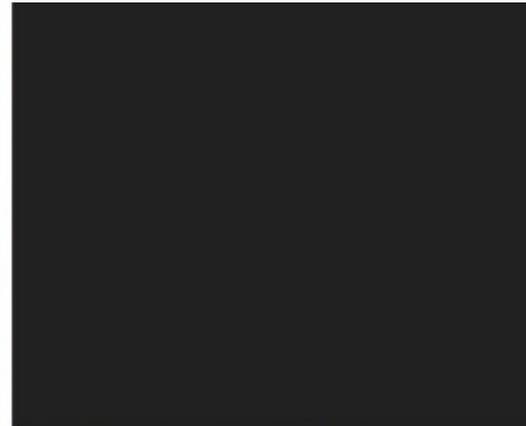


4. To select your course requests, click on the option 'Click here to change course requests'. You may click here for initial requests or if you need to make changes during your input.

The screenshot shows a user interface for a course request system. At the top left, a user profile for 'Charlie' is displayed, including a cartoon character icon, the name 'Charlie', 'Rochester High School', and the phone number '(248-726-5400)'. To the right of the profile are links for 'My Account', 'Help', and 'Logout'. The main header area includes the text 'Rochester Community Schools' and a greeting 'Good afternoon, Charlie Brown, 12/11/2024'. A left-hand navigation menu lists various options: Home, Synergy Mail, Calendar, Attendance, Class Schedule, Course History, **Course Request** (highlighted), Grade Book, School Information, and Student Info. The main content area is titled 'COURSE REQUEST' and features a light blue information box with an 'i' icon and text: 'Welcome Falcons, It's time to survey for classes as we plan for the 2025-2026 school year. As you enter your course selections, please be sure your total credits for the upper section equals 6.0. You also need to enter at least 4 alternate classes in the lower section, in order of preference. Please contact your counselor if you have any questions. You can access the synergy survey directions on the RHS Counseling web page. Have a good day!'. Below this is a yellow box containing the text 'Rochester High School (248-726-5400)' and 'School Year, Grade: 10', with some redacted areas. At the bottom of the main content area is a blue button with the text 'Click here to change course requests'.

5. Follow the directions on the next screen to add courses, remove courses, or request alternative courses.
6. When finished, select 'Click here to return to course request summary' to review all course requests for accuracy.
7. After verifying your course selections are correct, select logout.

COURSE DESCRIPTIONS



AP CAPSTONE

AP Seminar - #APCAPSEM1/APCAPSEM2

40 WEEKS

GRADE: Open to all 10th - 12th Gr. Students. 10th Gr. Students who have previous experience with in-depth research should discuss this with an ELA or SS teacher before taking this course.

This course may be counted for a Visual and Performing Applied Arts Credit

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources and develop their own perspectives through different disciplinary lenses. Assessment includes individual research reports and written arguments, team and individual multimedia presentations and oral defenses, and an end-of-course exam asking students to analyze and write arguments. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Students who have successfully completed Honors ELA 9 and/or 10 will be given scheduling preference as the course requires students to have advanced writing, reading, and grammar skills.

AP Research - #APCAPRES1/APCAPRES2

40 WEEKS

GRADE: 11-12 PREREQUISITE: AP Seminar

This course may be counted for a Visual and Performing Applied Arts Credit

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

AP Seminar (40 Weeks)	AP Research (40 Weeks)
<p>This foundational course, taken in grades 10 or 11, provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a variety of lenses and consider multiple points of view to develop a deep understanding of complex issues as they make connections between these issues and their own lives. Students read articles, research studies, and foundational and philosophical texts; listen to and view speeches, broadcasts, and personal accounts; and experience artistic and literary works to gain a rich appreciation and understanding of issues.</p> <p>Teachers have the flexibility to choose appropriate themes that allow for deep exploration based on student interests, local and civic issues, global or international topics, and concepts from other AP courses.</p> <p>Students are assessed with two through-course performance tasks and an end-of-course exam. The AP Seminar score is based on all three assessments and is reported on the standard 1– 5 AP scoring scale.</p>	<p>(AP Seminar is a prerequisite for AP Research) The second course, taken in grades 11 or 12, allows students to design, plan, and conduct a yearlong research-based investigation on a topic of individual interest. Through this inquiry and investigation, students demonstrate the ability to apply scholarly understanding to real-world problems and issues. Students further the skills acquired in the AP Seminar course by understanding research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information to build, present, and defend an argument.</p> <p>Students are assessed through culminating performance tasks: Academic thesis paper (approximately 5,000 words) with a defined structure Presentation, performance, or exhibition and oral defense of research and presentation The AP Research score is based on these components and is reported on the standard 1– 5 AP scoring scale.</p>

Obtaining an AP Capstone™ Diploma

In order to obtain an AP Capstone™ Diploma, students must successfully pass both AP Seminar and AP Research with a score of 3 or higher. In addition to AP Seminar and AP Research, students must also successfully pass four other AP Exams with a score of 3 or higher. AP Capstone™ Diplomas are recognized on Common App, and many colleges and universities recognize the diploma. For a list of colleges and universities that recognize and support the program, please view the College Board’s webpage:

<https://advancesinap.collegeboard.org/ap-capstone/higher-education-support>

ART DEPARTMENT



All art courses develop critical thinking, problem-solving, reasoning, analysis, interpretation, and conceptual synthesis. The focus is on research practices, interrogative questioning, creativity, artistry, curiosity, imagination, innovation, and personal expression.

The projects require perseverance, self-direction, planning, self-discipline, adaptability, and initiative. The acquisition of these skills helps prepare students for a future of 21st-century challenges and changes.

Many of the Art Department courses can be applied toward the Visual, Performing, and Applied Arts graduation requirements. The complete list can be found in the registration brochure.

TWO-DIMENSIONAL ART EXPLORATION - #05602

20 WEEKS

GRADES: 9-12 PREREQUISITE: None

This course is one of two courses designed to introduce students to the visual arts. Students in this course are introduced to the basics of two-dimensional art, specifically drawing, painting, and printmaking. Through the work completed in these three areas, students learn the concepts common to all the visual arts. These concepts include the elements and principles of design, color theory, and the design process. Ultimately students create quality artwork while becoming fluent in the visual language.

THREE-DIMENSIONAL ART EXPLORATION - #05612

20 WEEKS

GRADES: 9-12 PREREQUISITE: None

This course is one of two courses designed to introduce students to the visual arts. Students in this course are introduced to the basics of three-dimensional art, specifically sculpture, ceramics, and jewelry/metalsmithing. Through the work completed in these three areas, students learn the concepts common to all the visual arts. Students create artwork using the elements and principles of design and the three-dimensional design processes.

ADVANCED PLACEMENT ART HISTORY - #05572

40 WEEKS

GRADES: 10-12 PREREQUISITE: None

This course is a survey of painting, sculpture, architecture, and other art forms within a historical and cultural context. *AP Art History* can fulfill a social studies elective credit, not a Visual, Performing, and Applied Arts credit. This course focuses on preparing students for the AP Art History exam. Students are encouraged, but not required to take the Advanced Placement exam for this course, which takes place in May.

ADVANCED PLACEMENT ART & DESIGN (formerly, STUDIO ART) - #05512

GRADES: 11-12

PREREQUISITE: Portfolio and Instructor Approval

20 WEEKS or 40 WEEKS*

This course is intended for students who have a desire to complete a portfolio of work demonstrating an interest in their media of choice. Teacher approval is required. Students develop a portfolio for college admission, advanced study and/or submission to the College Board. Students are encouraged, but not required to turn this submission in to the College Board in May.

This course may be repeated for credit.

CERAMICS - #05702

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

In this class, students create functional and nonfunctional clay pieces. Students learn and apply a variety of techniques and processes to create artwork using clay, including hand building, wheel throwing, and surface treatments. Art history is used to enhance student understanding of quality ceramic creations. Students learn and apply safety rules and procedures in the classroom. Given criteria for evaluation, students assess their own and others' artwork. Students apply the elements and principles of design to ceramics artwork.

*This class may **not** be repeated. Students must move on to Advanced Ceramics.*

ADVANCED CERAMICS - #05712

20 WEEKS

GRADES: 9.5-12

PREREQUISITE: Ceramics

In this class, students create functional and non-functional clay pieces. Students learn and apply a variety of advanced techniques and processes to create artwork using clay, and glazes, including hand building, wheel throwing, and advanced surface treatments. Art history is used to enhance student understanding of quality ceramic creations. Students learn and apply safety rules and procedures in the classroom. Given criteria for evaluation, students critique their own and others' artwork. Students apply the elements and principles of design for creating, presenting, responding to, and connecting to their ceramic artwork.

DRAWING/PAINTING - #05632

20 WEEKS

GRADES: 9.5-12

PREREQUISITE: Two-Dimensional Art Exploration

In this course, students learn to draw and paint through direct observation. Using a variety of media and techniques, students create compositions that incorporate the elements and principles of design. Art history is used to enrich the creative process. Students begin to learn how to critique their own work and that of others.

This course may not be repeated for credit. Students must move on to Advanced Drawing/Painting.

ADVANCED DRAWING/PAINTING - #05642

20 WEEKS

GRADES: 10-12

PREREQUISITE: Drawing/Painting

This course is designed to build upon the skills learned in Drawing/Painting. Students continue to refine their techniques of drawing and painting, using the principles of color and design. As students critique their own work and that of others, they are better able to understand the attributes of the work and apply these attributes to their own compositions.

This course may be repeated for credit.

DIGITAL DESIGN (formerly, GRAPHIC DESIGN) - #05662

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

This course is designed to introduce students to the computer as a design tool. Students learn the basics of digital graphic programs, including photo manipulation/image creation, drawing, and page layout/typography. After learning about each of these components separately, students combine applications to create unique pieces of digital art.

This course may not be repeated for credit. Students must move on to Advanced Digital Design.

ADVANCED DIGITAL DESIGN (formerly, ADV. GRAPHIC DESIGN) - #05682 20 WEEKS

GRADES: 10-12

PREREQUISITE: Digital Design

In this course, students have the opportunity to further develop the skills acquired in Digital Design. Students will refine techniques and concepts in digital literacy. As students progress in digital media, they will work towards industry standards and further their understanding of design thinking. Continuing their skills in Adobe Photoshop and Adobe Illustrator, students will effectively combine art, photography, and illustration.

This course may be repeated for credit.

JEWELRY/METALS - #05722

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

In this class, students create functional and nonfunctional metal pieces. Students learn and apply a variety of techniques and processes, including riveting, soldering, casting, and a variety of surface treatments to create metal pieces of art. Art history is explored to enhance student understanding of quality metal creations and design. Students demonstrate an understanding of how to safely work with the tools used to create jewelry and other metal artwork. When given specific criteria for evaluation, students assess their own artwork and the work of others.

This course may be repeated for credit.

PHOTOGRAPHY (Darkroom) - #05582

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

This course utilizes the darkroom for traditional darkroom photography. Students will use 35mm cameras and film to produce quality analog images. Concepts of proper exposure, composition, printing, presentation, and critiques will be emphasized. Students research and explore the history of photography, its impact on society, and its aesthetic value.

ADVANCED PHOTOGRAPHY - #05592

20 WEEKS

GRADES: 10-12

PREREQUISITE: Photography

In this course, students will use a combination of digital techniques in Adobe Photoshop and darkroom techniques with film cameras to develop their photography skills. Students continue to develop concepts of creative photographic techniques that are first explored in Photography. Students apply these concepts to create personal and expressive works of art. Students apply the elements and principles of design to their images. As photographic images are created, students analyze them for their qualities and reflect on achieving the anticipated intent. Students demonstrate an understanding of how to work with photographic chemicals and the darkroom, as well as how to work with photographic computer software.

This course may be repeated for credit.

PRINTMAKING - #05802

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

Students learn and apply basic printmaking techniques, such as linoleum cuts, embossing, and mono-prints. The importance of design as a step in the creative process is emphasized, as is the concept of quality workmanship. Students analyze and interpret artwork that reflects cultures and time periods. Students learn safe and responsible use of printmaking tools and chemicals. Students critique their own artwork and the artwork of others.

This course may be repeated for credit.

SCULPTURE - #05852

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

Students learn the various processes used to create three-dimensional artwork. Using a variety of traditional and alternative media and techniques, students build, carve, and model artwork. Students examine sculptures from art history to deepen their understanding and enrich the design process. Students learn and apply safety rules and procedures in the classroom. Students critique their own sculptures and those of their classmates and discuss the characteristics of a well-crafted sculpture.

This course may be repeated for credit.

VIDEO PRODUCTION - #05922

20 WEEKS

GRADES: 11-12

PREREQUISITE: None

In this course, students learn how to write, film, and edit video productions. Students learn filming and editing terms and concepts and apply them to projects. Students learn and apply the appropriate style and approach for creating advertisements, public service announcements, and film projects. Students learn how to gather information for news productions and design and produce music videos. Students critique their productions and discuss the characteristics of a quality production.

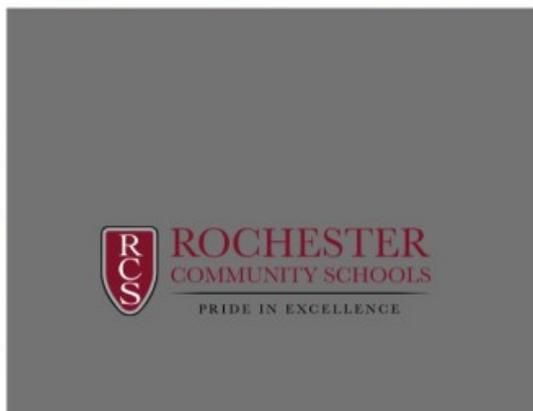
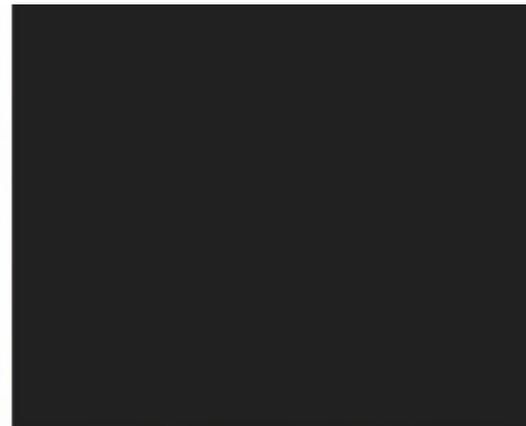
ADVANCED VIDEO PRODUCTION - #05932

20 WEEKS

GRADES: 11-12

PREREQUISITE: Video Production

This course provides students with the opportunity to further develop the skills acquired in Video Production. Through hands-on work, students learn advanced filming, editing skills, and studio lighting. Students also learn how to control and measure audio levels and operate a switching console. All of these skills will culminate in the planning and production of a full-length show. The course will simulate the environment of a television production studio, with students developing topics and concepts for shows, participating in discussions/evaluations of their work, and giving oral presentations of their research. *This course may be repeated for credit.*



BUSINESS & TECHNOLOGY DEPARTMENT

Business education courses provide education for students in four different programs of study; Finance, Business Administration, Management and Operations (BAMO), Digital Multimedia, and Marketing. Students are encouraged to complete all the classes in a particular program. The subjects prepare students for the courses they take in college, for skills they will need in the business world, and for skills they will need in life. Virtual Enterprise and Merchandising Lab are capstone experiences for students who have completed one of the four programs of study (CTE completer) and obtained instructor approval.

CTE completer status in the Business Services & Technology Department can be applied toward Visual, Performing, and Applied Arts, World Language, and 4th year math or 3rd science-related graduation requirements. The complete list can be found on page 7.

FINANCE PROGRAMS

ACCOUNTING 1 - #00012

20 WEEKS

GRADES: 10-12 PREREQUISITE: None

May be taken for a 4th-year math credit

Did you realize there are 3,520 projected job openings annually in Accounting, in Michigan alone, over the next 6 years? Or that college business majors must take Principles of Accounting, no matter what area of business they pursue? This course is recommended for students with an interest in business/finance, being a business major in college, or planning to own their own business. This one-semester course introduces students to fundamental accounting principles and procedures providing a sound foundation for further study. Students will analyze financial transactions and prepare financial statements. Students may utilize computer software to apply concepts to real-life situations. At the end of the semester, students will complete the accounting practices for a simulated company, which ties all units of study together.

ACCOUNTING 2 - #00022

20 WEEKS

GRADES: 10-12 PREREQUISITE: Accounting 1

May be taken for a 4th-year math credit

By taking Accounting 2, students will build a better foundation of understanding of accounting for use in college or for owning a business. Students reinforce accounting procedures covered in Accounting 1, as well as analyze accounts, prepare business statements, and close accounting books and records for corporations. Students use automated accounting software, which utilizes 21st-century teaching techniques with immediate feedback. As an enrichment activity to facilitate the processing of accounting data, the course culminates with a real-world accounting project using actual business forms to reinforce basic concepts of the accounting cycle and procedures.

Successful completion of the first 2 courses is considered a CTE completer

ACCOUNTING 3 - #00062

20 WEEKS

GRADES: 11-12 PREREQUISITE: Accounting 2

May be taken for a 4th year math credit

In Accounting 3, students focus on corporate accounting. This course is excellent preparation for the accounting courses students will take in college. Students completing this course gain a deeper understanding of accounting practices used to plan, organize, interpret and analyze financial systems. Students learn how to set up an automated accounting system for those starting their own businesses or working for other entrepreneurs. Banking systems and procedures are emphasized, giving

students a better understanding of the use of credit, the effects of paying/receiving interest, and preparing for one's financial future. The issue of ethics in the field of accounting is examined. The computer is used extensively to analyze transactions and financial statements.

FINANCE PROGRAMS

ACCOUNTING 4 #00072

20 WEEKS

GRADES: 11-12

PREREQUISITE: Accounting 3

May be taken for a 4th year math credit

This course is excellent preparation for the accounting courses students will take in college. In Accounting 4, students focus on interpreting and analyzing a corporation's financial information. Students examine a variety of financial tools including stocks, bonds, and mutual funds. Organizing a corporation, acquiring capital, and financial analysis of a corporation are studied. Managerial and cost accounting are emphasized. Students identify how a background in accounting prepares professionals for administrative career opportunities. Job requirements for Certified Public Accountants and Chief Financial Officers are studied and explored through field trips and speakers. Professional accounting organizations are also explored.

BUSINESS ADMINISTRATION, MANAGEMENT, AND OPERATIONS

BUSINESS FUNCTIONS AND OPERATION #00332

20 WEEKS

GRADES: 9-10

PREREQUISITE: None

Business Functions and Operations is a business course that provides the framework for pursuing additional business courses. This course acquaints students with the five functions of business: Production, Merchandising, Operations, Accounting and Finance, and Management. Students will also explore concepts in economics, entrepreneurship, human resources, risk management, credit, and careers in business. Business skills, including communication, interpersonal dynamics, presentation, and critical thinking skills, are emphasized.

SMALL BUSINESS AND ENTREPRENEURSHIP - #00172

20 WEEKS

GRADES: 11-12

PREREQUISITE: None

This course provides students the opportunity to build a solid foundation of knowledge of established business principles and practices that form the groundwork for all business operations. Students take a close look at established businesses, e-commerce, marketing products and services, financing operations, managing and developing employees, and making difficult business decisions in a dynamic and competitive atmosphere. In addition, this course introduces the student to the world of business ownership and provides the student with realistic concepts for starting his or her own business by developing an operational business plan.

Successful completion of the first 2 courses is considered a CTE completer.

VIRTUAL ENTERPRISE CAPSTONE - #00954

40 WEEKS

GRADES: 11-12

PREREQUISITE: CTE Completer & Instructor Approval

Virtual Enterprise is a yearlong simulated business that is set up and run by students to prepare them for working in a real business environment. The students determine the nature of their business, its products and services, its management and structure, and learn the daily operations of a business. Students will work alongside business mentors and other student-led virtual corporations on a national and global scale. Opportunities will become available throughout the course for students to participate in trade shows, leadership conferences, and regional, state, and international competitions. Students will earn a virtual paycheck which they will use for their own personal finances. This capstone course is designed to utilize prior knowledge and skills from previously taken classes in the business department.

This class may be repeated for credit with instructor approval.

DIGITAL MULTIMEDIA

COMPUTER OPERATIONS IN BUSINESS - #00532

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

This course is intended for any student desiring exposure to business applications using Microsoft Office Suite (Word, Excel, PowerPoint, and Access). Students will develop proficiency in word processing, creating spreadsheets, multimedia presentations, and databases. Skills will be taught and practiced using business scenarios and training tools to allow students to prepare for future college and career plans. Students are prepared to earn Microsoft Office Specialist certification through the industry standard test.

WEB DESIGN AND SOCIAL MEDIA - #00112

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

Designed for students with an interest in the web, graphic editing, animation, and social media, this class allows students to learn how to create and manage the elements of a fully functioning website. Graphic design principles, website development, design strategies, and animation techniques will be used. Students will create graphical images, edit photos, develop websites, and make animations utilizing Adobe programs such as Photoshop. Students will also examine the impact of social media and how businesses utilize social networks such as Facebook, Twitter, LinkedIn, YouTube, etc.

Successful completion of the 2 courses is considered a CTE completer.

MARKETING

MARKETING AND ADVERTISING - #00162

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

Marketing and Advertising educates students on the important role that Marketing plays in our economic system. Emphasis is on the functions of marketing including the product, research and development, pricing, promotion, purchasing, selling, risk management, and distribution. This class engages students in real-world marketing and advertising simulations, which provide a hands-on approach, incorporating the latest technology for marketing plans and other teamwork projects.

ADVANCED MARKETING - #00192

20 WEEKS

GRADES: 11-12

PREREQUISITE: Marketing and Advertising

Advanced Marketing prepares students for an advanced level of understanding in the dynamic field of marketing. Students will develop professional communications skills, human relations skills, and marketing career acquisition aptitudes. Students will demonstrate an application level of marketing knowledge through case studies, projects, and presentations. Students will assume a managerial perspective on concepts taught in Marketing and Advertising and develop a deeper understanding of strategic market planning, differences between consumer and organizational markets, and financial analysis.

Successful completion of the first 2 courses is considered a CTE completer.

MERCHANDISING LAB / STORE - #00232

20 WEEKS

GRADES: 11-12

PREREQUISITE: Marketing and Advertising and Instructor Approval

A lab class set in a real-world retail business environment. Students will learn and utilize the skills of marketing, merchandising, and operations management. Using a theory-into-practice approach, students examine the operations of an efficiently run retail enterprise and assume authentic on-the-job responsibilities. Students are taught the importance of quality customer service and the professional selling cycle. Students also learn how to operate a cash register, make sales, create displays, maintain the store, order inventory, and keep financial records.

This class may be repeated for credit with instructor approval.

WORK-BASED LEARNING

BUSINESS CAPSTONE EXPERIENCE S1, 6th Hour - #00984
BUSINESS CAPSTONE EXPERIENCE S1, 5th and 6th Hour - #00984B
BUSINESS CAPSTONE EXPERIENCE S2, 6th Hour - #70984
BUSINESS CAPSTONE EXPERIENCE S2, 5th and 6th Hour - #70984B

20 WEEKS

GRADES: 11-12

PREREQUISITE: Enrolled in concurrent business course and instructor approval (1 or 2-hour block class)

Capstone is an opportunity for business students who have taken a number of business classes to use their skills and knowledge in a **paid or unpaid** on-the-job training site. Job placements are determined by the needs of the student, the Capstone coordinators, business contacts, and the jobs the students have had in the past. Students are released one or two class periods each day to allow for 48 hours total of combined school and work. Students work a minimum of 10 hours a week, including Saturdays and Sundays. Students report to class bi-weekly and maintain timesheets that the employers sign to verify hours spent at work.

Students take a related concurrent business course during the semester of Capstone. Students are required to have the coordinating teacher visit the job site a minimum of two times a semester, and the employers evaluate students according to job duties and skills listed on the individual training plan.



COMPUTER SCIENCE

*Courses in the Computer Science Department can be applied toward the **Visual, Performing, and Applied Arts, World Language, and math or science-related** graduation requirements. The complete list can be found on Page 7.*

COMPUTER PROGRAMMING 1 - #04422

20 WEEKS

GRADES: 9-12 PREREQUISITE: None

This course is an introduction to structured programming languages. A problem-solving approach is emphasized. Topics include decision-making, loops, arrays, graphics, strings, files, sound, functions, subroutines, and special topics. The course is taught through a combination of individual programming problems, reports, lectures, videos, and projects. Students use **Scratch, Visual BASIC**, and one higher-level programming language.

COMPUTER PROGRAMMING 2 - #04432

20 WEEKS

GRADES: 9-12 PREREQUISITE: Programming 1 or Instructor Approval

This course is a continuation of object-oriented programming. Topics include using variables, controlling program flow, functions, using classes and objects, arrays, files, and graphics. Students work individually at the beginning and in groups toward the end of the course. Applications from the following areas are included: business, mathematics, science and game theory, and mobile app development. Students use **Python** and **Java** as their programming languages.

Successful completion of the first 2 courses is considered a CTE completer

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES - #04444

40 WEEKS

GRADES: 10-12 PREREQUISITE: None

AP Computer Science Principles is an introductory computing course. Students cultivate their understanding of computer science through working with data, collaborating to solve problems, and developing computer programs as they explore concepts like creativity, abstraction, data and information, algorithms, programming, the internet, and the global impact of computing. It also allows students the opportunity to investigate the innovations in other fields that computing has made possible and examines the ethical implications of new computing technologies.

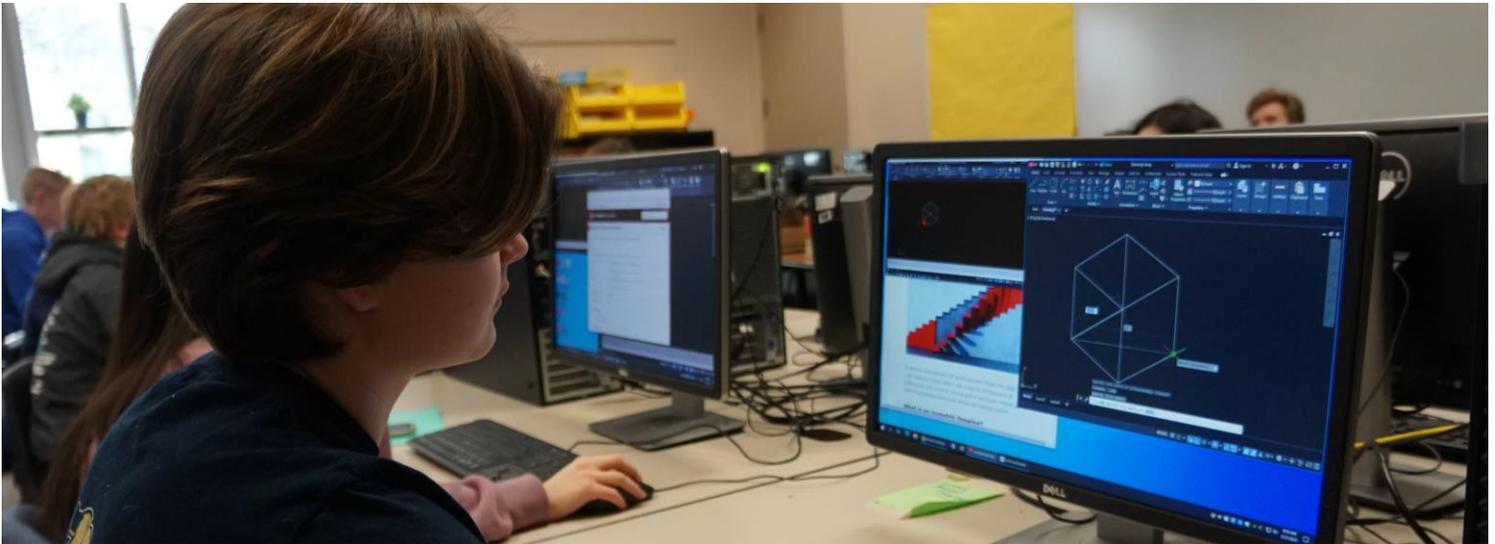
ADVANCED PLACEMENT COMPUTER SCIENCE A - #04434

40 WEEKS

GRADES: 11-12 PREREQUISITE: Computer Programming 1, 2 or AP Computer Science Principles

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. Students use the standard Java library from the AP Java subset delineated by College Board. The responsible use of these systems is reinforced throughout the course.

DESIGN & TECHNOLOGY



Students interested in the areas of machine technology should explore course offerings in woodworking fundamentals and advanced woodworking.

All courses in the Design and Technology areas are STEM designed to meet the needs of the college-bound and/or employment-bound student. Successful completion of the first two courses in Architecture, Engineering, Mechanical Drafting, Robotics, or Woodworking is considered CTE Completer status.

Course offerings are available to all students regardless of their base location. Bus transportation may be provided to transport those students interested in enrolling in the Design and Technology department at any of the high schools.

All of the Design and Technology Department courses can be applied toward the Visual, Performing and Applied Arts or math-related graduation requirements. The complete list can be found on Page 7.

DRAFTING AND DESIGN TECHNOLOGY

ARCHITECTURE 1 - #08732

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

Architecture 1 is a STEM (Science, Technology, Engineering, and Mathematics) education course. This course is designed to give students the basic skills of using industry-standard software as applied to architectural topics. Students will learn the fundamentals of architecture including industry nomenclature. Students will create two-dimensional drawings including a first floor plan, foundation and roof plan, as well as additional plans or detail drawings.

ARCHITECTURE 2 - #08742

20 WEEKS

GRADES: 9-12

PREREQUISITE: Architecture 1 or Instructor Approval

Architecture 2 is a STEM (Science, Technology, Engineering, and Mathematics) education course.

This course is designed to allow students to apply the skills learned in Architecture 1 while advancing their skills using industry-standard software as applied to architectural topics. Students will advance their knowledge of the fundamentals of architecture including industry nomenclature. Student will continue to create additional plans and detail drawings. Students will be introduced to parametric architectural models.

Successful completion of the first 2 courses is considered a CTE completer

ARCHITECTURE 3 - #08752

20 WEEKS

GRADES: 10-12

PREREQUISITE: Architecture 2 or Instructor Approval

Architecture 3 is a STEM (Science Technology Engineering and Mathematics) education course.

This course allows students to combine artistic expression with intellectual challenge. Students apply concepts and skills learned in previous Architecture classes to more sophisticated computer applications. Students work independently at their own rate to solve architectural problems requiring more advanced computer skills. Students learn and apply computer generated three-dimensional software to create renderings and walkthroughs. Using the internet, students furnish buildings.

ARCHITECTURE 4 - #08762

20 WEEKS

GRADES: 10-12

PREREQUISITE: Architecture 3 or Instructor Approval

Architecture 4 is a STEM (Science Technology Engineering and Mathematics) education course.

Students apply concepts and skills learned in previous Architecture classes to more sophisticated computer applications. Students will be exposed to more advanced architecture projects including commercial and residential buildings.

ENGINEERING TECHNOLOGY

ENGINEERING DESIGN 1 - #08532

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

Engineering Design 1 is a STEM (Science Technology Engineering and Mathematics) education class that will engage students in activities, projects, problem-based learning, and hands-on classroom experiences. Students create, design, build, discover, collaborate and solve problems while applying what they learn in math and science. Students acquire the computer skills necessary to create two-dimensional geometry and solid models that are the foundation of engineering graphic communication.

ENGINEERING DESIGN 2- #08542

20 WEEKS

GRADES: 9-12

PREREQUISITE: Engineering Design 1 or Instructor Approval

Engineering Design 2 is a STEM (Science Technology Engineering and Mathematics) education class that will engage students in activities, projects, problem-based learning, and hands-on classroom experiences. Students create, design, build, discover, collaborate and solve problems while applying what they learn in math and science. Students apply the computer skills learned in Engineering Design 1 to create projects and more advanced two-dimensional geometry and solid models that are the foundation of engineering graphic communication.

Successful completion of the first 2 courses is considered a CTE completer

ENGINEERING DESIGN 3 - #08552

20 WEEKS

GRADES: 10-12

PREREQUISITE: Engineering Design 1 & 2 or Instructor Approval

Engineering Design 3 is a STEM (Science Technology Engineering and Mathematics) education class that is a continuation of *Engineering Design 2*. Students will learn the fundamentals of converting ideas, sketches, pictorials and three-dimensional objects into working drawings. Students will use prototyping methods to create functional projects. Students learn nomenclature and techniques to develop assembly and presentation drawings. Students discover the importance of speed, neatness and accuracy. As a result of this course, students understand possible careers in engineering and design.

ENGINEERING DESIGN 4 - #08562

20 WEEKS

GRADES: 10-12

PREREQUISITE: Engineering Design 3 or Instructor Approval

Engineering Design 4 is a STEM (Science Technology Engineering and Mathematics) education class that is a continuation of *Engineering Design 3*. Students will apply the learned fundamentals to brainstorm more complex ideas, sketches, pictorials and three-dimensional objects into complete working drawings. Students will use prototyping methods to create functional projects. Students learn nomenclature and techniques to develop assembly and presentation drawings. Students discover the importance of speed, neatness and accuracy. As a result of this course, students understand possible careers in engineering and design.

MECHANICAL DRAFTING

MECHANICAL DRAFTING/DESIGN 1 - #08572

20 WEEKS

GRADES: 11-12 PREREQUISITE: None

Mechanical Drafting/Design 1 is a STEM (Science Technology Engineering and Mathematics) education class that is a continuation of *Engineering Design 4*. This semester course allows students an opportunity to advance their engineering training. Students will apply advanced functions in parametric modeling, assembling and presentation drawings. Students will continue to apply the learned fundamentals to create more challenging projects.

MECHANICAL DRAFTING/DESIGN 2 - #08582

20 WEEKS

GRADES: 11-12 PREREQUISITE: Mechanical Drafting/Design 1 or Instructor Approval

Mechanical Drafting/Design 2 is a STEM (Science Technology Engineering and Mathematics) education class that is a continuation of *Mechanical Drafting/Design 1*. This semester course allows students an opportunity to advance their engineering training. Students will apply advanced functions in parametric modeling, assembling and presentation drawings. Students will continue to apply the learned fundamentals to create more challenging projects.

Successful completion of the first 2 courses is considered a CTE completer

COMPUTER MODELING and ANIMATION - #08702

20 WEEKS

GRADES: 9-12 PREREQUISITE: None

Computer Modeling and Animation is a STEM (Science Technology Engineering and Mathematics) education course. Students are introduced to animation techniques including hand drawing, digital 3-D modeling and digital animation. Students use computer programs to create digital models, render 3-D objects and generate scenes. Students will be exposed to basic game design. Basic personal computer knowledge is recommended.

MECHATRONICS

ROBOTICS I - #08602

20 WEEKS

GRADES: 9 – 12 PREREQUISITE: None

Students will learn and apply the design process while learning fundamental skills in order to build mechanical systems, and small programmable robots. Students will learn and apply Safety, Procedures, Programming, Teamwork, Communication, and Collaboration while solving various problems. This project-based course will enhance a student's twenty first century STEM skills.

ROBOTICS II - #08612

20 WEEKS

GRADES: 9 – 12 PREREQUISITE: Robotics 1 or Instructor Approval

Students will continue learning and applying their skills. Students will advance their learning from semester 1 including: programming, advertising, and budgeting, while competing to solve various challenges. This project-based course will give students the opportunity to continue to enhance and apply their twenty-first-century STEM skills learned in the first semester.

F.I.R.S.T. ROBOTICS I AND II - #FirstRoboS1/FirstRoboS2

40 WEEKS

GRADES: 9 – 12 PREREQUISITE: FIRST Robotics or FTC Participation or instructor approval.

In this project-based course, students will engage in hands-on learning as they apply the design process to build mechanical systems and small programmable robots. Through real-world challenges, students will develop fundamental STEM skills, with a focus on Safety, Procedures, Programming, Teamwork, Communication, and Collaboration. As part of the FIRST Robotics Team, this program provides an opportunity for students to enhance their 21st-century skills, preparing them for future careers in technology, engineering, and robotics. Students will be

immersed in competency-based education, where they will solve complex problems and gain valuable experience in work-based environment. This pilot program is open to all students from Adams, Stoney Creek, and Rochester High Schools, who will attend daily instruction at the Rochester High School campus from 3:00 – 4:00 pm, (7th Hour) 1st Semester and build hours during 2nd semester.

No transportation is offered for this course/After school hours may vary/Students must be a Robotics Team member to participate.

WOODWORKING

WOODWORKING 1 - #08402

20 WEEKS (At RHS)

GRADES: 9-12 PREREQUISITE: None

Course content includes instruction on safety procedures, measurement and layout as well as use of portable power and hand tools and stationary power tools. Students will use their new skills to design and create project(s).

WOODWORKING 2 - #08412

20 WEEKS (At RHS)

GRADES: 9-12 PREREQUISITE: Woodworking I or Instructor Approval

This course features construction of furniture and furniture accessories. Portable power tools and stationary power tools are primarily used in construction of project(s). The project(s) chosen will challenge the skill level of the student and expand their knowledge and skill.

Successful completion of the first 2 courses is considered a CTE completer

WOODWORKING 3 #08422

20 WEEKS (At RHS)

GRADES: 10-12 PREREQUISITE: Woodworking 1 and 2 or Instructor Approval

Construction of furniture and millwork are featured. Students elect to build or continue a large project from Woodworking 2 or have the option to build a number of small projects. Projects are chosen to challenge skills level of the student and expand their knowledge and skill.

This course may be repeated for credit.

WOODWORKING 4 #08432

20 WEEKS (At RHS)

GRADES: 10-12 PREREQUISITE: Woodworking 1, 2, 3 or Instructor Approval

Construction of furniture, millwork, and industrial processes are featured. Students may choose to build a large project or a number of smaller projects of their choice and design. Projects are chosen to challenge skill level of the student and expand their knowledge and skills.

This course may be repeated for credit.

EDUCATIONAL CAREERS

EDUCATIONAL CAREERS #EdCareS1/EdCareS2

40 WEEKS

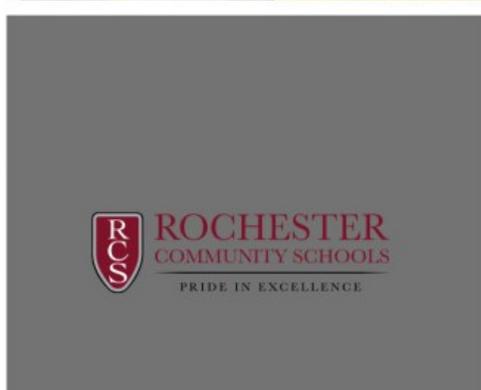
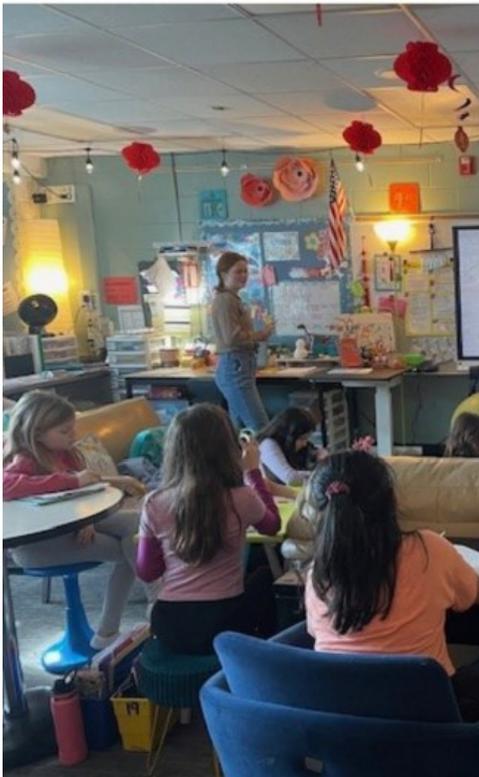
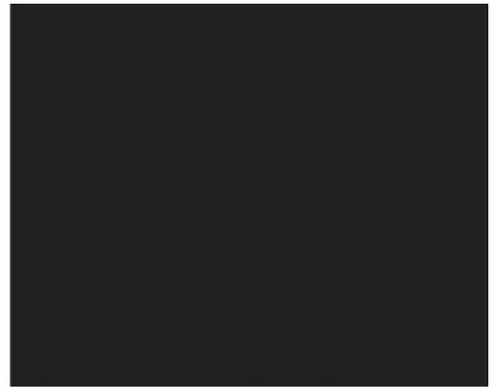
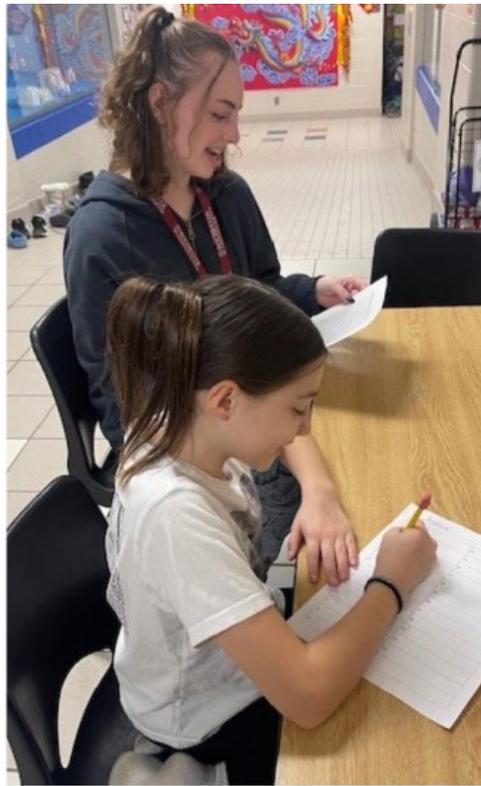
GRADES: 11-12

PREREQUISITE: None

Educational Careers is a one-year course designed for students interested in pursuing a career in an educational field and/or getting an inside glimpse at the world of teaching. Students will examine and research the topics of educational history, schooling options, and the certification process. Students will also study and practice teaching methodologies and strategies, lesson planning, equity in the classroom, and classroom management. Under the supervision of a cooperating teacher, students will participate in classroom observations and assist in Rochester classrooms, including in special education, elementary, or possibly middle school placements. Students will need to provide their own transportation to their placement school(s).

Successful completion of this course is considered a CTE Completer.

This class may be repeated for credit.



ENGLISH/LANGUAGE ARTS



English/Language Arts in the Rochester Community Schools is an integrated program of listening, speaking, writing, viewing and reading. These integrated skills become part of all courses in the language arts curriculum. Throughout the four years of high school, students should give special attention to the sequential development of the courses to be adequately prepared for college, for other career interests and to meet the Common Core Content Expectations and Michigan Merit Curriculum credit requirements. To prepare students for graduation, the curriculum focuses on writing, particularly the development of ideas through the writing process.

Freshmen enroll in the year-long English/Language Arts 9 class. Sophomores must successfully complete English/Language Arts 10. Juniors and Seniors must select either year- or semester-long courses that meet the High School English Language Arts Common Core State Standards.

The English/Language Arts Department recommends conferences with both the student's counselor and language arts teachers to ensure the appropriate courses for each student.

Certain courses in the English/Language Arts Department can be applied toward the Visual, Performing, and Applied Arts graduation requirement. The complete list can be found in the Registration Brochure.

ENGLISH/LANGUAGE ARTS 9 - #01052

40 WEEKS

GRADE: 9 (Required) PREREQUISITE: None

English/Language Arts 9 integrates composition and literature as students develop reading, writing, listening, speaking, and viewing skills. Students read and analyze literature within a thematic context and write compositions based on the readings. Students read literature from a variety of genres, including novels, short stories, poetry, drama, and non-fiction. Major pieces of literature students read and analyze include *Romeo and Juliet* and portions of the *Odyssey*. Other literary options include *Speak*, *Lord of the Flies*, *All American Boys*, *Code Name Verity*, *Fly Girl*, *Refugee*, and contemporary literary selections. Students write in a variety of formats: argumentative, narrative, and literary analysis. Students are introduced to the research process.

HONORS ENGLISH/LANGUAGE ARTS 9 - #01055

40 WEEKS

GRADE: 9 PREREQUISITE: Writing Sample and Placement Testing

Honors Language Arts 9 provides highly motivated ninth-grade students with an in-depth study of a wide variety of language skills. The course objectives include the *English/Language Arts 9* curriculum with additional literary selections and more in-depth compositions. Students taking this class have required summer readings which are the basis for initial fall assignments. This course prepares students for Advanced Placement courses.

ENGLISH/LANGUAGE ARTS 10 - #01072

40 WEEKS

GRADE: 10 (Required) PREREQUISITE: English/Language Arts 9

English/Language Arts 10 integrates composition and literature as students continue to develop skills in reading, writing, listening, speaking, and viewing. Students read and analyze American literature within a thematic and chronological context and write compositions based on the readings. Students read American literature from a variety of genres, including novels, short stories, poetry, drama, and non-fiction. Major pieces of literature students read and analyze may include *The Crucible*, *Of Mice and Men*, *Fahrenheit 451*, and *Great Gatsby*. Students write in a variety of formats: argumentative, narrative, and literary analysis. Students continue to build research skills.

HONORS ENGLISH/LANGUAGE ARTS 10 - #01075

40 WEEKS

GRADE: 10 PREREQUISITE: English/Language Arts 9

Honors Language Arts 10 provides highly motivated tenth-grade students with an in-depth study of a wide variety of language skills. The course objectives include the *English/Language Arts 10* curriculum with additional literary selections and more in-depth compositions. Students taking this class have required summer readings, which are the basis for initial fall assignments. This course prepares students for Advanced Placement courses. A teacher recommendation for this course is advised.

APPLICATIONS OF COMPOSITION - #01035

20 WEEKS

GRADE: 11(Required) PREREQUISITE: English/Language Arts 10

In this semester-long composition course, students expand on writing skills developed in the tenth grade. Students write in a variety of formats: literary analysis, argumentation, rhetorical analysis, and research-based. Students demonstrate the ability to properly cite, document sources, and synthesize information. Other writing units may include compare and contrast, narrative, and college admissions test preparation. Major pieces of literature students read, analyze, and respond in writing to may include *Cyrano de Bergerac*, *A Separate Peace*, *Death of a Salesman*, *Catcher in the Rye*, *1984*, and *Night*.

*This one-semester course needs to be paired with a literature course to complete one year of ELA credit.

12TH GRADE COMPOSITION - # 01046

20 WEEKS

GRADE: 12(Required) PREREQUISITE: Applications of Composition

NOTE: Note: If a student has completed AP Language and Composition, the next course in this sequence is AP Literature and Composition. 12th Grade Composition may be chosen, but it will repeat content from AP Language and Composition.

In this course, students expand on writing skills developed in eleventh grade. Students write in a variety of formats with a focus on various genres of writing in college courses. Students apply theories of literary criticism in a written literary analysis essay. Students research and develop a multimedia presentation based on a theme, issue, or genre. Students will understand how satire is used to respond to current issues. Additional units may include analyzing rhetorical devices in non-fiction and media, analyzing and writing memoirs, and analyzing literary devices through close reading. Major pieces of literature students read, analyze, and respond in writing to may include *Othello*, *Hamlet*, *The Glass Castle*, and *As I Lay Dying*.

*This one-semester course needs to be paired with a literature course to complete one year of ELA credit.

ADVANCED PLACEMENT ENGLISH LANGUAGE and COMPOSITION - #01164

40 WEEKS

GRADES: 11-12 PREREQUISITE: English/Language Arts 10

NOTE: It is recommended that students should plan to take both Advanced Placement courses (AP Language and Composition and AP Literature and Composition). If students plan on taking only one AP class, they should take AP Language and Composition as a senior. AP Language and Composition should be taken prior to taking AP Literature and Composition.

This year-long course is designed to be the equivalent of an introductory college composition course. Students write about a variety of subjects in several formal and informal contexts: journal writing, impromptu writing, rhetorical analysis essay, argumentative essay, and synthesis essay. Students read and respond in writing to a variety of prose styles and genres including nonfiction readings. Students analyze the author's use of rhetorical strategies and techniques. Students apply research skills to evaluate, use, and cite primary and secondary sources. Major texts may include *Gulliver's Travels*, *Black Dog of Fate*, *Julius Ceasar*, *Reading Lolita in Tehran*, *Me Talk Pretty One Day*, and *Angela's Ashes*. This course follows College Board guidelines. Students taking this course have required summer readings, which are the basis for initial fall assignments. A teacher recommendation for this course is advised.

ADVANCED PLACEMENT ENGLISH LITERATURE and COMPOSITION - #01174

40 WEEKS

GRADES: 12

PREREQUISITE: 11th Grade English

NOTE: *It is recommended that students should plan to take both Advanced Placement courses (AP Language and Composition and AP Literature and Composition). If students plan on taking only one AP class, they should take AP Language and Composition as a senior. AP Language and Composition should be taken prior to taking AP Literature and Composition.*

This year-long course is designed to be the equivalent of an introductory college literature course. Students engage in the careful reading and critical analysis of a wide range of literature. Students write interpretations of literature based on structure, style, and themes, as well as the author's use of literary elements. Students identify the social and historical values reflected in the literature. Through the close reading of literary texts, students examine the ways writers use language. Students write formal, extended analyses of literature as well as timed in-class responses. Emphasis is placed on writing expository and analytical essays. Major texts may include *The Things They Carried*, *Their Eyes Were Watching God*, *Invisible Man*, *As I Lay Dying*, *Othello*, *Macbeth*, *Hamlet*, *Heart of Darkness*, *Frankenstein*, *The Kite Runner*, and *The Hours*. This course follows College Board guidelines. Students taking this course have required summer readings, which are the basis for initial fall assignments.

20th & 21st CENTURY LITERATURE - #01232

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

In this semester-long class, students analyze various literary styles and genres from twentieth-century literature. Students read novels, poems, and short stories to determine their significance as being representative of the universal themes, conflicts, and characters of the period. Students respond to literature through discussions, presentations, and writing. Students analyze plots and conflicts to determine how they reflect society during the time period the story takes place. Students make connections to their own lives and the lives of others. Students read, analyze, and present to the class outside readings that demonstrate an understanding of the themes, genres, and characters analyzed in class. Literary options may include *Siddhartha*, *The Great Gatsby*, *One Flew Over the Cuckoo's Nest*, *All Quiet on the Western Front*, *The Chosen*, *A Painted House*, *The Stranger*, *The Bean Trees*, *All the Light We Cannot See*, and other contemporary literary selections.

EXPLORING LITERATURE - #01182

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

Students examine how reading influences people in different ways. Students interview people in the community to gain insight into why people read and how it has affected their lives. Students read and research titles and authors to determine what defines a quality piece of literature. Students gain perspective into an author's intent by examining elements of style and the author's craft. Students identify and discuss literary elements found in literature. Students explore universal themes in literature and identify examples from their own lives and today's society. Students examine how enduring literature reveals common characteristics among humans. Literary options may include *Killing Mr. Griffin*, *The Hunger Games*, *Monster*, *A Long Way Down*, and *Warrior Girl Unearthed* and contemporary literacy selections.

INTRODUCTION TO FILM/ SCREENWRITING - #01332

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

This semester course is designed to give students a critical framework for understanding and appreciating the aesthetic and technical aspects of film. Students view films, write reviews, analyze scenes shot-by-shot, research topics, make multimedia presentations, read excerpts of screenplays, and create ideas for their own screenplays. Students will view classic and more contemporary films. Although this course meets the Michigan Merit Curriculum literature requirement, it is not NCAA-approved.

LITERATURE OF THE STRANGE and MYSTERIOUS - #01322

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

Students in this semester literature course analyze the literary elements found in mystery, fantasy, suspense, science fiction, and horror. Students examine the similarities and differences among these genres. Reading a wide variety of short stories and novels, students identify the literary devices the author uses to achieve a desired effect and examine the ideas, theories, and assumptions behind the literature. Literary options may include *Murder on the Orient Express*, *Cat's Cradle*, *Dracula*, *Kindred*, *The Hobbit*, and *The Adventures of Sherlock Holmes*.

MYTHS - #01222

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

This semester literature course examines myths over time and across cultures. Students explore how archetypes in myths symbolize human experience and embody the spiritual values of a culture. Through reading and analyzing myths, students address fundamental and thoughtful questions. Through the study of myths, students better understand our connection to other people at a time when the welfare of each culture depends on the attitudes and actions of other cultures. Students deepen their understanding of the myths, compare myths across cultures, and explore connections of myths to their own lives through discussion, writing assignments, projects, and journals. Cultures of study may include Greek, Roman, Norse, Egyptian, Native American, Chinese, Sumerian, and Babylonian, among others.

POETRY #01312

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

This semester literature course examines poetry through form and time. Students explore the genre of poetry through both reading and writing in a way that is personally meaningful. Students are introduced to traditional forms and contemporary innovations of poetry through modern and classic texts. Students define poetry, examine the tools poets use, and conduct case studies of poets. Students read, analyze, research, and respond in meaningful and insightful ways to selected poems, essays, and informational texts. As a culminating project, students create a poetry portfolio of their own work.

SHAKESPEARE - #01402

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

Students will be exposed to the texts, as well as film productions and theater tapings, of Shakespeare's sonnets, comedies, tragedies, and histories to understand that Shakespeare is as relevant today as he was over 400 years ago. In addition to Shakespeare's plays and sonnets, contemporary interpretations will be studied to illustrate the effect Shakespeare still has on modern day. Students will leave this course being able to read, understand, analyze, and appreciate Shakespeare's work.

TRUE STORIES - #01452

20 WEEKS

GRADES: 11-12

PREREQUISITE: English/Language Arts 10

Students in this semester literature course analyze the elements of nonfiction storytelling and distinguish between literary truth vs. non-fictional truth. Students will be presented with a variety of contemporary non-fiction works (from multiple genres and in multi-media) that expose them to a diversity of life experiences and will offer the opportunity to examine the author's craft in conveying the truth in narrative form. Literary options include *Educated*, *Persepolis*, *Maus*, *The 57 Bus*, and *Just Mercy*.

NOTE: *Creative Writing, Multimedia Communications, and Yearbook can be applied toward the Visual Performing and Applied Arts graduation requirements.*

CREATIVE WRITING - #01602

20 WEEKS

GRADES: 10-12 PREREQUISITE: English/Language Arts 9

Using an integrated approach, students explore the elements of creative writing through research, reading, and analyzing short stories and poems. Students identify the characteristics of various genres as models for their own writing. Students develop effective descriptive techniques to create narratives and characterization. Students develop plot-driven or character-driven short stories that focus on theme, conflict, point of view, and setting. Students periodically present their written pieces to the class. Students experiment with developing voice throughout the semester. Students practice editing their writing and paying attention to the correct conventions of language. Students critique their own and their classmates' creative pieces.

JOURNALISM & MULTIMEDIA COMMUNICATIONS - #01832

20 WEEKS

GRADES: 9-12 PREREQUISITE: None

This course offers students the opportunity to study communications beyond traditional forms. Students will learn to develop critical thinking skills and to present their ideas in a variety of media, which may include web and traditional print articles, blogs, video and photojournalism, podcasting, and social media. They will also learn to pitch story ideas, investigate leads, conduct interviews, organize information, and write, revise, and edit various types of stories. The class will also study the effects of new forms of media, such as texting, Facebook, and Twitter, and learn ways to become better critics of the media and to present themselves professionally using 21st-century communication skills. Students will have the opportunity to contribute their pieces to the school newspaper/website.

YEARBOOK - #01834

40 WEEKS

GRADES: 10-12 PREREQUISITE: Multimedia Communications or Advanced Photography and Instructor Approval

Yearbook is an elective course. Members of the class are responsible for preparing the school yearbook for publication. Students write the copy, draw the layouts, take the photographs, and solicit the advertising.

This class may be repeated for credit.

NOTE: *Oral Communications can be applied toward English/ Language Arts elective credits.*

ORAL COMMUNICATIONS - #01062

20 WEEKS

GRADES 10-12 PREREQUISITE: English/Language Arts 9

In this semester course, students participate in activities that develop speaking and listening skills. Students begin by learning how to build confidence speaking in front of an audience by practicing proper voice and exhibiting effective body language. Students work on enunciation, projection, rate, pitch, and articulation. Students practice and deliver speeches that inform, persuade, and entertain. Students analyze the components and organization of each type of speech.

NOTE: *Advanced Multimedia Communications can be applied toward the Visual Performing and Applied Arts graduation requirement for SOPHOMORES AND JUNIORS. The following course can be applied toward English/ Language Arts graduation requirements for SENIORS ONLY who have completed Applications of Composition with a Literature elective OR an AP English course.*

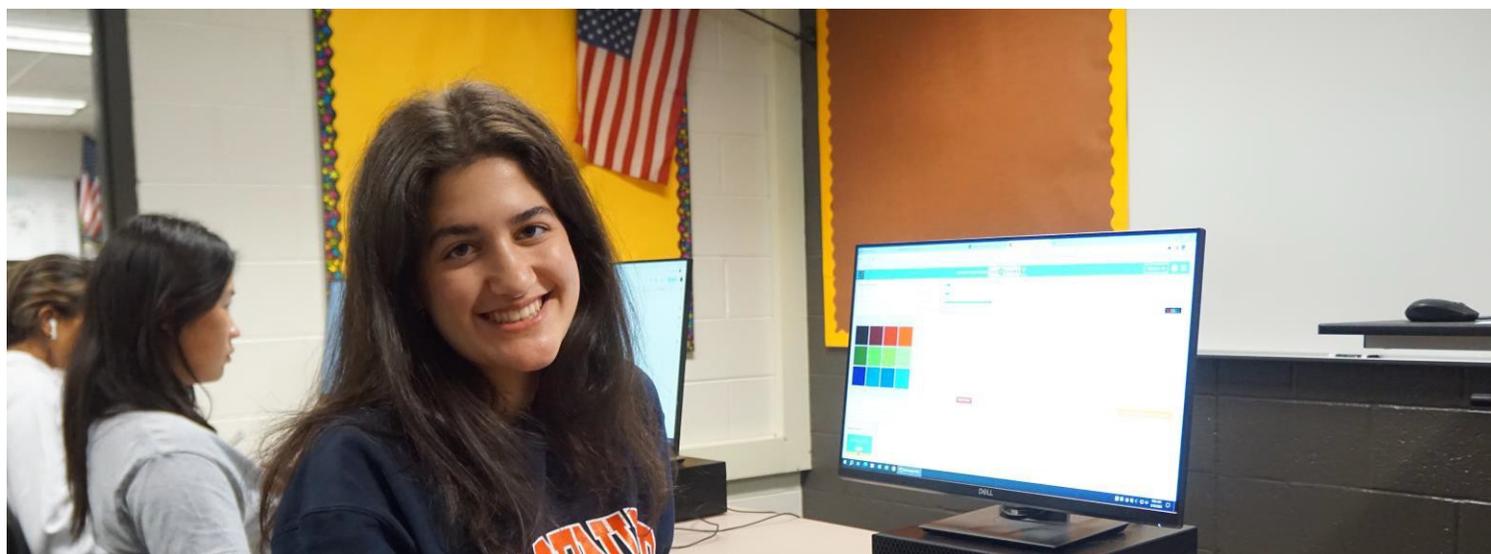
ADVANCED JOURNALISM & MULTIMEDIA COMMUNICATIONS (Newspaper) - #01844 40 WEEKS

GRADES: 10-12 PREREQUISITE: Multimedia Communications OR Instructor Approval

This course is a workshop in which students will produce student publications, including an online newspaper and several print publications yearly, with a focus on the future and 21st-century skills. The emphasis for the print publication will be on lengthier, in-depth stories printed on a monthly basis and/or special editions. The online publication will be the primary outlet for breaking news and upcoming events in a variety of formats: video, photo slideshows, podcasts, links, etc. The mission of RCS publications is to connect with the students in the school and citizens in the community as an open forum. The course allows students to produce informative, accurate, and professional student-run publications that seek to stimulate the discussion of issues in order to promote a more aware audience. Whether informing, voicing opinion, or entertaining, the student publications will strive for standards of balance and good taste and to spread the value and high standards of the print publication to the web.

This class may be repeated for credit.

FAMILY AND CONSUMER SCIENCES



CHILD DEVELOPMENT #08172

20 WEEKS

Grades: 10-12

This semester course is designed for students interested in learning about family life, parenting skills, and the first year of development. Topics include, but are not limited to, understanding children, effective parenting, reasons for becoming a parent, prenatal development, preparing for the birth of a child, newborn care, and infant development. Students will be required to prepare and present projects, work in cooperative groups, and listen to guest speakers. In addition, students will have the opportunity to experience the demands of parenting through practical activities and simulations. Students will be given opportunities to understand the importance of the earliest stage of child development.

FOODS AND NUTRITION #08002

20 WEEKS

Grades: 9-12

Foods and Nutrition is a semester-long class that gives students an authentic opportunity to learn various culinary skills while gaining an in-depth knowledge of healthy living and personal nutrition. Frequent labs allow for self-directed learning while implementing course content. Various nutrition-based projects allow students opportunities to improve healthy eating habits. Course content is designed to be immediately implemented into students' lives and food choices. Interpersonal skills are developed through small group-based culinary labs.

CUISINES OF THE WORLD #08312

20 WEEKS

Grades: 9-12

PREREQUISITE: Foods and Nutrition

This course focuses on global awareness as students investigate what influence factors such as culture and climate have in shaping the cuisine of various regions. Students utilize nutritional information acquired in Foods and Nutrition to analyze the impact of regional food sources on overall nutrition. Students use complex culinary practices to create traditional dishes from each country studied. Frequent labs allow for self-directed learning while implementing course content. Students learn how to alter recipes and menu plans and work in a small team to accomplish a goal.

FASHION DESIGN #08212

20 WEEKS

Grades 9-12

Fashion Design is a course for any student interested in a hands-on, creative lab-based course. Lab-based projects allow for self-directed learning while implementing course content. Students explore fashion trends while applying the principles and elements of design to create fabric-based projects. Students learn to use a sewing machine, hand sew, select fabrics, and construct patterns. Students gain global awareness by exploring trends and fashion norms in different cultures and throughout various time periods.

INTERIOR DESIGN #08102

20 WEEKS

Grades 9-12

Interior Design is a semester class where students gain the skills required to plan and decorate spaces suited to different needs. Students analyze the many housing options available to determine how the social, service, and private areas of a home can work together to satisfy individual and family needs. The concepts studied will help students make wise decisions about selecting a home site, planning a home, and selecting materials, furnishings, accessories, and window treatments. Students will investigate and compare home norms across time and cultures to gain global awareness. Students create floor plans and design boards to showcase different styles and functions of design.

INDEPENDENT LIVING #08062

20 WEEKS

Grades 9-10

Independent living is a course that helps students develop the skills necessary to become self-sufficient in their personal lives. Students learn how to manage different practical tasks of daily living in order to gain the confidence needed to handle the challenges of high school and of a post-high school world. Students apply skills already learned in core subject areas to new concepts of budgeting, healthful living, stress management, goal setting, interpersonal communication, and a variety of other soft skills. Students use a variety of assessments to learn how to apply their personal strengths to future careers.

PERSONAL FINANCE #08182

20 WEEKS

Grades 11-12

This semester course prepares students to successfully manage financial matters when living on their own. Students learn about planning for a career and analyze whether their career choice will afford them the lifestyle they desire. Students learn about budgeting, banking, managing money, saving and investing, using credit wisely, and types of insurance. Personal finance counts as senior math ½ credit if taken senior year.

MATHEMATICS



The Mathematics Department recommends conferences with both the student's counselor and mathematics teachers to ensure the most appropriate placement in mathematics for each student.

ALGEBRA 1 - #04164 or #04164CT

40 WEEKS

GRADES: 9-12

PREREQUISITE: Pre-Algebra

Students will build upon the concepts learned in *Pre-Algebra* and apply them to solving and graphing multi-step linear equations and functions. Students solve and graph linear inequalities as well as linear and non-linear systems using a variety of methods. Students will solve quadratic equations in multiple ways. Radical equations will be explored, including their connection to geometry. Students will learn to display and analyze data with measures of center and variation and explore the probability of various events. These will include independent, disjoint, and conditional probability.

GEOMETRY - #04602 or #04602CT

40 WEEKS

GRADES: 9-12

PREREQUISITE: Algebra 1

Students apply alternate ways of reasoning mathematically, beyond *Algebra*, including analytical and spatial reasoning. They apply what they know about two-dimensional figures to three-dimensional figures in real-world contexts and deepen their understanding of shape and shape relationships. Students apply what they know about linear functions and coordinate graphing to coordinate geometry. Students study postulates, definitions and theorems, as well as deductive reasoning skills that can be applied to both mathematical and real-world problem contexts.

HONORS GEOMETRY - # 04605

40 WEEKS

GRADES: 9-12

PREREQUISITE: Algebra 1 with Instructor Approval

The *Honors Geometry* course includes and extends the content of *Geometry*. Students apply alternate ways of reasoning mathematically, beyond *Algebra 1*, including analytical and spatial reasoning to more complex problems. They apply what they know about two-dimensional figures to three-dimensional figures in real-world contexts and deepen their understanding of shape and shape relationships. Students extend their understanding of linear functions and coordinate graphing to coordinate geometry. Students study postulates, definitions, and theorems, as well as deductive reasoning skills that can be applied to higher-level mathematical and real-world problem contexts. This course is designed for students who have an interest in developing a deeper understanding and a higher level of application of Geometry.

ALGEBRA 2 - #04175

40 WEEKS

GRADES: 9-12

PREREQUISITE: Geometry

Students build upon the concepts learned in *Algebra 1* and *Geometry* and continue the study of various function families, including polynomial, exponential, logarithmic, rational, and trigonometric functions. In addition to extending the algebra strand, students are introduced to the concepts of inverse functions, sequences, and series. Students will develop and apply their understanding of circular trigonometry and its connections to triangular trigonometry. In addition, students will continue their work with probability through counting methods and binomial distributions. Methods of how to collect good data will be explored along with experimental design and making inferences.

HONORS ALGEBRA 2 - # 04185

40 WEEKS

GRADES: 9-12

PREREQUISITE: Honors Geometry or Geometry with Instructor Approval

The *Honors Algebra 2* course includes the content expectations for *Algebra 2* as the foundation and applies them to problems that extend the concepts. Students learn and apply exponential and logarithmic functions and function families, including rational and trigonometric functions. In addition to extending the *Algebra 1* and *Algebra 2* strands, students apply the numeric and logarithmic ideas of accuracy, error, sequences, and iteration to more complex operations. Students apply their knowledge of geometry to the topic of conic sections. Students extend their understanding of circular trigonometry and its connections to triangular trigonometry through advanced problem-solving. This course is designed for students who have an interest in developing a deeper understanding and a higher level of application of Algebra 2.

INTRODUCTION TO COLLEGE MATH - #04714

40 WEEKS

GRADES: 11-12

PREREQUISITE: Algebra 2

This year-long mathematics course encompasses and extends topics from *Algebra 2* and statistics. Mathematical models are incorporated into each of the units providing students with examples of math relevant to everyday life. Financial applications based in algebra will be explored and used to demonstrate important statistical concepts.

This course is NOT designed for students who have earned credit in Precalculus.

PRECALCULUS - #04724

40 WEEKS

GRADES: 10-12

PREREQUISITE: Algebra 2

Students extend and apply concepts from *Algebra 2* to solve problems involving function families, including trigonometry and exponential, logarithmic, polynomial, quadratic, and rational functions. Students apply their understanding of matrices and polar coordinates and apply them to modeling and solving real-world problems. Students are introduced to limits and the formal definition of the derivative in preparation for a college-level calculus course.

HONORS PRECALCULUS - #04725

40 WEEKS

GRADES: 10-12

PREREQUISITE: Honors Algebra 2 or Algebra 2 with Instructor Approval

In addition to the concepts applied in *Precalculus*, students extend their understanding by solving more complex problems involving functions, vectors, matrices, combinatorics, and induction. Students are introduced to limits and the formal definition of the derivative in preparation for a college-level calculus course. This course is designed for students who have an interest in developing a deeper understanding and a higher level of application of Precalculus.

ADVANCED PLACEMENT CALCULUS-AB - #04824

40 WEEKS

GRADE: 11-12

PREREQUISITE: Honors Precalculus or Precalculus

Students apply concepts to solve problems involving analytic geometry, functions, graphs, limits, derivatives, and their applications, techniques of integration, applications of integration, solving first order differentials, trigonometric functions, logarithmic functions, and exponential functions.

ADVANCED PLACEMENT CALCULUS-BC - #04834

40 WEEKS

GRADE: 11-12

PREREQUISITE: Honors Precalculus or Precalculus with Instructor Approval

In addition to all the topics discussed in *AP Calculus-AB*, this course covers slope fields, L'Hopital's Rule, Euler's Method, derivatives of parametric, polar, and vector functions, improper integrals, integration involving partial fractions and trigonometric substitution and series.

ADVANCED PLACEMENT STATISTICS - #04862

40 WEEKS

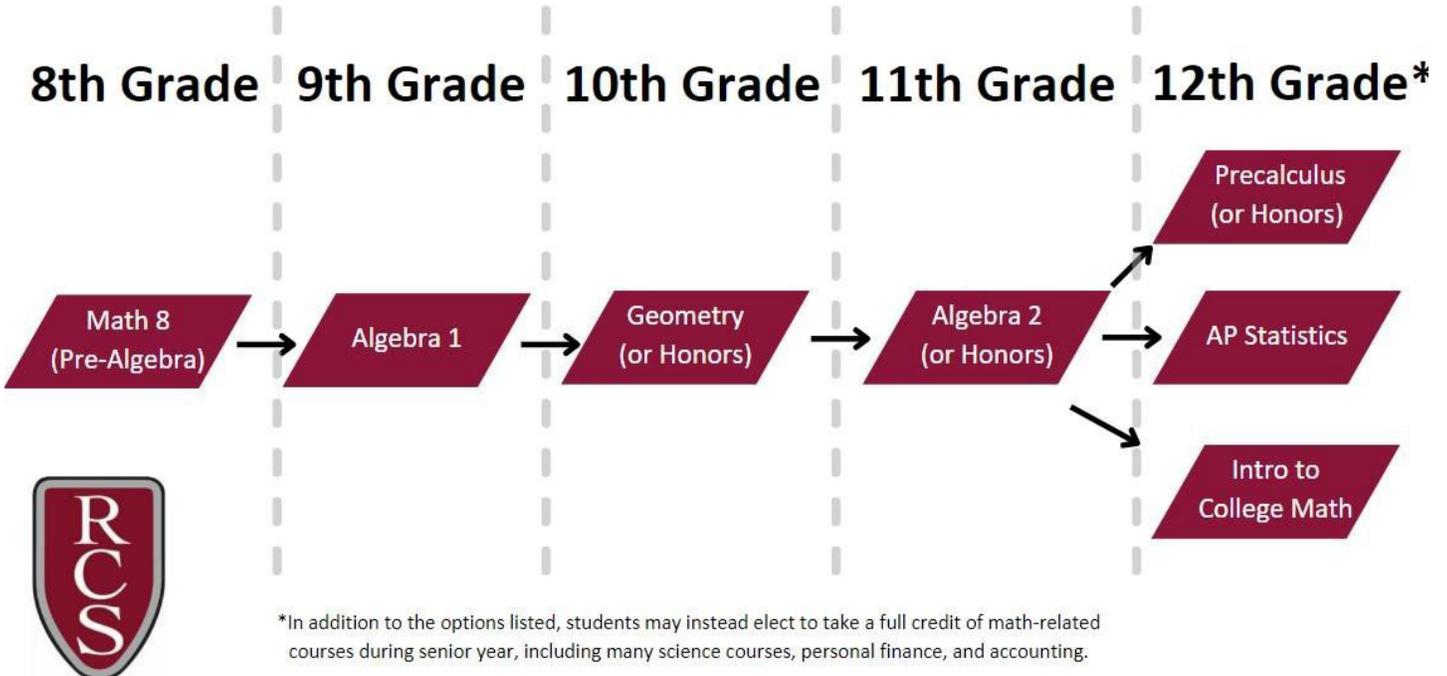
GRADES: 11-12

PREREQUISITE: Algebra 2

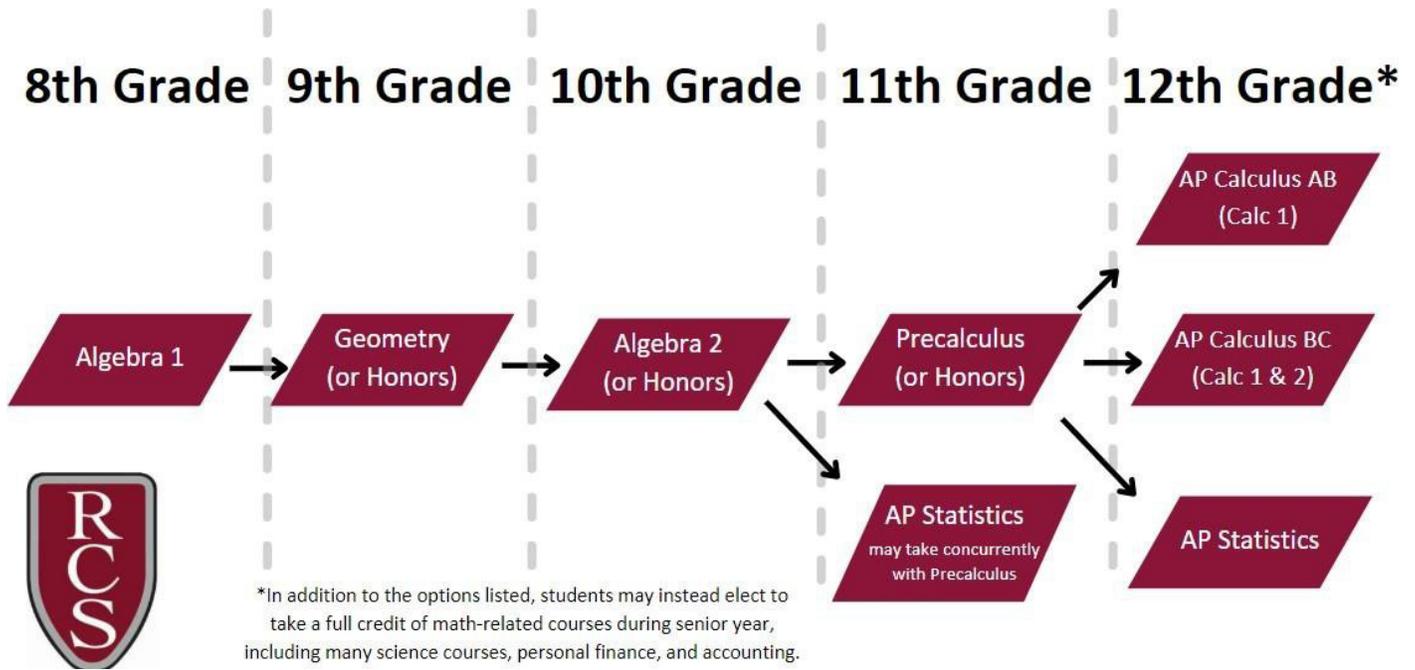
NOTE: Students will be required to use a graphing calculator throughout the course.

Students learn and apply the major concepts and tools used for collecting, analyzing, and drawing conclusions from data. The topics for the course are divided into four major themes: exploratory analysis, planning a study, probability, and statistical inference.

Standard Pathways Math Courses:



Honors/Advanced Pathways Math Courses:



MUSIC



A wide variety of opportunities, both performance and non-performance, are available within the Music curriculum. Some performance ensembles require instructor approval.

Many of the Music Department courses can be applied toward the Visual, Performing, and Applied Arts (VPAA) graduation requirement. The complete list can be found in the Course Description book.

NON-PERFORMANCE COURSES

EXPLORING MUSIC - #05002 (formerly MUSIC APPRECIATION)

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

No music experience required! *Exploring Music* explains the elements of music, explores music's place in the world of art and develops the skill of listening. Students will interact with many different genres of Western music, including but not limited to early American, jazz, digital, rock, and pop genres and their connections to Western music tradition. Many different forms of exploration may be utilized in order to individualize the course experience, including songwriting, listening, digital music/video creation, improvisation, and composition.

GUITAR - #05042

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

No music experience required! *Guitar* teaches standard music notation reading and basic guitar playing skills and techniques. Students participate in group instruction, independent practice time, one-on-one instruction, and playing assessments. Students learn to read music, play single-line melodies and guitar chords, demonstrate picking and strumming styles as well as care and tuning of the guitar.

This class may be repeated for credit.

MUSIC THEORY - #05032

20 WEEKS

GRADES: 9-12

PREREQUISITE: Instructor Approval

Music Theory includes the study and analysis of the basic elements of music: melody, harmony, and rhythm. There is extensive work in scales, intervals, chords, and harmonic progressions. Ear training and sight-singing are emphasized as part of the coursework, and there are opportunities to study arranging and composition.

INSTRUMENTAL MUSIC

CONCERT BAND - #05204

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Concert Band is a basic-level instrumental music course that builds upon the skills learned in middle school band class or its equivalent. Students prepare, study, and perform level-appropriate music for full band, chamber ensembles, and solos. In addition to regular class time, students are expected to participate in rehearsals and performances that take place outside the normal school day, such as concerts, school activities, Michigan School Band and Orchestra Association (MSBOA) festivals, and community events.

This class may be repeated for credit.

CONCERT ORCHESTRA - #05144

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Concert Orchestra is a basic-level instrumental music course that builds upon the skills learned in middle school orchestra. Students prepare, study, and perform level-appropriate music for string orchestra, chamber ensembles, and solos. In addition to regular class time, students are expected to participate in rehearsals and performances that take place outside the normal school day, such as concerts, school activities, Michigan School Band and Orchestra Association (MSBOA) festivals, and community events.

This class may be repeated for credit.

SYMPHONY ORCHESTRA - #05154

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Symphony Orchestra is an advanced-level instrumental music course that builds upon the skills learned in *Concert Orchestra* or its equivalent. Students prepare, study, and perform level-appropriate music for string orchestra, Chamber ensembles, and solos. In addition to regular class time, students are expected to participate in rehearsals and performances that take place outside the normal school day, including concerts, school activities, Michigan School Band and Orchestra Association (MSBOA) festivals and community events.

This class may be repeated for credit

JAZZ BAND - #05192

20 WEEKS (Semester 2 only)

GRADES 9-12 PREREQUISITE: Concurrent enrollment in a high school concert ensemble OR Instructor Approval

Jazz Band is composed of students with a full range of instrumental music experience and proficiency. Students enrolling in *Jazz Band* must concurrently enroll in a concert band ensemble or instructor approval to take this course. Instrumentalists build on the skills developed and experiences gained in concert ensembles through the study of different jazz genres and styles. Standard band instrumentation is utilized in addition to guitar, piano, bass, and drum set. Class meeting times take place outside of the normal school day. In addition to regular class time, students are expected to participate in activities that take place outside of the normal school day and school year. Students prepare for and perform in activities such as concerts, Michigan School Band and Orchestra Association (MSBOA) festivals, school assemblies, and community events.

This class may be repeated for credit.

MARCHING BAND - #05182

20 WEEKS (Semester 1 only)

GRADES: 9-12 PREREQUISITE: Instructor Approval AND, for first year members, concurrent or previous year's enrollment in a high school concert ensemble

Marching Band is composed of students with a full range of instrumental music experience and proficiency. Instrumentalists build on the skills developed and experiences gained in concert ensembles. Non-instrumentalists may participate as members of the Color Guard by connecting visual and auditory elements, without previous or concurrent year's enrollment in a high school concert ensemble. Class meeting times take place outside of the normal school day. In addition to regular

class time, students are expected to participate in activities that take place outside of the normal school day and school year. Students prepare for and perform in activities such as band camp, football games, MSBOA Marching Band Festival, concerts, school assemblies, and community events.

This class may be repeated for credit.

SYMPHONY BAND - #05174

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Symphony Band is an intermediate-level instrumental music course that builds upon the skills learned in *Concert Band* or its equivalent. Students prepare, study, and perform level-appropriate music for full band, chamber ensembles, and solos. In addition to regular class time, students are expected to participate in rehearsals and performances that take place outside the normal school day, such as concerts, school activities, Michigan School Band and Orchestra Association (MSBOA) festivals, and community events.

This class may be repeated for credit.

WIND ENSEMBLE - #05224

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Wind Ensemble is an advanced-level instrumental music course that builds upon the skills learned in *Symphony Band* or its equivalent. Students prepare, study, and perform level-appropriate music for full band, chamber ensembles, and solos. In addition to regular class time, students are expected to participate in rehearsals and performances that take place outside the normal school day, such as concerts, school activities, Michigan School Band and Orchestra Association (MSBOA) festivals, and community events.

This class may be repeated for credit.

VOCAL MUSIC

CHAMBER CHOIR - #05134

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Chamber Choir expands on skills and talents developed in previous choirs. Students continue to gain further musical understanding through the performance of mature choral repertoire from a variety of cultures, languages, historical periods, and styles. Students demonstrate sight reading skills at the highest level within the school. Students have the opportunity to participate in small ensemble experiences. Students prepare for and perform in different settings, such as concerts, school activities, Michigan School Vocal Music Association (MSVMA) festivals, and community events.

This class may be repeated for credit.

CHORALE - #05094

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Chorale expands on skills and talents developed in *previous choir classes*. Students participate in more advanced levels of ensemble performance. Students continue to gain further musical understanding through the performance of mature choral repertoire from a variety of cultures, languages, historical periods, and styles. Students demonstrate sight reading skills at the highest level within the school. Students will have the opportunity to participate in small ensemble experiences. Students prepare for and perform in different settings, such as concerts, school activities, Michigan School Vocal Music Association (MSVMA) festivals, and community events.

This class may be repeated for credit.

CONCERT CHOIR - #05124

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Concert Choir is a year-long course that builds on the skills developed and experiences gained in either *Tenor/Bass Chorus* or *Treble Choir*. In the event that those courses are not offered, Concert Choir is the choice for incoming students new to High School choir. Students continue to gain further musical understanding through the performance of music from a variety of cultures, languages, historical periods, and styles. Students refine and expand skills that improve vocal quality, such as tone production, breath management, vocal technique, and stage presence. Students continue to develop ensemble skills, such as listening, blending, and balancing. Students demonstrate improved sight reading skills at a higher level. Students prepare for and perform in different settings, such as concerts, school activities, Michigan School Vocal Music Association (MSVMA) festivals, and community events.

This class may be repeated for credit.

TREBLE CHORUS - #05114

40 WEEKS

GRADES: 9-12 PREREQUISITE: None

Treble Choir is a year-long course for treble voice singers. In this year-long course for students new to High School choir, students gain musical understanding through the performance of music from a variety of cultures, languages, historical periods, and styles. Students learn and apply skills, including tone production, breath management, vocal technique, and stage presence. Students learn and apply ensemble skills, such as listening, blending, and balancing. Students demonstrate their understanding of basic music theory by learning and applying basic sight reading skills. Students prepare for and perform in different settings, such as concerts, school activities, and Michigan School Vocal Music Association (MSVMA) festivals.

This class may be repeated for credit.

TENOR/BASS CHORUS - #05104

40 WEEKS

GRADES: 9-12 PREREQUISITE: None

In this year-long course for students new to High School choir, students gain musical understanding through the performance of music from a variety of cultures, languages, historical periods, and styles. Students learn and apply skills, including tone production, breath management, vocal technique, and stage presence. Students learn and apply ensemble skills, such as listening, blending, and balancing. Students demonstrate their understanding of basic music theory by learning and applying basic sight reading skills. Students prepare for and perform in different settings, such as concerts, school activities, and Michigan School Vocal Music Association (MSVMA) festivals.

This class may be repeated for credit.

VARSITY CHAMBER ENSEMBLE - #05084

40 WEEKS

GRADES: 9-12 PREREQUISITE: Instructor Approval

Varsity Chamber Ensemble is a mixed ensemble that expands on skills and talents developed in previous choirs. Students continue to gain further musical understanding through the performance of mature choral repertoire from a variety of cultures, languages, historical periods, and styles. Students demonstrate sight reading skills at the highest level within the school. Students have the opportunity to participate in small ensemble experiences. Students prepare for and perform in different settings, such as concerts, school activities, Michigan School Vocal Music Association (MSVMA) festivals, and community events.

This class may be repeated for credit.

PERFORMING ARTS



The following courses can be applied toward the Visual Performing and Applied Arts graduation requirement. The complete list of Visual, Performing and Applied Arts list can be found in the registration brochure.

THEATER 1 - #01512

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

Students are introduced to all aspects of theater with an emphasis on acting. Students explore improvisation, movement, voice, character and scene work. Students participate in a variety of activities, including brief written assignments.

THEATER 2 - #01522

20 WEEKS

GRADES: 10-12

PREREQUISITE: Theater 1 or Instructor Approval

Theater 2 is designed for serious theater students. Students apply the concepts and skills learned in *Theater 1* in more depth. In addition, students learn and apply the technical aspects of a theatrical production, such as lighting, set design, costuming, and sound. Students learn about and apply rules for theater safety. Students produce and present one-act plays, as well as participate in after school productions.

PHYSICAL EDUCATION



HEALTH - #03002 20 WEEKS

GRADES: 9 -12(Required)

PREREQUISITE: None

This one-semester health course assists students in making independent, informed decisions concerning their physical, mental, and emotional well-being. The students become actively engaged in a course that integrates classroom instruction and relevant application of concepts. An individualized behavioral and fitness profile introduces the concepts of total wellness as students develop their personal goals within the course throughout their lives. The health components emphasize goal setting, decision-making, and advocacy skills directly associated with adolescent risk behaviors. Building on the knowledge and skills gained in the classroom, students utilize the appropriate strategies in a variety of relevant applications while gaining competence and confidence in their abilities. Throughout the course, the concept of lifelong optimal wellness is reinforced and applied.

LIFEGUARD TRAINING - #03842

20 WEEKS (At RHS)

PREREQUISITES: To be eligible for Lifeguard courses, the participants must be 15 years of age on or before the final scheduled session of this course. The participants must successfully complete the following:

1. Swim 300 yards continuously demonstrating breath control and rhythmic breathing.
 - a. Candidates may swim using the front crawl, breaststroke, or a combination of both, but swimming on the back or side is not allowed. Swim goggles may be used.
2. Starting in the water, swim 20 yards using front crawl or breaststroke, surface dive 7-10 feet, retrieve a 10-pound object, return to the surface, swim 20 yards back to the starting point with the object, and exit the water without using a ladder or the steps. Students have 1 minute and 40 seconds to complete the task. Swim goggles are not allowed.
 - a. When returning to the starting point, the participant must hold the 10 pound object with both hands, placing the brick on his/her chest, and must keep his/her face above water. The participant can swim on his/her back using an elementary backstroke kick or rotary (egg beater) kick. The participant must exit the water using his/her strength. The time is complete once the participant has exited the water and is standing on the pool deck
3. Tread water for 2 minutes using only the legs. Candidates should place their hands under the armpits.

The primary purpose of the Red Cross Lifeguard program is to provide entry-level lifeguard candidates with the knowledge and skills to prevent, recognize, and respond to emergencies in and around the water and to provide care for injuries and sudden illnesses until emergency medical services (EMS) personnel arrive and take over. CPR, First Aid, and the use of an AED are included.

There is a \$35 fee for those students who wish to be tested for Lifeguard certification.

This class may be repeated for credit.

PE SPORTS ACTIVITIES #03032

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

This semester develops skills and performance in individual and team sports, including basketball, whiffle ball, soccer, flag football, pickle ball, tennis, golf, and swimming. The students are also exposed to team and cooperative learning activities. Students set fitness and performance goals to maximize their progress and improvement. Students also continue to improve their health, diet, and nutrition as they improve their overall fitness.

This class may be repeated for credit.

PERSONAL FITNESS – LIFELONG ACTIVITIES #03691

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

Students begin by evaluating their health and fitness goals to promote optimal wellness. Students will explore the direct correlation of physical fitness and its effects on mental wellness. Students will participate in a variety of activities that will promote overall mental, emotional, and social wellness, as well as explore stress reduction activities while increasing personal fitness levels.

Students will participate in a variety of activities; such as cycling, pilates, yoga, tae bo, tai chi, power walking, water aerobics, jogging, step aerobics, cardio boot camp, circuit training, jump roping, and stress reduction to maximize cardiovascular fitness. Students participate in a pretest and post-test to determine their aerobic fitness, muscular strength and endurance, flexibility, and body composition. Using the National Standards for Physical Fitness, students pretest on five fitness categories and set goals based on the results. At the end of the semester, students use the post-test to measure the results of their goals. Through participating in group activities, students develop skills in cooperation, sportsmanship, and leadership. Throughout the course, the concept of lifelong health and fitness is emphasized.

This class may be repeated for credit.

PERSONAL FITNESS – STRENGTH TRAINING - #03322

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

In this semester-long class, students participate in a variety of activities to improve their motor skills. Students set fitness goals designed to improve their strength, quickness, and conditioning. Students evaluate their progress and identify exercises to reach their performance goals and maximize their progress and improvement. Students identify nutritional goals to enhance their understanding of health and diet and how they contribute to their overall fitness.

This class may be repeated for credit.

PERSONAL FITNESS – STRENGTH TRAINING AND AGILITY FOR ATHLETES - #03212

20 WEEKS

GRADES: 9-12

PREREQUISITE: Students must be currently playing a school sport, planning on playing one within the current school year, or teacher approval

This class is designed for our student-athletes. This class will have a heavy focus on strength gain through weight/resistance training along with speed and agility drills. Individual workout plans will be created and tailored around in-season athletes' game/competition schedules if needed. To improve overall athletic performance, other areas of instruction will include, but not be limited to, the following: skill-specific drills/games, athletic yoga, plyometrics, nutrition, and leadership development.

This class may be repeated for credit.

UNIFIED PE - #03010

20 WEEKS

GRADES: 9-12

PREREQUISITE: None

This Physical Education course combines students of all abilities to create an inclusive environment for students with and without disabilities. The class is intended to help students develop fitness and sports skills in a non-competitive setting. Students will participate in developmentally appropriate activities including lifetime skills and activities, physical fitness, and sports. Students will work together to increase competence and confidence in a variety of physical activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students.

This class may be repeated for credit.

SCIENCE



BIOLOGY - #06004

40 WEEKS

GRADES: 9 (Required)

PREREQUISITE: None

Biology addresses all the Life Science and some of the Earth Science Expectations of the Michigan Science Standards. Students identify the unique properties of living systems as they relate to cells and organic molecules. Students examine ecosystems and their characteristics. Students explain the process of genetic reproduction and how traits are inherited. Students define evolution and examine factors that influence population growth and decline. Students describe how different species of plants, animals, and microorganisms that live today are related. Students participate in labs that reinforce the biological concepts learned.

ADVANCED PLACEMENT BIOLOGY - #06014

40 WEEKS

GRADES 11-12

PREREQUISITES: Biology and Chemistry: "B" or better, strongly recommended and Instructor Approval

Advanced Placement Biology is designed to be the equivalent of a two-semester biology major's introductory college biology course. Students begin the first semester by reviewing the summer reading assignments. As recommended by the College Board, students develop an understanding of the major topics of biology, including biochemistry, molecular biology, cells, heredity, evolution, organisms, and populations. Through a variety of laboratory experiences, including those recommended by the College Board, students apply their understanding of scientific concepts.

ANATOMY AND PHYSIOLOGY - #06284

40 WEEKS

GRADES: 10- 12

PREREQUISITES: Biology, Chemistry (Chemistry may be taken concurrently.)

This course helps prepare students for further study in human and veterinary medicine, nursing, physical and occupational therapy, dentistry, biotechnology, and related fields at the college level. The structure and function of cells, tissues, organs, and systems of the human body are closely examined. A detailed dissection of the cat will be correlated with the study of human anatomy. Students conduct clinical and physiological laboratory studies in addition to anatomical studies.

BOTANY - #06232

20 WEEKS

GRADES 10-12

PREREQUISITE: Biology

Botany is a lab-oriented continuation in the study of plants that began in *Biology*. This course is designed for students who are seeking to strengthen their science backgrounds and also for those interested in learning more about the propagation, growth, and care of plants. Topics include the anatomy, reproduction, growth, regulation, and classification of plants. Topics include the anatomy, reproduction, growth, regulation, and classification of plants. Use of the greenhouse, fieldwork, experimentation as well as specialized laboratory techniques and apparatus will be employed to enhance students' understanding of the plant world.

CHEMISTRY - #06314

40 WEEKS

GRADES: 10-12

PREREQUISITES: Biology, Algebra 1: "B" or better, strongly recommended

This course is recommended for students who plan to enroll in a four-year university program after high school and addresses some of the Physical Science and Earth Science expectations in the Michigan Science Standards. The structure and behavior of matter is studied. Topics include atomic theory, the periodic table, bonding, energy, problem-solving, measurements, chemical reactions, gas laws, equilibrium, solutions, and acids and bases. Laboratory work is intended to help develop and support topic areas. A large part of the course requires a comprehensive understanding of Algebra.

ADVANCED PLACEMENT CHEMISTRY - #06324

40 WEEKS

GRADES 11-12

PREREQUISITES: Chemistry: "B" or better strongly recommended, completion of Algebra 2, and Instructor Recommendation

In this college-level chemistry course, students study more advanced chemistry topics. These advanced topics include, but are not limited to; kinetics, equilibrium, and thermodynamics. Lab work is intended to develop skills needed in college chemistry and industry.

FUNDAMENTALS OF CHEMISTRY - #06344

40 WEEKS

GRADES 9-12

PREREQUISITE: Physical Science – Only available to students graduating in 2025, 2026, and 2027

This course is designed for the college-bound student who is not, at this time, planning to pursue a career in science. This course is designed to produce students who are literate in basic chemistry concepts.

ORGANIC CHEMISTRY - #06321

20 WEEKS

GRADES 11-12

PREREQUISITES: Chemistry: "B" or better strongly recommended

This course introduces students to the fundamentals of carbon-based chemistry and its real-world applications. Students will explore the naming of organic compounds, the structures and functions of organic molecules, and conduct hands-on labs to reinforce their understanding of the material. Designed to supplement previous coursework in general or AP Chemistry, this class is ideal for students interested in deepening their knowledge of chemistry. It is especially valuable for those considering careers in medicine, chemical engineering, or materials science.

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE - #06412

40 WEEKS

GRADES 10-12

PREREQUISITES: Biology: "B" or better strongly recommended, Chemistry is strongly recommended

Advanced Placement Environmental Science is the equivalent of a one-semester, introductory college course in environmental science. Students will explore and investigate the interrelationships of the natural world and analyze environmental problems, both natural and human-made. They will take part in laboratory investigations and field work. Students will practice explaining environmental concepts and processes, analyzing data, visual representations, and writings. They will also apply quantitative methods in solving problems, practice proposing a solution for an environmental problem and supporting their idea with evidence as well as analyze a research study to identify a hypothesis. Students may participate in activities including lectures, discussion, experimentation, and laboratory work.

EARTH AND SPACE SCIENCE - #06062

20 WEEKS

GRADES 9-12

PREREQUISITE: None

Earth and Space Science addresses the Earth Science Expectations of the Michigan Science Standards. The course includes topics such as Earth systems, structure, and space. Students will develop an understanding of the major topics of geology and astronomy, including energy in Earth systems, plate tectonics, volcanoes, and earthquakes.

FORENSIC SCIENCE - #06402

20 WEEKS

GRADES 10-12

PREREQUISITE: Biology

Students examine the sciences used in crime scene investigations. Students explore topics such as blood spatter Analysis, toxicology, serology, impressions, genetics, fingerprinting, and DNA. Students examine physical evidence through hands-on experiences. Students scrutinize components of crime scenes through simulations and laboratory investigations.

MEDICAL CAREERS #MedCareS1/MedCareS2 – (Pilot)

40 WEEKS

GRADE: 12

PREREQUISITE: Anatomy and Physiology

Shared Time: May be required to travel to another building or medical location

This comprehensive year-long program uniquely incorporates the medical sciences, pathology, and real work experiences into the curriculum. Throughout the course, students will engage in immersive work-based learning experiences, opportunities to participate in a Career and Technical Student Organization (CTSO), such as HOSA (Health Occupation Students Association), and develop essential employability skills. The curriculum covers a wide spectrum, including medical terminology, Basic Life Support (BLS), CPR, first aid, and medical mathematics relevant to the medical field. The course is designed to provide a co-educational setting that fosters a robust foundation in pathology, complemented by practical skills and ancillary certifications. Students will delve into personnel and workplace safety protocols, legal and ethical considerations, and cultural competence. Students will also gain expertise in communication, teamwork, and the application of health-related mathematics. By the end of this program, students will be well-equipped with the knowledge and skills essential for success in the dynamic and rewarding field of medicine.

Successful completion of this course is considered a CTE Completer.

MICROBIOLOGY AND GENETICS - #06222

20 WEEKS

GRADES 10-12

PREREQUISITE: Biology: "C" or better strongly recommended

Students explore concepts of heredity and environment, with emphasis placed on Mendelian laws. The principles of dominance and recessiveness are incorporated into the study of chance and probability as they relate to inheritance. Students learn about the chromosome theory and the gene hypothesis of inheritance, population genetics, human characteristics, applied genetics, linkage and crossing over, and chi-square. Students learn about microbes, how they affect us, and how we can protect ourselves from them. Students practice aseptic techniques in the growth and maintenance of non-pathogenic bacterial cultures while studying basic bacterial morphology and metabolic characteristics through the use of selected procedures.

PATHOLOGY- #06272

20 WEEKS

GRADES: 10-12

PREREQUISITE: Biology

This is a course designed to study the major diseases of humans at the cellular and tissue level. Actual diseased tissue from humans is examined and studied in laboratory exercises. Major topics in this course include cellular pathology, inflammatory response, immunity, heart diseases, stroke, artery diseases, cancer, respiratory diseases, digestive disorders, and diabetes. Medically related projects will be part of the requirements.

PHYSICAL SCIENCE – CHEMISTRY #06058

20 WEEKS

GRADES: 10-12

PREREQUISITE: Biology, Only available to students graduating in 2028, and beyond

This course is designed to address some of the physical science standards of the Michigan Science Standards. This course is designed to produce students who are literate in basic chemistry concepts. The structure and behavior of matter is studied. Topics include atomic theory, the periodic table, bonding, energy, problem-solving, measurements, chemical reactions, gas laws, equilibrium, solutions, and acids and bases. Laboratory work is intended to help develop and support topic areas.

PHYSICAL SCIENCE – PHYSICS #06056

20 WEEKS

GRADES: 10-12

PREREQUISITE: Biology, Only available to students graduating in 2028, and beyond

This course is designed to address some of the physical science standards of the Michigan Science Standards. This course is designed to produce students who are literate in basic chemistry concepts. Topics include the study of motion, forces, sound, electricity, magnetism, and light. Students will be applying fundamental algebraic skills to physics concepts.

PHYSICS - #06424

40 WEEKS

GRADES 10-12

PREREQUISITES: Physical Science, Algebra 2 strongly recommended (Algebra 2 may be taken concurrently) (Sophomore with Counselor Approval)

This course is recommended for students who wish to enter technical areas of study such as engineering, architecture, and medicine. Basic topics include motion, forces, energy, electricity, magnetism, and waves. The course emphasizes the development of analytical thinking skills.

ADVANCED PLACEMENT PHYSICS - #06454

40 WEEKS

GRADES 11-12

PREREQUISITES: Physics: "B" or better strongly recommended, Calculus may be taken concurrently.

This course covers a college-level introductory physics curriculum in sufficient depth for students to have the necessary knowledge and skills to prepare for the calculus-based Advanced Placement exam (AP Physics C). This course is recommended for students interested in pursuing a career in the physical sciences, engineering, or medicine.

FUNDAMENTALS OF PHYSICS - #06394

40 WEEKS

GRADES 10-12

PREREQUISITE: Physical Science – Only available to students graduating in 2025, 2026, and 2027

This course is recommended for college-bound students not pursuing technical fields. Topics include the study of motion, forces, sound, electricity, magnetism, and light. After students have an understanding of concepts, they learn and apply the mathematics underlying the concept. Higher-level thinking skills are emphasized.

VERTEBRATES - #06072

20 WEEKS

GRADES 10-12

PREREQUISITE: Biology: "C" or better strongly recommended

This course is designed for the advanced life science student interested in pursuing a study of the subphylum Vertebrata. The class focuses on evolutionary trends, vertebrate structure and function, and vertebrate behavior through lectures, observation, labs, and dissections. Dissections of sea lamprey, sharks, frogs, snakes, turtles, fish, birds, and other vertebrates may be required throughout the semester. Students may be responsible for the individual care and observation of live animals.

VETERINARY SCIENCE - #06331

10 WEEKS

GRADE: 12

PREREQUISITE: Application required/May be taken concurrently with
Anatomy and Physiology

Students are selected by a committee consisting of a principal, a counselor, and the anatomy and physiology teacher. Students must apply to the Science Department during the first semester of their senior year if they wish to be considered for this course. Enrollment is limited to five students from each high school.

Veterinary Science is a unique course that applies the knowledge and skills of anatomy and physiology in a clinical setting. This course is taught off-campus at a local veterinarian clinic during the third marking period and emphasizes a case-study approach to medicine. Students are engaged in working with animals, diagnosing cases, conducting basic diagnostic lab work, generating treatment formats, and attending surgery.

WILDERNESS SURVIVAL - #06282

20 WEEKS

GRADES: 10-12

PREREQUISITE: Biology

This elective course explores the problems of surviving various situations that may arise during a wilderness experience. The primary goal of the course is to develop a problem-solving strategy to manage fear as well as the physiological response of the body to heat and cold stress. The latest research and technology are used to study hypothermia, hyperthermia, electrolyte balance, water purification, nutrition, navigation, first aid, high-performance fabrics, and outdoor equipment. The above issues are approached from a scientific point of view using experimentation and situation analysis, both in the classroom and the outdoors. In addition, many wilderness survival skills are taught that exemplify a low-impact philosophy toward nature.

Note: This course is not NCAA-approved.

Science Graduation Requirement Pathways Effective for Class of 2028 and Beyond
(Freshman in 24-25 school year)

These are only the required courses for graduation. There are many elective options students may select above and beyond these requirements.

	YEAR 1	YEAR 2	YEAR 3
OPTION 1	Biology (40 weeks)	Chemistry (40 weeks)	Physics (40 weeks)
			OR
			Physical Science Physics (20 weeks) AND Earth and Space Science* (20 weeks)
OPTION 2	Biology (40 weeks)	Physics (40 weeks)	Chemistry (40 weeks)
			OR
			Physical Science Chemistry (20 weeks) AND Earth and Space Science* (20 weeks)
OPTION 3	Biology (40 weeks)	<i>The options below are flexible and can be taken in any order.</i>	
		Physical Science Chemistry (20 weeks)	AP Environmental Science* (40 weeks)
		AND	OR
		Physical Science Physics (20 weeks)	Earth and Space Science* (20 weeks) AND 1 Semester Science Elective (20 weeks)

*AP Environmental Science counts for your Earth and Space Science credit

Graduation Requirements for Classes of 2025-2027

OPTIONS	Physical Science (40 weeks)	Biology (40 weeks)	Chemistry/Fundamentals of Chemistry (40 weeks)
			OR
			Physics/Fundamentals of Physics (40 weeks)
			OR
			Earth Science (20 weeks) AND one Elective

SOCIAL STUDIES



WORLD HISTORY - #07332

40 WEEKS

GRADE: 9 (Required)

PREREQUISITE: None

This course introduces students to the study of the history of the world from the emergence of human society to post-World War II. Through the study of early societies from various parts of the world, students build a common memory of where mankind has been including decisions of the past, which account for present circumstances. Emphasis is placed on skills that enable students to evaluate evidence, develop comparative and causal analyses, interpret the historical record, and construct sound historical arguments and perspectives on which informed decisions in contemporary life can be based. In addition, this course enables students to construct an understanding of the record of human strivings, accomplishments, and failures. These understandings are drawn from five spheres of human activity: social, scientific/technological, economic, political, and philosophical. The integration of historical thinking skills and historical understandings throughout this course equips students to analyze issues and problems confronting citizens today.

BIG HISTORY - # 07332B

40 WEEKS

GRADES: 9

PREREQUISITE: None

Big History is a year-long course about the significant questions and changes in the history of the Universe and the world, including past and modern human history. Big History teaches students to consider their world from many different perspectives and to look for patterns to make sense of how change occurred. For that reason, the course studies historical change through the lenses of astronomy, cosmology, chemistry, geology, philosophy, anthropology, history, economics, literature, and many other disciplines. Students learn to view what we know today as stepping stones in the process of gaining knowledge and using it to understand our contemporary world. Students are required to read and write critically, as the class is heavily focused on analyzing and interpreting information from a multitude of sources. These sources include webcasts, videos, and experts from a variety of fields of study. Course contributors include scholars from the University of Michigan, Grand Valley State, Indiana University, and Columbia. Students who take this course must have consistent access to technology as the course materials are found online (in-class technology needs are provided). This course can be used to satisfy the World History credit requirements.

AP WORLD HISTORY: MODERN - #07345

40 WEEKS

GRADES: 10-12

PREREQUISITE: None

AP World History: Modern is an introductory college-level modern world history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections across time periods and regions. Students will craft historical arguments as they explore concepts like human interaction with the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

UNITED STATES HISTORY - #07212

40 WEEKS

GRADE: 10 (Required)

PREREQUISITE: None

This year-long course introduces students to the history of the United States from the post-Civil War period to the present. Students examine the major themes of history that align with the MDE Standards. The course divides the twentieth century chronologically into eras and explores the emerging issues of the twenty-first century while making connections to our past. Using primary and secondary sources, students identify major events from United States history and analyze their causes and effects. Students compare accounts of the past and express informed judgments about significant events that shaped the nation. Students analyze and present historical data.

AP U.S. HISTORY - #07232

40 WEEKS

GRADES: 10-12

PREREQUISITE: None

In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, continuity, and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

ECONOMICS - #07862

20 WEEKS

GRADES: 11-12 (Required)

PREREQUISITE: None

This semester-long course introduces the discipline of economics. The focal point of the course is the study of human wants in relationship to limited resources. Students deepen their understanding of basic economic concepts and apply them to national and international problems. In addition to their study of macroeconomics, students study personal finance and business in a free market economy. They learn about the banking system, stock market, taxation, productivity, marketing, personal finance and advertising. Using a variety of media, students compile, analyze, and present statistical data pertinent to economic problems. Students use their knowledge of economics to make informed decisions as consumers and to participate as citizens in deciding matters of economic policy.

*This course will fulfill the state-required .5 credit for personal finance necessary for the class of 2028 as well as .5 credit for economics

AP MICROECONOMICS - #07865

20 WEEKS

GRADES: 11-12

PREREQUISITE: None

Students taking the course will spend time examining the theory of consumer behavior, the theory of the firm, and the behavior of profit-maximizing firms under various market structures. They will evaluate the efficiency of the outcomes with respect to price, output, consumer surplus, and producer surplus. Students will have an opportunity to examine the behaviors of households and businesses in factor markets and learn how the determination of factor prices, wages, interest, and rent influence the distribution of income in a market economy. Students will also consider instances in which

private markets may fail to allocate resources efficiently and examine various public policy alternatives aimed at improving the efficiency of private markets.

*This course will fulfill the state-required .5 credit for personal finance necessary for the class of 2028 as well as .5 credit for economics

AP MACROECONOMICS - #07875

20 WEEKS

GRADES: 11-12

PREREQUISITE: AP MICROECONOMICS or ECONOMICS

This course is designed to provide students with a thorough understanding of the principles of economics in examining aggregate economic behavior. Students taking the course can expect to learn how the measures of economic performance, such as GDP, inflation, and unemployment, are constructed and how to apply them to evaluate the macroeconomic conditions of an economy. Students will also learn the basic analytical tools of macroeconomics and its application in the analysis and determination of national income, as well as evaluating the effectiveness of fiscal policy and monetary policy in promoting economic growth and stability. Recognizing the global nature of economics, students will also have ample opportunities to examine the impact of international trade and international finance on national economies. Various economic schools of thought are introduced as solutions to economic problems are considered.

AMERICAN GOVERNMENT - #07582

20 WEEKS

GRADE: 11 (Required)

PREREQUISITE: None

This semester-long class deepens students' knowledge of national, state, and local government in America. Students review the philosophical foundations of democratic government in the United States. The structure and functions of national and state governments under the American federal system are studied. Students strengthen their understanding of the legal rights and accompanying responsibilities shared by all citizens of our constitutional democracy. They explore American political behavior. Through discussions and writing, they practice making reasoned decisions about matters of public policy.

AP U.S. GOVERNMENT & POLITICS - #07592

40 WEEKS

GRADES: 11-12

PREREQUISITE: None

The purpose of *AP U.S. Government and Politics* is to give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. Students examine a variety of theoretical perspectives and explanations for various behaviors and their outcomes. In addition to the text, each unit includes reading and interpreting relevant primary documents and national current events. Each unit culminates with a multiple-choice section and at least one free-response question. Both the multiple-choice and the free-response questions require students to analyze and interpret major topics from the unit.

AP HUMAN GEOGRAPHY - #07855

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

The purpose of the *AP Human Geography* course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organizations and their environmental consequences. They also learn about the methods and tools geographers use in their science and practice. The topics students will explore are Nature and Perspective, Population, Cultural Patterns and Processes, Political Organization of Space, Agriculture and Rural Land Use, Industrialization and Economic Land Use, and Cities and Urban Land Use. Due to this only being a semester course, it is *strongly recommended* that students have successfully completed their economic and government credits prior to taking this course.

CURRENT ISSUES - #07902

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

This semester-long class explores current local, national, and international issues. Students read, research, and discuss topics to draw conclusions and form opinions. Students explore the historical, social, economic, and political significance of events to better understand their impact on the nation and world today and in their lives. From their readings and discussions, students

come to better understand and appreciate cultural pluralism and diversity. Students present their findings to the class through a variety of modes of presentation techniques.

INTERNATIONAL RELATIONS - #07842

20 WEEKS

GRADES: 11-12

PREREQUISITE: None

This semester class introduces students to international laws and policies. Students explore different political structures and their influence internationally. Students examine the different types of power and how and why a country uses them. Students trace violations of human rights and identify the provisions for protecting against such violations found in the Universal Declaration of Human Rights. Students analyze the relationship between nationalism, citizenship, and immigration. Students examine steps taken to resolve international conflicts and the resulting impact of these measures internationally. Students evaluate the effectiveness of actions taken to resolve international conflicts and identify the global ramifications of terrorist activity and measures taken to address this problem.

PHILOSOPHY - #07722

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

Students begin this course with an exploration of what philosophy is and why people study philosophy. Students explore the different philosophical schools of thought, key philosophers, and the historical context of the different philosophical schools of thought. Students analyze Western and Eastern perspectives and philosophers. Students examine the logic and apply elements of discourse. Students analyze ethical thinking and social and political philosophy. The semester ends with students exploring modern philosophies. Students engage in discussions about the major philosophical theories and their contemporary implications.

PRACTICAL LAW - #07792

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

In this semester-long course, students explore the fundamental elements of constitutional, family, consumer, civil, and criminal law. Students develop and refine inquiry, decision-making, problem-solving, and communication skills and examine how they apply to be responsible citizens. Students learn through classroom discussions, role-playing, analysis of case studies, and mock trials. Students listen to and interact with speakers in law-related careers to better understand the legal system.

PSYCHOLOGY 1 - #07642

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

In this semester-long course, students develop an understanding of how and why humans develop, perceive, think, feel, and act. Through learning about the essential principles of psychological science, students gain insight into the phenomena of everyday life. By applying these principles students think more critically about human behavior. Students explore the historical roots and goals of psychology. Learning and using the appropriate vocabulary, students study human behavior, mental processes, and the influence of past experiences. Students understand human behavior and how it affects practical issues in all areas of life and work.

APPLIED PSYCHOLOGY #07672

20 WEEKS

(formerly, INQUIRIES IN CONTEMPORARY PSYCHOLOGY)

GRADES: 10-12

PREREQUISITE: Psychology 1 or AP Psychology

In this semester-long, project-based class, students will have an opportunity to deepen their understanding of various psychological topics including abnormal psychology, treatment of disorders, and social psychology. Students will think more critically about human behavior through an inquiry-based exploration of various topics. Because this is an inquiry-based class, students will have a great deal of choice in determining their topics of study. Learning and using the appropriate vocabulary, students explore the complex richness of human behavior through group discussion, small group work, independent research, demonstrations, and case studies. As a result of this course, students increase insight into their own and others' behavior and gain practical information on how to deal with situations in everyday life.

AP PSYCHOLOGY - #07655

40 WEEKS

GRADES: 10-12

PREREQUISITE: None

This course introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students examine psychological facts, principles, and phenomena associated with each of the subfields within psychology. Students trace psychology's historical development and the biological basis of behavior. Students analyze theories of developmental psychology, personality, and cognition and the major contributors to those theories. Students determine what constitutes abnormal behavior and thinking and identify the treatment of psychological disorders. Students analyze behaviors and attitudes that relate to social psychology.

SOCIOLOGY - #07662

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

In this semester-long class, students explore the meaning of sociology and its different components. Students define sociology as the science that studies human society and social behavior. Students explore the American culture and cultures from other regions of the world. Students examine the seven social institutions and the social structure of each. Students explore the social development of the individual as he grows from childhood to adulthood in terms of social roles and responsibilities. Students define social deviance and the patterns of behavior that suggest different deviant behaviors. The semester culminates with students examining the rights of passage that transcend culture.

WORLD GEOGRAPHY - #07852

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

Students explore key concepts of geography and explore places and topics in ways that systematically build their geographic knowledge. Students apply the five themes of geography as they explore different regions of the world. Students use geography to solve problems and make decisions. Students deepen their knowledge of places and regions by focusing on relevant global issues that affect the world's people. Students learn and apply geographic tools and skills, such as reading a map. Students analyze the relationship between human geography and physical geography and determine human/environmental interactions. After students identify the various ways a region can be defined, students compare cultures, economies, and governments in different regions of the world. Students describe and compare the locations and characteristics of major world patterns of human activity. Students identify patterns in the world's population.

WORLD RELIGIONS - #07192

20 WEEKS

GRADES: 10-12

PREREQUISITE: None

Students examine major world religions, including Hinduism, Buddhism, Judaism, Christianity, Islam, and Sikhism. Students examine the concept of faith and the role faith plays in all religions. Students recognize common stereotypes associated with different world religions. Within each religion, students examine the sacred texts, houses of worship, and moral code. Students examine how women are viewed within each religion. Students explore different rituals associated with each religion, including marriage, death, and rites of passage rituals. Students differentiate between how each religion is practiced in its place of origin and how it is practiced in the United States. Students hear speakers from each religion and ask questions to clarify their understanding of the religion. Students work in small groups on presentations about different religions.

WORLD LANGUAGES



Course offerings are designed to promote the study of languages and cultures. Learners develop the ability to communicate in another language and gain insight into themselves and others. Students acquire knowledge of the structure and function of languages and societies. Studying languages provides learners with access to the knowledge and skills necessary to function in a global community, marketplace, and workplace.

A linguistically literate individual in a global community:

- Communicates across cultures
- Develops understanding of one's own culture and language
- Acquires new information
- Views language learning as lifelong
- Sees the connections to other disciplines
- Understands and values diversity

The principles guiding the Rochester Community Schools World Language Curriculum are based upon five overarching goals:

- **Communication** in three modes: interpersonal, interpretive, and presentational
- **Culture** of the various peoples to understand and value the perspectives of others
- **Connections** to other disciplines and to the world of work
- **Comparisons** to other languages and cultures
- **Communities** to promote lifelong learning through interactions within the global community

PLEASE NOTE: Full-year world language courses are high-school-level classes; grades earned in middle school will be on high school transcripts (though these grades will not be factored into the high school GPA).

AMERICAN SIGN LANGUAGE 1 – #02514

40 WEEKS

FRENCH 1 - #02314

GERMAN 1 - #02414

SPANISH 1 - #02814

GRADES: 9-12 PREREQUISITE: None

In this introductory course, students will interact at a survival level in everyday contexts with people in and from other cultures using the target language and appropriate rehearsed behaviors. Students will develop basic proficiency across the three modes of communication: interpretive, interpersonal, and presentational. Students will comprehend and interact at a survival level in everyday contexts with people in and from other cultures using the target language and appropriate rehearsed behaviors. By the end of the course, students are able to inform, narrate, and express preferences and opinions to communicate using a variety of practiced or familiar words, phrases, and simple sentences through written, spoken, or signed language. Students will identify typical products and practices to help understand perspectives in native and other

cultures using the target language. Upon successful completion of this course, students will reach the Novice-mid proficiency level on the [ACTFL Proficiency Guidelines](#).

Students enrolled in *American Sign Language 1* are introduced to non-verbal communication skills that aid in communicating with the deaf and hard of hearing. Areas of study include vocabulary development, grammatical features, cultural awareness, and conversational fluency. Combined, these components enable students to strengthen existing communication skills. Students examine the history of American Sign Language, sign variations, sign production and use of non-manual features. Students compare/contrast the cultural perspectives of the deaf and hearing, as well as master basic linguistic structures in English and American Sign Language.

AMERICAN SIGN LANGUAGE 2 - #02524

40 WEEKS

FRENCH 2 - #02324

GERMAN 2 - #02424

SPANISH 2 - #02824

GRADES: 9-12

PREREQUISITE: Level 1 or Equivalent Proficiency

This course is designed for students who have successfully completed level 1. Students will continue to develop their proficiency across the three modes of communication: interpretive, interpersonal, and presentational. Students will be able to request and provide information using a variety of practiced or familiar words, phrases, simple sentences, and questions. By the end of the course, students cultivate their communication skills from using simple sentences to more complex structures. Students will compare the target language cultures with their native culture in a variety of contexts. Upon successful completion of this course, students will reach the Novice-high proficiency level on the [ACTFL Proficiency Guidelines](#).

AMERICAN SIGN LANGUAGE 3 - #02534

40 WEEKS

CHINESE 3 - #02634

FRENCH 3 - #02334

GERMAN 3 - #02434

SPANISH 3 - #02834

GRADES: 9-12

PREREQUISITE: Level 2 or Equivalent Proficiency

This course is designed for students who have successfully completed level 2. Students will start to create with the language and further develop their vocabulary. Students will increase their proficiency across the three modes of communication: interpretive, interpersonal, and presentational. In conversational exchanges, students will be able to initiate, maintain, and bring to close simple conversations by asking and responding to simple questions and stating their opinions. By the end of the course, students will be able to inform, narrate, and express preferences and opinions using a variety of practiced or familiar words, phrases, and simple sentences. Students will explore practices, products, and perspectives of the target language cultures shared through a variety of authentic sources. Upon successful completion of this course, students will reach the Intermediate-low proficiency level on the [ACTFL Proficiency Guidelines](#).

AMERICAN SIGN LANGUAGE 4 - #02544

40 WEEKS

CHINESE 4 - #02644

FRENCH 4 - #02344

GERMAN 4 - #02444

SPANISH 4 - #02844

GRADES: 10-12

PREREQUISITE: Level 3 or Equivalent Proficiency

This course is designed for students who have successfully completed level 3. Students will continue creating with the language and expanding their working vocabulary. Students will develop their proficiency across the three modes of communication: interpretive, interpersonal, and presentational. In conversational exchanges, students will be better able to initiate, maintain and bring a close to conversations involving more complex situations. By the end of the course, students will be able to express their thoughts and opinions on a variety of relevant topics. Students will make comparisons between products and practices to help understand perspectives in native and other cultures using the target language. Upon successful completion of this course, students will reach the Intermediate-mid proficiency level on the [ACTFL Proficiency Guidelines](#).

ADVANCED PLACEMENT CHINESE LANGUAGE - #02654
ADVANCED PLACEMENT FRENCH LANGUAGE - #02354
ADVANCED PLACEMENT GERMAN LANGUAGE - #02454
ADVANCED PLACEMENT SPANISH LANGUAGE - #02854

40 WEEKS

GRADES: 11-12

PREREQUISITE: Level 4 or Equivalent Proficiency

This course is designed for students who have successfully completed level 4. It follows the guidelines of the College Board® AP World Language and Culture course and provides opportunities for students to demonstrate their proficiency in the three modes of communication: interpretive, interpersonal, and presentational. AP World Language and Culture courses are divided into thematic units which are based on recommended contexts and guided by essential questions. Review of the mechanics of advanced language structures is done within the contextual framework of each unit as needed. Corresponding cultural elements are integrated into the study of the units and activities are directed with the cultural connections in mind. By the end of the course, students will be able to interpret authentic materials, interact with speakers and express themselves with reasonable fluency both orally and in writing. Upon successful completion of this course, students will reach the Intermediate-high to Advanced-low proficiency level on the [ACTFL Proficiency Guidelines](#).

FRENCH FOR CAREERS - #02996
GERMAN FOR CAREERS - #02995
SPANISH FOR CAREERS - #02994

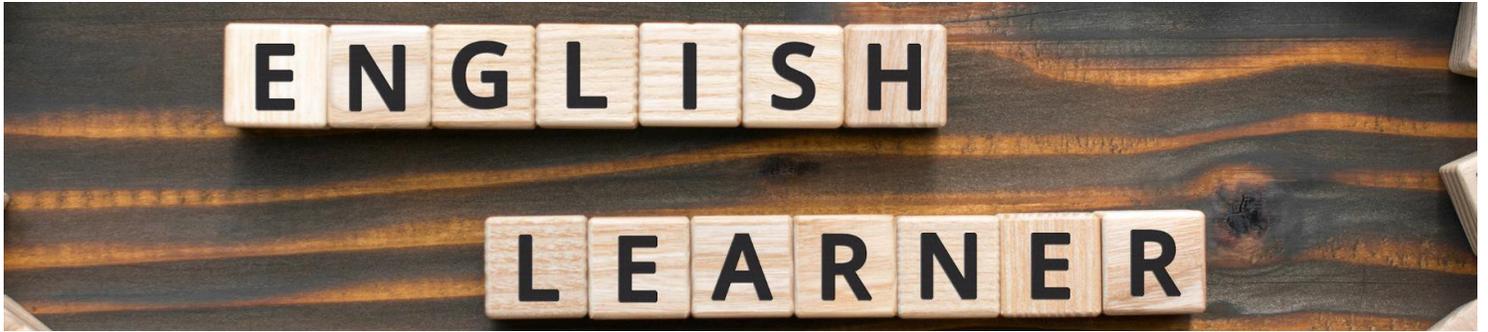
40 WEEKS

GRADES: 12

PREREQUISITE: AP French Language and Culture, AP German Language and Culture, or AP Spanish Language and Culture, or intermediate-mid or higher proficiency as indicated through a STAMP or PLACE assessment.

French for Careers, German for Careers, and Spanish for Careers offer students a rigorous, post-AP learning experience within the district. The World Languages for Careers courses are conducted completely in the target languages (French, German, or Spanish). These courses promote the exploration of careers in the expanding global economy while students simultaneously interact in multicultural and multilingual settings.

ENGLISH LANGUAGE LEARNER PROGRAM



ELL Classes are taught at Adams High School, Rochester High School, and Stoney Creek High School

Language support courses are designed for students at specific levels of English proficiency; placement in these courses will be determined by the ELL Teacher/Consultant.

LANGUAGE SUPPORT ENGLISH 1 - #41001/71001

40 WEEKS

GRADES: 9-12 PREREQUISITE: WIDA Screener or WIDA-ACCESS, and Instructor Approval

This English Language Arts class is designed for multilingual students at the overall WIDA proficiency level 1.0-2.0. This course interweaves the WIDA English Language Development (ELD) Standards with the Common Core State Standards and offers sheltered instruction, allowing students to focus on ELA concepts and language acquisition content. Students receive direct instruction pertaining to all four domains of language development: listening, reading, writing, and speaking. Students participate in group discussions with support, write simple sentences and paragraphs, develop high-frequency and academic vocabulary, and read narrative and expository texts. This course takes the place of the general education ELA course, and students will be in this course for an entire academic year.

LANGUAGE SUPPORT ENGLISH 2 - #41002/71002

40 WEEKS

GRADES: 9-12 PREREQUISITE: WIDA Screener (or equivalent) or WIDA-ACCESS, and Instructor Approval

This English Language Arts class is designed for multilingual students at the overall WIDA proficiency level 2.0-3.0. This course interweaves the WIDA English Language Development (ELD) Standards with the Common Core State Standards and offers sheltered instruction, allowing students to focus on ELA concepts and language acquisition content. Students receive direct instruction pertaining to all four domains of language development: listening, reading, writing, and speaking. Students participate in group discussions with support, write compound and complex sentences and longer paragraphs, develop academic vocabulary, and read narrative and expository texts. This course takes the place of the general education ELA course, and students will be in this course for an entire academic year.

LANGUAGE SUPPORT ENGLISH 3- #41003/71003

40 WEEKS

GRADES: 9-12 PREREQUISITE: WIDA Screener (or equivalent) or WIDA-ACCESS, and Instructor Approval

This English Language Arts class is designed for multilingual students at the overall WIDA proficiency level 3.0-4.0. This course interweaves the WIDA English Language Development (ELD) Standards with the Common Core State Standards and offers sheltered instruction, allowing students to focus on ELA concepts and language acquisition content. Students receive direct instruction pertaining to all four domains of language development: listening, reading, writing, and speaking. Students participate in group discussions and argumentation, write compound and complex forms of sentences and multi-paragraph essays, develop academic vocabulary with context clues, and read narrative, expository, and argumentative texts. This course takes the place of the general education ELA course, and students will be in this course for an entire academic year.

LANGUAGE SUPPORT ACADEMIC SKILLS #41004/#71004

20 WEEKS

GRADES: 9-12

PREREQUISITE: WIDA Screener (or equivalent) or WIDA-ACCESS, and Instructor Approval

This Academic Skills class is offered to multilingual students at the overall WIDA proficiency level 1.0-4.7. This course emphasizes academic support for multilingual students who are taking content courses. Students receive support in academic vocabulary relevant to their content area, along with content-specific reading and writing instruction. Students also develop focused literacy skills through mini-lessons designed to enhance their comprehension and communication abilities. Additionally, students are provided with extra time to complete classroom assignments and assessments, ensuring they can engage fully with the material. This course replaces an elective.

This course may be repeated for credit with instructor approval.

SPECIAL EDUCATION

LANGUAGE ARTS FOUNDATIONS

GRADE: 9-12
GRADE: 9-12

#21309R / #71309R
#21309E / #71309E

This course is designed to provide an integrated approach to literacy instruction so students can access grade-level content. This intensive instruction integrates the key foundational literacy skills necessary for reading and making meaning. Acquisition of rich comprehension, language, and vocabulary skills occurs by exposing students to complex text and collaborative discussions. The development of skills necessary to also effectively express ideas orally and in writing are explicitly taught.

LANGUAGE ARTS 1

GRADE: 9-12
GRADE: 9-12

#21310R / #71310R
#21310E / #71310E

This course is designed to provide an integrated approach to literacy instruction so students can access grade-level content. This intensive instruction integrates the key foundational literacy skills necessary for reading and making meaning. Acquisition of rich comprehension, language, and vocabulary skills occurs by exposing students to complex text and collaborative discussions. The development of skills necessary to effectively express ideas orally and in writing are explicitly taught. This course can be a build-on from LA Foundations.

COMPOSITION and LITERATURE 1

GRADE: 9-12
GRADE: 9-12

#21300R / #71300R
#21300E / #71300E

Students in this course develop skills necessary to be proficient writers through active engagement in a variety of writing strategies. Students learn and apply the components of narrative and expository compositions using the writing process, with emphasis on planning. Students will read and analyze a variety of genres and respond to the literature in writing.

COMPOSITION and LITERATURE 2

GRADE: 9-12
GRADE: 9-12

#21310R / #71310R
#21310E / #71310E

Students in this course will continue to develop the skills necessary to be proficient writers through active engagement in a variety of writing strategies. Students learn and apply the components of narrative and expository compositions using the writing process, with emphasis on planning. Students will read and analyze a variety of genres and respond to the literature in writing.

INSIDE ALGEBRA FOUNDATIONS

GRADES: 9-12
GRADES: 9-12

#24032R / #74032R
#24032E / #74032E

Inside Algebra A, supports students through explicit instruction organized in a clear, consistent manner. A variety of activities help students learn and recognize the relationships between those concepts and skills. Students will learn the essential math knowledge and experience required to transition successfully to Algebra 1 or Inside Algebra B. Topics students will learn variables and expressions, rational numbers, graphing relations and functions, and analyzing and solving linear equations and inequalities.

INSIDE ALGEBRA B

GRADES: 9-12
GRADES: 9-12

#24042R / #74042R
#24042E / #74042E

Inside Algebra B, continues to support students through explicit instruction organized in a clear, consistent manner. A variety of activities help students learn and recognize the relationships between those concepts and skills. Students will learn the essential math knowledge and experience required to transition successfully to Algebra 1 or Consumers Math. Topics students

will learn are variables and expressions, rational numbers, graphing relations and functions, and analyzing and solving linear equations and inequalities.

CONSUMER MATH

GRADES: 10-12

#24022R / #74022R

The course is designed to help students understand and apply math skills which will help students progress toward their identified career pathway. Students will develop essential skills in the areas of understanding vocational salary, budgeting, banking, savings, selecting housing, understanding credit cards and interest, as well as applying for loans. The goal of the Consumer Math course is to enable students to make educated decisions on matters of personal finance.

LEARNING STRATEGIES

GRADES 9-12

#29002R / #79002R

GRADES 9-12

#29002E / #79002E

GRADES 9-12

#29002F / #79002F

GRADES 9-12

#29002A / #79002A

In this course, students will be provided direct instruction in strategies to support and improve academic performance. Students are taught to use research-based strategies that develop skills in topics such as time management, attention to detail, active learning, critical thinking, reading comprehension, test-taking, and written expression. Students will evaluate how they see themselves as learners, identify their strengths and weaknesses, and then be guided through the process of goal setting in order to be proactive and independent learners.

CAREER EDUCATION

GRADES 9-12

#28000F / #78000F

This course is designed for students to explore various career options through interest inventories, skill exploration, research, and practical experience in building-based work opportunities. Students will develop self-advocacy, interviewing, and key basic skills that will assist them in the world of work and their adult lives.

WORK-BASED LEARNING

GRADES: 11-12

#39561F / #79561F

20 WEEKS

Prerequisite: IEPT Determined and Teacher Consultant Work Site Based Learning Approval

Work Based Learning is designed to teach both functional and universal employability skills in a variety of authentic business settings. The program provides opportunities for students to explore different work environments and assists in building appropriate employer-employee relationships. Students are supervised daily by a job coach unless it is determined that they are capable and ready to seek independent employment. A written training agreement/plan must be completed prior to placement on each work site.

PRACTICAL ASSESSMENT EXPLORATION SYSTEM (PAES) LAB

GRADES 10-12

#39561P / #79561P

PAES is a research-based, functional skills curriculum with an embedded formative assessment of career potential and employability skills. PAES is an assessment system that identifies functional skill levels, career interests, aptitude for community-based employment, work behavior strengths, and barriers to success

PROGRAM LANGUAGE ARTS

GRADES 9-12

#12020A / #72020A

GRADES 9-12

#39010B / #79010B

This course provides explicit instruction for students who are working on English Language Arts skills that align with state alternate standards (Essential Elements). Using a balanced literacy framework for teaching language arts, four language arts areas (guided reading, self-selected reading, writing, and working with words) are integrated into reading instruction. Emphasis will be placed on building individual basic skills, as well as the practical application of reading and writing as it relates to daily living, community participation, and personal enjoyment.

PROGRAM MATHEMATICS

GRADES 9-12
GRADES 9-12

#12030A / #72030A
#39020B / #79020B

This course provides explicit instruction for students who are working on mathematic skills that align with state alternate standards (Essential Elements). Using a multisensory, systematic progression of instruction, with a problem-solving focus, instruction allows students to be successful math learners. Emphasis will be on building individual skills, as well as the practical application of mathematics as it relates to daily living and community participation.

PROGRAM SCIENCE/SOCIAL STUDIES

GRADES: 9-12
GRADES: 9-12

#12000A / #72000A
#38000B / #78000B

This course provides explicit instruction for students who are working on basic Science and Social Studies skills that align with a standard-based curriculum. Course topics include, but are not limited to: Government, US and World History, Geography, Life, Earth and Space Science.

PROGRAM DAILY LIVING SKILLS

GRADES: 9-12
GRADES: 9-12

#12011A / #72011A
#38093B / #78093B

This course is based on state benchmarks and designed to assist students with building skills in activities of daily living that will allow them to be as independent as possible in their adult life. To address important components of daily life, students are given instruction and hands-on experiences in social/communication skills, household upkeep and safety issues, reproductive health, employability skills, independent living, personal finance, and self-determination. Community-Based Learning is an integral part of this class.

PEER TO PEER MENTORING (LINK PROGRAM)

Grades: 10-12

#09611

20 WEEKS

Students will serve as a peer partner for students with disabilities and will provide an immersive experience to help increase inclusion for all. The goal of the program is for students with and without disabilities to come to together for a shared experience in a variety of school settings which may include, the general education core academic courses, elective area courses, weekly community-based outings (restaurants, grocery stores, exercise establishments, etc.), lunch experiences, and after school social activities. Peer partners will receive ongoing training and support to ensure a successful experience. Peer partners will be required to complete assignments assigned by the teacher that may include, but are not limited to: reflective journal and article writing, reflective personal journal entries, meeting with the teacher to learn about various disabilities and research-based strategies, creating projects that promote social interaction with students, and a final project (See course semester syllabus).

PREREQUISITE: Must complete an application and receive approval from a counselor/classroom teacher. This class will be graded as Credit (G) or No Credit (H).

This class may be taken more than one semester with approval.

UNIFIED PE

GRADES: 9-12

#03010

20 WEEKS

This Physical Education course combines students of all abilities to create an inclusive environment for students with and without disabilities. The class is intended to help students develop fitness and sports skills in a non-competitive setting. Students will participate in developmentally appropriate activities including lifetime skills and activities, physical fitness, and sports. Students will work together to increase competence and confidence in a variety of physical activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students.

This class may be taken more than one semester with approval.

OAKLAND SCHOOLS TECHNICAL CAMPUSES

www.ostconline.com

Oakland Schools Technical Campus Northeast

**1371 North Perry Street
Pontiac, Michigan 48340
(248) 451-2700 Phone
(248) 451-2720 Fax**

Oakland Schools Technical Campus Northwest

**8211 Big Lake Road
Clarkston, Michigan 48346
(248) 922-5800 Phone
(248) 922-5805 Fax**

Rochester Community Schools is a participating district in the Career and Technical Education Program of Oakland County and is served by the Oakland Schools Technical Campuses – Northeast and Northwest. Courses may be available at additional campuses and options can be discussed directly with the counseling office.

Courses are 2-1/2 hour blocks offered either in the morning or afternoon. Students are provided transportation between the high schools and the Oakland Schools Technical Campus.

Students apply for these programs through the counseling office. Only students in the 11th and 12th grades are eligible for these programs. Students generally receive 1-1/2 credits per semester, and some of the programs require two years for completion. Students may opt for only one year of any two-year program, based on availability

PROGRAMS

Course numbers are listed after the heading for each program (# first semester / #second semester)

AGRISCIENCE AND ENVIRONMENTAL TECHNOLOGIES - #09500 / #79500

This program is set up for students to work alongside professionals in hydroponics, veterinary science, sustainable agriculture, environmental engineering, and conservation. The curriculum includes Forensic Science, Wildlife, Fisheries, and Forestry Management, Greenhouse Management, Floral Design, Hydroponic Management, Organic Gardening, Landscape Design, Veterinary Assisting, Animal Grooming, Biotechnology Technician Assisting, Environmental Science, and Aquacultures. Students conduct dynamic hands-on activities and experiments in animal, plant, and environmental sciences and use advanced technology to develop ethical and viable solutions for real-world environmental problems.

AUTOMOTIVE TECHNOLOGY - #09504 / #79504

The Automotive Technology program provides an intensive hands-on program in a rapidly changing industry designed to prepare students with the skills necessary to successfully diagnose, repair, and maintain automobiles from basic through advanced automotive systems. The students work alongside master technicians and operate professional diagnostic tools and equipment gaining core and fundamental skills through advanced diagnosis and repair strategies in safety, customer service, engine repair, automatic trans/transaxle, manual drivetrain and axles, suspension and steering, brakes, electrical/electronic systems, heating and air conditioning, engine performance, and diesel engine theory. The automotive technology program has National Automotive Technicians Education Foundation (NATEF) and Automotive Service Excellence (ASE) certifications.

COLLISION REPAIR AND REFINISHING - #09510 / #79510

The Collision Repair & Refinishing program provides an intensive hands-on program designed to prepare students to repair, restore, and refinish vehicles to showroom condition. The students will gain core and foundation skills related to auto collision repair and refinishing and create custom modifications using artistic design techniques. Students will use the same advanced painting, welding, and repair equipment as automotive professionals. The collision repair & refinishing program has National Automotive Technicians Education Foundation (NATEF), Automotive Service Excellence (ASE), and Automotive Lift Institute (ALI), and S/P2 Computer Programming certifications.

COMPUTER PROGRAMMING - #09520 / #79520

Computer Programming students will learn Information Technology skills in web development, application development, and computer programming. They will learn to write code to power game design and business application development and explore programming with robotics. Students will program in advanced languages such as Java, HTML5, and CSS3. Within these career opportunities, students can earn certifications including Certified Internet Webmaster (CIW), Oracle-Java Foundations, and Microsoft Technology Associate (MTA). This program has an Oakland Technical Early College option which requires an additional application.

CONSTRUCTION TECHNOLOGY - #09524 / #79424

Construction Technology students are provided with opportunities to learn skills to work in all areas of the construction field including: carpentry, interior/exterior finishing, electrical, plumbing, masonry; heating, ventilation, air conditioning and refrigeration (HVAC/R); home repair, building and grounds maintenance and construction management. Students will build and maintain residential and commercial construction projects, operate power tools and heavy equipment for demolition and construction, and read blueprints for rough and finished carpentry, masonry, electrical, and plumbing.

COSMETOLOGY - #09530 / #79530

Students receive extensive hands-on instruction working alongside professionals in a full-service, interactive salon and spa using advanced salon techniques to provide hair, nail, and skin care services and to create artistic designs using the latest technology, trends, and brand-name products. Core skills include entrepreneurship, salon ecology, safety and electricity, general anatomy, and chemistry. Technical skills include hair care and treatments, esthetics, nail technology, hair cutting, and hair coloring. This course uses an advanced integrated curriculum in academics, technical, and workplace skills. Successful completion of the Cosmetology program allows the student to apply for State licensing exams (which require post-secondary attendance).

CRIMINAL JUSTICE – #09586 / #79586

Students will develop an understanding of the criminal justice system by exploring the three components of the system: law enforcement, courts, and corrections. During the program, students are exposed to in-demand technical and foundational skills such as ethical responsibility, situational awareness, report writing and field note-taking, courtroom testimony, crime scene management, criminal law and investigation, health and safety, and trends affecting the corrections system. Students are required to participate in physical fitness each week to prepare for the post-secondary MCOLES certification. Additionally, physical fitness provides students with an opportunity to build intellectual strength. Students develop their own career portfolios throughout the year.

The program offers certifications in Adult and Pediatric CPR/AED/First Aid, Naxalon (narcan) Administration, and Bloodborne Pathogen Safety.

CULINARY ARTS/HOSPITALITY - #09534 / #79534

In this program, students cook alongside professional chefs to create amazing gourmet cuisine using a broad background of skills and knowledge utilizing industry-based tools, equipment, and technology. Students are trained in business procedures, and they learn to be a key part of the team that operates a restaurant and catering service, crafting and presenting delicious, gourmet creations while preparing for competitions and events. Students become proficient in the use of point-of-sale systems and communicating with guests. Training is provided in cooking, menu design, staffing and scheduling, food preparation, and financial management, as well as the fundamentals of the travel, tourism, and hospitality industries. Students will have the opportunity to earn ServSafe industry certifications.

CYBERSECURITY NETWORKING - #09522 / #79522

In this program, students learn how to design, install, and troubleshoot computer network systems as well as practice cybersecurity response measures through simulated hacking environments focused on looking for weaknesses and vulnerabilities in systems. Students will focus on developing sophisticated counter-cybersecurity measures aimed at combating technical online threats and hazards that are capable of disrupting and destroying essential services and systems. Students will have the opportunity to earn MTA and CompTIA certifications, as well as EC Council's Certified Ethical Hacker Associate and Computer Forensics Associate certifications.

ENERGY-ELECTRICAL TECHNOLOGY- #09590 / #79590

This intensive and hands-on cluster will prepare students with skills to enter post-secondary institutions or move directly into employment opportunities. Students will work alongside professionals to power and maintain a secure and reliable electrical grid. Students will conduct hands-on activities with renewable energies while working in an outdoor environment. The curriculum includes core foundational skills for wiring and energizing residential and commercial projects, and students will leave the program prepared for further education, advanced certifications, and employment. Students will have the opportunity to earn OSHA 10, Red Cross CPR/First Aid, and Energy Industry Fundamentals certifications.

ENGINEERING, ROBOTICS, AND MECHATRONICS– #09544 / #79544

This intensive and hands-on program will prepare students with skills to enter post-secondary institutions or move directly into employment opportunities. Students will learn high-tech engineering technologies to invent, revolutionize, build, and creatively solve the needs and demands of a technologically advancing world. Students will design and build powerful robotic, hydraulic, pneumatic, electrical, electronic, and mechanical systems and learn to creatively solve complex

Engineering and design challenges using advanced CAD/CAM and CNC technologies. The curriculum also includes core foundational skills for design processes, power, machines, quality insurance, and fabrication. This program has an Oakland Technical Early College option, which requires an additional application. This program has an Oakland Technical Early College option which requires an additional application.

ENTREPRENEURSHIP AND ADVANCED MARKETING - #09554 / #79554

In these career opportunities, students learn valuable leadership, entrepreneurship, and marketing skills that provide them with a successful foundation for any career, in addition to the knowledge necessary to manage and run their own business. This includes creating advertising, developing social media, and running special events. All students will have the opportunity to earn Microsoft Office Specialist Certifications, Customer Service and Sales Certification, Retail Management Certification, and Entrepreneurship and Small Business Certification. This program has an Oakland Technical Early College option, which requires an additional application.

GRAPHIC AND COMMUNICATION DESIGN - #09556 / #79556

Students in the Graphic and Communication Design cluster will be training towards careers that communicate ideas and information to the public and include the areas of graphic communication, design communication, interactive multimedia/animation and audio, video, and film production skills and processes. Students will be introduced to a variety of digital media used in online advertising, social media marketing, and website implementation, including video production and post-production, animation, and motion graphics. Additionally, this cluster provides training opportunities in screen printing, press operations and bindery, page layout, digital photography and illustration, advertising design, and marketing presentations used in "real-world" projects. As students design and create dynamic brand identifications, products, animations, and digital media, they will create a personal portfolio showcasing their ideas and talents. This program has an Oakland Technical Early College option, which requires an additional application. Students will have the opportunity to earn Adobe Illustrator, InDesign, and Photoshop certifications.

HEALTH SCIENCES - #09560 / #79560

Health Sciences students learn to make a difference by providing quality care alongside experts in many different healthcare professions. They will apply healthcare skills in a variety of clinical environments while they develop a professional work ethic and the ability to provide compassionate patient care. Students are provided the opportunity to learn the core and foundation skills for health fields such as medical assisting, laboratory, medical office technology, dental assisting, optical technology, nursing, and pharmacy. Also, students will gain an understanding of all areas of the health core curriculum, including safety, anatomy and physiology, asepsis, ethics, medical terminology, pharmacology, prevention, and office procedures. Additional training opportunities are available in phlebotomist, EKG technician, sports safety, radiology aide, surgical technical aide, respiratory therapy aide, occupational therapist, physical therapist, dietary aide, and medical records and billing. Students are able to complete the state requirements and sit for their state board exam to become a Certified Nurse Aide (CNA).

MACHINING – #09540 / #79540

This intensive and hands-on program will prepare students with skills to enter post-secondary institutions or move directly into employment opportunities. Students will use advanced equipment and innovative techniques to create many technologically advanced machined projects. Students will invent, design, and build high-tech precision parts and tools that are used worldwide. Certified professionals will teach students how to program and operate industrial CNC machines to create products from engineering blueprints and specifications. The curriculum also includes core foundational skills for design processes, power, machines, quality insurance, and fabrication. This program has an Oakland Technical Early College option, which requires an additional application.

MEDIUM/HEAVY TRUCK & EQUIPMENT - #09564 / #79564

Students will become proficient with shop tools and equipment while maintaining and repairing semi-trucks, bulldozers, backhoe loaders, etc. The HETT (Heavy Equipment & Truck Technology) program is divided into units of study. Examples are Shop Lab (Drilling, tapping, torch cutting, arc/mig welding, etc.), Engine Service (Troubleshooting, diagnosis, cylinder head, overhaul, etc.), Electrical (Base electricity, batteries, starters, charging, etc.), Hydraulic

and Air Brakes. Students get the opportunity to operate equipment during the Spring. Students who complete this course can enjoy a career as a heavy equipment technician, medium/heavy truck technician, truck driver, heavy equipment operator (from landscape skid loaders to bulldozers), laborer, welder, forklift driver, service writers, foremen, supervisors, teachers, engineer technical support personnel and emergency vehicle repair. The program offers certifications in Career Safe OSHA 10, ASE – T8 Inspection & Minor Repair, ASE T2 – Diesel Engines, MHDT – Electrical Systems, and ASE T4 – Brakes.

WELDING – #09550 / #79550

This intensive and hands-on program will prepare students with skills to enter post-secondary institutions or move directly into employment opportunities. Students will learn to control fire, electricity, and heat to design, dismantle, and fabricate a wide range of products. Students will use advanced equipment and techniques to join, cut, bend, and manipulate metal as they develop the skill, confidence, work ethic, and stamina necessary for a high-paying career anywhere in the world. The curriculum also includes core foundational skills for design processes, power, machines, quality assurance, and fabrication. This program has an Oakland Technical Early College option, which requires an additional application.