



2025-2026 PROGRAM OF STUDIES
OWEN J. ROBERTS HIGH SCHOOL

Owen J. Roberts High School

www.ojrdsd.spc.com/ojrhs

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MESSAGE TO OUR STUDENTS AND FAMILIES

Students and their families are encouraged to become familiar with the information this document contains regarding our academic program. Please be advised that some of the material is subject to change during the school year.

Selecting courses is an important decision making process for students and families. This Program of Studies is designed to aid students and families in making the best possible course selections. Please review course offerings and scheduling information in this booklet carefully. Be sure to select the courses which fulfill Owen J. Roberts High School graduation requirements and which create the foundation of knowledge for future academic and career goals.

It is the objective of the Owen J. Roberts High School administration to develop a schedule for each student that meets their educational needs and interests. Students who need individual help are encouraged to make an appointment with their school counselor. Teachers and administrators will also gladly assist students and families who need additional information.

WHAT'S NEW FOR 2025-2026?

| Department | New Offerings |
|----------------|---|
| English | ➤ English for Professional Communications 2 |
| Social Studies | ➤ Sociology of Sport ➤ Sociology (now an online class) |
| Science | ➤ Science of the National Parks ➤ AP Physics C now 2 separate courses (AP Physics C: Mechanics & AP Physics C: Electricity & Magnetism) ➤ Fundamentals of Chemistry & Physics replaces Physical Science |
| Business | ➤ Investment Fundamentals |

SCHOOL COUNSELING DEPARTMENT

The school counseling staff is available to assist students and families in the course selection process. We encourage you to contact us if you have any questions about this process. The School Counseling Office is open from 7:00 AM to 3:00 PM

| School Counselor | Caseload | Email Address | Phone Number |
|-------------------|----------------------|--|----------------|
| Meghan Nuding | A-Co | mnuding@ojrsd.net | (610) 469-5145 |
| Brittany Williams | Cp-Gr | bwilliams@ojrsd.net | (610) 469-5146 |
| Kelly Karas | Gs-Ku | kkaras@ojrsd.net | (610) 469-5787 |
| Vasilis Phyrillas | Kv-Mo | vphyrillas@ojrsd.net | (610) 469-5164 |
| Jennifer Arnst | Mp-Pa, TCHS students | jarnst@ojrsd.net | (610) 469-5200 |
| Michael Pagano | Pb-Si | mpagano@ojrsd.net | (610) 469-5158 |

| | | | |
|-------------------|------|--|----------------|
| Jennifer Gadaleta | Sj-Z | jgadaleta@ojrsd.net | (610) 469-5147 |
|-------------------|------|--|----------------|

| Counseling Staff | Position | Email Address | Phone Number |
|------------------|-------------------|--|----------------|
| Kim Guinan | Secretary | kguinan@ojrsd.net | (610) 469-5162 |
| Brandy Lavin | Transcripts Clerk | blavin@ojrsd.net | (610) 469-5149 |

GRADING SCALE & REPORTING

Marking period and current course grades are always available on Skyward. These grades reflect all aspects of academic achievement and are a composite of many factors including: test results, classroom participation, academic effort, homework assignments, and any other educationally sound criteria used as a basis for grading. The final grade is the average of four nine-week cycle marking period grades and the final exam, where applicable.

In order to receive a grade of Medical a student must provide a statement from a physician; otherwise a regular grade will be recorded. The statement must include the reason for the medical excuse, the duration and the limitations. The medical grade will be replaced by a regular grade upon satisfactory completion of course requirements. No credit will be awarded for a medical grade.

Grading Scale:

A= 92%-100% Excellent

B= 83%-91% Good

C= 74%-82% Fair

D= 65%-73% Passing

F= 0-64% Failed to do satisfactory work

W- Withdraw

S- Satisfactory

U- Unsatisfactory

M- Medical

NG- No Grade

Honor Roll:

Distinguished Honors: All grades are 92%-100% and Satisfactory

Honors: All grades are 83%-100% and Satisfactory

GRADUATION REQUIREMENTS

Owen J. Roberts High School's requirements for graduation are based on criteria as determined by the Owen J. Roberts School Board and the Pennsylvania school code. To be graduated from OJRHS, students must complete the following requirements:

- Completion of credits as outlined in the tables below
- A Proficient or Advanced score on Keystone Exams in Algebra I, English Literature, & Biology (or the satisfaction of an alternative graduation pathway under Act 158)

Classes of 2026 & 2027:

| Subject | Credit Requirements |
|-------------------------------|----------------------------|
| English | 4.0 |
| Mathematics | 3.0 |
| Science | 3.0 |
| Social Studies | 3.0 |
| Physical Education | 1.4 [^] |
| Health | 0.5 |
| Electives | 9.1 |
| Total Credits Required | 24.0 |

Beginning with the Class of 2028:

| Subject | Credit Requirements |
|-------------------------------|----------------------------|
| English | 4.0 |
| Mathematics | 3.0 |
| Science | 3.0 |
| Social Studies | 3.0 |
| Physical Education | 1.5 [^] |
| Health | 0.5 |
| Personal Finance | 0.5 [*] |
| Electives | 8.5 [*] |
| Total Credits Required | 24.0 |

* Students taking a 0.5 credit Personal Finance course must earn 8.5 elective credits to graduate. Students taking a math course that fulfills the Personal Finance standards as outlined in the Program of Studies, must earn 9.0 credits to graduate.

[^] A student who spends a portion of their day in a different building due to participation in a partner program can lose instructional time during the day due to travel between programs. For these students, the principal at their discretion, has the authority to waive any curricular graduation requirement that is in excess of state mandates if the student would be required to take an online class to fulfill the graduation requirement, because the class is unable to fit into the student's daily schedule due to other requirements. However, the principal may not waive graduation credit requirements to allow students to graduate with fewer than the 24-credit minimum.

ACADEMIC PLANNERS

Classes of 2026 and 2027

Class of 2028 and beyond

(Select File, Make a Copy to create editable version of either document)

PROMOTION REQUIREMENTS

Students must earn credit in each grade in order to make progress toward graduation from high school in four years. Credit for a subject is awarded at the conclusion of a course after the student has satisfactorily completed all the requirements of that subject and has satisfied all instructional obligations with a passing final grade. Therefore, the credit a student earns determines if the student meets the requirements to be promoted each year to the next grade level.

| Minimum Credits | Earned in | Promotion to |
|-----------------|-------------------------|--------------|
| 5.0 | 9th grade | Grade 10 |
| 11.0 | 9th & 10th grade | Grade 11 |
| 17.5 | 9th, 10th, & 11th grade | Grade 12 |

Notes:

Being promoted to the next grade level does not guarantee a student has the necessary number of credits to be on track to graduate. Students should carefully check their credit status with their school counselor when scheduling classes.

Students who are able to schedule all the necessary classes to meet the requirements for graduation will be considered seniors.

CALCULATION OF GRADE POINT AVERAGE

At the end of each school year, final grades will be recorded on the report card and student transcript on the 100 point scale, previously outlined. Grade point average (GPA) will be calculated on a weighted 4.0 scale at the conclusion of the school year by converting the final grade in a course to a point value, outlined in this chart, and multiplied by the credit received for the course. The sum of the point values is divided by the credit total to yield the GPA.

All OJRHS courses are included in GPA except those noted as “unweighted” in their respective course descriptions as well as original credit summer courses. All course weights are indicated within the course description. The designation of class valedictory and salutatory status will be determined in the spring of each year based on student achievement and GPA. More than one student may qualify for each category.

Courses taken outside of Owen J. Roberts High School:

Courses taken at another high school or any middle school will not count towards GPA. Transfer students must enter Owen J. Roberts High School by the beginning of the second semester of sophomore year to be considered for valedictory or salutatory level.

College courses, courses offered by online providers, and any other external course do not count towards GPA and must be pre-approved. Courses taken by rising 9th graders before the first day of the school year do not count for high school credit. However, they may count for academic placement. See Board [**Regulation 213A**](#) or your school counselor for more information.

INSTRUCTIONAL LEVELS

Each course description indicates the academic instructional level at which the course is taught. These academic instructional levels are: Standard or Applied (ST or App), College Preparatory (CP), Honors (H), and Advanced Placement (AP)/International Baccalaureate/Dual Enrollment (DE). The level denotes the degree of academic difficulty, the depth of the course content, and the nature of assignments and assessments required. These levels are defined as follows:

- Standard (ST)/Applied (App): Designed for those students who demonstrate an average command of language and other academic skills, and who advance at a moderate rate.
- College Preparatory (CP): Designed to challenge students who demonstrate an above average command of academic skills, learn rapidly, and plan to attend a post-secondary school.
- Honors (H): Designed for students who are academically accelerated and college-bound. These courses have substantial academic criteria and prerequisites that must be attained before enrollment. Students must be disciplined, motivated, and have strong reading, writing, and analytical skills. Assessments most often come in the form of essays and short research papers. These courses often require summer reading and writing assignments. Students are advised to carefully consider the amount of work required and the amount of discretionary time they have before electing more than two honors level courses per year.
- Advanced Placement (AP): Designed for academically accelerated students who meet the criteria of the program and plan to attend a four year college. Advanced Placement (AP) courses follow a prescribed syllabus prepared by The College Board. Students will be prepared to take AP exams in the spring of each year. Students are responsible for AP test fees. Students may be awarded college credit or advanced standing based on their test scores and the policies of the college they ultimately attend.
- International Baccalaureate Diploma Program (IBDP): IBDP classes are offered as part of our IB Career Program. IBDP classes are academically challenging courses that prepare students who plan to attend a four-year college. IB Diploma Program (DP) courses follow a prescribed curriculum prepared by the International Baccalaureate and are taught by teachers trained specifically for those courses. Students will be prepared to take IBDP exams in the spring of each year. Students are responsible for IB test fees. Students may be awarded college credit or advanced standing based on their test scores and the policies of the college they ultimately attend.

- Dual Enrollment (DE): Students can take dual enrollment courses to earn both high school and college credit simultaneously. These courses are offered via partnerships between Owen J. Roberts and various universities. For more information, review the Dual Enrollment information in the below section.
- Unweighted (UW): Unweighted courses do not count towards grade point average.

DUAL ENROLLMENT

Dual Enrollment (also known as dual credit) courses enable students to earn both high school and college credit for specific classes. These courses have been conditionally approved for college credit pending yearly instructor approval. Students must register online and pay a fee to earn college credit. Dual Enrollment courses are noted as such within the course description and are subject to change. Registration details will be communicated directly to enrolled students and their parents/guardians.

All universities have policies for accepting transfer credits, including via dual enrollment. Students should investigate the feasibility of credit transfers from the dual enrollment partnering university to their post-high school college/university of choice.

Per the [Pennsylvania Department of Education](#), dual enrollment courses are required to be weighted "in a manner similar to Advanced Placement and International Baccalaureate Diploma Program courses in the school entity's grading system".

Our current dual enrollment partnerships include:

[Immaculata University](#) click [here](#) for additional information.

Immaculata University & Delaware County Community College: [Allied Health & Teacher Academy](#)
[Montgomery County Community College](#) Introduction to Engineering

Delaware Valley University: [Genetics](#)

SPECIAL EDUCATION SERVICES

The Special Education Department provides services to students with Individualized Education Plans. The department is composed of certified learning support teachers, speech and language therapists, and instructional support staff. Additionally, vision, hearing, occupational, and physical therapists are available for students requiring those services. In order to meet the unique educational needs of the students, the department offers a continuum of services including itinerant learning support, direct instruction classes, emotional support, autistic support, and life skills support. Learning Support teachers will assist identified students with course selection. For more information, contact [Mr. Joseph Milnes](#), High School Supervisor of Special Education.

BRANDYWINE VIRTUAL ACADEMY

Students may enroll in the Owen J. Roberts Brandywine Virtual Academy with administrative approval. This option is designed to support students with unique needs, including but not limited to: late start, early exit, participation in special programs, health concerns, etc. Students have the option of either a full cyber program or may schedule a combination of in person and

cyber courses. If interested in taking a cyber course that is offered by OJR, students must enroll in that OJR course. Students interested in this option should contact [their school counselor](#). OJRHS offers many of its own online courses, which are noted as such in the “Format” section of the course description. Students may enroll in a comparable BVA course if the OJR cyber course is not offered. Cyber/hybrid students are considered members of our high school learning community. As such, they may participate in extracurricular activities and earn an Owen J. Roberts High School diploma.

All courses are weighted as designated in the [Weighting Scale](#). Students must earn a minimum of 50% of their credits through OJR courses to be considered for Valedictory/Salutatory status. Cyber courses are not designed to provide a means of resolving course conflicts once student schedules have been created. Courses not being offered in-person due to reasons such as low enrollment cannot be substituted for a similar BVA course.

ORIGINAL CREDIT SUMMER COURSES

Students can take our summer courses for original credit (and to potentially advance to the next level). For credit to be awarded, students are expected to work at an accelerated pace and pass the final exam. Courses offered by OJRHS typically include: Geometry, Precalculus, Driver’s Education, Health and Physical Education. Courses may be offered in person or in a virtual asynchronous format. These courses are standards-based and accelerated in nature. As such, they do not count towards a student’s grade point average. Those who are unsuccessful in meeting these standards will not be penalized. Pursuant to Board Regulation 213A, courses taken by rising 9th graders do not count for high school credit. However, they may count for academic placement. The OJRSD Summer Enrichment Program brochure, posted on the district website in March, includes the upcoming summer’s offerings.

AM/PM PRIVILEGE

Students may request AM/PM Privilege if they are on track for promotion/graduation with courses scheduled/credits earned. Those who do so may arrive at school at the start of 2nd period and/or leave school after 7th period. Students seeking additional periods of Privilege must have administrative approval. Students seeking to schedule Privilege are responsible for their own transportation.

In general, to be eligible for AM/PM Privilege, a student must meet and maintain minimum disciplinary, attendance, and grade eligibility standards. Privilege may be revoked at the discretion of the administration or a parent/guardian at any time for any actions or accumulation of actions that are deemed sufficiently inappropriate. Privilege can be requested during the elective request period in the spring.

NCAA ELIGIBILITY CENTER ACADEMIC REQUIREMENTS

Students interested in competing in Division I or II athletics at the college level should schedule a conference with their school counselor to ensure that course selections are in compliance with NCAA regulations. It is strongly suggested that, if possible, a student schedule this conference upon entering the ninth grade. NCAA qualifying courses can be found at

www.eligibilitycenter.org/. Enter the school CEEB code of 394085 for a complete list of currently approved courses. These courses are subject to change at any time by the NCAA. For more information, please refer to the School Counseling Department's [Eligibility Center page](#).

TENTATIVE SCHEDULING TIMELINE

February 19 - March 31: All major subject, world language, and special education teachers will recommend courses and levels for students.

February 28: Virtual Elective Area Presentations for 8th graders in Social Studies classes.

March 11:

- Elective request access opens for students in grades 8-11.
- High school counselor Q and A with 8th graders in Social Studies classes.
- 9th-11th grade elective selection video presented in Flex.

March 13: Virtual Elective Selection Night, 7 PM. School counselors present an overview of the scheduling process to parents in all grade levels.

March 31:

- Deadline for students to complete elective requests.
- Teachers make final course recommendations.

April 2-4: High school counselors meet 1 on 1 with 8th graders for elective/course verification.

April 22-25: Course verification for grades 9-11 with high school counselors.

May 2: All requested changes, waiver forms, etc. must be completed by this date. NO course changes will be made after this date.

Mid-August: Student schedules available on Skyward.

Late August: 8th grade and new student orientations.

Dates are subject to change.

ACADEMIC PLACEMENT PROCESS

Current academic teachers will recommend the following year's placement in each subject. These course recommendations are intended to not only challenge students, but also afford them the greatest opportunity for success. All recommendations are made with careful consideration of a student's demonstrated abilities and performance in the classroom, their academic goals, and the required knowledge and skill for the level of the course requested. Additionally, students must meet prerequisites as indicated in order to enroll in any given course.

Students performing at a consistently high level within their current course may want to consider moving to a more demanding level in the subsequent school year. Students finding that a higher level course is too challenging may wish to consider dropping down a level in that subject in the following school year.

The placement process helps to reduce the number of inappropriate course selections and the number of schedule changes. In March, all core subject and special education teachers will make their recommendation for students' placements. Teachers will inform students in their classes of their recommendations. Students should inform teachers of their desire to change levels at this time.

The core subject recommendations and requested elective courses are not guaranteed to be on final student schedules. They are the basis upon which the school's master schedule for the next year will be built in the spring. Families and students should note that some alternate elective choices may be substituted for courses that cannot fit into students' schedules.

GUIDELINES FOR INITIAL REQUESTING OF COURSES

Every year our master schedule is built on the course requests of over 1800 students. Every effort will be made to schedule students in the courses for which they have been recommended or that they have requested. However, the availability of courses depends upon many factors, including the number of students requesting a course, staff and classroom availability, the number of sections of a course, and the placement of courses in a schedule. Consequently, some students may be enrolled in alternate elective courses because of scheduling conflicts, or the cancellation of courses due to insufficient enrollment. Students cannot retake a course unless it is designated as repeatable. To maximize their chances of being scheduled for their desired elective courses, students should use the following guidelines during the initial course request period in March/April of the preceding school year:

- Before requesting courses for next year, review course descriptions, check all prerequisites and academic instructional levels.
- Attend Course Selection Night.
- Select alternative elective courses that may be substituted for course requests that cannot be scheduled. Pick a variety of full-year and half-year courses.
- Complete elective requests by the established deadline (March 31st).
- Contact your school counselor if you have special concerns or need to clarify course needs or priorities.

SCHEDULE CHANGES

Course Verification Process:

The course verification process is an important step in ensuring that student's course recommendations and requests are accurate and appropriately aligned with their academic goals and interests. During the verification window students will have the opportunity to review their recommended courses, requested electives, and alternate elective choices to determine if any adjustments are needed. Each student (grades 9-11) will receive a hard copy verification report to review with their parents/guardians. If the recommended & requested courses are correct, the Student Course Verification Report should be signed and returned to the School Counseling Office. If an adjustment is required, students will have an opportunity to schedule a brief meeting with a school counselor.

NOTE: Student schedules will not be available until late August. The verification process does not guarantee that first choice electives will be scheduled, so it is important to ensure that alternate electives are acceptable.

Electives will not be changed at the beginning of the school year.

Student Change of Course Recommendations or Requests

Course requests have direct influence on the development of the master schedule, the courses offered, and the staffing allotment each school year. The deadline for students to make changes to their requested or recommended courses for the upcoming school year is the first Friday in May of the preceding school year.

Process for Waiving Into a Course Different From the Teacher Recommendation

A student interested in taking a course different from that which was recommended by their teacher should first speak with the teacher to discuss the recommendation during the recommendation/request window. Following the meeting with the teacher, if the student's appeal is denied, but they would still like to request an alternate course, students may obtain a recommendation waiver form from the School Counseling Office. Waiver forms must be filled out completely and signed by the appropriate persons before being returned to the School Counseling Office. The deadline to submit waiver forms is the first Friday in May. Incomplete waivers will not be honored. Waiver forms will not be accepted digitally or after the deadline.

Student Schedule Correction Requests Prior to the Start of the School Year

Students and families should review a student's schedule in detail once the student schedule is released just prior to the start of the school year. Students may request schedule corrections for reasons such as not having enough credits, not being scheduled for a required course, etc. The schedule correction request process will be communicated by the School Counseling Department. The ability to fulfill schedule correction requests will be limited by the overall structure of the schedule, the number of sections, and seat availability in each course.

Withdrawing from a Course

Withdrawing from a course is a significant decision and should only occur in extreme circumstances. Students have until the end of the school day on the first Friday in October to withdraw from a 1st semester or year long course without penalty. Students have until the first Friday in March to withdraw from a 2nd semester course without penalty. After these deadlines it will be considered a course withdrawal. Students will need to request a withdrawal form (to be signed by parent/guardian) and a Withdrawal (W) final grade will be reported on the student's report card and student's transcript for the course.

Deadlines:

- First Friday in May (of the preceding year): Final day to change course requests for upcoming school year or to submit recommendation waiver forms.
- First Friday of the School Year: Last day for independent student requests for schedule corrections.
- First Friday of October: Last day to withdraw from a yearlong or 1st semester course without penalty.
- Last Day of the First Semester: Last day to request a drop in course level.
- First Friday of March: Last day to withdraw from a 2nd semester course without penalty

UNDERSTANDING COURSE CHARTS & COURSE DESCRIPTIONS

Course Charts

- Course Name
 - Greyed Out: Course not being offered in 2025-2026
 - Course Name Bolded: New course
- See below for details regarding Open to Grades, Level, Length, and Credits
- Symbols: **+** Repeatable for credit, **◆** Dual Enrollment, **✓** Online Course, **☒** Hybrid Course, **\$** Optional fee for dual enrollment or AP/IB test, **@** Course has required summer assignment

Course Descriptions

Greyed Out: Course not being offered in 2025-2026

Credit/Length

- Credit- The unit a student earns upon completion of a course. A course that meets every day, all year is worth 1.0 credit. Partial credit is awarded for courses that meet less frequently based on instructional time.
- Length- The duration of the course (Year, Semester, or Marking Period).

Format

- In Person- courses meet in the classroom every day the class is scheduled.
- Hybrid- courses meet in person every other day, with the equivalent of one period of independent coursework per cycle.
- Online- courses never meet in person and are completely asynchronous. Online courses are scheduled in period 0.

| | | | |
|--|-------------|------------------|--|
| Course Title | | <u>Level(s)</u> | ←Click link |
| Credit/Length | (see above) | Course Number(s) | Identifier in Skyward |
| Format(s) | (see above) | Open to Grade(s) | Which grades of students may take the course |
| Prerequisite: A course to be completed to qualify for this course | | | |
| <u>Dual Enrollment:</u> ←Click link | | | |
| This course is repeatable for credit. Students may retake the course and earn credit each time they do so. | | | |
| Course description | | | |

COURSE CHARTS

| AGRICULTURE COURSE CHART | | | | | | |
|--------------------------|----------------|----------------|-------|--------|---------|-----|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 07115 | Animal Studies | 9, 10, 11, 12 | CP | YR | 1.0 | + ✓ |
| 07215 | Horticulture | 9, 10, 11, 12 | CP | YR | 1.0 | + |
| 07225 | Horticulture 2 | 10, 11, 12 | CP | YR | 1.0 | + |

[Understanding Course Charts](#)

| ART EDUCATION COURSE CHART | | | | | | |
|----------------------------|-----------------------------|----------------|-------|--------|--------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDIT | KEY |
| 08215 | Ceramics 1 | 9, 10, 11, 12 | ST | SM | 1.0 | |
| 08225 | Ceramics 2 | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 08235 | Ceramics 3 | 10, 11, 12 | ST | SM | 0.5 | |
| 08425 | Ceramics 4 | 10, 11, 12 | EE | SM | 0.5 | ◆ \$ |
| 08315 | Drawing 1 | 9, 10, 11, 12 | ST | SM | 1.0 | |
| 08325 | Drawing 2 | 9, 10, 11, 12 | CP | SM | 1.0 | |
| 08320 | DE Drawing 2 | 9, 10, 11, 12 | DE | SM | 1.0 | ◆ \$ |
| 08415 | Painting 1 | 9, 10, 11, 12 | CP | SM | 0.5 | |
| 08425 | Painting 2 | 9, 10, 11, 12 | CP | SM | 1.0 | |
| 08420 | DE Painting 2 | 9, 10, 11, 12 | DE | SM | 0.5 | ◆ \$ |
| 08515 | Sculpture | 9, 10, 11, 12 | ST | SM | 1.0 | |
| 08612 | Studio Art | 10, 11, 12 | CP | YR | 0.5 | |
| 08611 | Studio Art | 10, 11, 12 | H | YR | 1.0 | |
| 08620 | AP Studio Art | 10, 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 08715 | Digital Art & Design 1 | 9, 10, 11, 12 | DE | SM | 0.5 | ◆ \$ |
| 08725 | Digital Art & Design 2 | 9, 10, 11, 12 | DE | SM | 0.5 | ◆ \$ |
| 08735 | Digital Art & Design 3 | 10, 11, 12 | ST | SM | 0.5 | |
| 08815 | Animation | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 08912 | Yearbook Design | 9, 10, 11, 12 | CP | SM | 0.5 | + |
| 08902,01 | Yearbook Design | 9, 10, 11, 12 | CP, H | YR | 1.0 | + |
| 08945 | Fundamentals of Art Therapy | 9, 10, 11, 12 | ST | SM | 0.5 | |

Understanding Course Charts

| BUSINESS EDUCATION COURSE CHART | | | | | | |
|---------------------------------|--------------------------------|----------------|-------|--------|---------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 064230 | Personal Finance | 11, 12 | ST | SM | 0.5 | ✓ |
| 06424 | Investment Fundamentals | 10, 11, 12 | DE | SM | 0.5 | ◆ \$ |
| 06711 | DECA Business Writing | 9, 10, 11, 12 | H | SM | 0.5 | + ✓ |
| 06132 | Accounting 1 | 9, 10, 11, 12 | DE | SM | 0.5 | ◆ \$ |
| 06141 | Accounting 2 | 9, 10, 11, 12 | De | SM | 0.5 | ◆ \$ |
| 06151 | Accounting 3 | 10, 11, 12 | H | YR | 1.0 | |
| 06212 | Advertising | 9, 10, 11, 12 | CP | SM | 0.5 | |
| 06312 | Business Dynamics | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 06322 | Business Law | 9, 10, 11, 12 | DE | SM | 0.5 | ◆ \$ |
| 06331 | Entrepreneurship | 10, 11, 12 | DE | YR | 1.0 | ◆ \$ |
| 06532 | Marketing Management | 11, 12 | DE | YR | 1.0 | ◆ \$ |
| 06330 | IB Business Management SL | 10, 11, 12 | IB | YR | 1.0 | ◆ \$ |
| 06512 | Sports Marketing | 9, 10, 11, 12 | CP | YR | 1.0 | |

Understanding Course Charts

| ENGLISH COURSE CHART | | | | | | |
|----------------------|---------------------------|----------------|-------|--------|---------|-----|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 01002 | CP English 9 | 9 | CP | YR | 1.0 | @ |
| 01003C | CP English 9 (co-taught) | 9 | CP | YR | 1.0 | @ |
| 010200 | CP English 9/10 | 9, 10 | CP | YR | 1.0 | ✓ @ |
| 010190 | H English 9/10 | 9, 10 | H | YR | 1.0 | ✓ @ |
| 01001 | H English 9 | 9 | H | YR | 1.0 | @ |
| 01012 | CP English 10 | 10 | CP | YR | 1.0 | @ |
| 01013C | CP English 10 (co-taught) | 10 | CP | YR | 1.0 | @ |
| 010210 | CP English 10/9 | 9, 10 | CP | YR | 10 | ✓ @ |
| 010220 | H English 10/9 | 9, 10 | H | YR | 10 | ✓ @ |
| 01011 | H English 10 | 10 | H | YR | 1.0 | @ |
| 01102 | CP English 11 | 11 | CP | YR | 1.0 | @ |
| 01101 | H English 11 | 11 | H | YR | 1.0 | @ |

| | | | | | | |
|--------|--|---------------|----------|----|-----|--------|
| 012320 | CP English 11/12 | 11 | CP | YR | 1.0 | ✓ @ |
| 012310 | H English 11/12 | 11 | H | YR | 1.0 | ✓ @ |
| 01132 | English for Professional Communications 1 | 11, 12 | CP | YR | 1.0 | @ |
| 01133 | English for Professional Communications 2 | 11, 12 | CP | YR | 1.0 | @ |
| 01112H | Literature for Change | 11 | CP | YR | 1.0 | ✕ @ |
| 01123H | Literature for Change | 11 | CP | YR | 1.0 | ✕ @ |
| 01920 | IB Language & Literature HL Year 1 | 11 | IB | YR | 1.0 | ◆ \$ @ |
| 01100 | AP English Language & Composition | 11 | AP | YR | 1.0 | ◆ \$ @ |
| 01202 | CP English 12 | 12 | CP | YR | 1.0 | @ |
| 01201 | H English 12 | 12 | H | YR | 1.0 | @ |
| 012210 | CP English 12/11 | 11, 12 | CP | YR | 1.0 | ✓ @ |
| 012220 | H English 12/11 | 11, 12 | H | YR | 1.0 | ✓ @ |
| 01212H | Literature of Success | 12 | CP | YR | 1.0 | ✕ @ |
| 01213H | Literature of Success | 12 | H | YR | 1.0 | ✕ @ |
| 01930 | IB Language & Literature HL Year 2 | 12 | IB | YR | 1.0 | ◆ \$ @ |
| 01200 | AP English Literature & Composition | 12 | AP | YR | 1.0 | ◆ \$ @ |
| 20208 | Academic Reading & Vocabulary | 9, 10, 11, 12 | UW | YR | 1.0 | + |
| 20209 | Academic Reading & Vocabulary | 9, 10, 11, 12 | UW | YR | 0.5 | + |
| 01900 | English for English Learners | 9, 10, 11, 12 | Standard | YR | 1.0 | + |
| 01415 | Drama & Theater | 9, 10, 11, 12 | Standard | SM | 0.5 | |
| 01515 | Debate | 9, 10, 11, 12 | Standard | SM | 0.5 | |
| 01815 | History of Film | 9, 10, 11, 12 | Standard | SM | 0.5 | |
| 01525 | Public Speaking | 9, 10, 11, 12 | Standard | SM | 0.5 | |
| 01615 | Journalism | 9, 10, 11, 12 | Standard | SM | 0.5 | |
| 018130 | SAT Reading Prep | 10, 11, 12 | UW | MP | .25 | + ✓ |

[Understanding Course Charts](#)

FAMILY & CONSUMER SCIENCE COURSE CHART

| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
|--------------------|------------------------|-----------------------|--------------|---------------|----------------|------------|
| 09115 | Child Development 1 | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 09125 | Child Development 2 | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 09215 | Culinary Arts 1 | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 09225 | Culinary Arts 2 | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 09315 | Global & Gourmet Foods | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 09713 | Baking & Pastry Arts | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 09515 | Interior Design | 9, 10, 11, 12 | ST | SM | 0.5 | |

Understanding Course Charts

HEALTH & PHYSICAL EDUCATION COURSE CHART

| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
|--------------------|---|-----------------------|--------------|---------------|----------------|------------|
| 12999 | 9th Grade Health & Wellness | 9 | ST | YR | 0.5 | |
| 13099 | 9th Grade Physical Education | 9 | ST | YR | 0.5 | |
| 12000 | Health | 10, 11, 12 | ST | SM | 0.5 | |
| 120000 | OL Health | 10, 11, 12 | ST | SM | 0.5 | ✓ |
| 1311R 1311W | Lifelong Activities | 10, 11, 12 | ST | SM | .25 | + |
| 1312R 1312W | Weight Training & Conditioning | 10, 11, 12 | ST | SM | .25 | + |
| 1313R 1313W | Yoga | 11, 12 | ST | SM | .25 | + |
| 1314R 1314W | Competitive Physical Education | 10, 11, 12 | ST | SM | .25 | + |
| 1315R 1315W | Cyber Physical Education | 10, 11, 12 | ST | SM | .25 | + ✓ |
| 134150 | Sports Officiating | 10, 11, 12 | ST | YR | 0.5 | ✓ |
| 13421 | Essentials of Personal Training | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 13420 | Introduction to Athletic Coaching Education | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 13315 | Athletic Training 1 | 9, 10, 11, 12 | ST | YR | 1.0 | |
| 13335 | Athletic Training 2 | 10, 11, 12 | ST | SM | 0.5 | |

| | | | | | | |
|--------|-------------------|---------------|----|----|-----|---|
| 13416 | Sports Management | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 13413 | Sports Psychology | 10, 11, 12 | ST | SM | 0.5 | |
| 13413O | Sports Psychology | 10, 11, 12 | ST | SM | 0.5 | ✓ |

Understanding Course Charts

| INTERNATIONAL BACCALAUREATE CAREER PROGRAM COURSE CHART | | | | | | |
|---|---|----------------|-------|--------|---------|--------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 01920 | IB Language & Literature HL Year 1 | 11 | IB | YR | 1.0 | ◆ \$ @ |
| 01930 | IB Language & Literature HL Year 2 | 12 | IB | YR | 1.0 | ◆ \$ @ |
| 02950 | IB Mathematics: Applications & Interpretation SL Year 1 | 11 | IB | YR | 1.0 | ◆ \$ |
| 02960 | IB Mathematics: Applications & Interpretation SL Year 2 | 12 | IB | YR | 1.0 | ◆ \$ |
| 06330 | IB Business Management SL | 10, 11, 12 | IB | YR | 1.0 | ◆ \$ |
| 03920 | IB Philosophy SL | 10, 11, 12 | IB | YR | 1.0 | ◆ \$ |
| 091111 | IB Core Year 1 | 11 | H | YR | 1.0 | ⊠ |
| 091112 | IB Core Year 2 | 12 | H | YR | 1.0 | ⊠ |

Understanding Course Charts

| MATHEMATICS COURSE CHART | | | | | | |
|--------------------------|--|----------------|-------|--------|---------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 02122 | Algebra Part 1 | 9, 10, 11 | CP | YR | 1.0 | |
| 02132 | Algebra Part 2 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 02115 | Algebra 1 | 9, 10 | CP | YR | 1.0 | |
| 02222 | CP Geometry | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 02222C | CP Geometry (co-taught) | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 02111 | H Geometry | 9, 10, 11 | H | YR | 1.0 | |
| 02950 | IB Mathematics Applications & Interpretation SL Year 1 | 11 | IB | YR | 1.0 | ◆ \$ |
| 02960 | IB Mathematics Applications & Interpretation SL Year 2 | 12 | IB | YR | 1.0 | ◆ \$ |

| | | | | | | |
|--------|--|---------------|----|----|-----|--------|
| 02312C | CP Algebra 2 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 02312 | CP Algebra 2 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 02311 | H Algebra 2 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 02413 | Applied Financial Algebra | 11, 12 | ST | YR | 1.0 | |
| 02412 | CP Financial Algebra | 11, 12 | CP | YR | 1.0 | |
| 02442 | College Algebra | 12 | CP | YR | 1.0 | |
| 02432 | CP Algebra 3 & Trigonometry | 10, 11, 12 | CP | YR | 1.0 | |
| 02552 | CP Precalculus | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 02541 | H Precalculus | 9, 10, 11, 12 | H | YR | 1.0 | @ |
| 02532 | CP Calculus | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 02521 | H Calculus | 9, 10, 11, 12 | H | YR | 1.0 | @ |
| 02510 | AP Calculus AB | 9, 10, 11, 12 | AP | YR | 1.0 | ◆ \$ @ |
| 02520 | AP Calculus BC | 9, 10, 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 02632 | CP Statistics | 11, 12 | CP | YR | 1.0 | |
| 02610 | AP Statistics | 11, 12 | AP | YR | 1.0 | ◆ \$ @ |
| 02730 | AP Computer Science A | 10, 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 02740 | AP Computer Science Principles | 10, 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 02763 | Foundations of Programming (Python) | 9, 10, 11, 12 | DE | SM | 0.5 | ◆ \$ |
| 02753 | Game Design | 9, 10, 11, 12 | ST | YR | 1.0 | |
| 02813O | SAT Math Preparation | 10, 11, 12 | UW | MP | .25 | + ✓ |

[Understanding Course Charts](#)

| MUSIC EDUCATION COURSE CHART | | | | | | |
|------------------------------|-----------------|----------------|-------|--------|---------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 11115 | Music Theory | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 11125 | AP Music Theory | 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 11135 | Music History | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 11212 | Band | 9, 10, 11, 12 | CP | YR | 1.0 | + |
| 11211 | Band | 9, 10, 11, 12 | H | YR | 1.0 | + |
| 11312 | Orchestra | 9, 10, 11, 12 | CP | YR | 1.0 | + |

| | | | | | | |
|----------------|----------------|---------------|----|----------|-----------|---|
| 11311 | Orchestra | 9, 10, 11, 12 | H | YR | 1.0 | + |
| 11432 | Choir | 9, 10, 11, 12 | CP | YR | 1.0 | + |
| 11431 | Choir | 9, 10, 11, 12 | H | YR | 1.0 | + |
| 11451 | Chamber Choir | 10, 11, 12 | H | YR | 1.0 | + |
| 11952 11953 | Music Contract | 9, 10, 11, 12 | CP | SM YR | .5 1.0 | + |

[Understanding Course Charts](#)

| NAVAL SCIENCE (NJROTC) COURSE CHART | | | | | | |
|-------------------------------------|------------------|----------------|-------|--------|---------|-----|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 16500 | CP Naval Science | 9, 10, 11, 12 | CP | YR | 1.0 | + |
| 16051 | CP Naval Science | 9, 10, 11, 12 | CP | YR | 0.5 | + |
| 16050 | H Naval Science | 12 | H | YR | 1.0 | + |
| 16051 | H Naval Science | 12 | H | YR | 0.5 | + |

[Understanding Course Charts](#)

| SCIENCE COURSE CHART | | | | | | |
|----------------------|-------------------------------------|----------------|-------|--------|---------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 04222C | CP Earth Science (co-taught) | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 04222 | CP Earth Science | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 04211 | H Earth Science | 9, 10, 11, 12 | H | YR | 1.0 | |
| 04332C | CP Biology (co-taught) | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 04332 | CP Biology | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 04321 | H Biology | 9, 10, 11, 12 | H | YR | 1.0 | |
| 04310 | AP Biology | 11, 12 | AP | YR | 1.25 | ◆ \$ |
| 04462 | Fundamentals of Chemistry & Physics | 11, 12 | CP | YR | 1.0 | |
| 04452 | Academic Chemistry | 11, 12 | CP | YR | 1.0 | |
| 04442 | CP Chemistry | 10, 11, 12 | CP | YR | 1.0 | |
| 04431 | H Chemistry | 10, 11, 12 | H | YR | 1.0 | |
| 04410 | AP Chemistry | 11, 12 | AP | YR | 1.25 | ◆ \$ |
| 04732 | CP Physics | 11, 12 | CP | YR | 1.0 | |
| 04741 | H Physics | 11, 12 | H | YR | 1.0 | |
| 04730 | AP Physics 1 | 11, 12 | AP | YR | 1.25 | ◆ \$ |

| | | | | | | |
|--------|---------------------------------------|---------------|----|----|------|------|
| 04745 | AP Physics C: Mechanics | 11, 12 | AP | YR | 1.25 | ◆ \$ |
| 04750 | AP Physics C: Electricity & Magnetism | 11, 12 | AP | YR | 1.25 | ◆ \$ |
| 04850 | AP Environmental Science | 11, 12 | AP | YR | 1.25 | ◆ \$ |
| 04841 | Human Anatomy & Physiology | 11, 12 | H | YR | 1.0 | |
| 04352 | CP Biotechnology | 10, 11, 12 | CP | YR | 1.0 | |
| 04351 | H Biotechnology | 10, 11, 12 | H | YR | 1.0 | |
| 04361H | Ecology | 10, 11, 12 | H | YR | 1.0 | ✓ |
| 04731 | Genetics | 10, 11, 12 | DE | YR | 1.0 | ◆ \$ |
| 04732 | Foundations of Genetics | 10, 11, 12 | CP | YR | 1.0 | |
| 04353 | Introduction to Beekeeping | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 048840 | Science of the National Parks | 9, 10, 11, 12 | ST | SM | 0.5 | ✓ |
| 04812 | Astronomy | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 04863 | Advanced Astronomy | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 04842 | Oceanography | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 04873 | Forensics | 10, 11, 12 | ST | SM | 0.5 | |
| 048830 | Natural Disasters | 9, 10, 11, 12 | ST | SM | 0.5 | ✓ |

Understanding Course Charts

| SOCIAL STUDIES COURSE CHART | | | | | | |
|-----------------------------|----------------------------------|----------------|-------|--------|---------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 03133 | ST Western Civilization | 9 | ST | YR | 1.0 | |
| 03122 | CP Western Civilization | 9 | CP | YR | 1.0 | |
| 03111 | H Western Civilization | 9 | H | YR | 1.0 | |
| 03110 | AP World History | 9 | AP | YR | 1.0 | ◆ \$ |
| 03233 | ST 20th Century American History | 10 | ST | YR | 1.0 | |
| 03222 | CP 20th Century American History | 10 | CP | YR | 1.0 | |
| 03211 | H 20th Century American History | 11 | H | YR | 1.0 | |
| 03200 | AP United States History | 10, 11, 12 | AP | YR | 1.0 | ◆ \$ |

| | | | | | | |
|--------|---|---------------|----|----|-----|--------|
| 03333 | ST US Government & Economics | 11 | ST | YR | 1.0 | |
| 03322 | CP US Government & Economics | 11 | CP | YR | 1.0 | |
| 03311 | H US Government & Economics | 11 | H | YR | 1.0 | |
| 03410 | AP Government & Politics: United States | 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 03430 | AP Government & Politics: Comparative | 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 03660 | AP Human Geography | 9, 10, 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 03600 | AP European History | 11, 12 | AP | YR | 1.0 | ◆ ✓ \$ |
| 03530 | AP Micro & Macro Economics | 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 03610 | AP Psychology | 11, 12 | AP | YR | 1.0 | ◆ \$ |
| 03920 | IB Philosophy | 10, 11, 12 | IB | YR | 1.0 | ◆ \$ |
| 03243 | African American Studies 1 | 10, 11, 12 | ST | SM | 0.5 | |
| 03253 | African American Studies 2 | 10, 11, 12 | ST | SM | 0.5 | |
| 03625 | Crime & Justice | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 03543 | Economics | 10, 11, 12 | ST | SM | 0.5 | |
| 03633H | Holocaust & Genocide Studies | 10, 11, 12 | ST | SM | 0.5 | ✓ |
| 03645 | Psychology | 10, 11, 12 | ST | SM | 0.5 | |
| 03665O | Psychology of Happiness | 9, 10, 11, 12 | ST | SM | 0.5 | ✓ |
| 03605 | Sociology of Sport | 10, 11, 12 | ST | SM | 0.5 | |
| 03604O | Sociology | 11, 12 | ST | SM | 0.5 | ✓ |

[Understanding Course Charts](#)

| TECHNOLOGY EDUCATION COURSE CHART | | | | | | |
|-----------------------------------|---|----------------|-------|--------|---------|-----|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 10112 | Computer Aided Drafting & Design (CADD) | 9, 10, 11, 12 | CP | SM | 0.5 | |
| 10122 | Architectural Engineering & Design | 9, 10, 11, 12 | CP | SM | 0.5 | |
| 10132 | Mechanical Engineering & Design | 9, 10, 11, 12 | CP | SM | 0.5 | |
| 10142 | Product | 9, 10, 11, 12 | CP | SM | 0.5 | |

| Engineering & Design | | | | | | |
|----------------------|------------------------------|---------------|----|----|-----|------|
| 10512 | Introduction to Engineering | 10, 11, 12 | DE | YR | 1.0 | ◆ \$ |
| 10522 | CP Principles of Engineering | 11, 12 | CP | YR | 1.0 | |
| 10521 | H Principles of Engineering | 11, 12 | H | YR | 1.0 | |
| 10532 | CP Engineering Design | 12 | CP | YR | 1.0 | |
| 10531 | H Engineering Design | 12 | H | YR | 1.0 | |
| 10215 | Introduction to Photography | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 10225 | Digital Photography | 9, 10, 11, 12 | ST | SM | 0.5 | |
| 10312 | Video Production | 9, 10, 11, 12 | CP | SM | 0.5 | |
| 10352 | Film Production | 9, 10, 11, 12 | CP | SM | 0.5 | |
| 10332 | Television Production | 10, 11, 12 | CP | YR | 1.0 | + |
| 10361 | Advanced Film Production | 10, 11, 12 | H | YR | 1.0 | + |

[Understanding Course Charts](#)

| WORLD LANGUAGES COURSE CHART | | | | | | |
|------------------------------|------------------------------|----------------|-------|--------|---------|--------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 05112 | CP French 1 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05111 | H French 1 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05122 | CP French 2 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05121 | H French 2 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05132 | CP French 3 | 10, 11, 12 | CP | YR | 1.0 | |
| 05131 | H French 3 | 10, 11, 12 | H | YR | 1.0 | |
| 05142 | CP French 4 | 11, 12 | CP | YR | 1.0 | |
| 05141 | DE French 4 | 11, 12 | DE | YR | 1.0 | ◆ \$ |
| 051410 | DE French 4 | 11, 12 | DE | YR | 1.0 | ◆ ✓ \$ |
| 05151 | DE French 5 | 12 | DE | YR | 1.0 | ◆ \$ |
| 05160 | AP French Language & Culture | 12 | AP | YR | 1.0 | ◆ \$ @ |
| 05212 | CP German 1 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05211 | H German 1 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05222 | CP German 2 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05221 | H German 2 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05232 | CP German 3 | 10, 11, 12 | CP | YR | 1.0 | |
| 05231 | H German 3 | 10, 11, 12 | H | YR | 1.0 | |

| | | | | | | |
|--------|-------------------------------|---------------|----|----|-----|--------|
| 05242 | CP German 4 | 11, 12 | CP | YR | 1.0 | |
| 05241 | H German 4 | 11, 12 | H | YR | 1.0 | |
| 05251 | CP German 5 | 12 | CP | YR | 1.0 | |
| 05260 | AP German Language & Culture | 12 | AP | YR | 1.0 | ◆ \$ |
| 05312 | CP Latin 1 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05311 | H Latin 1 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05322 | CP Latin 2 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05321 | H Latin 2 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05332 | CP Latin 3 | 10, 11, 12 | CP | YR | 1.0 | |
| 05331 | H Latin 3 | 10, 11, 12 | H | YR | 1.0 | |
| 05342 | CP Latin 4 | 11, 12 | CP | YR | 1.0 | |
| 05341 | DE Latin 4 | 11,12 | DE | YR | 1.0 | ◆ \$ |
| 05351 | CP Latin 5 | 12 | CP | YR | 1.0 | |
| 05360 | AP Latin | 12 | AP | YR | 1.0 | ◆ \$ |
| 05412 | CP Spanish 1 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05411 | H Spanish 1 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05402 | Spanish 1-B | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05462 | Spanish 1 Part A | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05422 | CP Spanish 2 | 9, 10, 11, 12 | CP | YR | 1.0 | |
| 05421 | H Spanish 2 | 9, 10, 11, 12 | H | YR | 1.0 | |
| 05432 | CP Spanish 3 | 10, 11, 12 | CP | YR | 1.0 | |
| 05431 | H Spanish 3 | 10, 11, 12 | H | YR | 1.0 | |
| 05442 | CP Spanish 4 | 11, 12 | CP | YR | 1.0 | |
| 05441 | DE Spanish 4 | 11, 12 | DE | YR | 1.0 | ◆ \$ |
| 05451 | DE Spanish 5 | 12 | DE | YR | 1.0 | ◆ \$ |
| 05460 | AP Spanish Language & Culture | 12 | AP | YR | 1.0 | ◆ \$ @ |
| 05372O | Mythology | 9, 10, 11, 12 | ST | SM | 0.5 | ✓ |
| 05170O | French Culture | 9, 10, 11, 12 | ST | SM | 0.5 | ✓ |
| 05373O | Roman Archaeology | 9, 10, 11, 12 | ST | SM | 0.5 | ✓ |

Understanding Course Charts

| SUPPLEMENTAL COURSE CHART | | | | | | |
|--------------------------------------|---------------------------------------|----------------|-------|--------|---------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 45035 | Gifted Enrichment | 9, 10, 11, 12 | H | SM | .25 | + |
| Fall: 14375 Spring: 14475 | Driver Education | 9, 10, 11, 12 | ST | SM | .25 | |
| Fall: 14375O Spring: 14475O | Driver Education | 9, 10, 11, 12 | ST | SM | .25 | ✓ |
| N/A | Driver Education- Behind the Wheel | 10, 11, 12 | N/A | N/A | N/A | \$ |
| Various | School/Community Service | 12 | UW | SM, YR | 0.5-1.0 | |
| 19201 | Allied Health Science | 12 | DE | YR | 2.0 | ◆ \$ |
| 19210 | Teacher Leadership Academy | 12 | DE | YR | 2.0 | ◆ \$ |

Understanding Course Charts

| TCHS-PICKERING COURSE CHART | | | | | | |
|-----------------------------|---|----------------|-------|--------|---------|------|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 1911P | Allied Health | 12 | DE | YR | 2.0 | ◆ \$ |
| 1911P | Animal Science | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Automotive Collision Technology | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Automotive Service Technology | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Carpentry | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Commercial Art & Design Media | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Cosmetology | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Criminal Justice & Police Sciences | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Culinary Arts | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Digital Media & Sound Communications | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Early Childhood Care & Education | 10, 11, 12 | ST | YR | 3.0 | + |

| | | | | | | |
|-------|---------------------------------|----------------|----|----|-----|------|
| 1911P | Electrical Occupations | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Health Career Pathways | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | HVAC & Refrigeration Technology | 10, 11, 12 | ST | YR | 3.0 | + |
| 1911P | Teacher Leadership Academy | 12 | DE | YR | 2.0 | ◆ \$ |
| 1911P | Welding & Metal Fabrications | 10, 11, 12, 22 | ST | YR | 3.0 | + |

[Understanding Course Charts](#)

| OCTORARA HOMELAND SECURITY & PROTECTIVE SERVICES ACADEMY COURSE CHART | | | | | | |
|---|---------------------|----------------|-------|--------|---------|-----|
| Course Code | COURSE | OPEN TO GRADES | LEVEL | LENGTH | CREDITS | KEY |
| 19400 | Protective Services | 10, 11, 12 | ST | YR | 3.0 | + |

COURSE DESCRIPTIONS

AGRICULTURE

| | | | |
|---------------------|-----------------------|------------------|--------------|
| Course Title | Animal Studies | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 07115 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: If repeating, passing grade in previous course

This course is repeatable for credit.

Animal Studies is an introductory course which offers a broad overview of knowledge and skills required in the animal science industry. The instruction is presented with a “hands-on” approach, balancing theory with a practical application in the companion animal lab. Students will gain experience for careers and/or further education in agriculture, zoology, veterinary science, wildlife, and aquaculture.

Students can repeat this course and continue to learn new and interesting information because of the unique structure of the curriculum. Students will learn four different academic topics each year of the four year cycle:

| | | |
|---------|-----------|---|
| Cycle 3 | 2025-2026 | Birds, Poultry Science, Swine Science, Equine Science |
| Cycle 4 | 2026-2027 | Reptiles, Amphibians, Entomology, Zoo Science |
| Cycle 1 | 2027-2028 | Small Mammals, Dairy Science, Beef Science, Wildlife |
| Cycle 2 | 2028-2029 | Canines, Felines, Small Ruminants, Aquaculture |

| |
|--|
| |
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| Course Title | Horticulture | Level(s) | College Prep |
|---------------------|---------------------|------------------|--------------|
| Credit/Length | 1.0/Year | Course Number(s) | 07215 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: If repeating, passing grade in previous course

This course is repeatable for credit.

Horticulture is an introductory course which offers a broad overview of the knowledge, skills, and professional techniques required in the plant science industry. The instruction is presented with a “hands on” approach, balancing theory with practical application, concentrating on the cross-curricular subjects of science, art, business, and mathematics. In this program, students learn the skills and information necessary to graduate with a solid, basic knowledge of horticultural topics. Major content areas include landscaping, floriculture, and greenhouse management. Related business practices and technology, careers, plant materials, and lab safety and mechanics are emphasized each year.

Each of the following topics is discussed annually and in-depth study is provided in four year cycles to include:

- Cycle 3 (2025-2026) Interior Landscaping, Plant Production, Landscape Design, Careers
- Cycle 4 (2026-2027) Soil Science, Landscape Installation, Floriculture, Food Systems
- Cycle 1 (2027-2028) Landscape Maintenance, Vegetable Production, Nursery Management, Biotechnology
- Cycle 2 (2028-2029) Horticulture Business Management, Plant Science, Greenhouse Management, Landscape Construction

Course requirements may be fulfilled in the classroom, lab facility, greenhouse, school grounds, and in the community. This course can be repeated each year because of the unique structure of the curriculum.

NOTE: Students who have developed extraordinary interests or skills can schedule this course for 2 periods for two credits. Teacher approval is required and it is only available to students in grades 10-12 who have previously studied Horticulture and achieved a “B” or better average. These students should register for courses numbered (07215) and (07225).

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ART

The Art Program provides courses for students interested in learning a variety of art skills or for the artistically talented student who is seriously considering an art career or profession. The art courses are divided into three categories: Fine Arts, Commercial Arts, and Crafts.

* These courses have been endorsed by Montgomery County Community College and have therefore been weighted at CP and Honors

| Course Title | Ceramics 1 | Level(s) | Standard |
|---------------------|-------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 08215 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Students will design and create clay projects using introductory clay techniques including hand building, wheel throwing, decorating, and finishing techniques. Projects will include wheel thrown mugs, bowls, plates, vases, and hand built boxes and vases. (Crafts)

| Course Title | Ceramics 2 | Level(s) | Standard |
|---------------------|-------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 08225 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Ceramics 1

Students will continue to develop their clay skills by investigating new clay and glaze techniques. Projects include original designs in teapots, lids, pedestals, and large-scale works. (Crafts)

| Course Title | Ceramics 3 | Level(s) | Standard |
|---------------------|-------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 08235 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Ceramics 2

In Ceramics 3, equipment is available for wheel-work, mold making, and slip casting projects, as well as large kilns for hand building and sculpture. Students are encouraged to investigate processes that range in diversity from wood firing, raku, and salt glazing to stoneware and porcelain. (Crafts)

| | | | |
|---------------------|-------------------|------------------|-----------------|
| Course Title | Ceramics 4 | Level(s) | Dual Enrollment |
| Credit/Length | .5/Semester | Course Number(s) | 08245 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Ceramics 3

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Students develop themes from other cultures and diverse historical periods. Students will record their ideas, research glaze formulas, and document their pieces in a sketchbook. Students are encouraged to investigate processes that range in diversity from wood firing, raku and salt glazing to stoneware and porcelain. Students will investigate, interpret, and redefine an idea by attempting multiple solutions to art problems. Attempting to express such ideas in multiple ways guides students in thematic development. Equipment is available for wheel-work, mold making, and slip casting projects, as well as large kilns for hand building and sculpture. (Crafts)

| | | | |
|---------------------|------------------|------------------|----------|
| Course Title | Drawing 1 | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 08315 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Drawing 1 introduces students to a wide variety of drawing techniques and materials. Students will create portraits, landscapes, figures, still life art, perspective drawings, and surreal art. Emphasis is placed on developing strong drawing skills. (Fine Arts)

| | | | |
|---------------------|---------------------|------------------|-----------------|
| Course Title | DE Drawing 2 | Level(s) | Dual Enrollment |
| Credit/Length | .5/Semester | Course Number(s) | 08325, 08320 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Drawing 1

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Drawing 2 students will build on Drawing 1 fundamentals using a variety of black, white, and color materials. The course emphasizes developing personal style, creative thinking, and advanced drawing techniques. *The Dual Enrollment level course requires an additional writing assignment.* (Fine Arts)

| | | | |
|---------------------|-------------------|------------------|----------|
| Course Title | Painting 1 | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 08415 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Painting 1 students will learn techniques using watercolor, acrylic, and oil paints. Observation, imagination, and art history will inspire a wide range of projects. (Fine Arts)

| | | | |
|---------------------|----------------------|----------|-----------------|
| Course Title | DE Painting 2 | Level(s) | Dual Enrollment |
|---------------------|----------------------|----------|-----------------|

| | | | |
|---------------|-------------|------------------|--------------|
| Credit/Length | .5/Semester | Course Number(s) | 08425, 08420 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Painting 1

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Building upon the skills acquired in Painting 1, students investigate the concept of color theory, expand their painting techniques, and apply this information to a variety of subject matter. The content includes portraiture, landscapes, still life, and abstract art. *The Dual Enrollment level course requires an additional writing assignment.* (Fine Arts)

| | | | |
|---------------------|------------------|------------------|----------|
| Course Title | Sculpture | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 08515 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course provides students with an opportunity to create three-dimensional works of art using a variety of materials including clay, wood, stone, wire, and plaster. Observation, real life, art history, and imagination inspire subjects for sculpture. (Fine Arts)

| | | | |
|---------------------|-------------------|------------------|-----------------------|
| Course Title | Studio Art | Level(s) | *College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 08612, 08611 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Drawing 1 & Painting 1 or teacher permission

EXPLORE YOUR ARTISTIC STYLE! A serious approach is taken to develop personal style, refine drawing and painting techniques, and explore new art media. This course is not limited to students planning to attend art school after graduation. *The Honors level course requires an additional writing assignment.* (Fine Arts).

| | | | |
|---------------------|--|------------------|--------------------|
| Course Title | AP Studio Art (2D Design/3D Design/Drawing) | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 08620 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: 2 Fine Arts courses or teacher permission

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

This course is designed for students who may plan to major or minor in an art-related area. It enables students to develop a portfolio that meets college level art requirements. Students interested in college credit for this course must submit an AP Studio Art portfolio in May for evaluation by The College Board. Guided by the AP Studio Art teacher, students develop independent art goals. (Fine Arts)

| | | | |
|---------------------|-----------------------------------|----------|----------|
| Course Title | Digital Art & Design 1 | Level(s) | Standard |
|---------------------|-----------------------------------|----------|----------|

| | | | |
|--|-------------|------------------|--------|
| Credit/Length | .5/Semester | Course Number(s) | 08715 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Adobe PHOTOSHOP will be used to alter photos and develop basic graphic design and image manipulation skills. Projects may include restoring old photographs; combining two or more images (ex. Animal Hybrid); digital painting; and creating posters and ads for print and web. (Commercial Arts)</p> | | | |

| | | | |
|---------------------|-----------------------------------|------------------|-----------------|
| Course Title | Digital Art & Design 2 | Level(s) | Dual Enrollment |
| Credit/Length | .5/Semester | Course Number(s) | 08725 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Digital Art & Design 1

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Adobe **PHOTOSHOP** & **ILLUSTRATOR** will be used to further develop students' skills in graphic design. Students will create illustrations and designs to produce projects such as page layouts, menus, scientific illustration, posters, t-shirts, corporate identity packages, logos, and package designs. (Commercial Arts)

| | | | |
|---------------------|-----------------------------------|------------------|-----------------|
| Course Title | Digital Art & Design 3 | Level(s) | Dual Enrollment |
| Credit/Length | .5/Semester | Course Number(s) | 08735 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Digital Art & Design 1 & 2

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Designed for students seeking to major in graphic design, this course provides students the opportunity to compile a professional, interactive CD portfolio of their work. Students will focus on layout, corporate identity and marketing through the design of a variety of pieces of their own creation such as comic book characters, interactive designs, yearbook or magazine layouts, and promotional items. They will enhance their application of the software Adobe **PHOTOSHOP**, Adobe **ILLUSTRATOR** and Adobe **INDESIGN**. (Commercial Arts)

| | | | |
|---------------------|------------------|------------------|----------|
| Course Title | Animation | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 08815 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Digital Art & Design 1

This course is an introduction to computer animation. Students will use programs such as **Adobe ANIMATE**, **Adobe PHOTOSHOP**, and **Adobe ILLUSTRATOR** to aid in their designs, as well as online software. Students will design characters, storyboards, character animation, and web animation. Students will have the opportunity to use photographs and sound clips in their animations. (Commercial Arts)

| | | | |
|---------------------|------------------------|----------|-----------------------------|
| Course Title | Yearbook Design | Level(s) | College Prep/Honors-editors |
|---------------------|------------------------|----------|-----------------------------|

| | | | |
|---|--------------------------|------------------|------------------------------|
| | | | only |
| Credit/Length | .5/Semester and 1.0/Year | Course Number(s) | 08912, 08902, 08901 (Honors) |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: Digital Art & Design 1 (preferred) <u>and/or</u> instructor approval | | | |
| This course is repeatable for credit. | | | |
| <p>Students learn aspects of yearbook design and production. These aspects include, but are not limited to: publication design, photojournalistic writing, organization skills, and teamwork. Students in this class are responsible for the creation and production of a certain number of assigned page layouts. Page layout assignments include: collecting and taking photographs, conducting interviews, writing captions and stories, organizing the information into well designed page layouts, meeting deadlines, and editing the pages for spelling errors and misinformation. The overall class goal is to yield high quality yearbook pages. Students learn skills that range from using computer software programs such as Adobe BRIDGE and Adobe PHOTOSHOP to using digital cameras. Leadership opportunities are available. It is recommended that editors of the yearbook take this course. Class work time may be required outside of the regular class period. Students in this course are required to be part of the Yearbook Club and will be required to attend after school meetings as much as possible. <i>Teacher consent, through interview, is required to take this class.</i> This course has been endorsed by the University of Tampa and has therefore been weighted at CP and Honors. (Commercial Arts)</p> | | | |

| | | | |
|---|------------------------------------|------------------|----------|
| Course Title | Fundamentals of Art Therapy | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 08945 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>This course provides an introduction to art therapy theory, a modality in which the creative process is used to facilitate exploration of self-awareness to improve well-being. Students will explore the origin and foundations of art therapy and investigate its theory and practices. A wide range of techniques and materials in the two and three dimensional arts will be surveyed. Career opportunities in this area will be investigated.</p> | | | |

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BUSINESS EDUCATION

Business courses provide a solid educational foundation for students who want to successfully complete college programs in various business disciplines. As the nature of work continues to change, business education becomes increasingly important to all students. The business education program prepares students to become responsible citizens, capable of making astute economic decisions that will benefit their personal and professional lives. Students will be introduced to the basics of finance, the decision making techniques needed to be wise consumers, the economic principles of an increasingly international marketplace, and the processes by which businesses operate.

* These courses have been endorsed by Temple University and have therefore been weighted at either CP or Honors.

| Course Title | Personal Finance | Level(s) | Standard |
|---|------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 064230 |
| Format(s) | Online | Open to Grade(s) | 11 - 12 |
| <p>A key component to one's future financial success is the ability to understand and manage one's personal finances. This course will provide the knowledge and skills needed to make informed decisions about real-world financial situations. Students will explore how occupational choices can influence earning potential while learning how to apply their decision-making skills to set goals and evaluate career options. Students will also develop skills in the areas of money management, budgeting, the use of credit, investing, and consumers rights and responsibilities.</p> <p><i>*This course will not meet the Personal Finance graduation requirement until 2026-2027</i></p> | | | |

| Course Title | Investment Fundamentals | Level(s) | Dual Enrollment |
|---|-------------------------|------------------|-----------------|
| Credit/Length | .5/Semester | Course Number(s) | 06424 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| <p><u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval</p> <p>This course aims to interpret the significance of investment strategies through an emphasis on hands-on learning and practical applications. Students will acquire skills in planning for long-term financial objectives and assessing various investment options. The curriculum will include an exploration of stocks and bonds, as well as an examination of financial instruments such as mutual funds, index funds, and exchange-traded funds (ETFs). Additionally, students will gain insights into the advantages of tax-advantaged investment vehicles. The course is structured to encourage students not only to understand the principles of investing but also to formulate a comprehensive plan that aligns with their financial aspirations through analytical tools and techniques pertinent to investment, financing, and dividend decisions. This course is recommended for students considering a business major in college.</p> | | | |

| | | | |
|---------------------|------------------------------|------------------|--------|
| Course Title | DECA Business Writing | Level(s) | Honors |
| Credit/Length | .5/Semester | Course Number(s) | 06711 |
| Format(s) | Online | Open to Grade(s) | 9 - 12 |

Prerequisite: Business Education teacher recommendation

This course is repeatable for credit.

This course allows students to apply the principles of business communication through the completion of a business research paper and presentation for DECA competition. Students will learn business data analysis, business writing concepts, desktop publishing, and presentation techniques. DECA members competing in written events are strongly encouraged to take this course.

| | | | |
|---------------------|---------------------|------------------|-----------------|
| Course Title | Accounting 1 | Level(s) | Dual Enrollment |
| Credit/Length | .5/Semester | Course Number(s) | 06132 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Accounting 1 is the language of business and this introductory course is a valuable first step for students planning a business career, such as accounting, management, finance, and marketing. Students develop an understanding of the accounting cycle with a focus on analyzing and interpreting financial statements and how corporate financial decisions are made through the use of accounting information. Technology skills are enhanced through the use of computer software, simulated activities, and case studies.

| | | | |
|---------------------|---------------------|------------------|-----------------|
| Course Title | Accounting 2 | Level(s) | Dual Enrollment |
| Credit/Length | .5/Semester | Course Number(s) | 06141 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Accounting 1

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Accounting 2 expands the students' understanding of accounting subsystems and internal control procedures. The students gain experience with plant assets, depreciation, inventory, notes, and accruals; and they apply these skills to the day-to-day financial reporting and decision making of a corporation. Technology skills are enhanced through the use of computer software, simulated activities, and case studies.

| | | | |
|---------------------|---------------------|------------------|---------|
| Course Title | Accounting 3 | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 06151 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Accounting 2

Accounting 3 expands the students' understanding of accounting subsystems and internal control procedures. The students gain experience with the procedures for acquiring capital for growth, acquiring and expensing the costs of plant and intangible assets, and accounting for inventory costs. Included is the accounting for international sales and how to record Internet sales. Technology skills are enhanced through the use of computer software, simulated activities,

and case studies as well as strategies for effective written and oral communication skills needed by accountants.

| | | | |
|---------------------|--------------------|------------------|--------------|
| Course Title | Advertising | Level(s) | College Prep |
| Credit/Length | .5/Semester | Course Number(s) | 06212 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Advertising provides an opportunity for students to learn the theory and practice of advertising and promotions. The concept of marketing communications will be explored through the understanding, identifying, evaluating, selecting and planning the various types of promotions for a target audience. As part of the course, students will develop an advertising and promotion campaign for a product.

| | | | |
|---------------------|--------------------------|------------------|--------------|
| Course Title | Business Dynamics | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 06312 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Business Dynamics is a crucial class for anyone looking to kick-start a career in the business world. It provides a solid grounding in essential business concepts that are relevant everywhere, whether in your hometown or across the globe. Throughout the course, students will examine both the internal and external influences on businesses, diving into key subjects such as economic trends, ethics, social responsibility, and effective communication. The course also covers fundamental accounting skills and resource management techniques to boost an organization's value. Moreover, students will develop marketing strategies that highlight unique selling points, address customer needs, explore distribution methods, and evaluate pricing strategies.

| | | | |
|---------------------|---------------------|------------------|-----------------|
| Course Title | Business Law | Level(s) | Dual Enrollment |
| Credit/Length | .5/Semester | Course Number(s) | 06322 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Business Law addresses statutes and regulations affecting businesses, families, and individuals in their related roles. Students will learn a basic knowledge of the legal system and how business law impacts commerce in their own country and abroad. Technology and computer laws of emerging importance in the workplace will be discussed. Case problems and activities will help students learn about rights, privileges, and responsibilities of consumers, workers, and citizens. This course is recommended for students interested in majoring in business in college.

| | | | |
|---------------------|-------------------------|------------------|-----------------|
| Course Title | Entrepreneurship | Level(s) | Dual Enrollment |
| Credit/Length | 1.0/Year | Course Number(s) | 06331 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Any one Business course

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Students in this course will gain practical knowledge about starting and managing a small business. This course reviews and applies entrepreneurial marketing approaches used by

successful entrepreneurs. These include utilizing industry sector trends, identifying emerging customer niches, developing new products/services, using guerilla marketing strategies, and Internet and social marketing strategies. Students will explore the relationship between a well-developed marketing plan and successfully raising start-up capital as they develop a business plan.

| Course Title | Marketing Management | Level(s) | Dual Enrollment |
|---------------------|-----------------------------|------------------|-----------------|
| Credit/Length | 1.0/Year | Course Number(s) | 06532 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

This course will not be offered in 2026-27.

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval

Marketing Management is at the core of operating a business and creating customer value and marketplace exchanges to benefit a business. In this course, students will learn about identifying and measuring consumers' needs and wants, assessing the competitive environment, selecting the most appropriate customer targets and developing marketing strategy and implementation programs for an offering that satisfies consumers' needs better than the competition. As part of the curriculum, students will be involved in academic preparation for competitive events in DECA.

| Course Title | Sports Marketing | Level(s) | College Prep |
|---------------|------------------|------------------|--------------|
| Credit/Length | 1.0/Year | Course Number(s) | 06512 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course will not be offered in 2025-26. It will be offered in 2026-27.

Sports Marketing is the business side of sports. This course encompasses planning, implementing and controlling marketing activities as they relate to athletic teams, sports venues and related products and services. Students who take this course will have a working understanding of marketing's role in sports and sports-related organizations and will help students develop skills in applying fundamental marketing concepts.

| Course Title | IB Business Management SL | Level(s) | International Baccalaureate |
|---------------------|----------------------------------|------------------|-----------------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 06330 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

The IB Diploma Program Business Management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of business management tools and techniques. Students learn to analyze, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate. Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing and operations management. Six concepts underpin the course (change, culture, ethics, globalization, innovation and strategy), and allow students to develop their understanding of interdisciplinary concepts from a business management perspective. The course encourages the appreciation of

ethical concerns, as well as issues of corporate social responsibility (CSR), at both a local and global level. Through the study of topics such as human resource management, organizational growth and business strategy, the course aims to develop transferable skills relevant to today's students.

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ENGLISH

The Owen J. Roberts English Department believes its primary purpose is to teach students to write, developing logical, well-organized essays in various modes. Our goal is that students will begin a lifelong, self-directed appreciation of literature and will learn to use precise language through the development of listening, reading, writing, and speaking skills. During the first year of high school, students will study selections from all genres of literature. The next three years will be devoted to studying literature from a wide variety of cultures and time periods. Our goal is to broaden and multiply the number of books and texts a student will encounter.

Writing Portfolio: In each student's high school English classes, a progression of writing skills will be developed from creating basic sentence patterns to writing a research paper. Every student will be required to complete between 10 and 12 essays each year. All of those essays will be included in the student's electronic writing portfolio each year. This portfolio should contain a minimum of 44 total essays by the end of the student's senior year.

The typical sequence of courses that Owen J. Roberts High School students select is presented in the chart linked below. The chart is divided into instructional levels and is intended to give an overview of the required courses from which students can choose. It is only a guide to assist students and families in the registration process. A student's course selections are not limited to the sequences shown. Each student should consult his/her teachers, school counselor, and families to determine the appropriate courses and sequence that best supports his/her academic and career goals. The academic levels – Advanced Placement/International Baccalaureate/Dual Enrollment (AP/IB/DE), Honors (H), and College Prep (CP) - indicate the general level of instruction of the courses.

English Course Sequence Chart

| Course Title | English 9 | Level(s) | College Prep |
|--|------------------|------------------|---------------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 01002, 01003C (co-taught) |
| Format(s) | In Person | Open to Grade(s) | 9 |
| Prerequisite: Language Arts 8 | | | |
| This course introduces students to the fundamentals of literature, emphasizes writing and speaking skills, and reinforces the basics of grammar. Students will write ten essays for this class and complete a research project. <i>Summer assignment required.</i> | | | |

| Course Title | English 9 | Level(s) | Honors |
|---------------------|------------------|------------------|--------|
| Credit/Length | 1.0/Year | Course Number(s) | 01001 |
| Format(s) | In Person | Open to Grade(s) | 9 |

Prerequisite: Language Arts 8

This course introduces students to the fundamentals of literature, emphasizes writing and speaking skills, and reinforces the basics of grammar. Students will write ten essays for this class and complete a research project. *Summer assignment required.*

| | | | |
|---------------|--------------|------------------|----------------------|
| Course Title | English 9/10 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01020O, 01019O |
| Format(s) | Online | Open to Grade(s) | 9 - 10 |

Prerequisite: Language Arts 8 or English 9

This course introduces students to the fundamentals of literature, emphasizes writing and speaking skills, and reinforces the basics of grammar. Students will write ten essays for this class and complete a research project. *Summer assignment required.*

| | | | |
|---------------------|-------------------|------------------|---------------------------|
| Course Title | English 10 | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 01012, 01013C (co-taught) |
| Format(s) | In Person | Open to Grade(s) | 10 |

Prerequisite: CP or H English 9

The students in this course study all genres of literature and refine their writing and speaking skills. Students are required to write ten essays, including a research paper. *Summer assignment required.*

| | | | |
|---------------------|-------------------|------------------|--------|
| Course Title | English 10 | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01011 |
| Format(s) | In Person | Open to Grade(s) | 10 |

Prerequisite: CP or H English 9

The students in this course study all genres of literature and refine their writing and speaking skills. Students will study American Literature from the Colonial through Contemporary eras and are required to write ten essays, including a research paper. *Summer assignment required.*

| | | | |
|---------------------|---------------------|------------------|----------------------|
| Course Title | English 10/9 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01021O, 01022O |
| Format(s) | Online | Open to Grade(s) | 9 - 10 |

Prerequisite: Language Arts 8 or English 9

The students in this course study all genres of literature and refine their writing and speaking skills. The students taking Honors will study American Literature from the Colonial through Contemporary eras. Both levels are required to write ten essays, including a research paper. *Summer assignment required.*

| | | | |
|---------------------|-------------------|----------|--------------|
| Course Title | English 11 | Level(s) | College Prep |
|---------------------|-------------------|----------|--------------|

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|---|-----------|------------------|-------|
| Credit/Length | 1.0/Year | Course Number(s) | 01102 |
| Format(s) | In Person | Open to Grade(s) | 11 |
| Prerequisite: CP or H English 10 | | | |
| Students taking College Prep English study a variety of works of literature from ancient civilizations to the present. They will write 12 critical essays and a research paper based on their reading. <i>Summer assignment required.</i> | | | |

| | | | |
|--|-------------------|------------------|--------|
| Course Title | English 11 | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01101 |
| Format(s) | In Person | Open to Grade(s) | 11 |
| Prerequisite: CP or H English 10 | | | |
| Students taking Honors English will study a variety of works of contemporary and classic literature. The honors class will move at an accelerated pace and will include additional readings and essays. <i>Summer assignment required.</i> | | | |

| | | | |
|---|---------------|------------------|----------------------|
| Course Title | English 11/12 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01231O, 01231O |
| Format(s) | Online | Open to Grade(s) | 11 -12 |
| Prerequisite: CP or H English 10 or 11 | | | |
| Students taking College Prep English study a variety of works of literature from ancient civilizations to the present. They will write 12 critical essays and a research paper based on their reading. Students taking Honors English will study a variety of works of contemporary and classic literature. The honors class will move at an accelerated pace and will include additional readings and essays. <i>Summer assignment required.</i> | | | |

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|---|---|------------------|--------------|
| Course Title | English for Professional Communications 1 | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 01132 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: CP or Honors English 10 or AP English Language & Composition | | | |
| Success in the workplace begins with effective communication. Students will improve their communication skills by exploring fundamental topics in their fields of interest. They will practice interviewing, negotiating, speaking at meetings, giving presentations, writing business letters and memos, telephoning, vocabulary appropriate for their respective fields, business social skills, and Internet use. Through each of these practical skills, grammatical accuracy, speaking and listening, pronunciation, new vocabulary, and sociolinguistic skills (body language, formality, and tone) will be stressed. The course would ideally include a fieldwork component to help students improve problem-solving and communication skills. | | | |

This course will be offered in alternating years with English for Professional Communications 2. Both 11th and 12th graders may enroll in either course. English for Professional Communications 1 is not a prerequisite for English for Professional Communications 2. *Summer assignment required.*

| | | | |
|---------------------|--|------------------|--------------|
| Course Title | English for Professional Communications 2 | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 01133 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or Honors English 10 or AP English Language & Composition

Effective communication skills, including rhetorical techniques, coupled with critical thinking skills form the basis of this course. Students will bolster their listening, speaking, writing, and reading comprehension through literature tailored to their future goals, presentations representative of those in a workplace environment, written pieces featuring clarity and style, and discussions that foster keen attention and thoughtful contributions.

This course will be offered in alternating years with English for Professional Communications 1. Both 11th and 12th graders may enroll in either course. English for Professional Communications 1 is not a prerequisite for English for Professional Communications 2. *Summer assignment required.*

| | | | |
|---------------------|------------------------------|------------------|----------------------|
| Course Title | Literature for Change | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01112H, 01123H |
| Format(s) | Hybrid | Open to Grade(s) | 11 |

Prerequisite: CP or H English 10

Students taking this course will explore how the individual functions as an architect of change not only in his own life but also as an agent of change in the construction of the world around him. The course is organized around global issues, self-agency and affecting change, and has an increased focus on fiction and nonfiction that highlights innovation, problem-solving, and action planning. Students will examine literature of great minds by studying how one can improve himself and change the world for the better, by reading a variety of literature in the “changing the world” genre. *Summer assignment required.*

| | | | |
|---------------------|---|------------------|-----------------------------|
| Course Title | IB Language & Literature HL Year 1 | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 01929 |

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|---|-----------|------------------|----|
| Format(s) | In Person | Open to Grade(s) | 11 |
| Prerequisite: CP or H English 10 | | | |
| <u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| The Language A: Language and Literature course is a two-year course that introduces the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. The formal analysis of texts is supplemented by awareness that meaning is not fixed but can change in respect to contexts of production and consumption. | | | |
| In the language A: language and literature course, students will learn about the complex and dynamic nature of language and explore both its practical and aesthetic dimensions. They will explore the crucial role language plays in communication, reflecting experience, and shaping the world. Students will also learn about their own roles as producers of language and develop their productive skills. Throughout the course, students will explore the various ways in which language choices, text types, literary forms, and contextual elements all affect meaning. <i>Summer assignment required.</i> | | | |
| * <i>Literature selections, assessments, and examination requirements for the HL necessitate the two-year offering.</i> | | | |

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|--|--|------------------|--------------------|
| Course Title | AP English Language & Composition | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 01100 |
| Format(s) | In Person | Open to Grade(s) | 11 |
| Prerequisite: H English 10 | | | |
| <u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This is a college-level course that follows the AP English Language and Composition curriculum examining rhetoric as “the art of finding and analyzing all the choices involving language that a writer, speaker, reader, or listener might make in a situation so that the text becomes meaningful and purposeful” (David Jolliffe, former AP exam creator). Students will develop a personal writing style through the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts, including graphic images as forms of text from many disciplines and historical periods. Students are prepared for and encouraged to take the AP English Language and Composition Exam. <i>Lengthy summer readings and essays required.</i> | | | |

| | | | |
|---------------------|-------------------|------------------|----------------------|
| Course Title | English 12 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01202, 01201 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: CP or H English 11

Students taking College Prep English study a variety of works of literature that range from Shakespeare to modern novels. Those in College Prep will write 12 critical essays and a research paper based upon their reading. The Honors class will move at an accelerated pace and will include additional readings and essays. *Summer assignment required.*

| | | | |
|---------------------|----------------------|------------------|----------------------|
| Course Title | English 12/11 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01221O, 01222O |
| Format(s) | Online | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H English 10 or 11

Students taking College Prep English study a variety of works of literature that range from Shakespeare to modern novels. Those in College Prep will write 12 critical essays and a research paper based upon their reading. The Honors class will move at an accelerated pace and will include additional readings and essays. *Summer assignment required.*

| | | | |
|---------------------|------------------------------|------------------|----------------------|
| Course Title | Literature of Success | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 01212H, 01213H |
| Format(s) | Hybrid | Open to Grade(s) | 12 |

Prerequisite: CP or H English 11

Students taking this course explore the history, literature, ethics, and philosophy of two age-old questions: what does it mean to be “successful” and how does one achieve this elusive goal? Students will examine the critical and cultural perspectives of success, reading a variety of literature in “success” genre. *Summer assignment required.*

| | | | |
|---------------------|---|------------------|-----------------------------|
| Course Title | IB Language & Literature HL Year 2 | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 01930 |
| Format(s) | In person | Open to Grade(s) | 12 |

Prerequisite: English 11

The Language A: Language and Literature is a two-year course that introduces the critical study and interpretation of written texts from a wide range of literary genres. The formal analysis of texts is supplemented by awareness that meaning is not fixed but can change in respect to contexts of production and consumption.

Through close analysis of various text types and literary forms, students will consider their own interpretations, as well as the critical perspectives of others, to explore how such positions are shaped by cultural belief systems and to negotiate meanings for texts. Students will engage in activities that involve them in the process of production and help shape their critical awareness of how texts and their associated visual and audio elements work together to influence the audience/reader and how audiences/readers open up the possibilities of texts. With its focus on a wide variety of communicative acts, the course is meant to develop sensitivity to the foundational

nature, and pervasive influence, of language and literature in the world at large. *Summer assignment required.*

** Literature selections, assessments, and examination requirements for the HL necessitate the two-year offering.*

| | | | |
|---------------------|--|------------------|--------------------|
| Course Title | AP English Literature & Composition | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 01200 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: H English 11 or AP English 11

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This class follows the Advanced Placement Literature and Composition curriculum and is representative of an introductory college literature course. It will intensively study literature of the world from Shakespeare to the present. In addition, students will be prepared to respond to written English in a variety of contexts and to further refine their skills in writing expository prose. They will be prepared for and are encouraged to take the Literature and Composition AP Examination. *Lengthy summer readings and essays required.*

| | | | |
|---------------------|--|------------------|--------------|
| Course Title | Academic Reading & Vocabulary | Level(s) | Unweighted |
| Credit/Length | .5 & 1.0/Year | Course Number(s) | 20209, 20208 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course is repeatable for credit.

Students will develop their ability to understand, analyze, and synthesize reading and vocabulary across contents and texts, as well as increase reading fluency and both implicit and explicit comprehension skills. The course provides individualized and small group instruction in reading with an emphasis on non-fiction text. Texts are chosen to reflect students' interests, reading level, and areas of need. Vocabulary instruction emphasizes morphology and the use of context clues. Diagnostic tests and curriculum-based assessments are administered to assess proficiency levels and areas of need. Students are assigned to this class either 3 or 5 days per cycle depending on their language arts placement, level of proficiency on previous PSSA scores, Keystone exam scores, individual reading assessments, or via teacher recommendation.

| | | | |
|---------------------|-------------------------------------|------------------|----------|
| Course Title | English for English Learners | Level(s) | Standard |
| Credit/Length | 1.0/Year | Course Number(s) | 01900 |

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|--|-----------|------------------|--------|
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| This course is repeatable for credit. | | | |
| This English course is for English learners whose level of English proficiency (ELP) is just beginning or still emerging (ELP < 3). The goals of this course are to improve reading, writing, and critical thinking in both English and the student's first language, as well as listening and speaking in English. This course is co-taught by an ELD teacher and an English teacher. | | | |

ENGLISH ELECTIVES

English electives may not be selected in place of the required courses in the sequence of the English curriculum.

| | | | |
|--|----------------------------|------------------|----------|
| Course Title | Drama & Theater | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 01515 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| This course is designed as an introduction to the basics of theater and drama. Students will engage in sensory exercises, non-verbal and verbal skills, monologues, multiple character scenes, and participate in a class project. | | | |

| | | | |
|--|-------------|------------------|----------|
| Course Title | Debate | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 01515 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <i>This course <u>will not</u> be offered in 2025-26. It <u>will</u> be offered in 2026-27.</i> | | | |
| Debate is a communication class designed to strengthen students' skills in the art of argumentation. Students will research national debate topics, prepare cases, and debate using cross-examination and Lincoln-Douglas formats. | | | |

| | | | |
|--|-----------------|------------------|----------|
| Course Title | History of Film | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 01815 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <i>This course <u>will not</u> be offered in 2026-27.</i> | | | |
| History of Film will cover the era of the silent films of the 1920s through films of the 1950s. The chosen films will be a reflection of the culture during that time frame. Included will be Academy Award winning films in a variety of genres. The films will be approached through literary analysis. Students will write persuasive and informational essays. | | | |

| | | | |
|--|-----------------|------------------|----------|
| Course Title | Public Speaking | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 01525 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <i>This course <u>will not</u> be offered in 2025-26. It <u>will</u> be offered in 2026-27.</i> | | | |
| This course provides an opportunity for students to refine their speaking and listening abilities. Students will prepare and deliver a variety of speeches and critique each other's performances. | | | |

| | | | |
|---------------------|-------------------|------------------|----------|
| Course Title | Journalism | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 01615 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course will not be offered in 2026-27.

This course provides students with an understanding of news reporting for the print and electronic media and an opportunity to learn basic editorial and writing skills. Selected writings will be presented in a class newspaper. This course may be repeated by those students interested in the school newspaper.

| | | | |
|---------------------|-------------------------|------------------|------------|
| Course Title | SAT Reading Prep | Level(s) | Unweighted |
| Credit/Length | .25/Marking Period | Course Number(s) | 018130 |
| Format(s) | Online | Open to Grade(s) | 10-12 |

This course is repeatable for credit.

This course provides an opportunity for students planning to take the SAT to refine their test-taking skills, focus on sample questions, and practice in the area of reading only.

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FAMILY & CONSUMER SCIENCE

The Family and Consumer Sciences program is designed to provide all students with the knowledge and skills necessary for rewarding personal, family and professional life in an ever changing global society. Courses are planned in the areas of food and nutrition, human development, relationships, parenting and child care, housing and home furnishings, and consumer resource management to provide a solid foundation for personal use, job skills and higher education. Decision making, career choices and employment skills are emphasized in each course. Students may choose to specialize in one or two areas or complete the entire program.

| | | | |
|---------------------|----------------------------|------------------|----------|
| Course Title | Child Development 1 | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 09115 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course will acquaint students with the growth and developmental patterns of infants and toddlers as well as pre-pregnancy considerations. It will enable students to explore the manner in which children learn to relate to their environment. Methods of stimulating and teaching infants and toddlers will be studied. This course is highly recommended for those interested in broadening their knowledge of young children.

| | | | |
|---------------------|----------------------------|------------------|----------|
| Course Title | Child Development 2 | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 09125 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: None (*Child Development 1 is not a prerequisite for this course*)

This course will acquaint students with the growth and developmental patterns of infants and toddlers as well as pre-pregnancy considerations. It will enable students to explore the manner in which children learn to relate to their environment. Methods of stimulating and teaching infants and toddlers will be studied. This course is highly recommended for those interested in broadening their knowledge of young children.

| Course Title | Culinary Arts 1 | Level(s) | Standard |
|---------------------|------------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 09215 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

The goal of this course is to prepare students to function independently in the kitchen to meet personal nutritional needs or to prepare for higher education. Students will apply knife skills, measuring, sanitation and safety practices, culinary terminology, food science principles, and basic cooking methods in preparation of foods while in the lab. Emphasis is placed on putting learned theory of food selection, preparation and storage into practice. Students will complete several in-class discussions and projects involving current nutrition and food trends. This course is also highly recommended for students interested in the hospitality/food service industry.

| Course Title | Culinary Arts 2 | Level(s) | Standard |
|---------------------|------------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 09225 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Culinary Arts 1

This course will continue to develop food science principles and safe food handling practices while expanding into other types of food preparation such as eggs, soups, salads, sandwiches, and casseroles. Laboratories will continue to be important in application of theory and practice. Evaluation of current fad diets, nutritive value, and convenience will be included as well as menu planning and use of seasonings.

| Course Title | Global & Gourmet Foods | Level(s) | Standard |
|---------------------|-----------------------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 09315 |
| Format(s) | In person | Open to Grade(s) | 9 - 12 |

This course is for students who have an adventurous palette or want to refine their culinary skills. Students will study and explore the diverse eating habits and customs throughout various countries both national and worldwide. Classic cuisine from various regions and specific countries will be prepared. Throughout the semester, food seasonings and flavorings, which add embellishment and intrigue to a meal will be explored. In addition, gourmet foods and proper plate presentation are discussed as a way to enhance an eating experience

| Course Title | Baking & Pastry Arts | Level(s) | Standard |
|---------------------|---------------------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 09713 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course is for students who have an adventurous palette or want to refine their culinary skills. Students will study and explore the diverse eating habits and customs throughout various countries both national and worldwide. Classic cuisine from various regions and specific countries will be prepared. Throughout the semester, food seasonings and flavorings, which add embellishment and intrigue to a meal will be explored. In addition, gourmet foods and proper plate presentation are discussed as a way to enhance an eating experience.

| | | | |
|---------------------|------------------------|------------------|----------|
| Course Title | Interior Design | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 09515 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Students will experience an overview of Interior Design including an introduction to design, selection, and application of components in the interior environment. Effective design problem-solving skills will be implemented. Developing and sketching floor plans and renderings will be included. This course is highly recommended for the student interested in pursuing a career in interior design, fashion design, decoration, or display.

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HEALTH & PHYSICAL EDUCATION

The Health and Physical Education program is designed to provide students the knowledge and skills that will enable them to practice, achieve, and maintain physically active and healthful lives. A variety of fitness, recreational, sport, and lifetime activities are used to help students favorably impact their lives and those around them.

| | | | |
|---------------------|--|------------------|----------|
| Course Title | 9th Grade Health & Wellness | Level(s) | Standard |
| Credit/Length | .5/Year | Course Number(s) | 12999 |
| Format(s) | In Person | Open to Grade(s) | 9 |

This course examines essential skills to make beneficial individual health choices as well as maintaining the health of others. Emphasis is placed on first aid, CPR techniques, nutrition, exercise, and drug and alcohol awareness. This course guides students in making important life decisions in the psychological, physiological, social, emotional, and mental aspects of their lives. Students acquire a deeper understanding of nutrition and their personal daily nutritional needs. Digital citizenship topics help students develop a positive digital footprint while focusing on the use of technology and its effects on overall health. Students will also learn about contemporary social health issues that affect individuals. Finally, students will analyze the interdependence existing among the body systems.

This course will be automatically scheduled for all 9th grade students.

| | | | |
|---------------------|-------------------------------------|------------------|----------|
| Course Title | 9th Grade Physical Education | Level(s) | Standard |
| Credit/Length | .5/Year | Course Number(s) | 13099 |
| Format(s) | In Person | Open to Grade(s) | 9 |

This course introduces 9th-grade students to fitness-based concepts, emphasizing personal health, physical fitness, and the development of lifelong wellness habits. Through engaging activities, students will explore various fitness components, improve physical performance, and gain an understanding of how to create and maintain a healthy lifestyle. Students will participate in diverse physical activities to enhance fitness and promote overall health. The course will also foster teamwork, sportsmanship, and positive attitudes towards physical activity.

This course will be automatically scheduled for all 9th grade students.

| | | | |
|---------------------|------------------------------|------------------|---------------|
| Course Title | Health & Wellness | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 12000, 12000O |
| Format(s) | In Person, Online | Open to Grade(s) | 10 - 12 |

This course examines essential skills to make beneficial individual health choices as well as maintaining the health of others. Emphasis is placed on first aid, CPR techniques, nutrition, exercise, and drug and alcohol awareness. This course guides students in making important life decisions in the psychological, physiological, social, emotional, and mental aspects of their lives. Students acquire a deeper understanding of nutrition and their personal daily nutritional needs. Digital citizenship topics help students develop a positive digital footprint while focusing on the use of technology and its effects on overall health. Students will also learn about contemporary social health issues that affect individuals. Finally, students will analyze the interdependence existing among the body systems.

| | | | |
|---------------------|----------------------------|------------------|--------------|
| Course Title | Lifelong Activities | Level(s) | Standard |
| Credit/Length | .25/Semester | Course Number(s) | 1311R, 1311W |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

This course is repeatable for credit.

This course emphasizes the value of maintaining a healthy and active lifestyle. Activities that can be continued throughout a lifetime are the main focus of this course. The course will be broken down into the below units. Net and Wall Games and Team Games units will focus on team-based sports for competitive play and strategy of game play. Emphasis will be placed on strategic thinking, sport strategy, advanced skills, refined techniques, and competitive play.

- Net and Wall Games - Activities include tennis, badminton, volleyball and pickleball.
- Team Games- Activities include soccer, base games, end zone games, basketball, and Tchoukball.

Fitness and Activities - Activities include frisbee golf, yard games and fitness-based activities. Opportunities will be provided to develop skills and sustain levels of fitness by allowing students to learn skills they can use at any age.

| | | | |
|---------------------|---|------------------|--------------|
| Course Title | Weight Training & Conditioning | Level(s) | Standard |
| Credit/Length | .25/Semester | Course Number(s) | 1312R, 1312W |

| | | | |
|-----------|-----------|------------------|---------|
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
|-----------|-----------|------------------|---------|

This course is repeatable for credit.

This course allows students the opportunity to learn the benefits of strength training. It would also allow for speed and agility development. The course teaches students weight room safety and how to lift properly without injuring themselves.

| | | | |
|---------------------|--------------|------------------|--------------|
| Course Title | Yoga | Level(s) | Standard |
| Credit/Length | .25/Semester | Course Number(s) | 1313R, 1313W |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

This course is repeatable for credit.

This strength and flexibility course focuses on fundamental yoga poses while also emphasizing other principles of dynamic movement, cardiovascular endurance, and strength. This course offers a moderately vigorous intensity, but can be modified for students of all abilities and needs.

| | | | |
|---------------------|---------------------------------------|------------------|--------------|
| Course Title | Competitive Physical Education | Level(s) | Standard |
| Credit/Length | .25/Semester | Course Number(s) | 1314R, 1314W |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

This course is repeatable for credit.

This course is designed for those students who have a desire to participate in a more challenging/competitive environment than the regular Physical Education class. Competitive Physical Education will focus on leadership, team building/teamwork, problem solving, participation, sportsmanship and sport strategy through various games/activities. Students will acquire knowledge and skills in recreational, athletic and lifetime activities throughout the planned units of this course.

| | | | |
|---------------------|---------------------------|------------------|----------|
| Course Title | Sports Officiating | Level(s) | Standard |
| Credit/Length | .5/Year | Course Number(s) | 13415O |
| Format(s) | Online | Open to Grade(s) | 10- 12 |

The course is designed to develop the knowledge and mechanics of the rules which govern various sports. The three sports covered will be: soccer, basketball and baseball/softball. Students will be able to officiate high school interscholastic sports upon completion of course requirements and testing through the Pennsylvania Interscholastic Athletic Association.

| | | | |
|---------------------|---------------------------------|------------------|--------------|
| Course Title | Cyber Physical Education | Level(s) | Standard |
| Credit/Length | .25/Semester | Course Number(s) | 1315R, 1315W |
| Format(s) | Online | Open to Grade(s) | 10 - 12 |

This course is repeatable for credit.

Throughout this course students will learn about the principles of fitness and how to train properly. They will pick their own activities, analyze how these principles apply directly to themselves and learn how to adjust the program as needed. This course may be scheduled for cyber/hybrid students only.

HEALTH & PHYSICAL EDUCATION ELECTIVES

Health & Physical Education electives do not count toward the Physical Education graduation requirement.

| Course Title | Essentials of Personal Training | Level(s) | Standard |
|---------------------|--|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 13421 |
| Format(s) | In Person | Open to Grade(s) | 9 -12 |

This course allows students the opportunity to meet once a cycle and provides basic instruction and activities in physical development. The course is designed to give students the opportunity to develop their personal fitness/workout routines outside of school. All students are screened twice a year in five areas of physical fitness measuring muscular strength and endurance, cardio-respiratory endurance, speed, agility and flexibility. School equipment is available but limited.

| Course Title | Introduction to Athletic Coaching Education | Level(s) | Standard |
|---------------------|--|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 13420 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course is designed to give students a first hand look into what it takes to be an athletic coach. Students will gain the knowledge and practical skills necessary to excel as a coach in the dynamic world of athletics. This comprehensive course is designed to provide aspiring coaches with the essential tools to communicate with stakeholders, strategies to build a positive culture and techniques to develop leadership skills that will inspire the future generation of athletes. Students will discover their own coaching style and apply it to the sport that they choose. Students will have the opportunity to make a positive impact while gaining experience that will help their career..

| Course Title | Athletic Training 1 | Level(s) | College Prep* |
|---------------------|----------------------------|------------------|---------------|
| Credit/Length | 1.0/Year | Course Number(s) | 13315 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

The purpose of this course is to prepare and train students to assist in preventing and treating first aid issues. Students will also learn to tape, wrap, and care for athletes. Record keeping procedures, as well as the organization and administration of a high school athletic training program will also be a part of the curriculum. Practical experience with sports teams is also part of the curriculum. *This course has been endorsed by West Chester University and has therefore been weighted at College Prep level.

| | | | |
|---------------------|----------------------------|------------------|----------|
| Course Title | Athletic Training 2 | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 13335 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Athletic Training 1

Athletic Training 2 will build on the knowledge obtained from the original athletic training class. This class will allow students to analyze, create and engage in the various strategies used by ATCs and PTs to evaluate, treat and rehabilitate athletes from the day of the injury, all the way through the athletes return to the full participation in their sport.

| | | | |
|---------------------|--------------------------|------------------|----------|
| Course Title | Sports Management | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 13416 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course provides an overview of the principles, practices, and challenges in the field of sports management. It covers topics related to sports administration, marketing, event management, finance, ethics, and more.

| | | | |
|---------------------|--------------------------|------------------|---------------|
| Course Title | Sports Psychology | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 13413, 13413O |
| Format(s) | In Person, Online | Open to Grade(s) | 10 - 12 |

Sports Psychology focuses on the performance aspect of life and how one's mindset can either propel or hinder achievement. This course utilizes psychological knowledge and skills to examine optimal performance and well-being of students and athletes by addressing developmental and social aspects of sports participation, classroom performance and systemic issues associated with sports settings.

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INTERNATIONAL BACCALAUREATE CAREER PROGRAM

Owen J. Roberts High School (OJRHS) is an International Baccalaureate World School for the Career-related Program. IB World Schools are schools that share a common philosophy – a

commitment to high quality, challenging, international education that Owen J. Roberts believes is important for our students. The IBCP is a two-year program beginning in a student's junior year. Students enroll in the program in the winter of their sophomore year. Students who enroll in the program take an intensive, highly structured curriculum in their junior and senior years. More information about the International Baccalaureate organization and the IBCP program is available at www.ibo.org.

Career-related program students will access a broad, flexible education which will help develop knowledge, practical training, intellectual engagement, and international-mindedness, while also developing higher-order cognitive skills and academic behaviors that enhance their employability and expand their world view. (Paraphrased from Dr. Siva Kumari, IB Director General 2014). The IBCP at OJRHS will prepare students for flexibility and mobility in a range of Science, Technology, Engineering, Arts and Math (STEAM) careers, Navy Junior Reserve Officers Training Corps (NJROTC), Computer Science and Business as well as enhance their continuing education at post-secondary schools. The mix of career-related courses combined with the knowledge and skills obtained from studying Diploma Program courses will broaden the student's experience base and enhance their access to higher education institutions and training programs.

Students can either take the IBCP two-year program or take individual IB courses as electives or to fulfill other graduation requirements. Each course has a culminating exam that can be used to earn advanced placement and or credit at colleges and universities.

Students who complete all of the requirements of the IBCP program at OJRHS will receive an IBCP Certificate in addition to earning their OJRHS diploma. Our IBCP graduates have gone on to a variety of 4 year colleges and universities as well as career and technical training institutions.

IBCP Requirements

There are three required components of the IBCP Program at OJRHS: IB Diploma Courses, the IB Core Course and the Career Related options described below. The organization of the program is shown on the chart below. Descriptions of each of the main components of the program are described below the chart.

IBCP Certification Program

IB COURSES

2 Courses Required:
At least 1, 2-year course
AP/IB/DE Weight

2 Credit Options

- Language and Literature (two years, 2 credits)
- Mathematics Applications and Interpretations (two years, 2 credits)

1 Credit Options

- Philosophy (one year 1 credit)
- Business Management (one year, 1 credit)

CAREER COURSE OPTIONS

Choose 2 Credits over 2 years
AP/IB/DE, Honors or CP Weight

Engineering

- Introduction to Engineering (AP/IB/DE)
- Principles of Engineering (H/CP)
- Engineering Design (H/CP)
- Two 0.5 credit Engineering Electives (CP)

Life Sciences

- Ecology (H)
- Genetics (AP/IB/DE)
- Foundations of Genetics (CP)
- Biotechnology (H/CP)
- Anatomy and Physiology (H)
- Allied Health- Seniors only- 2 credits (AP/IB/DE)

Education

- Teacher Leadership Academy- Seniors only- 2 credits (AP/IB/DE)

NJROTC

- ROTC offers various courses in each of the 4 years of high school. Students will take one ROTC course each year of the IBCP program.

Computer Information Systems and Business

- AP Computer Science
- AP Computer Principles
- Accounting 2 (DE)
- Accounting 3 (DE)
- Business Law (DE)
- Entrepreneurship (DE)
- OL DECA Writing (H)
- Marketing Management (DE)

IB CORE

Required Course
2 Credits/2 years
Honors Weight--Hybrid

The IB CORE includes the Personal and Professional Skills course and the following:

- Service Learning (required 50 hours)
- Reflective Project
- Language Portfolio (required 50 hours of language learning)

Meets in person every other day
TWO YEAR Course
Honors
1 credit per year

1. IB Diploma Courses Minimum of 3 credits over 2 courses

Completion of at least two Diploma Program courses for a minimum of 3 credits over 2 years. These courses are weighted at the AP/IB/DE level. Students need to take at least one of the two courses over a two-year period (junior and senior year).

2. IBCP Core 2 credits over 2 years

Completion of the IBCP Core Class over 2 years. This is also referred to as the Personal and Professional Skills (PPS) course and includes organizational time for the three components of the Core. All components of the Core are scheduled as a single class, taken every other day for two consecutive years. The course is scheduled as a hybrid course as there is independent work to be completed for each of the 4 core components, which is monitored and evaluated throughout the two-year period. A full description of the IBCP Core components can be found below. These include:

1. Personal and Professional Skills Course.
2. Reflective Project (submitted senior year)
3. Service Learning and Portfolio (required 50 hours with mentor supervision)
4. Language Portfolio, including concurrent foreign language development (minimum of 50 hours, submitted senior year).

3. OJR IB Career Area Courses 2 credits

Completion of at least two credits worth of career-related courses from OJRHS's Science, Technology, Engineering, Arts and Math (STEAM) Career electives, NJROTC Program or Computer Information Systems and Business programs. Biology is a prerequisite to the Life Sciences course option. Course offerings in each option are presented below:

STEAM Engineering

1. Introduction to Engineering (AP/IB/DE level) 1 credit—Dual Enrollment With Montgomery County CC
2. Principles of Engineering (CP and Honors level) 1 credit
3. Engineering and Design (CP and Honors level) 1 credit
4. Computer Aided Drafting and Design (CP level) 0.5 credit
5. Architectural Engineering and Design (CP level) 0.5 credit
6. Mechanical Engineering And Design (CP level) 0.5 credit
7. Product Engineering and Design (CP level) 0.5 credit

The above 7 courses can be found in the [Technology Education](#) section

STEAM Life Sciences

1. Ecology: Temperate and Tropical Systems (Honors level) 1 credit
2. Genetics (CP and AP/IB/DE level) 1 credit—Dual Enrollment with Delaware Valley University
3. Biotechnology (CP and Honors level) 1 credit
4. Anatomy & Physiology (Honors level)- 1 credit
5. Allied Health (AP/IB/DE level) – 2 credits- Dual Enrollment with Immaculata University

These courses can be found in the following locations: [Science](#) (first four classes), [Allied Health](#).

Computer and Information Systems and Business

1. AP Computer Science A (AP level) 1 credit
2. AP Computer Science Principles (AP level) 1 credit
3. Accounting 2 (DE level) 0.5 credits
4. Accounting 3 (H level) 1 credit
5. Business Law (DE level) 0.5 credits
6. Entrepreneurship (DE level) 1 credit
7. Marketing Management (DE level) 1 credit

These courses can be found in the following locations: [Mathematics](#) (AP Computer Science classes) and [Business](#) (Business courses).

NJROTC

1. Naval Science (CP level) 1 credit
2. Naval Science (H level) 1 credit

The above courses can be found in the [NJROTC](#) section.

Information for Rising Juniors

Students interested in the IBCP program should express interest to [Mr. Kirby](#) (IB Coordinator) to obtain additional information regarding the requirements and benefits of the program. Students should then apply to the program in December of their sophomore year. The application process is not intended to discourage students from entering IBCP, rather to ensure incoming students and families understand the expectations and intent of the IBCP program, to assess each candidate's level of preparation for the program and to ensure that all components of the program are able to be scheduled over the junior and senior year. Students entering into the IBCP are strongly encouraged to consult the IBCP Coordinator regarding their course selections. Suggested course planning schedules are available to assist the student in planning so that all of the IBCP requirements and OJRHS graduation requirements are met. Students who have applied and have been accepted into the OJRHS IBCP program will be given priority during scheduling of IB Diploma courses.

STEAM Engineering: Students desiring to take STEAM Engineering courses during their junior and senior year should have completed two years of high school math, both 9th and 10th grade science, social studies, and English.

STEAM Life Sciences: Students desiring to take STEAM Life Sciences courses during their junior and senior year should have completed two years of high school math, both 9th grade science and Biology, social studies, and English.

Computer and Information Systems (CIS) and Business: Students desiring to take STEAM CIS and Business courses during their junior and senior year should have completed two years of high school math, both 9th and 10th grade science, social studies, and English.

NJROTC: Students desiring to take NJROTC classes during their junior and senior year as part of the IBCP should consult with our NJROTC commander and have completed one year of NJROTC coursework as a prerequisite.

Information for rising 10th and 11th graders

Freshman and sophomores interested in IB should consider taking graduation requirements such as Health before their junior year to allow more flexibility in scheduling for their junior and senior years. Students wanting to enter Life Sciences will need to have completed a biology class by the end of 10th grade.

IB Diploma Courses

| | | | |
|---------------------|---|------------------|--------------------------------|
| Course Title | IB Language & Literature HL Year 1 | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 01920 |
| Format(s) | In Person | Open to Grade(s) | 11 |

Prerequisite: CP or H English 10

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

The Language A: Language and Literature course is a two-year course that introduces the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. The formal analysis of texts is supplemented by awareness that meaning is not fixed but can change in respect to contexts of production and consumption.

In the language A: language and literature course students will learn about the complex and dynamic nature of language and explore both its practical and aesthetic dimensions. They will explore the crucial role language plays in communication, reflecting experience, and shaping the world. Students will also learn about their own roles as producers of language and develop their productive skills. Throughout the course, students will explore the various ways in which language choices, text types, literary forms, and contextual elements all affect meaning.

** Literature selections, assessments, and examination requirements for the HL necessitate the two-year offering. Summer assignment required.*

| | | | |
|---------------------|---|------------------|--------------------------------|
| Course Title | IB Language & Literature HL * Year 2 | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 01930 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: IB Language & Literature HL Year 1

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

Fee: IB Exam Fee

The Language A: Language and Literature is a two-year course that introduces the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. The formal analysis of texts is supplemented by awareness that meaning is not fixed but can change in respect to contexts of production and consumption.

Through close analysis of various text types and literary forms, students will consider their own interpretations, as well as the critical perspectives of others, to explore how such positions are shaped by cultural belief systems and to negotiate meanings for texts. Students will engage in activities that involve them in the process of production and help shape their critical awareness of how texts and their associated visual and audio elements work together to influence the audience/reader and how audiences/readers open up the possibilities of texts. With its focus on a wide variety of communicative acts, the course is meant to develop sensitivity to the foundational nature, and pervasive influence, of language in the world at large.

* Literature selections, assessments, and examination requirements for the HL necessitate the two-year offering.

| Course Title | IB Mathematics: Applications & Interpretation SL *Year 1 | Level(s) | International Baccalaureate |
|---------------------|---|------------------|-----------------------------|
| Credit/Length | 1.0/ Year | Course Number(s) | 02950 |
| Format(s) | In Person | Open to Grade(s) | 11 |

Prerequisite: CP Algebra 2 or H Algebra 2

This course caters to students who already possess knowledge of basic mathematical concepts and who are equipped with the skills needed to apply simple mathematical techniques correctly. This course focuses on topics that are needed to prepare students for calculus and statistic topics in an application to the real-world, such as algebraic concepts and theories, expansion on functions, problems involving exponential and logarithmic functions, trigonometry, statistics and sequences. It meets the needs of students whose interest in mathematics is more practical than theoretical but yet seek challenging content. A graphing calculator is required for this class.

* The requirements of this course necessitate a two-year offering.

| Course Title | IB Mathematics: Applications & Interpretation SL *Year 2 | Level(s) | International Baccalaureate |
|---------------------|---|------------------|-----------------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 02960 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: IB Mathematics: Applications & Interpretation SL Year 1

Fee: IB Exam Fee

This course is a continuation of IB Mathematics: Applications and Interpretation SL Year 1. The course caters to students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. This course will focus on topics that are needed to prepare students for calculus and statistic topics in an application to the real-world, such as algebraic concepts and theories, expansion on functions and equations involving exponential and logarithmic equations, trigonometry, and the unit circle, statistics and sequences. It is intended to meet the needs of students whose interest in mathematics is more practical than theoretical but seek more challenging content. This course is the second year of the two-year course and will focus more on the Calculus and Statistic components in application to the real-world. A graphing calculator is required for this class.

* The requirements of this course necessitate a two-year offering.

| | | | |
|---------------------|----------------------------------|------------------|-----------------------------|
| Course Title | IB Business Management SL | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 06330 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

The IB Diploma Program Business Management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of business management tools and techniques. Students learn to analyze, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate. Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing and operations management. Six concepts underpin the course (change, culture, ethics, globalization, innovation and strategy), and allow students to develop their understanding of interdisciplinary concepts from a business management perspective. The course encourages the appreciation of ethical concerns, as well as issues of corporate social responsibility (CSR), at both a local and global level. Through the study of topics such as human resource management, organizational growth and business strategy, the course aims to develop transferable skills relevant to today's students.

| | | | |
|---------------------|-------------------------|------------------|-----------------------------|
| Course Title | IB Philosophy SL | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 03920 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: ST, CP or H Western Civilization or AP World History

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

Fee: IB Exam Fee

Philosophy is a systematic critical inquiry into profound, fascinating and challenging questions such as: What is it to be human? Do we have free will? What do we mean when we say something is right or wrong? These abstract questions arise out of our everyday experiences, and philosophical tools such as critical and systematic thinking, careful analysis, and construction of arguments provide the means of addressing such questions. The course is focused on stimulating students' intellectual curiosity and encouraging them to examine both their own perspectives and those of others. Students are challenged to develop their own philosophical voice and to grow into independent thinkers, in addition to engaging with some of the world's most interesting and influential thinkers. The course also develops highly transferable skills such as the ability to formulate arguments clearly, to make reasoned judgments and to evaluate highly complex and multifaceted issues.

| Course Title | IB Core Year 1* | Level(s) | Honors |
|--|------------------------|------------------|--------|
| Credit/Length | 1.0/Year | Course Number(s) | 91111 |
| Format(s) | Hybrid | Open to Grade(s) | 11 |
| Prerequisite: Concurrent enrollment in the IBCP Program | | | |
| Year 1 of the 2-year IB Core designed to enhance students' personal qualities and professional development. This course places the Diploma Program courses and the career-related study into context and draws all aspects of the framework together. There are four required components of the Career-related Program Core: personal and professional skills, service learning (50 hour requirement outside of school), language development (50 hour requirement of a world language taken junior year), and a reflective project. During year 1, the students will create and start their service learning in the community, and will start to plan and research their reflective project on their ethical dilemma of choice. | | | |
| <i>* The requirements of this course necessitate a two year offering.</i> | | | |

| Course Title | IB Core Year 2* | Level(s) | Honors |
|---|------------------------|------------------|--------|
| Credit/Length | 1.0/Year | Course Number(s) | 91112 |
| Format(s) | Hybrid | Open to Grade(s) | 11 |
| Prerequisite: IB Core Year 1 | | | |
| Year 2 of the 2-year IB Core will continue to enhance students' personal qualities and professional development focusing on intercultural understanding, applied ethics, and effective communication. This course places the Diploma Program courses and the career-related study into context and draws all aspects of the framework together. There are four required components of the Career-related Program Core: personal and professional skills, service learning (50 hour requirement outside of school), language development (50 hour requirement of a world language taken junior year), and a reflective project. In the second year CORE course students will complete their community service, submit their Language Development Portfolio and complete and submit their Reflective Project on their chosen ethical dilemma. | | | |
| <i>*The requirements of this course necessitate a two year offering.</i> | | | |

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MATHEMATICS

The Mathematics Department offerings afford students the opportunity to interact with mathematics at the level most commensurate with their abilities.

The typical sequence of courses that Owen J. Roberts High School students select is presented in the chart below. The chart is divided into instructional levels and is intended to give an overview of the required courses from which students can choose. It is only a guide to assist students and families in the registration process. A student's course selections are not limited to the sequences shown. Each student should consult his/her teachers, school counselor, and families to determine

the appropriate courses and sequence that best supports his/her academic and career goals. The academic levels – Advanced Placement (AP) International Baccalaureate (IB), Dual Enrollment (DE), Honors (H), College Prep (CP) and Standard (ST) - indicate the general level of instruction of the courses.

Mathematics Course Sequence Chart

| Course Title | Algebra Part 1 | Level(s) | College Prep |
|--|-----------------------|------------------|--------------|
| Credit/Length | 1.0/Year | Course Number(s) | 02122 |
| Format(s) | In Person | Open to Grade(s) | 9 - 11 |
| This course develops algebraic concepts. Emphasis is placed on problem solving and stresses Keystone Algebra topics. The selection of Algebra Parts 1 and 2 will place the student in a two year course that will cover topics of a first year algebra course. This course is not open to students who have successfully completed Algebra 1 or above. | | | |

| Course Title | Algebra Part 2 | Level(s) | College Prep |
|--|-----------------------|------------------|--------------|
| Credit/Length | 1.0/Year | Course Number(s) | 02132 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: Algebra Part 1 <u>or</u> Algebra Part 1 A (8 th Grade) | | | |
| This course is a continuation of Algebra Part 1, and must be completed to fulfill an Algebra 1 requirement. The course stresses Keystone Algebra topics. | | | |

| Course Title | Algebra 1 | Level(s) | College Prep |
|--|------------------|------------------|--------------|
| Credit/Length | 1.0/Year | Course Number(s) | 02115 |
| Format(s) | In Person | Open to Grade(s) | 9 - 10 |
| This course organizes previously learned arithmetic concepts and provides students with the basic concepts, definitions, and fundamental skills necessary to understand Algebra 1. Students who plan to enroll in a post-secondary school program should consider this course. A graphing calculator is recommended for this course. | | | |

| Course Title | College Prep Geometry | Level(s) | College Prep |
|---|------------------------------|------------------|--------------|
| Credit/Length | 1.0/ Year | Course Number(s) | 02222C |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: Algebra 1 | | | |
| This course introduces topics of Euclidean geometry. The main emphasis is placed on applications of geometry and of algebra skills in geometry. College bound students should take this course before taking college entrance exams. Teacher-led discussions, with constant repetition, is the method of teaching used in the course. A scientific calculator is recommended. | | | |

| Course Title | College Prep Geometry | Level(s) | College Prep |
|---------------------|------------------------------|------------------|--------------|
| Credit/Length | 1.0/ Year | Course Number(s) | 02222 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Algebra 1B (8th grade) or Algebra 1 or Algebra Part 2

This course introduces topics of Euclidean geometry. Mathematical proof is introduced, but the main emphasis is placed on applications of geometry and of algebra skills in geometry. College bound students should take this course before taking college entrance exams. A scientific calculator is recommended.

| | | | |
|---------------------|------------------------|------------------|--------|
| Course Title | Honors Geometry | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 02211 |
| Format(s) | In Person | Open to Grade(s) | 9 - 11 |

Prerequisite: Algebra I

This course is an accelerated version of Geometry for students who demonstrate advanced mathematics ability. More emphasis is placed on the deductive proof than in College Prep Geometry. A scientific calculator is required.

| | | | |
|---------------------|---|------------------|--------------------------------|
| Course Title | IB Mathematics: Applications & Interpretation SL *YEAR 1 | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 02950 |
| Format(s) | In Person | Open to Grade(s) | 11 |

Prerequisite: CP Algebra 2 or H Algebra 2

This course caters to students who already possess knowledge of basic mathematical concepts and who are equipped with the skills needed to apply simple mathematical techniques correctly. This course focuses on topics that are needed to prepare students for calculus and statistical topics in an application to the real-world, such as algebraic concepts and theories, expansion on functions, problems involving exponential and logarithmic functions, trigonometry, statistics and sequences. It meets the needs of students whose interest in mathematics is more practical than theoretical but yet seek challenging content. A graphing calculator is required for this class.

**The requirements of this course necessitate a two-year offering.*

| | | | |
|---------------------|---|------------------|--------------------------------|
| Course Title | IB Mathematics: Applications & Interpretation SL *YEAR 2 | Level(s) | International Baccalaureate |
| Credit/Length | 1.0/Year | Course Number(s) | 02960 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: IB Mathematics & Interpretation SL Year 1

This course is a continuation of IB Mathematics: Applications and Interpretation SL Year 1. The course caters to students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. This course will focus on topics that are needed to prepare students for calculus and statistic topics in an application to the real-world, such as algebraic concepts and theories, expansion on functions

and equations involving exponential and logarithmic equations, trigonometry, and the unit circle, statistics and sequences. It is intended to meet the needs of students whose interest in mathematics is more practical than theoretical but seek more challenging content. This course is the second year of the two-year course and will focus more on the Calculus and Statistic components in application to the real-world. A graphing calculator is required for this class.

** The requirements of this course necessitate a two-year offering.*

| | | | |
|---------------------|-------------------------------|------------------|--------------|
| Course Title | College Prep Algebra 2 | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 02312C |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Algebra 1 or Geometry

This course continues to develop concepts of Algebra 1 and Geometry with focus on developing concepts in a group setting. Teacher-led discussions, with constant repetition, is the method of teaching used in the course. It expands topics introduced in Algebra 1 and introduces more advanced algebra topics. A graphing calculator is recommended.

| | | | |
|---------------------|-------------------------------|------------------|--------------|
| Course Title | College Prep Algebra 2 | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 02312 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Algebra 1 or Geometry

This course continues to develop concepts of Algebra 1 and Geometry. It expands topics introduced in Algebra 1 and introduces more advanced algebra topics. A graphing calculator is recommended.

| | | | |
|---------------------|-------------------------|------------------|--------|
| Course Title | Honors Algebra 2 | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 02311 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Algebra 1 or Honors Geometry and a Proficient or Advanced score on the Algebra 1 Keystone exam

This course is an accelerated version of Algebra 2 for students who demonstrate exceptional ability in mathematics. It includes advanced topics in algebra. A graphing calculator is required.

| | | | |
|---------------------|---|------------------|----------|
| Course Title | Applied Financial Algebra <i>(formerly Applied Math Topics)</i> | Level(s) | Standard |
| Credit/Length | 1.0/Year | Course Number(s) | 02413 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

This course focuses on everyday consumer problems requiring application of mathematical skills. The primary objective is to develop competency in solving consumer problems through exploration, discussion, application, the use of algebra, and special projects. A focus on life math skills such as budgets, taxes, loans, mortgages, banking will be utilized in the special projects.

| | | | |
|---------------------|---|----------|--------------|
| Course Title | College Prep Financial Algebra <i>(formerly CP Math Topics)</i> | Level(s) | College Prep |
|---------------------|---|----------|--------------|

| | | | |
|---------------|-----------|------------------|---------|
| Credit/Length | 1.0/Year | Course Number(s) | 02412 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP Algebra 2 or CP Algebra 3/Trig

This course focuses on everyday consumer problems requiring application of mathematical skills. The primary objective is to develop competency in solving consumer problems through exploration, discussion, application, the use of algebra, and special projects. A focus on life math skills such as budgets, taxes, loans, mortgages, banking will be utilized in the special projects.

| | | | |
|---------------------|------------------------|------------------|--------------|
| Course Title | College Algebra | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 02442 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: CP Algebra 2 or CP Algebra 3/Trig

This course will focus on preparation for success on the college placement exams. The topics discussed in this course will go beyond high school math including matrices, probability and statistics (including permutations and combinations), right angle and non-right angle trigonometry, reciprocal trigonometric functions, sequences and series, logic, and set theory. Intertwined throughout the course will be regular practice of college placement assessments.

| | | | |
|---------------------|--|------------------|--------------|
| Course Title | College Prep Algebra 3/Trigonometry | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 02432 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: CP Algebra (02312) or CP ALGEBRA 2 (02312C)

This course takes the student through a thorough examination of fundamental algebraic operations, factoring, graphing, exponents, logarithms, linear equations, and inequalities and quadratic functions. Topics in trigonometry include applications of right and non-right triangles.

| | | | |
|---------------------|---------------------------------|------------------|--------------|
| Course Title | College Prep Precalculus | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 02552 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP Algebra 2 or CP Algebra 3/Trigonometry

This course reviews and expands upon topics from Algebra 2 and introduces and develops concepts of trigonometry. In addition, elementary topics of calculus are introduced. A graphing calculator is recommended.

| | | | |
|---------------------|---------------------------|------------------|--------|
| Course Title | Honors Precalculus | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 02541 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: H Algebra 2

This course is an accelerated and expanded version of Precalculus for students who demonstrate exceptional ability in mathematics and who plan to take either Honors Calculus or AP Calculus. Emphasis is placed on creating functions that model data sets, trigonometry including analytical

trigonometry, and introducing elementary concepts of calculus. A graphing calculator is required. *Summer assignment required.*

| | | | |
|---------------------|------------------------------|------------------|--------------|
| Course Title | College Prep Calculus | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 02532 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP or H Precalculus

This course introduces elementary topics of calculus including limits, continuity, curve sketching, differentiation, and integration. It is recommended for students who will need to take calculus in college. A graphing calculator is required.

| | | | |
|---------------------|------------------------|------------------|--------|
| Course Title | Honors Calculus | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 02521 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP or H Precalculus

This course introduces elementary topics of calculus including limits, continuity, curve sketching, differentiation, and integration. It is recommended for students who will need to take calculus in college. A graphing calculator is required. *Summer assignment required.*

| | | | |
|---------------------|-----------------------|------------------|--------------------|
| Course Title | AP Calculus AB | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 02510 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP or H Precalculus or H Calculus

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

Advanced Placement Calculus (AB) is a college level course designed for students with exceptional talent in mathematics. This course covers one semester of college calculus. Students in this course are expected to take the AB level AP Calculus examination. A graphing calculator is required. *Summer assignment required.*

| | | | |
|---------------------|-----------------------|------------------|--------------------|
| Course Title | AP Calculus BC | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 02520 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: AP Calculus AB or H Calculus with a 4 or a 5 on the AP Calculus AB Exam

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

Advanced Placement Calculus (BC) is a college level course designed for students with exceptional talent in mathematics. This course covers one semester of college calculus. Students in this course are expected to take the BC level AP Calculus examination. A graphing calculator is required.

| | | | |
|--|--------------------------------|------------------|--------------|
| Course Title | College Prep Statistics | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 02632 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: CP Algebra 2 | | | |
| This course will cover topics in statistics, probability and experimental design and will introduce topics related to inference and hypothesis testing. A graphing calculator is required. | | | |

| | | | |
|---|----------------------|------------------|--------------------|
| Course Title | AP Statistics | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 02610 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: CP or H Precalculus or H Calculus | | | |
| <u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This is a college level course intended for the student who shows exceptional aptitude and interest in statistics. Topics will cover a semester of college statistics. Students in this course are expected to take the AP Statistics exam. A graphing calculator is required. <i>Summer assignment required.</i> | | | |

| | | | |
|--|------------------------------|------------------|--------------------|
| Course Title | AP Computer Science A | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 02730 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| Prerequisite: Algebra 2 and Foundations of Programming (or passing score on District Programming Concepts Exam). | | | |
| <u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| The AP Computer Science A course is an introductory course in computer science. The course, which is designed to be the equivalent of a first-semester college-level course in computer science, emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. The course is built around the development of computer programs using the Java programming language. Students have the option of taking the AP Exam at the end of the course. | | | |

| Course Title | AP Computer Science Principles | Level(s) | Advanced Placement |
|---|---------------------------------------|------------------|--------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 02740 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| Prerequisite: Algebra 2 <u>and</u> one high school science class | | | |
| <u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This course is equivalent to a college level introductory course in computing. The course is built around fundamentals of computing including analysis of computing innovations, problem solving, working with data, un | | | |
| <i>This course complements AP Computer Science Principles; students can take these courses in either order.</i> | | | |
| derstanding the internet, cybersecurity and programming, and mobile app development. The AP assessment consists of two components: a multiple choice exam and a performance task for which students develop a working mobile app with a purpose. There are no computing prerequisites for this AP course. | | | |
| <i>This course complements AP Computer Science A; students can take these courses in either order.</i> | | | |

MATHEMATICS ELECTIVES

Math electives may not be selected in place of the required courses in the sequence of the Math curriculum.

| Course Title | Foundations of Programming (Python) | Level(s) | Dual Enrollment |
|---|--|------------------|-----------------|
| Credit/Length | .5/Semester | Course Number(s) | 02763 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This course introduces programming using the Python programming language. Students learn fundamental programming strategies and practices including developing algorithms that incorporate sequence, selection, and iteration (looping). Students learn to work with variables, data types, conditional statements, and predefined methods. Also covered are programming strategies to avoid errors, documenting code, common kinds of exceptions and causes, working with strings and lists, including using loops to iterate over strings and lists, using boolean expressions and conditional statements to control program flow, methods used to transform lists and strings, procedural abstraction with functions and parameters, and an introduction to object oriented programming, including classes, constructors, instance variables, and methods. | | | |
| Through interactive lessons and programming exercises, students gain basic programming skills and problem solving abilities. This course equips students with the foundational programming knowledge required to succeed in higher level programming activities and courses such as Game Design and AP Computer Science A. | | | |

| | | | |
|--|--------------------|------------------|----------|
| Course Title | Game Design | Level(s) | Standard |
| Credit/Length | 1.0/Year | Course Number(s) | 02753 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: Algebra I and Foundations of Programming (or passing score on District Programming Concepts Exam). | | | |
| Video Game Design teaches the foundations of computer science and programming through the development of video games. Students will combine many concepts of computer science to build several of their own games from scratch using JavaScript. | | | |

| | | | |
|--|-----------------------------|------------------|-----------|
| Course Title | SAT Math Preparation | Level(s) | No Weight |
| Credit/Length | 0/Semester | Course Number(s) | 028130 |
| Format(s) | Online | Open to Grade(s) | 10 - 12 |
| This course is repeatable for credit. | | | |
| This course provides an opportunity for students planning to take the SAT to refine their test-taking skills, focus on sample questions, and practice in the area of mathematics only. | | | |

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MUSIC EDUCATION

The main goal of the Music Education department is to offer a variety of performing opportunities to all students who sing and/or play an instrument. Courses are set up so that any student can be a member of up to two ensembles. All students are encouraged to participate regardless of their musical background.

* These courses have been endorsed by Kutztown University (band) and Houghton College (choir/orchestra) and have therefore been weighted at CP and Honors. Honors level courses in Band, Orchestra, and Choir have additional expectations/requirements.

Combined Ensembles: Students may alternate between any two ensembles by indicating this preference to their teacher during course requests. Students will earn 0.5 credit for each course.

| | | | |
|--|---------------------|------------------|----------|
| Course Title | Music Theory | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 11115 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| This course is open to any high school student who would like to learn more about the basic elements of music including: musical notation, keys, harmony, chords, and part writing. Previous musical training on an instrument or voice is helpful but not required. | | | |

| | | | |
|---------------------|------------------------|------------------|--------------------|
| Course Title | AP Music Theory | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 11125 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

AP Music Theory is an advanced course of music theory intended for students who wish to study music formally at the collegiate level. Students must have completed the semester-long Music Theory elective and must have obtained written approval from the instructor. In order to be pre-approved, students MUST demonstrate a certain level of prior music knowledge as determined by the instructor. The course outline will adhere to the strict tenets of the AP Course Guidelines. Students who complete this course are encouraged to take the AP Music Theory Exam.

| Course Title | Music History | Level(s) | Standard |
|---------------------|----------------------|------------------|----------|
| Credit/Length | .5/Semester | Course Number(s) | 11135 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

AP Music Theory is an advanced course of music theory intended for students who wish to study music formally at the collegiate level. Students must have completed the semester-long Music Theory elective and must have obtained written approval from the instructor. In order to be pre-approved, students MUST demonstrate a certain level of prior music knowledge as determined by the instructor. The course outline will adhere to the strict tenets of the AP Course Guidelines. Students who complete this course are encouraged to take the AP Music Theory Exam.

| Course Title | Band | Level(s) | College Prep*, Honors* |
|---------------------|-------------|------------------|------------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 11212, 11211 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course is repeatable for credit.

The OJR band is open to all students with a sufficient degree of proficiency on a band instrument. A thorough variety of performances and training will be offered to those students who demonstrate adequate ability. Attention will be paid to the development of a sense of musicality as well as the evaluation of performance. Major activities include marching band from September through November and concert band from November through June.

| Course Title | Orchestra | Level(s) | College Prep*, Honors* |
|---------------------|------------------|------------------|------------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 11312, 11311 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course is repeatable for credit.

This course is open to all students with a sufficient ability to play the violin, viola, cello, or bass. Musicality and self-evaluation of performance are highly stressed. A wide variety of performing opportunities is offered at several concerts during the school year.

| | | | |
|---------------------|--------------|------------------|------------------------|
| Course Title | Choir | Level(s) | College Prep*, Honors* |
| Credit/Length | 1.0/Year | Course Number(s) | 11432, 11431 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: A willingness to sing. Successful student audition (if the student has not previously participated in Chorus).

This course is repeatable for credit.

Choir provides the student singer an opportunity to rehearse and perform appropriate choral music for two major concerts, with additional community appearances. The choral literature includes various styles and arrangements of three-part through eight-part pieces, for voices in categories of soprano, alto, tenor, and bass. All students sing in the voice part which is chosen for them based upon their audition. Grade level does not affect placement. Student grades are based upon their personal progress in music theory (demonstrated through written and singing assessments), their organization while learning the repertoire, their demonstration of singing the repertoire (practice videos), and on their singing participation in daily classes. Additional small ensemble opportunities are available after school on an auditioned basis. Participation in an after-school group, while providing enrichment, does not affect a chorus student's grade.

| | | | |
|---------------------|----------------------|------------------|------------------|
| Course Title | Chamber Choir | Level(s) | Honors (pending) |
| Credit/Length | 1.0/Year | Course Number(s) | 11451 |
| Format(s) | Music Contract | Open to Grade(s) | 9 - 12 |

Prerequisite: Teacher recommendation

This course is repeatable for credit.

Music Contract gives instrumentalists and vocalists an opportunity to develop and enhance their musical skills and interests in a small group setting. Members of OJRHS performing, instrumental or vocal ensembles are encouraged to elect this class. It offers the student the opportunity to explore subjects that fall into two categories:

- Instrumental Music Contract: This option is recommended for all instrumental ensemble members. It is designed for students who wish to improve their technical and musical skills. This will be accomplished through sectional or small group work and/or independent study
- Vocal Music Contract: This option is recommended for all choral ensemble members. It is designed for students who wish to improve or learn proper vocal technique and musical skills. This will be accomplished through small group instruction and/or independent study.

| | | | |
|---------------------|-----------------------|------------------|----------------|
| Course Title | Music Contract | Level(s) | College Prep* |
| Credit/Length | 1.0/Year .5/Year | Course Number(s) | 11952 11953 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Teacher recommendation

This course is repeatable for credit.

Music Contract gives instrumentalists and vocalists an opportunity to develop and enhance their musical skills and interests in a small group setting. Members of OJRHS performing, instrumental or vocal ensembles are encouraged to elect this class. It offers the student the opportunity to explore subjects that fall into two categories:

- Instrumental Music Contract: This option is recommended for all instrumental ensemble members. It is designed for students who wish to improve their technical and musical skills. This will be accomplished through sectional or small group work and/or independent study
- Vocal Music Contract: This option is recommended for all choral ensemble members. It is designed for students who wish to improve or learn proper vocal technique and musical skills. This will be accomplished through small group instruction and/or independent study.

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NAVAL SCIENCE (NJROTC)

The NJROTC program provides students with the opportunity to learn about government, national security, and good citizenship. It promotes habits of orderliness, self-discipline, and personal responsibility while developing a high degree of personal honor, self-reliance, teamwork and leadership. There is no requirement to join the military and over 95% of students do not enter military service after graduation. However, participation in NJROTC enhances a student's chances to earn ROTC scholarships and appointments to the Military Academies, and provides for enlistment at a higher pay grade if military service is chosen. Students may begin the program at any point in their high school career. Every year students may elect to take NJROTC.

Home schooled students or students without availability in their schedule, may enroll in the NJROTC independent study and extracurricular program (Period 9). For period 9 students to be eligible to fully participate in all NJROTC activities, the equivalent of the one day a cycle program must be completed. While not receiving academic credit, period 9 students receive all program benefits including post graduation scholarship and early military advancement.

| Course Title | CP Naval Science | Level(s) | CP |
|---------------------|-------------------------|------------------|----------------|
| Credit/Length | 1.0/Year .5/Year | Course Number(s) | 16500 16051 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This course is repeatable for credit.

Naval Science introduces students to the meaning of citizenship, the elements of leadership and management, the value of scholarship in attaining life goals, and engenders a sound appreciation for the heritage and traditions of America. During the four year program, students will study:

maritime geography, navigation, maritime history, the interrelationship of sea power with national security, military justice, international law, naval ships and weaponry, meteorology, small boat seamanship, and an introduction to survival training. The importance of service to others will be consistently reinforced with annual volunteer and/or program service requirements.

During their first year students will focus on habits of orderliness, self-discipline and personal responsibility while developing a high degree of personal honor, self-reliance and teamwork. Academically they will focus on military and naval customs and traditions. Students will have the opportunity to take field trips, learn to drill, be involved in community activities and to participate in a variety of extracurricular activities.

In their second year, Naval Science students will continue to develop their traits of citizenship, leadership, responsibility and self-discipline while furthering an appreciation for their country. This year includes an introduction to leadership and management.

Third year naval science students continue to develop leadership and management skills and assume mid level leadership positions while continuing through the naval science curriculum.

| Course Title | Honors Naval Science | Level(s) | Honors |
|---------------------|-----------------------------|------------------|----------------|
| Credit/Length | 1.0/Year .5/Year | Course Number(s) | 16050 16051 |
| Format(s) | In Person | Open to Grade(s) | 10-12 |

Prerequisite: CP Naval Science via teacher recommendation

This course is repeatable for credit.

During year four, naval science students develop leadership traits with a more in-depth study of management principles and practices including the study of human motivation, group dynamics, effective communication, and leadership authority and moral responsibility. The course is oriented toward individual study with the students gaining leadership experience by assuming class leadership positions.

Naval Science honors provides the opportunity for students to earn pre-college military leadership credit from an NROTC preparatory partner university. Naval Science honors continues to develop students' leadership with a more in-depth study of leadership, including the study of human motivation, group dynamics, effective communication and leader authority and moral responsibility.

The honors level course has the following additional requirements: attain rank of Petty Officer 1st class or higher, organize, manage and lead volunteer service and NJROTC program events throughout the year and successfully execute a program wide leadership position.

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SCIENCE

The science department provides all students with a background in the earth, biological and physical sciences. Students interested in pursuing a career in the field of science will be given the opportunity to explore in greater depth scientific concepts in specialized areas. 3.0 credits of science are required for graduation. It is recommended that college bound students take four years of science.

The typical sequence of courses that Owen J. Roberts High School students select is presented in the chart linked below. The chart is divided into instructional levels and is intended to give an overview of the required courses from which students can choose. It is only a guide to assist students and families in the registration process. A student's course selections are not limited to the sequences shown. Each student should consult his/her teachers, school counselor, and families to determine the appropriate courses and sequence that best supports his/her academic and career goals. The academic levels – Advanced Placement/International Baccalaureate/Dual Enrollment (AP/IB/DE), Honors (H), College Prep (CP) and Standard (ST) - indicate the general level of instruction of the courses.

Science Course Sequence Chart

| Course Title | College Prep Earth Science | Level(s) | College Prep |
|---------------|----------------------------|------------------|--------------|
| Credit/Length | 1.0/Year | Course Number(s) | 04222C |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

This co-taught course is the introductory 9th grade, general science course designed to give students learning experiences within the physical, life and earth and space sciences and an opportunity to acquire knowledge, appreciation and understanding of the earth, its atmosphere, biologic processes and the natural universe. It is an interdisciplinary course with content that focuses on: the nature of science, astronomy, meteorology, major earth and biologic processes within the natural world. Emphasis is placed on using problem solving techniques to explore the human relationship with the physical and biological nature of the earth and the environment in which we live through observation, experimentation, performance, and study. This course is the first step in preparing students for the Biology Keystone Exam through the chemistry and ecology unit. Students will work in teams to design and construct models to either represent or test scientific concepts. Students will apply the concepts they learn to real-life situations and solve problems. Finally, students will study several life science topics, including ecology and the environment, in preparation for the Biology Keystone Exam.

| | | | |
|---------------------|-----------------------------------|------------------|--------------|
| Course Title | College Prep Earth Science | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04222 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: 8th grade Physical Science or Honors Science

The Earth Science course is designed to give students an opportunity to acquire knowledge, appreciation and understanding of the Earth and the greater universe. Earth Science is an interdisciplinary course with content that focuses on the nature of science, astronomy, meteorology, geology, and ecology. Emphasis is placed on using problem solving techniques to explore our relationship with the earth and the environment in which we live through observation, experimentation, performance, and study. This course is the first step in preparing students for the Biology Keystone Exam through the chemistry and ecology unit.

| | | | |
|---------------------|-----------------------------|------------------|--------|
| Course Title | Honors Earth Science | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 04211 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: 8th grade Honors Physical Science or Physical Science

This is an honors level course designed to be a rigorous form of the college prep course. It is geared for students interested in an intellectual challenge and who possess a willingness to perform quality work. The earth science topics are studied in greater depth. This class would be useful for those interested in pursuing a science career. This course is the first step in preparing students for the Biology Keystone Exam through chemistry and ecology units.

| | | | |
|---------------------|-----------------------------|------------------|--------------|
| Course Title | College Prep Biology | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04332C |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP or H Earth Science and one year of high school math

This co-taught course focuses on building a foundational understanding of biological concepts and examines practical implications in life sciences. Major areas of study include the cell and cellular activity, basic and organic chemistry, bioenergetics, genetics, molecular biology, and evolution. A "hands-on" approach with laboratory activities serves to reinforce learning experiences.

| | | | |
|---------------------|-----------------------------|------------------|--------------|
| Course Title | College Prep Biology | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04332 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP or H Earth Science

This biology course focuses on building a foundational understanding of biological concepts and examines practical implications in life sciences. Major fields of study include the cell and cellular activities, organic chemistry, bioenergetics, evolution, genetics and molecular biology. An integrated approach with laboratory activities serves to reinforce learning experiences.

| | | | |
|--|-----------------------|------------------|--------|
| Course Title | Honors Biology | Level(s) | Honors |
| Credit/Length | 04321 | Course Number(s) | 04321 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: Rising 10th graders: Completion/concurrent enrollment in H Earth Science and H Algebra 2 | | | |
| Rising 9th graders: Completion/concurrent enrollment in H Algebra 2 and 8th grade science teacher recommendation | | | |
| This course is designed for students who plan to pursue a science career. Activities are of a more demanding nature than those of College Prep Biology. General biological principles are addressed with the expectation of independent study on topics covered in class. Fields of study include cell biology, cell chemistry, bioenergetics, molecular biology, adaptation and change, and genetics. | | | |

| | | | |
|--|-------------------|------------------|--------------------|
| Course Title | AP Biology | Level(s) | Advanced Placement |
| Credit/Length | 1.25/Year | Course Number(s) | 04310 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: Biology <u>and</u> CP or H Chemistry | | | |
| <u>Dual Enrollment</u> :3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This Advanced Placement course is designed for college bound students. It will represent a college freshman course, emphasizing laboratory and study skills required in college. Topics of study will include anatomy, botany, cell biology, ecology, evolution and development, DNA, genetics and physiology. Students in this course are expected to take the AP Biology exam. | | | |

| | | | |
|--|---------------------------|------------------|--------------|
| Course Title | Academic Chemistry | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04452 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: Two years of high school science <u>and</u> completion/concurrent enrollment in Algebra 2 | | | |
| Students will study the basic structures and properties of matter in this course. Although some algebra is used, the heaviest emphasis is placed on a conceptual understanding. Regular lab activities will reinforce the concepts covered in class. Whenever possible, chemistry is related to students' everyday lives. This course is designed to give an overview of chemistry and will not adequately prepare students for future careers in math, engineering or medicine. | | | |

| | | | |
|--|--|------------------|--------------|
| Course Title | Fundamentals of Chemistry & Physics | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04462 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: Successful completion of two years of high school math | | | |

This course is designed to meet the needs of students who will be entering trade school or the workforce immediately upon graduation. The approach will be an interdisciplinary introduction to both chemistry and physics with a focus on real world application. The first semester students will focus on introductory chemistry including the study of elements, compounds and their interactions. In the second semester, students will study introductory physics including mechanics, light, and electricity. It is not available to students who have successfully completed any level of Chemistry or Physics.

| | | | |
|---------------------|-------------------------------|------------------|--------------|
| Course Title | College Prep Chemistry | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04442 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Algebra 2 or Algebra 3 and CP Biology or Physical Science

This course is primarily intended for students who are college-bound interested in non-science majors. A laboratory approach is used to study the composition and properties of matter and the changes that matter undergoes. Additional topics include elements, compounds, the structure of the atom, chemical formulas, chemical reactions and equations, the mole, basic thermodynamics, gasses, and solutions. Students must be willing to make a daily commitment of study outside of class.

| | | | |
|---------------------|-------------------------|------------------|---------|
| Course Title | Honors Chemistry | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 04431 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: CP or H Biology and H Algebra 2 or concurrent enrollment in Calculus

This course is designed for the college-bound student who is currently interested in pursuing a career in science, engineering or math. The course is rigorous, dealing with an in-depth, theoretical approach to the field of chemistry utilizing complex problem solving. The course utilizes laboratory activities to complement course material and is designed to prepare students for Advanced Placement Chemistry. Students must be willing to make a daily commitment of intense study outside of class.

| | | | |
|---------------------|---------------------|------------------|---------|
| Course Title | AP Chemistry | Level(s) | 11 - 12 |
| Credit/Length | 1.25 | Course Number(s) | 04410 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H Chemistry and completion/concurrent enrollment in Precalculus

Dual Enrollment: 6 credits via Immaculata University contingent upon yearly instructor approval.

This is a rigorous Advanced Placement course designed to represent a freshman college chemistry course that would be taken by science, pre-medicine or engineering majors. The

student is expected to spend several hours each cycle outside of class studying chemistry. Topics covered include quantitative analysis, complex stoichiometry, atomic and molecular structure, chemical reactions, aqueous equilibria, kinetics, thermodynamics, electrochemistry, and solutions. Students in this course are expected to take the AP Chemistry exam.

| | | | |
|---------------------|-----------------------------|------------------|--------------|
| Course Title | College Prep Physics | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04732 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: Completion/concurrent enrollment in Precalculus or completion of CP Physical Science

This course is designed for college bound students. The course stresses the use of mathematics in physical situations presented in the fields of mechanics, magnetism, light, sound, electricity, and atomic and nuclear physics. A laboratory session is used to enrich the topics covered in class. This course may use computerized assessments.

| | | | |
|---------------------|-----------------------|------------------|---------|
| Course Title | Honors Physics | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 04741 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H Chemistry and completion of Precalculus

This is a fast-paced course designed to introduce students to algebra based, college level physics. Topics of study include mechanics, electricity & magnetism, thermodynamics, waves and nuclear physics. A laboratory component will complement the course for students to develop their conceptual and analytical thinking skills.

| | | | |
|---------------------|---------------------|------------------|--------------------|
| Course Title | AP Physics 1 | Level(s) | Advanced Placement |
| Credit/Length | 1.25/Year | Course Number(s) | 04730 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H Chemistry and completion of Precalculus

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This is a rigorous, in-depth Advanced Placement course that is designed to represent one semester of algebra-based college level physics. A laboratory session will bring hands-on activities to a number of subjects covered. Topics of study include kinematics (motion), dynamics (forces), circular motion, simple harmonic motion, momentum, work/energy, rotational motion, electrostatics, DC circuits, mechanical waves and sound. This course may use computerized assessments.

| | | | |
|---------------------|--------------------------------|------------------|--------------------|
| Course Title | AP Physics C: Mechanics | Level(s) | Advanced Placement |
| Credit/Length | 1.25/Year | Course Number(s) | 04745 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: Completion of Chemistry, completion or concurrent enrollment in Calculus

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

Mechanics, a calculus-based course especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. Students will spend a minimum of 25% of instructional time engaged in hands-on laboratory work with an emphasis on inquiry-based investigations that provide students with opportunities to demonstrate the foundational physics principles and apply the science practices.

| | | | |
|---------------------|--|------------------|--------------------|
| Course Title | AP Physics C: Electricity & Magnetism | Level(s) | Advanced Placement |
| Credit/Length | 1.25/Year | Course Number(s) | 04750 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: Completion/concurrent enrollment in AP Physics 1 or AP Physics C: Mechanics and completion/concurrent enrollment in Calculus

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

Electricity and Magnetism is a calculus-based physics course, especially appropriate for students planning to specialize or major in a physical science or engineering field. The course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course. Students will spend a minimum of 25% of instructional time engaged in hands-on laboratory work with an emphasis on inquiry-based investigations that provide students with opportunities to demonstrate the foundational physics principles and apply the science practices.

| | | | |
|---------------------|---------------------------------|------------------|--------------------|
| Course Title | AP Environmental Science | Level(s) | Advanced Placement |
| Credit/Length | 1.25/Year | Course Number(s) | 04850 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H Chemistry or CP or H Earth Science and CP or H Biology

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

The AP Environmental Science Course is the equivalent of a 3-credit college course in environmental science. This course will provide students with the scientific concepts and principles to understand the relationships between the natural and human made world, to identify and analyze environmental problems, to understand and analyze risks associated with these problems and to examine and develop solutions to these problems. Topics of AP Environmental Science include: earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution and global environmental issues. Upon completion of the AP Environmental Science course, a student should be prepared to do well on the AP Environmental Science exam potentially earning college credits. *In addition to the daily class period, this class has a hybrid lab period rather than an in-person double lab period, which means students will be responsible for completing coursework outside of class each week.*

Because of the additional time required, this AP course carries weighted credit to reflect the extra effort and rigor expected.

SCIENCE ELECTIVES

Science electives may be taken concurrently with another science but may not be substituted for one of the three science credits which are required for graduation

| Course Title | Human Anatomy & Physiology | Level(s) | Honors |
|---|---------------------------------------|------------------|---------|
| Credit/Length | 1.0/Year | Course Number(s) | 04841 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: Biology <u>and</u> Chemistry or Physical Science | | | |
| This rigorous course is designed for students interested in pursuing a career in the field of biology, nursing, physical therapy, medicine, med-tech and other related fields. The course uses an integrated approach that includes dissections that serve to compare the structure and function of the human body. Labs complement subject areas covered in class. | | | |

| Course Title | Biotechnology | Level(s) | College Prep or Honors |
|--|----------------------|------------------|--|
| Credit/Length | 1.0/Year | Course Number(s) | 04352 (College Prep) 04351 (Honors) |
| Format(s) | In Person | Open to Grade(s) | 10 -12 |
| Prerequisite: CP or H Biology | | | |
| Biotechnology is a course designed to provide students with a basic understanding of knowledge, concepts, and scientific techniques associated with development and improvement of using living organisms and their by-products for commercial development. In one semester students will study agricultural applications of biotechnology linked to plants, animals and food production. Topics in this semester will include genetically modified crops, integrated pest management, selective breeding and production, plant and livestock breeding techniques, and food safety, processing and regulations. In the other semester students will study medical and research applications of biotechnology. Topics in this semester will include recombinant DNA technology and genomics, forensic biology, biomedical engineering, antibiotics, natural products chemistry and environmental applications | | | |

| | | | |
|---------------------|--|------------------|---------|
| Course Title | Ecology: Temperate & Tropical Systems | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 04361H |
| Format(s) | Hybrid | Open to Grade(s) | 10 - 12 |

Prerequisite: CP or H Biology

This course provides students with an opportunity to learn more about organisms in temperate and tropical ecosystems and examine their ecological interactions. Students should plan to conduct 3-4 hours of online work per week in addition to participation in several required field-based experiences. Students will learn about the evolution and adaptation of plants focusing on temperate ecosystems in the first marking period. During this time, they will be asked to find and identify key evolutionary plants in their own backyard or neighborhood. In the second marking period, students learn about tropical plants and rain forest ecology, secondary metabolites in plants, their medicinal use, and the impact of agriculture on rainforest diversity. The third marking period focuses on the ecological and evolutionary advances of animals, population ecology, food webs, and wildlife forensics. The fourth marking period covers aquatic ecology topics, including river systems, estuaries, mangrove forests, tropical reefs, and coral bleaching. Throughout the year, field-based labs will be offered allowing students to visit and learn about ecology in places such as Crow's Nest, Hawk Mountain, Holt Education Center, and participate in local stream or ephemeral studies. Capstone experiences may include a trip to Costa Rica and or the Chincoteague Bay Field Station or an investigation of an ecological study of your choice. Trips may incur a cost, however low price and or free options are always available. All trip offerings are subject to change due to enrollment, site availability, or transportation conflicts.

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|---------------------|-----------------|------------------|-----------------|
| Course Title | Genetics | Level(s) | Dual Enrollment |
| Credit/Length | 1.0/Year | Course Number(s) | 04371 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: CP or H Biology

Dual Enrollment: 3 credits via Delaware Valley University contingent upon yearly instructor approval.

This course is designed for academically advanced students who desire a challenge through rigorous college level content with age-appropriate lessons and reinforcement including laboratory and classroom activities. Grades are based mostly on assessments. Three main branches of genetics (molecular biology, transmission genetics and population genetics) will be examined. After first reviewing the structure and function of DNA, a PCR amplification will be performed. Students will then sequence their own mitochondrial DNA and examine their regional ancestry using bioinformatics. Students will study the structure and function of chromosomes, including mitosis and meiosis. Additionally, they will also apply these concepts through in vitro fertilization using sea urchins. Students will learn about the history of the human genome and examine a region of their own DNA that links to common ancestors from 50,000 years ago. In the genetic engineering unit, students will investigate and report findings on the impact of GMO's and create genetically engineered bacteria for a living art project.

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|---------------------|--------------------------------|------------------|--------------|
| Course Title | Foundations of Genetics | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 04372 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: CP or H Biology

This course will provide students with a background of the three main branches of genetics: molecular biology, transmission genetics, and population genetics. Students will be exposed to college level content but will also receive opportunities for graded classroom work and differentiated assessments. After first reviewing the structure and function of DNA, a PCR amplification will be performed. Students will then sequence their own mitochondrial DNA and examine their regional ancestry using bioinformatics. Students will study the structure and function of chromosomes, including mitosis and meiosis. Additionally, they will also apply these concepts through in vitro fertilization using sea urchins. Students will learn about the history of the human genome and examine a region of their own DNA that links to common ancestors from 50,000 years ago. In the genetic engineering unit, students will investigate and report findings on the impact of GMO's and create genetically engineered bacteria for a living art project.

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|---------------------|-----------------------------------|------------------|----------|
| Course Title | Introduction to Beekeeping | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 04353 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

The care and management of honey bees is an especially important practice in today's world, as growing dangers threaten honey bees throughout the world. This course will discuss many of these dangers. Students will learn about bee biology and behavior, year round hive management, bee diseases and pests, swarming behavior, the equipment beekeepers utilize, bee products including honey, and many more topics.

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|---------------------|--------------------------------------|------------------|----------|
| Course Title | Science of the National Parks | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 048840 |
| Format(s) | Online | Open to Grade(s) | 9 - 12 |

This course offers an exploration of the science behind natural parks, with a focus on the ecological, geological, and environmental principles that define these unique and varied landscapes. Students will explore the establishment of the park system and then dive into different parks to examine the biodiversity, natural resources, and geological formations within those parks. Topics include ecosystem interactions, geologic formations and history, the impact of people on the parks, species preservation, and sustainable park management.

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|---------------------|------------------|----------|----------|
| Course Title | Astronomy | Level(s) | Standard |
|---------------------|------------------|----------|----------|

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|--|-------------|------------------|--------|
| Credit/Length | .5/Semester | Course Number(s) | 04812 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Astronomy is a one semester course designed to provide students with knowledge about the universe and our place in it. Topics to be covered include our solar system, the sun-earth-moon system, the sun and planets, electromagnetic spectrum and light, properties of stars, and stellar evolution and galaxies. | | | |

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|---|---------------------------|------------------|----------|
| Course Title | Advanced Astronomy | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 04863 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: Completion/concurrent enrollment in Algebra 2 | | | |
| This course is an advanced astronomy course in which students will investigate our wider universe. Using the fundamental physical laws of science, this course will involve both a quantitative and qualitative approach towards a variety of astronomical topics. Some of the topics to be explored are: the laws of gravity, planetary motion, stellar evolution (supernovae, pulsars, black holes), the origin and evolution of the universe, Einstein's theories of Special and General Relativity, exoplanet research, and the search for extraterrestrial life. | | | |

| | | | |
|--|---------------------|------------------|----------|
| Course Title | Oceanography | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 04842 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Because 71% of the Earth's surface is beneath the oceans, this course examines the Earth's dynamic oceans and the interactions that occur at various depths. This course will focus on many of the processes found within the oceans to help the student develop a better understanding of how our oceans work. A few topics that students will explore are the formation of the oceans, plate tectonics and the ocean floor, marine provinces, waves and water dynamics, and Beaches and shoreline processes. | | | |

| | | | |
|--|------------------|------------------|----------|
| Course Title | Forensics | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 04873 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| Prerequisite: Completion/concurrent enrollment in Biology <u>and</u> completion/concurrent enrollment in Geometry | | | |
| Forensic Science is the application of science (basics within chemistry, physics, and biology) to the criminal and civil laws that are enforced by police agencies in a criminal justice system. It includes the investigation of fingerprinting, fiber analysis, ballistics, trace evidence analysis, blood spatters, and blood samples. Students are taught the proper collection, preservation, and laboratory analysis of various samples. | | | |

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|---------------------|--------------------------|------------------|----------|
| Course Title | Natural Disasters | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 048830 |
| Format(s) | Online | Open to Grade(s) | 9 - 12 |

Natural Disasters deals with the analysis of violent catastrophic phenomena that constantly occur in different parts of our planet Earth; special attention is given to understand how they affect human activities. It is designed to give an overview of the fundamental Earth Science processes triggering natural disasters; including, internal and external processes involved in producing these natural hazards. Current environmental issues such as threats to the world's human population and biodiversity and the cyclic recurrence of some of these disasters will be discussed. Natural disasters include earthquakes, tsunamis, volcanoes, floods, landslides, hurricanes, tornadoes, wildfires, climate change, and impacts of extraterrestrial objects

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SOCIAL STUDIES

The course offerings in Social Studies reflect a range of human history, society and development. For graduation, students must successfully complete 1.0 credit in Western Civilization, 1.0 credit in American History, and 1.0 credit in Government.

The typical sequence of courses that Owen J. Roberts High School students select is presented in the chart linked below. The chart is divided into instructional levels and is intended to give an overview of the required courses from which students can choose. It is only a guide to assist students and families in the registration process. A student's course selections are not limited to the sequences shown. Each student should consult his/her teachers, school counselor, and families to determine the appropriate courses and sequence that best supports his/her academic and career goals. The academic levels – Advanced Placement/International Baccalaureate/Dual Enrollment (AP/IB/DE), Honors (H), College Prep (CP) and Standard (ST) - indicate the general level of instruction of the courses.

Social Studies Course Sequence Chart

| | | | |
|---------------------|---------------------------|----------|------------------------|
| Course Title | History of Western | Level(s) | Standard, College Prep |
|---------------------|---------------------------|----------|------------------------|

| | | | |
|---------------|---------------------|------------------|--------------------|
| | Civilization | | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 03133, 03122, 0311 |
| Format(s) | In Person | Open to Grade(s) | 9 |

Prerequisite: 8th grade Social Studies

The History of Western Civilization is an overview of the development of our civilization from the Medieval world and the Renaissance to the origins of World War II. This course equips students to understand the major political, religious, artistic, and philosophical ideas that predominate in today's world. The focus is on major turning points and breakthrough ideas; the course moves swiftly from the Middle Ages and Renaissance and then on to the modern world. The course encourages students to wrestle with the unresolved problems of Western Civilization in order to better understand the world they will inherit tomorrow.

| | | | |
|---------------------|-------------------------|------------------|--------------------|
| Course Title | AP World History | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 03110 |
| Format(s) | In Person | In Person | 9 |

Prerequisite: 8th grade Honors Social Studies

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

The Advanced Placement World History: Modern (WHAP) is a challenging full year course that explores the year 1200 to the present day. WHAP is considered the equivalent of a semester college survey course in Modern World history (equal three credits). In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. Students in this course are expected to take the Advanced Placement examination in May.

| | | | |
|---------------------|---|------------------|--------------------------------|
| Course Title | 20th Century American History | Level(s) | Standard, College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 03233, 03222, 03211 |
| Format(s) | In Person | Open to Grade(s) | 10 |

Prerequisite: ST, CP or H Western Civilization

20th Century American History will examine the major themes in American history from the advent of American imperialism in the late 19th century to the modern day. Areas of emphasis will be American economic policy, significant cultural changes, as well as crucial domestic and foreign events throughout the 20th century. Highlights will include American imperialism, the World Wars, the Cold War, the Civil Rights movement, as well as other significant events that helped to mold our 21st century world.

| | | | |
|---------------------|---------------------------------|------------------|--------------------|
| Course Title | AP United States History | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 03200 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: CP, H or AP Social Studies

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This Advanced Placement course is a college level introduction to United States history from the pre-Columbian world of 1491 to the present day. This course is demanding in the areas of discussion, writing, critical thinking, and academic independence considerably beyond honors level courses. Students in this course are expected to take the Advanced Placement examination in May.

| | | | |
|---------------------|----------------------------------|------------------|--------------------------------|
| Course Title | U.S. Government/Economics | Level(s) | Standard, College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 03333, 03322, 03311 |
| Format(s) | In Person | Open to Grade(s) | 11 |

Prerequisite: ST, CP or H 20th Century American History or AP US History

This course is divided into two major areas of focus. The first semester will focus on American government with an emphasis in understanding origins and principles of government, the Constitution, the power and levels of government, judicial issues, and the role of the citizen. The second semester will focus on economics, the role of the consumer, the role of business and the role of government. This course will also focus on uncovering the basic principles of the United States' government and economic systems. Emphasis is placed on understanding the impact the government and economics has on student lives today. Students are asked to identify, research, interpret, and analyze key events and principles while making comparisons and applications to their own personal experiences.

| | | | |
|---------------------|--|------------------|--------------------|
| Course Title | AP Government & Politics: United States | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 03410 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP, H or AP Social Studies

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This Advanced Placement course explores the American political system in its entirety. Students in this class will examine and analyze all of the complexities and features of the American federal system from the broad ideas of the Constitution and the Bill of Rights to focused, intense study on specific policy initiatives and bureaucratic theory. The class will also explore the American public and how we, as Americans, develop our political values and are affected by the media and political policies. This course is extremely demanding in the areas of discussion, writing, critical thinking and academic independence and requires extensive reading. Its scope is considerably beyond honors level coursework. Students in this course are expected to take the Advanced Placement examination in May.

| | | | |
|---------------------|--|------------------|--------------------|
| Course Title | AP Government & Politics: Comparative | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 03430 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP, H or AP Social Studies

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This Advanced Placement course explores the governments of the United States, Britain, Russia, China, Mexico, Iran and Nigeria during the course of the year. Not only will these government systems be analyzed individually, but the class will also cover the issues of globalization and democratization as points of comparison between the various nations. Social, political, military, economic and historical issues will all be studied and analyzed along with pertinent current events. This course is demanding in the areas of discussion, writing, critical thinking, and academic independence considerably beyond honors level courses. Extensive reading and writing are required to be successful in this course. Students in this course are expected to take the Advanced Placement examination in May.

SOCIAL STUDIES ELECTIVES

Science electives may be taken concurrently with another social studies course but may not be substituted for one of the three social studies credits which are required for graduation

| | | | |
|---------------------|---------------------------|------------------|--------------------|
| Course Title | AP Human Geography | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 03660 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP, H or AP Social Studies

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This rigorous course engages students in the intricate complexities of human society and its spatial dimensions while also delving into topics such as population dynamics, cultural patterns, political organization, economic systems, and urban development. Students will explore these themes through a geographic lens, employing critical thinking skills to analyze spatial data, interpret maps, and assess global case studies. By the end of the course, students will not only be prepared for the AP Human Geography exam but will also gain a nuanced understanding of the interconnectedness of human societies and the physical world, equipping them with the knowledge to be informed and responsible global citizens.

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|---------------------|----------------------------|----------|--------------------|
| Course Title | AP European History | Level(s) | Advanced Placement |
|---------------------|----------------------------|----------|--------------------|

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|---------------|----------|------------------|---------|
| Credit/Length | 1.0/Year | Course Number(s) | 03600 |
| Format(s) | Online | Open to Grade(s) | 11 - 12 |

Prerequisite: CP, H or AP Social Studies

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

In addition to providing a basic narrative of events, movements, and cause and effect relationships, this course will develop an understanding of some of the principal themes in European history. Students will be expected to analyze historical evidence and express historical understanding through writing. Themes include intellectual, cultural, political, diplomatic, social and economic history. This online asynchronous course requires extensive reading. Students in this course are expected to take the Advanced Placement examination in May.

| Course Title | AP Micro and Macro Economics | Level(s) | Advanced Placement |
|---------------|------------------------------|------------------|--------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 03530 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP, H or AP Social Studies

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This Advanced Placement course gives students a thorough understanding of economic principles that apply to the economic system as a whole. It emphasizes the study of national income and price determination and develops familiarity with performance measures, growth and international economics. At the microeconomic level it explores the economic principles that apply to the industry level. Concepts covered include; basic economic concepts, supply and demand in relation to product markets, factor markets and income determination and the government's role in the economy. Students in this course are expected to take the Advanced Placement examination in May.

| Course Title | AP Psychology | Level(s) | Advanced Placement |
|---------------|---------------|------------------|--------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 03610 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H Biology and CP or H Social Studies. Psychology elective (course 03645) is STRONGLY recommended.

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

This course is designed to provide students with a comprehensive overview of psychology. Students will explore the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students will evaluate the psychological facts, principles and phenomena associated with each of the major subfields within psychology. Students in this course are expected to take the Advanced Placement examination in May.

| Course Title | IB Philosophy | Level(s) | International Baccalaureate |
|--------------|---------------|----------|-----------------------------|
|--------------|---------------|----------|-----------------------------|

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|---------------|-----------|------------------|---------|
| Credit/Length | 1.0/Year | Course Number(s) | 03920 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: ST, CP or H Western Civilization or AP World History

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval.

Philosophy is a systematic critical inquiry into profound, fascinating and challenging questions such as: What is it to be human? Do we have free will? What do we mean when we say something is right or wrong? These abstract questions arise out of our everyday experiences, and philosophical tools such as critical and systematic thinking, careful analysis, and construction of arguments provide the means of addressing such questions. The course is focused on stimulating students' intellectual curiosity and encouraging them to examine both their own perspectives and those of others. Students are challenged to develop their own philosophical voice and to grow into independent thinkers, in addition to engaging with some of the world's most interesting and influential thinkers. The course also develops highly transferable skills such as the ability to formulate arguments clearly, to make reasoned judgments and to evaluate highly complex and multifaceted issues.

| | | | |
|---------------|-----------------------------------|------------------|----------|
| Course Title | African American Studies 1 | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 03243 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Philosophy is a systematic critical inquiry into profound, fascinating and challenging questions such as: What is it to be human? Do we have free will? What do we mean when we say something is right or wrong? These abstract questions arise out of our everyday experiences, and philosophical tools such as critical and systematic thinking, careful analysis, and construction of arguments provide the means of addressing such questions. The course is focused on stimulating students' intellectual curiosity and encouraging them to examine both their own perspectives and those of others. Students are challenged to develop their own philosophical voice and to grow into independent thinkers, in addition to engaging with some of the world's most interesting and influential thinkers. The course also develops highly transferable skills such as the ability to formulate arguments clearly, to make reasoned judgments and to evaluate highly complex and multifaceted issues.

| | | | |
|---------------------|-----------------------------------|----------|----------|
| Course Title | African American Studies 2 | Level(s) | Standard |
|---------------------|-----------------------------------|----------|----------|

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|---|-----------|------------------|---------|
| Credit/Length | .5/Year | Course Number(s) | 03253 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| <p>This course begins with the Jim Crow era in the South and finishes with a present day focus on problems that plague the African-American community. The course explores how the many accomplishments of African Americans during the Reconstruction era are overlooked and the lasting impact discrimination and segregation have had on African Americans. In addition, the course will cover topics including segregation, the contributions of great African-Americans in the 20th century, the Civil Rights Movement of the 1950s and 1960s, and current struggles and challenges plaguing the African-American community (i.e. violence, educational and income gaps, negative media image, etc.). This exploratory course discusses the most significant events of American history told from the vantage point of African Americans</p> | | | |

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|--|----------------------------|------------------|----------|
| Course Title | Crime & Justice | Level(s) | Standard |
| Credit/Length | .5/Year | Course Number(s) | 03625 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Crime and Justice will investigate the nature of crime and justice in the United States. The course is separated into two portions. The first segment deals with crime and the criminal process. The second deals with justice and rehabilitation versus punishment in current society. Highlights of the course include the role of the media and Constitutional rights.</p> <p><i>The mature subject matter in this course, including violence and crime, necessitates maturity on behalf of enrolled students.</i></p> | | | |

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|---|------------------|------------------|----------|
| Course Title | Economics | Level(s) | Standard |
| Credit/Length | .5/Year | Course Number(s) | 03543 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| <p>This course will strengthen student knowledge of personal finance, provide a strong foundation for economic decision making as well as enhance their understanding of major economic trends and theories. The course will feature a mixture of topics ranging from personal economic decision making to comparisons of economic systems and theories. Focusing on basic economic theories, major macroeconomic systems and consumer economic education, this course will provide students with a vital and useful set of economic tools for use throughout life.</p> | | | |

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|---------------------|---|----------|----------|
| Course Title | Holocaust & Genocide Studies | Level(s) | Standard |
|---------------------|---|----------|----------|

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|---------------|---------|------------------|---------|
| Credit/Length | .5/Year | Course Number(s) | 03633H |
| Format(s) | Online | Open to Grade(s) | 10 - 12 |

This online course delves deeply into the causes, history and legacy of genocide in the 20th century. A specific focus is given to the Holocaust, the event that coined the term genocide, while additional examples of genocidal acts are also examined. Students will explore the roots of genocide and the conditions in which such violent acts can occur through the use of primary source material as well as a varied collection of online media and sources. Students will analyze the pervasive nature of intolerance and hatred and how those forces can ultimately lead to state sanctioned violence against minority groups. The class will also examine and evaluate possible solutions to mitigate the potential for crimes against humanity or genocide to occur in the future.

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|---------------------|-------------------|------------------|----------|
| Course Title | Psychology | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 03645 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Students enrolled in this course will study behaviors exhibited by individuals and groups. They will review the historical roots of psychology and explore the biological and social foundations of human behavior. Students enrolled in this course will be expected to complete projects and evaluate psychological theory and participate in class discussions.

Due to the mature subject matter of this elective, it is an option for 10th through 12th grade students only

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|---------------------|--------------------------------|------------------|----------|
| Course Title | Psychology of Happiness | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 03665O |
| Format(s) | Online | Open to Grade(s) | 9 - 12 |

Psychology of Happiness is the scientific study of what helps people live full lives. This overview course focuses on the science of thriving, explores what it means to be “happy” and how we can cultivate well-being as individuals.

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|---------------------|---------------------------|------------------|----------|
| Course Title | Sociology of Sport | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 03605 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

This course investigates organized sport as an institutional and cultural phenomenon from a sociological perspective. Through such critical study, students will gain a greater understanding of American culture, social inequality, and societal institutions. Much of the course focuses on race, class, gender and how sports both reflect and perpetuate status inequities. We also explore relationships among sports and education, politics, and adolescent culture and delve into social problems in contemporary sports.

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|---------------------|------------------|----------|----------|
| Course Title | Sociology | Level(s) | Standard |
|---------------------|------------------|----------|----------|

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|---------------|-------------|------------------|---------|
| Credit/Length | .5/Semester | Course Number(s) | 036040 |
| Format(s) | Online | Open to Grade(s) | 11 - 12 |

Sociology & Society focuses on examining current issues in American society by using the practices and theories of sociology. Topics include the impact and role of the media on society, social justice and the changing nature of the American family and society. Issues are examined through class discussions, videos and magazine articles. The courses focuses on approaching social issues through the application of the practice of sociology and its theories. The course prioritizes examining issues as well as their causes and effects from multiple perspectives. The course relies heavily on the exchange of ideas, both through the spoken and written word, and is recommended only for students who are eager to discuss and debate.

Due to the subject matter this elective is limited to 11th and 12th grade students.

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TECHNOLOGY EDUCATION

| | | | |
|---------------------|--|------------------|--------------|
| Course Title | Computer Aided Drafting and Design (CADD) | Level(s) | College Prep |
| Credit/Length | .5/Semester | Course Number(s) | 10112 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Computer Aided Drafting and Design is an introductory course designed to further student understanding of the fundamentals of drafting practices and the software programs utilized in a variety of fields. The students apply the knowledge acquired to a variety of drafting and design opportunities. Students will learn to read and generate several types of technical drawings before using a variety of software applications and lab equipment. Students will apply the design process to various drafting problems including activities that include mechanical, architectural, and civil engineering. Note: This course cannot be taken by students that have taken Introduction to Engineering or Principles of Engineering.

| | | | |
|---------------------|---|------------------|--------------|
| Course Title | Architectural Engineering & Design | Level(s) | College Prep |
| Credit/Length | .5/Semester | Course Number(s) | 10122 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Introduction to Engineering or Principles of Engineering or CADD or teacher recommendation

This course will be offered in 2026-27.

Architectural Engineering and Design (AED) is a course that will continue to develop the STEAM (Science, Technology, Engineering, the Arts, and Math) topics covered in Introduction to Engineering course (ITE), Principles of Engineering (POE) and Computer Aided Drafting and Design (CADD). Students will utilize the skills obtained in the introductory courses to further develop their professional portfolio of work. Students will be immersed in design opportunities created to investigate topics that may include, but not limited to; historical trends in architectural design, common constructional practices, environmental considerations, and aesthetic design.

| Course Title | Mechanical Engineering & Design | Level(s) | College Prep |
|---|--|------------------|--------------|
| Credit/Length | .5/Semester | Course Number(s) | 10132 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: Introduction to Engineering <u>or</u> Principles of Engineering <u>or</u> CADD or teacher recommendation | | | |
| <p>Mechanical Engineering and Design (MED) is a course that will continue to develop the STEAM (Science, Technology, Engineering, the Arts, and Math) topics covered in Introduction to Engineering course (ITE), Principles of Engineering (POE) and Computer Aided Drafting and Design (CADD). Students will utilize the skills obtained in the introductory courses to further develop their professional portfolio of work. Students will be immersed in design opportunities created to investigate topics that may include, but not limited to; isometric and orthographic drawings, materials properties, structural components, measurement systems, manufacturing and fabrication practices, ergonomics, problem solving, and aesthetic design.</p> <p><i>This course <u>will not</u> be offered in 2026 - 2027.</i></p> | | | |

| Course Title | Product Engineering & Design | Level(s) | College Prep |
|--|---|------------------|--------------|
| Credit/Length | .5/Semester | Course Number(s) | 10142 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: CADD <u>and</u> teacher recommendation | | | |
| <p>Product Engineering and Design (PED) is a course that will continue to develop the STEAM (Science, Technology, Engineering, the Arts, and Math) topics covered in Introduction to Engineering course (ITE), Principles of Engineering (POE) and Computer Aided Drafting and Design (CADD). Students will utilize the skills obtained in the introductory courses to further develop their professional portfolio of work. Students will be immersed in design opportunities created to investigate topics that may include, but not limited to; ergonomics, material properties and applications, manufacturing, prototyping, packaging, problem solving, environmental considerations, and aesthetic design.</p> | | | |

| Course Title | Introduction to Engineering | Level(s) | Advanced Placement |
|--|------------------------------------|------------------|--------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 10512 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| Prerequisite: CADD <u>and</u> teacher recommendation | | | |
| <u>Dual Enrollment</u> : 3 credits via Montgomery County Community College contingent upon yearly instructor approval. | | | |
| <p>The Introduction to Engineering (ITE) course will introduce STEM topics to students by utilizing the basics of design, and how teamwork, effective communication, research and analysis drives the engineering and design process. Additionally, the impact of design on humans and the environment will be studied. Students will use engineering standards and technical documentation to create a professional portfolio of their work products. Students will be immersed in design opportunities to investigate topics such as sustainability, mechatronics, forces, structures, architecture, aerodynamics, agriculture, design, manufacturing and the environment.</p> | | | |

| Course Title | Principles of Engineering | Level(s) | College Prep, Honors* |
|--|----------------------------------|------------------|-----------------------|
| Credit/Length | 1.0/Year | Course Number(s) | 10522, 10521 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: Introduction to Engineering <u>and</u> teacher recommendation | | | |
| <p>Principles of Engineering is a course that will continue to develop the STEAM (Science, Technology, Engineering, the Arts, and Math) topics covered in Introduction to Engineering. Students will utilize the skills obtained in the introductory course to further develop their professional portfolio of design and engineering work. Students will be immersed in design opportunities created to investigate topics that may include, but are not limited to: mechatronics, statics, hydraulics and pneumatics, Work/Force/Power and mechanical advantage, prototyping, energy and sustainable design. Engineering Case Studies will be used to demonstrate applied engineering concepts and students will be engaged using math and science to design and engineer solutions to real-world engineering problems.</p> <p><i>See * below for honors level expectations.</i></p> | | | |

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|---------------------|---------------------------|------------------|-----------------------|
| Course Title | Engineering Design | Level(s) | College Prep, Honors* |
| Credit/Length | 1.0/Year | Course Number(s) | 10532, 10531 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: Principles of Engineering *and* teacher recommendation

Engineering and Design is a course that will continue to develop the STEAM (Science, Technology, Engineering, the Arts, and Math) topics covered in the Introduction to Engineering course (ITE). Students will utilize the skills obtained in the introductory course to further develop their professional portfolio of Engineering and Design work and deepen the skills developed in the introductory course. Students utilize and continue to develop research, design, prototyping and engineering skills in STEAM areas that include but are not limited to; civil and materials engineering practices and applications, mechatronics, aerodynamics, ergonomics, prototyping, and aesthetic design. The course will have a strong focus on research to support engineering and design and the documentation of the engineering and design process through rigorous portfolio development.

**Honors level expectations for Introduction to Engineering, Principles of Engineering and Engineering Design:*

Students will be required to complete honors extension assignments. These could include, but are not limited to: reflective papers, additional research on selected topics, and/or presentations. In addition, honors level writing and portfolio work will be reviewed and evaluated with a greater focus on technical vocabulary and depth of insightful reflection. Group projects and presentations are designed to, whenever possible, include students from both the CP and Honors section.

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| Course Title | Introduction to Photography | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 10215 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Introduction to Photography is a course that will introduce the students to the fundamentals of photography. Through a variety of projects and hands-on experiences, students will learn the basic functions of a camera and composition skills that will enhance their pictures. The course will begin with black and white film photography, developing, and darkroom techniques and transcend to the digital age to give the students the full scope and evolution of the world of photography. School equipment is available but is limited.

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|---------------------|----------------------------|------------------|----------|
| Course Title | Digital Photography | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 10225 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Introduction to Photography

Digital Photography is a course that will focus on the skills of composition, lighting, image editing software and critiques. Assignments will include creative use of camera controls including ISO, shutter speed and aperture to create dynamic photographs with depth of field, action motion, shadows and light and alternative camera angles. Projects will include but are not limited to portraits, street photography, food photography, night photography, painting with light, landscapes and compositions based on the principles and elements of design. Students will receive instruction, demonstration, and see samples of the desired outcomes. Students will create their own photography web page and post their work and writing to their pages.

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| Course Title | Video Production | Level(s) | College Prep |
| Credit/Length | .5/Semester | Course Number(s) | 10312 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Video Production is an introductory course that will introduce the students to the fundamentals of digital video production. Through a variety of projects and hands-on production experiences, students will learn the three phases of the production process (script writing, effective camera shooting, lighting and video editing techniques) as well as how to add music, titles and narration to video projects. School equipment is available or students can use their own equipment.

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|---------------------|------------------------|------------------|--------------|
| Course Title | Film Production | Level(s) | College Prep |
| Credit/Length | .5/Semester | Course Number(s) | 10352 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: Video Production or teacher recommendation

Film Production is a course that will continue to develop and further the students' understanding of video production with an emphasis on filmmaking. Through a variety of projects and hands-on production experiences, students will immerse themselves in the art of filmmaking by exploring various genres of film. Students will expand and refine production and postproduction filmmaking skills and techniques as they develop their own short film. Students will have the opportunity to enter their films in film festivals and competitions including the annual Owen J. Roberts High School Student Film Festival. School equipment is available or students can use their own equipment.

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|---------------------|------------------------------|------------------|--------------|
| Course Title | Television Production | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 10332 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Video Production or teacher recommendation

This course is repeatable for credit.

Television Production introduces the students to the fundamentals of working in the high school television studio. Students will learn the aspects of electronic news gathering, writing for broadcast, and producing feature news stories and public service announcements to produce the school news show, The Paw Report. In the studio, students will learn the proper production procedures as well as the use and application of television production equipment. Students will also have the opportunity to produce live school events for broadcast on the school's television channel or posting to the high school web page.

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|---------------------|---------------------------------|------------------|---------|
| Course Title | Advanced Film Production | Level(s) | Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 10361 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Film Production or teacher recommendation

This course is repeatable for credit.

Advanced Film Production is a course that will continue to develop and further the students' understanding of filmmaking. The purpose of this course is to broaden the students' skills, knowledge and understanding of filmmaking through a more in-depth immersion into the art of filmmaking. To accomplish this objective areas of emphasis will include but are not limited to, writing, casting, location scouting, acting, filming style and techniques, lighting methods, audio recording techniques, production design/set dressing, set etiquette, video editing and much more. Students will have the opportunity to enter their films in film festivals and competitions including the annual Owen J. Roberts High School Student Film Festival. School equipment is available or students can use their own equipment.

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WORLD LANGUAGE

| | | | |
|---------------------|-----------------|------------------|----------------------|
| Course Title | French 1 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05112, 05111 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Students learn to communicate about themselves, their families, and everyday life experiences. Themes are introduced through oral as well as written activities. Audio exercises are used to enhance listening and speaking skills, and videos provide a view of life and culture in French-speaking countries.

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|---------------------|-----------------|------------------|----------------------|
| Course Title | French 2 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05122, 05121 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: CP or H French 1

Students further develop their oral and written communication skills through the discussions of themes including leisure activities, school life, and gastronomy. Students improve their listening and verbal skills through class discussion and use audio exercises as reinforcement. Through a variety of listening, speaking, reading, and writing activities, students expand their vocabulary and grammar skills.

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|---------------------|-----------------|------------------|----------------------|
| Course Title | French 3 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05132, 05131 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: CP or H French 2

Students improve their listening, speaking, reading, and writing skills through an expansion of vocabulary and the introduction of some advanced grammatical structures. Themes include careers, relationships, and storytelling. Students continue to study the culture and customs of French-speaking countries and will read a major work of French literature.

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|---------------------|-----------------|------------------|-------------------------------|
| Course Title | French 4 | Level(s) | College Prep, Dual Enrollment |
| Credit/Length | 1.0/Year | Course Number(s) | 05142, 05141 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H French 3

Dual Enrollment: 6 credits via Immaculata University contingent upon yearly instructor approval (DE only).

Students continue to improve their listening, speaking, reading, and writing skills through the introduction of abstract vocabulary topics and advanced grammatical structures. Students will read and discuss excerpts from authentic Francophone literature and will view and analyze short films.

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| Course Title | French 5 | Level(s) | Dual Enrollment |
| Credit/Length | 1.0/Year | Course Number(s) | 05151 |
| Format(s) | In Person | Open to Grade(s) | 12 |
| Prerequisite: CP or DE French 4 | | | |
| <u>Dual Enrollment:</u> 6 credits via Immaculata University contingent upon yearly instructor approval | | | |
| This course provides continuing proficiency and transition for further college studies. Contemporary and classical literature is read and discussed in French with emphasis on the ability to communicate in French. Compositions will reflect literary, contemporary and cultural themes. <i>In the event of insufficient enrollment in CP French 4 or DE French 5 these courses may be combined.</i> | | | |

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|--|---|------------------|--------------------|
| Course Title | AP French Language & Culture | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 05160 |
| Format(s) | In Person | Open to Grade(s) | 12 |
| Prerequisite: CP or DE French 4 | | | |
| <u>Dual Enrollment:</u> 6 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This college level course will prepare students to express themselves coherently, resourcefully, and with reasonable fluency and accuracy in both written and spoken French. Extensive training in presentational skills and the organization and writing of compositions is emphasized. Students are expected to think critically about contemporary issues in Francophone cultures. Students will be prepared to take the AP exam in May. <i>Summer assignment required.</i> | | | |

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|---|-----------------|------------------|----------------------|
| Course Title | German 1 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05212, 05211 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Students enrolled in German 1 will begin with basic chapters including family, food, weather, holidays, traveling and school. Students will begin learning how to speak and write during the duration of German 1. German 1 will prepare students for German 2. | | | |

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|---|-----------------|------------------|----------------------|
| Course Title | German 2 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05222, 05221 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| Prerequisite: CP or H German 1 | | | |
| German 2 will begin with a review of German 1. The emphasis in German 2 is mastering the grammar and structure of the language as well as speaking the language. This course will prepare students for upper levels of writing, speaking, and thinking in German. | | | |

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|---------------------|-----------------|------------------|----------------------|
| Course Title | German 3 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05232, 05231 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: CP or H German 2

German 3 is primarily the reinforcement of previously developed oral, reading, listening and writing skills. The more difficult points of grammar are reinforced with additional oral and written exercises. The stress in reading is on meaningful content rather than speech patterns. The readings serve as a springboard for discussion and creative writing thereby developing speaking skills. German cultural contributions, including history and famous artists, are further developed.

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|---------------------|-----------------|------------------|----------------------|
| Course Title | German 4 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05242, 05241 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H German 3

German 4 concentrates on the reinforcement of the four language skills. Grammar is covered primarily in the form of review, with refinement of more difficult points. Some modern and classical literature is read and discussed in German. Creative writing is also stressed. Contemporary culture involving youth is closely examined. Speaking skills are refined and practiced.

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| Course Title | German 5 | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 05251 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: CP or H German 4

German 5 provides advanced work in conversational German. Listening comprehension and oral fluency are emphasized. Modern and classical literature, as well as cultural contributions and contemporary issues are also discussed. Emphasis on contemporary youth literature develops reading, writing, and vocabulary skills.

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|---------------------|---|------------------|--------------------|
| Course Title | AP German Language & Culture | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 05260 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: CP or H German 4

Dual Enrollment: 3 credits via Immaculata University contingent upon yearly instructor approval. This college level course will prepare students to express themselves coherently, resourcefully, and with reasonable fluency and accuracy in both written and spoken German. Extensive training in the organization and writing of compositions is emphasized. Contemporary and classic literature is read and discussed. Students will be expected to take the Advanced Placement German Language Exam in May. *In the event of insufficient enrollment, students who take AP German will be combined with students in German 5 and will be given additional independent work.*

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| Course Title | Latin 1 | Level(s) | College Prep, Honors |
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| Credit/Length | 1.0/Year | Course Number(s) | 05312, 05311 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Latin 1 introduces basic vocabulary to students and provides the opportunity to learn about noun declensions, the present tense of verbs, adjectives, adverbs, and basic pronouns. While reading Latin stories, students will experience Ancient Rome through short stories in Latin, the book tells of both the daily lives and the adventures of Caecilius, a banker, and Metella, his wife, which are all set in the Roman city of Pompeii. This serialized story will provide students with invaluable cultural comparisons of education, history, geography, and of course mythology. Students will also experience a deeper look at linguistics through word derivation as they begin to make connections between Latin and English. This course supplements learning elements and topics from many of the core subjects such as Language Arts, History, Social Studies, Literature, Philosophy and modern World Languages.</p> | | | |

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|---|----------------|------------------|----------------------|
| Course Title | Latin 2 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05322, 05321 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Prerequisite: CP or H Latin 1</p> <p>Students will continue their journey through the Roman Empire while following the main character of Quintus north into Roman Britain and learning about this province, its people, and its politics. The history, culture and grammar build on last year's concepts as the course expands its vocabulary and grammatical structures to envelop more advanced topics such as verb tense and mood. The students continue to make connections lexically and culturally as they read about the Celtic tribes in Britain as well as the cosmopolitan ways of Alexandria in Egypt. The history and culture are taught side by side with the grammar and vocabulary lessons, which provide the student with an educational experience rich in interdisciplinary study.</p> | | | |

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|---|----------------|------------------|----------------------|
| Course Title | Latin 3 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05332, 05331 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| <p>Prerequisite: CP or H Latin 2</p> <p>Students continue to learn about the Roman province of Britain and look in depth at the archaeological site of Bath, England, as well as learn about Roman engineering and the military. The associated readings develop in complexity to include advanced verb forms of the subjunctive mood and a wide variety of clauses, participles, gerunds, and other verbal constructs. These advanced topics and expanded vocabulary complete the Latin student's introduction to the grammar of the Latin language and leave them on firm footing for their exploration of Latin literature in fourth year.</p> | | | |

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| Course Title | Latin 4 | Level(s) | College Prep, Dual |
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| | | | Enrollment |
| Credit/Length | 1.0/Year | Course Number(s) | 05342, 05341 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |

Prerequisite: CP or H Latin 3

Dual Enrollment: 6 credits via Immaculata University contingent upon yearly instructor approval (DE only).

Students use the grammar, vocabulary, history, and cultural knowledge that they gained in the first three years of study to explore texts from several “Golden Age” Latin authors. They will study the letters and speeches of Cicero, the love poems of Catullus and Ovid and the history of Livy. These authors have had a far-ranging impact on the literature of the world in the two millennia since the height of the Roman Empire, and students will have an opportunity to read these selections in the original language. Through this year, students will become familiar with the stylistic and rhetorical devices that authors use to make their readings more attractive, interesting, and profound. Students will also be introduced to the basic meters of Roman poetry.

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| Course Title | Latin 5 | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 05351 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: CP or DE Latin 4

Fifth year Latin is an intense course geared to the translation of Latin literature. Emphasis of the course is directed toward translation and understanding as well as figures of speech and poetic meter. *Summer assignment required.*

NOTE: In the event of insufficient enrollment, students who take Latin 5 will be combined with students in AP Latin (05351) and work with a modified syllabus.

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|---------------------|-----------------|------------------|--------------------|
| Course Title | AP Latin | Level(s) | Advanced Placement |
| Credit/Length | 1.0/Year | Course Number(s) | 05360 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: CP Latin 5

Dual Enrollment: 6 credits via Immaculata University contingent upon yearly instructor approval.

Advanced Placement Latin is an intensive study of Latin literature. The prescribed, college-level syllabus will focus on Vergil's epic poem the Aeneid and Julius Caesar's De Bello Gallico war commentaries. The length of the translations is considerable. This AP course will also require practice writing AP-style literary essays and sight translation. Attention is given to figures of speech and stylistic devices, advanced grammar and vocabulary, poetic meter, as well as the cultural, social, and political context of the poem. *Summer assignment required.*

NOTE: In the event of insufficient enrollment, students who take AP Latin will be combined with students in Latin 5 (05351) and will be given additional independent work.

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| Course Title | Spanish 1 | Level(s) | College Prep, Honors |
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| Credit/Length | 1.0/Year | Course Number(s) | 05412, 05411 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Students in Spanish 1 learn to communicate about themselves, their families and everyday life experiences. Students receive basic instruction in speaking, listening, reading and writing. Grammar is introduced through oral and written exercises. Students will be introduced to Spanish-speaking cultures and customs. This course provides the foundation for further studies in Spanish.</p> | | | |

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|--|--------------------|------------------|--------------|
| Course Title | Spanish 1-B | Level(s) | College Prep |
| Credit/Length | 1.0/Year | Course Number(s) | 05402 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Prerequisite: Spanish 1 or 8th grade Spanish Part 1</p> <p>Spanish 1B is a course designed for students who need extra reinforcement of Spanish 1 topics before taking Spanish 2. Students who have a final average of a 65-73 in Spanish 1 or have only completed Spanish Part 1 in the Middle School and/or teacher recommendation are eligible to enroll in this course. <i>Any student who failed Spanish 1 <u>may not</u> take this course.</i></p> <p><i>Please note, this course is not approved by the NCAA Eligibility Center.</i></p> | | | |

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|---|-------------------------|------------------|--------------|
| Course Title | Spanish 1 Part A | Level(s) | College Prep |
| Credit/Length | 1.0 | Course Number(s) | 05462 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Spanish 1B is a course designed for students who need extra reinforcement of Spanish 1 topics before taking Spanish 2. Students who have a final average of a 65-73 in Spanish 1 or have only completed Spanish Part 1 in the Middle School and/or teacher recommendation are eligible to enroll in this course. <i>Any student who failed Spanish 1 <u>may not</u> take this course.</i></p> <p><i>Please note, this course is not approved by the NCAA Eligibility Center.</i></p> | | | |

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| Course Title | Spanish 2 | Level(s) | College Prep, Honors |
| Credit/Length | 1.0/Year | Course Number(s) | 05422, 05421 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |
| <p>Prerequisite: CP or H Spanish or Spanish 1B</p> <p>In Spanish 2, students build upon beginner level listening, speaking, reading and writing skills. Students learn to describe familiar, uncomplicated situations. Students will continue to learn about the cultures and customs from the Spanish-speaking world.</p> | | | |

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| Course Title | Spanish 3 | Level(s) | College Prep, Honors |
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| Credit/Length | 1.0/Year | Course Number(s) | 05432, 05431 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |
| Prerequisite: CP or H Spanish 2 | | | |
| The Spanish 3 course focuses on practical travel situations as well as everyday life experiences. All four aspects of the language (listening, speaking, reading and writing) are incorporated. Students master basic grammar and are introduced to advanced grammatical structures. | | | |

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|---|------------------|------------------|-------------------------------|
| Course Title | Spanish 4 | Level(s) | College Prep, Dual Enrollment |
| Credit/Length | 1.0/Year | Course Number(s) | 05442, 05441 |
| Format(s) | In Person | Open to Grade(s) | 11 - 12 |
| Prerequisite: CP or H Spanish 3 | | | |
| <u>Dual Enrollment:</u> 6 credits via Immaculata University contingent upon yearly instructor approval (DE only). | | | |
| In Spanish 4, students build upon advanced level listening, speaking, reading, and writing skills. Their writing will improve from the sentence level to the paragraph level. Students learn to initiate and sustain conversation on an intermediate to high level. | | | |

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| Course Title | Spanish 5 | Level(s) | Dual Enrollment |
| Credit/Length | 1.0/Year | Course Number(s) | 05451 |
| Format(s) | In Person | Open to Grade(s) | 12 |
| Prerequisite: CP or H Spanish 4 | | | |
| <u>Dual Enrollment:</u> 3 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This course provides continuing proficiency and transition for further college studies. Class discussions and compositions incorporate advanced grammatical structures with current world issues. Students will study the culture, geography and history of Spanish speaking countries. | | | |

| | | | |
|---------------------|----------------------------------|----------|--------------------|
| Course Title | AP Spanish Language & | Level(s) | Advanced Placement |
|---------------------|----------------------------------|----------|--------------------|

| | | | |
|--|----------------|------------------|-------|
| | Culture | | |
| Credit/Length | 1.0/Year | Course Number(s) | 05460 |
| Format(s) | In Person | Open to Grade(s) | 12 |
| Prerequisite: CP or H Spanish 4 | | | |
| <u>Dual Enrollment</u> : 6 credits via Immaculata University contingent upon yearly instructor approval. | | | |
| This course focuses on advanced work in conversational Spanish, listening comprehension, reading and writing. Class discussions and compositions will incorporate advanced grammatical structures with current world issues. Modern and classical literature is read and discussed in the target language. Students will practice listening skills with authentic materials from news broadcasts and other internet resources. The fifth year course is geared towards preparing to take the Advanced Placement Exam and provides a basis for further studies on the college level. The course is conducted entirely in the target language. Students will be expected to take the Advanced Placement Spanish Language Exam in May. <i>Summer assignment required.</i> | | | |
| <i>NOTE: In the event of insufficient enrollment in either Spanish 5 or AP Spanish the two courses will be combined and taught at the level of the majority of the students enrolled.</i> | | | |

WORLD LANGUAGE ELECTIVES

| | | | |
|--|------------------|------------------|----------|
| Course Title | Mythology | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 053720 |
| Format(s) | Online | Open to Grade(s) | 9 - 12 |
| Prerequisite: Passing grade in previous English course | | | |
| Mythology and other forms of folklore have been used throughout time as a way to give examples of moral behavior, to explain natural and scientific phenomena, and of course to entertain and inform the societies that created them. This course will focus on the wide variety of myth and folklore themes from the ancient world through to other traditions such as Norse and Native American mythologies as well as a look at modern mythologies. Students will learn about the universality of mythic motifs as well as the comparative mythology of the epic cycle. | | | |
| <i>Please note, no knowledge of Latin or Greek language is required.</i> | | | |

| | | | |
|---------------------|---------------------------------|----------|----------|
| Course Title | French Culture: Liberty, | Level(s) | Standard |
|---------------------|---------------------------------|----------|----------|

| | | | |
|---------------|------------------------------------|------------------|--------|
| | Equality, and Joie de Vivre | | |
| Credit/Length | .5/Semester | Course Number(s) | 051700 |
| Format(s) | Online | Open to Grade(s) | 9 - 12 |

This course will not be offered in 2025-2026.

Learn about the culture of one of the most beloved and influential countries! Did you know that French culture influences what you wear, what you eat, what you say as well as your fundamental rights? Learn some language basics in this culture- focused course that will explore everything from architecture, fashion and industry to gastronomy, cheese, art and politics with a bit of history thrown in for good measure. Expand your worldview and cultural knowledge of all things francophone in this semester-long online/asynchronous elective course.

Please note, no knowledge of the French language is required.

| | | | |
|---------------------|--------------------------|------------------|----------|
| Course Title | Roman Archaeology | Level(s) | Standard |
| Credit/Length | .5/Semester | Course Number(s) | 053730 |
| Format(s) | Online | Open to Grade(s) | 9 - 12 |

This course will be a general overview of and introduction to the study of archaeology in the Ancient World. The following topics will be explored: defining archaeology, historical views of archaeology vs. modern archaeology, careers in archaeology, archaeological techniques and technology, famous archaeologists, notable archaeological sites in the ancient world, looting and the antiquities black market, and language and linguistics in an archaeological context. No prior experience or study in either Archaeology or Latin is required. The course will be taught in English.

Please note, no knowledge of Latin is required.

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SUPPLEMENTAL COURSES

| | | | |
|---------------------|--------------------------|------------------|--------|
| Course Title | Gifted Enrichment | Level(s) | Honors |
| Credit/Length | .25/Semester | Course Number(s) | 45035 |
| Format(s) | In Person | Open to Grade(s) | 9 - 12 |

Prerequisite: A current, active Gifted Individualized Education Plan is required while enrolled.

This course is repeatable for credit.

Gifted Enrichment provides unique opportunities for students to participate in a wide variety of self-selected academic supported enrichment activities. These projects are facilitated in small-group and independent study formats. Up to 1.0 credit of Gifted Enrichment per period may be scheduled.

| | | | |
|---------------------|-------------------------|----------|----------|
| Course Title | Driver Education | Level(s) | Standard |
|---------------------|-------------------------|----------|----------|

| | | | |
|---------------|------------------|------------------|---|
| Credit/Length | .25/Semester | Course Number(s) | In person fall/spring: 1437F/1447F Online fall/spring: 1437FO/1447FO |
| Format(s) | In Person/Online | Open to Grade(s) | 9 - 12 |

The course is recommended for students nearing the permit testing date or their 16th birthday. It is designed to prepare students for their permit testing date while helping them become safe and responsible drivers. The classroom phase consists of learning the driving skills necessary to operate a vehicle safely, studying for the Pennsylvania Driver's Test, and preparing students for obtaining their driver's license.

| | | | |
|---------------------|---|------------------|----------|
| Course Title | Driver Education- Behind the Wheel | Level(s) | Ungraded |
| Credit/Length | Uncredited | Course Number(s) | n/a |
| Format(s) | n/a | Open to Grade(s) | 9 - 12 |

Prerequisite: PA learner's permit or driver's license, 30 hours of classroom instruction

The driver education teacher will individually schedule students for their driving lessons. Lessons will be after school, evenings, Saturdays, Sundays, and during the summer. Any student who wants Behind the Wheel must have a PA learner's permit or PA driver's license and complete/pass the Classroom Phase of Driver Education. The cost of the program (\$350) covers 6 hours of behind-the-wheel training. The school can administer the road test to a student during their last hour of instruction. In order to do so, the student must have completed the classroom instruction; have their permit for 6 months; and complete at least 65 hours of supervised driving. Following the training, students will be issued a letter of completion for submission to the insurance carrier. The program is very popular. The waiting list is based upon the Test Eligibility Date located on the permit. Please be patient! For questions or additional information, please contact Mr. Ryan Ayres (rayres@ojrsd.net), Mr. Joe Youngblood (jyoungblood@ojrsd.net) or the high school main office (610-469-5101).

| | | | |
|---------------------|---------------------------------|------------------|---------------------------------|
| Course Title | School/Community Service | Level(s) | Unweighted |
| Credit/Length | .5/1.0 | Course Number(s) | Various |
| Format(s) | In Person | Open to Grade(s) | 12 (school) 9-12 (community) |

Prerequisite: Completed application, including parent, teacher/mentor and school counselor approval.

Students will have the opportunity to expand their real life experiences and benefit from an alternative learning atmosphere by volunteering in approved service agencies (*Community Service*) or within the school (*School Service*). Examples of possible service include tutoring elementary students, student assistant at the high school, working for Habitat for Humanity, and volunteering at a nursing home.

Notes:

School Service:

- Only seniors can schedule School Service.
- One student may work for each teacher.

Students in grades 9-12 may earn credit for Community Service.

Students can earn a maximum of 1.0 credit through this course.

Students must procure School and/or Community Service placements.

| | | | |
|---------------------|------------------------------|------------------|-----------------|
| Course Title | Allied Health Science | Level(s) | Dual Enrollment |
| Credit/Length | 2.0/Year | Course Number(s) | 19201 |
| Format(s) | Year | Open to Grade(s) | 12 |

Prerequisite: Completion and approval of application

Dual Enrollment: Up to 15 credits via Delaware County Community College and Immaculata University contingent upon yearly instructor approval.

This program offered by the Chester County Intermediate Unit (CCIU) provides high school seniors with clinical training and on-the-job-experience in a variety of occupations in the medical field. Students spend three 1.5 hour days at either Paoli, Phoenixville or Pottstown Hospital observing and participating in the different job functions of its various departments. Students will rotate among departments including: critical care units, radiology, respiratory care, pharmacy, physical therapy, clinical laboratories, emergency rooms, medical and surgical nursing, and general medicine. Students also spend two 1.5 hour days per cycle in the classroom for theory (basic anatomy and physiology, including disease processes and medical terminology).

Students must provide their own transportation to and from the educational and clinical site. A PM option is available.

| | | | |
|---------------------|-----------------------------------|----------|-----------------|
| Course Title | Teacher Leadership Academy | Level(s) | Dual Enrollment |
|---------------------|-----------------------------------|----------|-----------------|

| | | | |
|---------------|-----------|------------------|-------|
| Credit/Length | 2.0/Year | Course Number(s) | 19210 |
| Format(s) | In Person | Open to Grade(s) | 12 |

Prerequisite: Completion and approval of application

Dual Enrollment: 9 credits via Delaware County Community College and Immaculata University contingent upon yearly instructor approval.

The Teacher Leadership Academy, offered by the Chester County Intermediate Unit, is a two-credit program for high school seniors interested in pursuing a career in the field of education.

Credits may be awarded for the completion of the following courses:

DCCC: EDU 110, Introduction to Teaching and EDU 206, Teaching With Technology

Immaculata University: EDU 302, Educational Psychology

The Teacher Academy provides an introduction to the knowledge and skills required to work in the teaching profession in the 21st Century. The course consists of 7.5 hours/cycle (90 minutes/day, either morning or afternoon) divided between classroom instruction and internships with certified, tenured teachers at all grade levels, resulting in approximately 180 hours of instruction and 90 hours of internship experience. In addition, guest speakers from the educational field will present throughout the year; students will also participate in relevant field trips. As a culminating project, students complete a portfolio.

| | | | |
|---------------------|----------------------------|------------------|---|
| Course Title | Independent Study | Level(s) | Varies based on administrative approval |
| Credit/Length | .5 or 1.0/Semester or Year | Course Number(s) | Varies |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: School counselor recommendation of student; curriculum must be approved by faculty mentor, department chairperson, administration, and School Board.

The student works with a faculty member on an approved project, program, or course of study for a predetermined period of time and academic credit. An Independent Study program can be taken concurrently with a maximum of five major courses. It cannot be used as a substitute for a required course in the curriculum, nor can a course listed in the curriculum be taken as an independent study. The OJR School Board must approve all independent study programs before credit will be granted. Interested students should contact their counselor for details.

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TECHNICAL COLLEGE HIGH SCHOOL- PICKERING

The Chester County Technical College High School Pickering Campus is a public high school in Phoenixville, PA specializing in Career and Technical Education (CTE) and available for students in

grades 10 through 12. CTE programs prepare students for success in college, the workplace and life. Students and their families are always welcome to visit.

All CTE programs at the Pickering Campus are designated as High Priority Occupations (HPO) by the Pennsylvania Department of Labor and Industry and are aligned with the Pennsylvania State Academic Standards and national industry certifications.

CTE programs at the Pickering Campus lead seamlessly to postsecondary education through the Pennsylvania Department of Education’s (PDE) SOAR Programs of Study. The mission of SOAR is to prepare Students (who are) Occupationally and Academically Ready for college and careers in an increasingly diverse, high- performing workforce. Graduates of approved SOAR programs who meet challenging academic and technical criteria qualify for several FREE technical credits at over forty-two participating colleges across Pennsylvania. These include the Pennsylvania College of Technology, Delaware County Community College, Clarion University, Thaddeus Stevens College of Technology, and Harcum College. For more information about SOAR and the complete list of participating colleges and postsecondary programs, please click [here](#).

- Traditional high school career and technical programs
- Traditional college courses
- Dual-enrollment classes that blend high school and for-credit college courses

| | | | |
|---------------|-----------------------------|------------------|--|
| Course Title | Programs names listed below | Level(s) | Standard (Teacher Academy & Allied Health are Dual Enrollment weight) |
| Credit/Length | 3.0/Year | Course Number(s) | 1911P |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Parent permission and application approval by TCHS

The Chester County Intermediate Unit operates career and technical educational programs for secondary students at the Technical College High School (TCHS) Pickering Campus. The programs offered at TCHS provide marketable job skills that will allow students a strong foundation to enter the workforce or continue with higher education. All programs provide students with an opportunity to earn college credit or advanced placement at selected post-secondary schools in their career field. For more details about earning college credit for TCHS High School course work, please see our [website](#) and select Students/College Credit Opportunities or the individual Career & Technical Education program descriptions. Students may attend TCHS Pickering every year starting in grade 10.

TCHS-PICKERING PROGRAMS

Allied Health

This highly successful senior-only program is a college preparatory option for academically talented high school seniors considering a career in the medical profession. The program includes 7.5 hours per cycle of classroom and clinical experience in a healthcare facility as well as AED and CPR certification. Students may also participate in Dual Enrollment for college credit. Due to the number of clinical locations available, the program has limited enrollment. TCHS Pickering participating hospitals include Paoli Hospital and Phoenixville Hospital although students may be accepted at other locations. In order to participate in the program, students must obtain a driver's license and must be able to provide their own transportation by the first day of their senior year.

Dual Enrollment: Up to 15 credits via Immaculata University and Delaware County Community College contingent upon yearly instructor approval.

Animal Science

Animal Science prepares students to provide for the welfare of animals in the pet companion industry, veterinary science and biomedical fields. Graduates of the program are prepared for post-secondary education and entry-level employment. Upon graduation, interesting and rewarding career paths can be followed which combine a love for animals with an interest in the life sciences. Program concentrations include animal anatomy and physiology, animal cruelty issues, animal hygiene, genetics, husbandry, nutrition, preventative care and medicine, reproduction, and surgical assisting. Due to the emphasis on science and math, students considering this program should possess a strong academic foundation.

Automotive Collision Technology

Automotive Collision Technology is for students who have a keen interest in motor vehicles and an eye for color, shape and creativity. Graduates of the program are prepared to pursue professional credentialing, entry-level employment, and post-secondary education. Automotive Collision technology instruction is provided in the following areas: detailing and estimating, glass and hardware repair and replacement, metal finishing and body fillings, non-structural damage repair, outer body panel repair, painting and refinishing, welding and cutting. Program learning activities parallel the industry-recognized I-CAR curriculum.

Automotive Service Technology

The Automotive Service Technology program is certified by the National Automotive Technicians Education Foundation (NATEF) and prepares students for post-secondary education and entry-level employment in the rapidly changing automotive service industry. Students are introduced to the ever-changing advancements that occur in the automotive industry such as hybrid vehicle design and maintenance. Instruction is provided in the following areas: automotive electrical and electronics systems, brake repair and installation, drivetrain and engine performance, heating and cooling systems, suspension and steering systems. The program also emphasizes customer relations and instructs students in the use of proper etiquette in a service economy.

Carpentry

The Carpentry program develops students' skills for a career in the residential, commercial and home improvement construction industry. Students enrolled in the program learn safety practices, job estimating, and materials selection practices. They also learn the basics of rough carpentry, including the layout of walls, rafters, stairs and floors. Finish carpentry is also studied, including blueprint reading and drafting, cutting and joining construction materials, door, window and trim installation. Students have the opportunity to learn cabinet and furniture construction, including the use of laminates. A major focus is the construction of the joints required in fine cabinetry and furniture construction. Students study blueprint reading, construction methods and estimating, materials selection, and the safe use of hand and power tools. Students are responsible for the completion of hands-on carpentry and cabinetmaking projects from start to finish.

Commercial Art & Design Media

The Commercial & Graphic Arts program is based on industry standards that prepare students for admission to post-secondary art schools and entry-level employment in the graphic communications industry. Students learn the basics of design, color theory, page layout, lettering and the production skills needed for the printing industry. Advanced study focuses on the use of computer graphic design skills and introduces students to software such as; Adobe, Photoshop, InDesign, Flash and Acrobat Pro. Upon completion of the program, students have a portfolio of their work to present to prospective employers and college admissions officers.

Cosmetology

The Cosmetology program prepares students for state licensing in the field of cosmetology. Students can qualify to become a licensed cosmetologist or to obtain a specialized license in other areas, such as: nail technician, esthetician or natural hair braider. Program theory and hands-on skill instruction is provided in the following areas: facials, hairstyling, cutting, coloring, permanent waving and relaxing, straightening, infection control, principles and practice, manicures and pedicures, and professional awareness.

Criminal Justice & Police Sciences

The Criminal Justice and Police Sciences program prepares students for both post-secondary education and entry-level employment in the protective services field. Students in the program are graded based on mastery of traditional classroom theory and performance of hands-on skills, including: performing police and security tactics, investigating crime scenes, and investigation report writing. Students receive instruction in the following areas: basic fire science, crime scene investigation, criminal investigation, criminal law, civil law, and court procedures, electronic security systems, forensic science, investigative photography, police and security tactics, and self-defense.

Culinary Arts

The Culinary Arts program teaches students the necessary skills to be successful in the creative and rewarding food service industry. Graduates of the program may choose to continue their education with advanced standing in college and other post-secondary programs, or they may seek employment in entry-level culinary positions. The instructional program includes classroom theory and hands-on skill development in the following areas: baking, catering, customer service, food preparation, food service management, short order and high-volume cooking. Graduates of the program are certified under an American Culinary Federation approved program.

Digital Media & Sound Communications

Digital Media & Sound Communications teaches the art and science of media production in the genres of video, audio, web, design, TV production, animation, photography and more. Students will develop skills in; communication technology and safety procedures, design layouts, ethical and societal issues in communication technology, photography and cinematography, web collaboration and web design applications. Upon completion of the Digital Media & Sound Communications program, students may earn an Adobe Certified Associate Certificate as well as an Apple Certified Pro – Final Cut Pro Certification.

Early Childhood Care & Education

The Early Childhood Care and Education program aligns its curriculum with the Pennsylvania Department of Education Bureau of Career & Technical Education Child Development Associate (CDA)-Ready curriculum. All components of our Early Childhood Care and Education program prepare students to earn the CDA national certification. To become CDA ready, students complete 120 hours of formal training through multiple modalities, such as: active accredited trainings, project-based learning, research and field observations, and web-based distance education. Students gain experience as they rotate through various in-house preschool programs. Students create portfolios and professional development records that document their training and 480 hours of experience working with children in a preschool environment. Agreements with various colleges can provide students with between six and 15 undergraduate credits in early childhood education after completing the program.

Electrical Occupations

Students who are passionate about electronics and want their education to include hands-on building, installing and repairing of electrical systems will thrive in the Electrical Occupations program. Students will be provided with an understanding of safety, the handling of power tools, how to navigate a jobsite and an in-depth understanding of electricity. This program will allow students to navigate the National Electrical Code (NEC) and be well-positioned to pursue careers in the electrical trades.

Health Career Pathways

Students explore the many exciting career pathways available in the health and medical occupations fields. They study vital signs, adult and pediatric patient assessment, ambulatory devices, and direct patient care. Direct clinical observation experience in a health care setting may be arranged to prepare students for a variety of careers in the healthcare industry. The Health Occupations program combines instruction in anatomy and physiology, growth and development, health careers, medical abbreviations, medical ethics, medical terminology, and nutrition. An emphasis is placed on communication and leadership skills, computer literacy and medical math. Many graduates of this program choose to continue their education to pursue careers in nursing, sports medicine, physical therapy and radiology.

HVAC & Refrigeration Technology

This program is a great fit for students who are interested in using their hands and their minds to find solutions to everyday problems. In this program, students can expect to learn how to use industry standard tools, basic wiring and advanced electronics. This program prepares students to pursue a career or college. Students will learn to: identify and use industry standard tools, learn about OSHA industry standard safety regulations, assemble piping and tubing, understand electrical and control wiring and build a circuit, learn and practice sheet metal fabrication, install a full HVAC system, and demonstrate the ability to troubleshoot HVAC equipment.

Teacher Leadership Academy

The Teacher Leadership Academy is a program for high school seniors only interested in pursuing a career in the field of education. In addition to earning 2 high school credits, students have the opportunity to enroll in a dual enrollment program to earn college credit. The course consists of 7.5 hours/cycle divided between classroom instruction and internships with certified, tenured teachers at all grade levels, resulting in approximately 180 hours of instruction and 90 hours of internship experience. Student internships consist of Elementary, Secondary Education and Special Education placements. In order to participate in the program, students must obtain a driver's license and must be able to provide their own transportation by the first day of their senior year.

Dual Enrollment: Up to 24 credits via Immaculata University and Delaware County Community College contingent upon yearly instructor approval.

Welding & Metal Fabrications

Students in this program will be prepared for a variety of metalworking occupations as they gain hands-on experience with both welding and metal shaping equipment. This program will teach students how to fabricate new items and repair existing metal items. Students will be instructed using industry standard machines, such as: lathes, mills, grinders, drills, saws and welders that will allow students to form, shape, mold, cut, twist and work upon metal. This program prepares students for industry careers or college.

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OCTORARA HOMELAND SECURITY & PROTECTIVE SERVICES ACADEMY (OHSPSA)

| | | | |
|---------------|---------------------|------------------|----------|
| Course Title | Protective Services | Level(s) | Standard |
| Credit/Length | 3.0/Year | Course Number(s) | 19400 |
| Format(s) | In Person | Open to Grade(s) | 10 - 12 |

Prerequisite: Parent permission and application approval by OHSPA

This course is repeatable for credit.

The Octorara Homeland Security and Protective Services Academy (OHSPSA) is an approved PA Department of Education Career and Technical Education Program of Study available to students in grades 10, 11, and 12 for students in every Chester County school. The Academy is a part-time school of choice specializing in careers for pre-hospital emergency medical care, emergency medical technician, EMT, firefighting, emergency management, law enforcement, corrections, and military services. This program of study prepares individuals to apply technical knowledge and skills required to perform entry level duties as a firefighter, emergency medical and first aid responder, security, corrections, as well as various other occupations which encompass the broad spectrum of public safety. The program stresses techniques, methods, and procedures associated with emergency responses. Upon completion, students have the ability to earn up to 50 college credits, 64 state and national job-related certifications which are required for entry level positions. The Academy is a half day program located at the Chester County Emergency Services Training Center in Coatesville. For more information about OHSPSA, go to www.octorara.k12.pa.us.

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ADVANCED PLACEMENT COURSE OFFERINGS

The following is a list of Advanced Placement (AP) courses being offered at Owen J. Roberts High School in the 2025-2026 school year:

| | |
|--------------------------------------|------------------------------------|
| English Language & Composition | Psychology |
| English Literature & Composition | Biology |
| Calculus AB | Chemistry |
| Calculus BC | Physics 1 |
| Statistics | Physics C: Mechanics |
| Computer Science A | Physics C: Electricity & Magnetism |
| Computer Science Principles | Environmental Science |
| World History | Music Theory |
| United States History | Studio Art: 2-D/3-D Design |
| Government & Politics: United States | French Language & Culture |
| Government & Politics: Comparative | German Language & Culture |
| Human Geography | Latin |
| European History | Spanish Language & Culture |
| Macroeconomics/Microeconomics | |

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IMMACULATA UNIVERSITY DUAL ENROLLMENT OFFERINGS

Owen J. Roberts has partnered with Immaculata University to offer dual enrollment opportunities in all of our Advanced Placement and International Baccalaureate courses, along with select world language classes. Students enrolled in OJR courses worth 6 Immaculata credits will register for one course each in the fall and spring semesters. The student's grade for their Immaculata fall semester course will be the average of their OJR 1st and 2nd marking period grades. Students enrolled in OJR courses worth 3 credits will register for their course in the beginning of the spring semester. The student's grade for their Immaculata spring semester course will be their final grade in their OJR course. The Immaculata grading scale is provided below.

| Owen J. Roberts Course | Immaculata Equivalent Course(s) | Credits |
|---|---------------------------------|---------|
| AP English Language & Composition | ENG 106 | 3 |
| AP English Literature & Composition | ENG 106 | 3 |
| IB Language & Literature HL Year 1 | ENG 106 | 3 |
| IB Language & Literature HL Year 2 | ENG 107 | 3 |
| AP Calculus AB | MATH 207 | 3 |
| AP Calculus BC | MATH 208 | 3 |
| AP Statistics | PSY 208 | 3 |
| AP Computer Science A | CIS 218 | 3 |
| AP Computer Science Principles | CIS 203 | 3 |
| DE Foundations of Programming | CIS 218 | 3 |
| AP European History (OL) | HIST 115 | 3 |
| AP World History | HIST 116 | 3 |
| AP US History | HIST 311 | 3 |
| AP Government & Politics: United States | POL 201 | 3 |
| AP Government & Politics: Comparative | POL 202 | 3 |
| AP Microeconomics/Macroeconomics | ECO 202/201 | 6 |
| AP Psychology | PSY 101 | 3 |
| AP Human Geography | GEO 101 | 3 |
| IB Philosophy | PHI 101 | 3 |
| AP Biology | BIOL 103 | 3 |
| AP Chemistry | CHEM 101/102 | 6 |
| AP Physics 1 | PHY 152 | 3 |
| AP Physics C: Mechanics | PHY 203 | 3 |

| | | |
|---------------------------------------|-----------------|---|
| AP Environmental Science | BIOL 113 | 3 |
| AP French Language & Culture | FREN 201/202 | 6 |
| DE French 5 | FREN 101 | 3 |
| DE French 4 | FREN 101/102 | 6 |
| AP Spanish Language & Culture | SPAN 201/202 | 6 |
| DE Spanish 5 | SPAN 101 | 3 |
| DE Spanish 4 | SPAN 101/102 | 6 |
| AP German Language & Culture | GER 101 | 3 |
| AP Latin | ENG 329/ENG 150 | 6 |
| DE Latin 4 | ENG 122/ENG 150 | 6 |
| DE Accounting 1 | ACC 203 | 3 |
| DE Accounting 2 | ACC 204 | 3 |
| DE Business Law | BUS 315 | 3 |
| IB Business Management SL | BUS 360 | 3 |
| DE Entrepreneurship | BUS 324 | 3 |
| DE Investment Fundamentals | BUS 302 | 3 |
| DE Marketing Management | MKT 309 | 3 |
| DE Drawing 2 | ART 102 | 3 |
| DE Painting 2 | ART 303 | 3 |
| DE Ceramics 4 | ART 209 | 3 |
| AP Studio Art (2-D Design/3-D Design) | ART 102 | 3 |
| DE Digital Art & Design 2 | ART 201 | 3 |
| AP Music Theory | MUSC 130 | 3 |

Immaculata University Grading Scale

| Grade | Percent Range |
|-------|---------------|
| A | 100% to 93% |
| A- | 92% to 90% |
| B+ | 89% to 87% |
| B | 86% to 83% |

| | |
|----|------------|
| B- | 82% to 80% |
| C+ | 79% to 77% |
| C | 76% to 73% |
| C- | 72% to 70% |
| D+ | 69% to 67% |
| D | 66% to 60% |
| F | 59% to 0% |

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