## 2024-25 CURRICULUM GUIDE



PT0 T XI
CATHOLIC HIGH SCHOOL


## CURRICULUM GUIDE 2024-2025 SCHOOL YEAR

## PIUS XI CATHOLIC HIGH SCHOOL MISSION

Pius XI Catholic High School exists to prepare a diverse community of students to achieve their unique and highest potential. Guided by our Franciscan values of dignity, peace, and respect, we nurture students to excel academically, develop moral courage, and live lives of faith and service.

## GRADUATION REQUIREMENTS

English
Theology
Mathematics
Science
Social Studies
Fitness
Health (Wellness)
Fine Arts
World Language
Electives
4.0 credits
4.0 credits
3.0 credits
3.0 credits
3.0 credits
1.5 credits
0.5 credits
1.0 credit
2.0 credits
3.0 credits

## CAMPUS MINISTRY GRADUATION REQUIREMENT

Under the direction of Campus Ministry, students are required to earn 0.5 credit of service each year by completing service experiences and participating in school retreats. These experiences must be documented and submitted in order to be counted towards the graduation requirement.

## EARNING COLLEGE CREDIT WHILE AT PIUS XI

## PROJECT LEAD THE WAY (PLTW)

The PLTW program believes all students need access to real world, applied learning experiences that empower them to gain the skills they need to thrive in college, career, and beyond. That is why our pathways in engineering, biomedical science, and computer science provide hands-on learning opportunities. PLTW's research-supported approach empowers students to discover and explore interests, imagine and design solutions to real-world challenges, and become independent, confident problem solvers.

Colleges and universities across the U.S. recognize and reward PLTW students for their great work. These postsecondary institutions recognize PLTW students with scholarships, admissions preference, course credit, and more. Students will take the new End of Course Assessment at the end of the school year and will receive a detailed score report that highlights their subjectmatter knowledge and mastery of in-demand, transportable skills.

Students can use their test results to bolster college applications or resumes or can send their score report directly to higher education institutions and employers, who may use it for admissions, scholarships, dual credit opportunities, campus experiences, internships, apprenticeships, industry certifications, and more. For the most up to date information on how each PLTW course will be beneficial at various colleges and universities, see the following website: https://www.pltw.org/experience-pltw/student-
opportunities

## ADVANCED PLACEMENT (AP) PROGRAM

Are you ready for a unique learning experience that will help you succeed in college? Each year, students around the world who want to learn and achieve at the highest possible level in high school become Advanced Placement (AP) students. The College Board, a not-for-profit membership association, whose mission is to connect high school students to college success and opportunity, supports the AP Program. AP courses, taught at a college level, offer a rigorous and rewarding challenge for high school students. Through AP's college-level courses and exams, students can earn college credit and advanced placement, and stand out in the admissions process. According to the College Board, completion of an AP class during high school correlates directly to success and persistence in college. To register for an AP course, students must meet certain criteria as specified by the academic department. These might include prerequisites and/or an application process, which would be indicated in the course descriptions.

At Pius XI, we offer a wide range of Advanced Placement (AP) courses:

| Art | AP Studio Art Portfolio Preparation, AP Studio Art -11, \& AP Studio Art-12 |
| :--- | :--- |
| English | AP English Literature and Composition \& AP English Language and Composition |
| Mathematics | AP Pre-Calculus, AP Calculus AB, AP Calculus BC, \& AP Statistics |
| Science | AP Biology, AP Physics I, AP Environmental Science, AP/PLTW Computer Science Principles |
| Social Science | AP Human Geography, AP Macroeconomics, AP Psychology, \& AP US History |
| World Languages | AP Spanish Language \& AP French |

Registration for an AP course automatically includes registration for the AP exam. Each AP exam is typically $\$ 98$. There is a reduced fee rate of $\$ 53$ (may vary each year) for students whose parents/guardians qualify for free/reduced lunch. Exam fees are due by November $8^{\text {th }}$. Students may decide to take an AP course but not the exam. All AP exams must be canceled by November $8^{\text {th }}$ in order for parents/guardians not in incur the $\$ 40$ exam cancellation fee for any exam that is not taken.

Semester grades that students receive in their AP courses are weighted. This means an " $A$ " is figured into a student's grade point average as five points rather than four, etc. Any grade lower than a $\mathrm{C}+$ is not weighted. Pius XI recognizes and will accept AP credit from other accredited sources. Following our policy, AP courses taken outside Pius XI will not be averaged into a student's GPA as a weighted grade. To have a successful, complete experience in an AP course, students must take the AP exam for that course in May.

## CONCURRENT ENROLLMENT/DUAL ENROLLMENT

Pius XI Catholic High School partners with local universities to offer concurrent enrollment/dual enrollment. These courses allow qualified high school students to learn a college curriculum as part of their high school curriculum. Some of these courses are taught at Pius XI by credentialed Pius XI staff; some are taught at Pius XI by college/university staff; and some courses require students to travel to the college/university campus. Students who choose to enroll pay a substantially reduced tuition rate for the college credit and are admitted to the University as "non-degree seeking students." Upon successful completion of the course, these students will receive high school credits, as well as college credits and an official University transcript. The official University transcript verifies to other colleges/universities that the student has received college/university credits.

## PLANNING REQUIRED AND ELECTIVE COURSES

To learn the specific graduation requirements for any academic department, please look at the department's entry in this guide. For instance, in order to graduate from Pius XI, a student must take three credits of science, but Biology must be one of those credits.

## STEM.ORG ACCREDITATION

Pius XI is officially recognized and accredited by STEM.org as an exemplary STEM school. Being STEM.org accredited is, in part, a recognition of how we offer excellent STEM education to students at any level. In keeping with our core values, we are committed to fostering diversity and inclusivity within our STEM programming. We actively encourage students from all backgrounds to pursue STEM classes and recognize the importance of a diverse workforce to address current and future global challenges.

## IMPORTANT INFORMATION FOR INCOMING FRESHMEN

If you want to concentrate on a particular area of study, it is best to talk to the Division Head to plan for your complete four years of study. It is wise to take a variety of courses and to explore some unfamiliar areas. Trying to "get required courses out of the way" in the first year or two may not be the most appropriate choice for you. Students should take courses when it is most beneficial for them. For example, a student who really wants to take four years of Art, Performing Arts, Engineering or World Languages might need to wait until sophomore year to take Health or Social Sciences. The Social Science Department offers many fine elective courses junior and senior years. Then again, if a student's passion is Social Sciences, the student may want to fit it in freshman year. It comes down to deciding what the student really wants and then planning all four years carefully. For rising freshmen and transfer students a placement test for reading, math and world language may be required to place the student appropriately.

## COLLEGE REQUIREMENTS

Some colleges may require coursework in areas such as World Languages, Visual or Performing Arts. Please consult with the Counseling Center about requirements for specific colleges. If you have a strong interest in a particular department, be sure to speak to the Department Chairperson for information about specialized colleges. Some UW campuses and other universities and colleges require at least two years (sometimes three) of a world language for admission. To be competitive in applying to these schools, many students take three or four years of a world language. Many colleges and universities have world language exit requirements, which can be satisfied by taking four years of a world language in high school.

## YOUTH APPRENTICESHIP/WORK BASED LEARNING

Juniors and Seniors in good academic standing at Pius XI may be able to participate in Youth Apprenticeship or Work Based Learning experiences. Youth Apprenticeship is a work-based learning course offered to approved juniors and seniors who wish to explore career interests with local employers while earning wages and credit. Students gain industry experience and learn valuable employability skills. Students must be enrolled in approved, concurrent courses that align with their designated career pathway. There is a minimum work requirement of 450 hours over the course of the school year which can be completed during the school day (approved release), after school, and/or on weekends. Work based learning experiences "allow K-12 students to participate in career awareness, career exploration, and career development" and required hours may vary depending upon the type of experience. Prerequisite: Junior or Senior (16 years or older); approved transportation arrangements; satisfactorily meeting graduation credit requirements; parent/guardian permission; and administrative approval.

## COURSE DURATION CODES

In our $4 \times 4$ schedule, courses meet daily for a term ( 9 weeks), daily for a semester, alternating days for a semester, or alternating days for the entire year. The codes below should be used to determine the duration of a course. Under Course Description, the duration of each course is listed next to the credits. [ Ex: 801 - ART FUNDAMENTALS, 1.0 credit (AY)] Please be advised that course offerings may change due to enrollment or scheduling restrictions.

DT - daily for a term $\quad$ DS - daily for a semester $\quad$ AS - alternating days for a semester $\quad$ AY - alternating days for a year

## SPECIFIC DEPARTMENT QUESTIONS

If you have specific questions about the requirements, consents or courses for a specific department, please reach out to the Division Head/Dean of Instruction/Assistant Principal listed below.

| FINE ARTS | CATHY BURNETT | CBURNETT@PIUSXI.ORG | $414-290-8184$ |
| :--- | :--- | :--- | :--- |
|  <br> SPECIAL STUDIES | LAKENDRA BROWN | LBROWN@PIUSXI.ORG | $414-290-0216$ |
| SCIENCE, ENGINEERING <br> \& FITNESS | CATHY ZURAWSKI | CZURAWSKI@PIUSXI.ORG | $414-290-741 I$ ext 556 |
| MATHEMATICS | ALLISON WARHUS | AWARHUS@PIUSXI.ORG |  |
|  <br> WORLD LANGUAGE | MICHELE GRIFFIN | MGRIFFIN@PIUSXI.ORG |  |
|  <br> THEOLOGY | MANDY RUSZKIEWICZ | ARUSZKIEWICZ@PIUSXI.ORG |  |

## COURSE INFORMATION

## ART \& DESIGN

The nationally recognized Pius XI Visual Arts Program is designed to be taken all four years. The scope and sequence of our curriculum develops strong technical and conceptual thinking skills while focusing on personal voice. Our students are prepared for college admission and scholarship if they choose to pursue it. Pius XI has a one-year fine arts requirement, as do most colleges and universities; however, most Art colleges and Universities with strong art programs require an Art Portfolio for college admission and scholarship. Visual art careers include, but are not limited to, digital arts, architecture, animation, graphic design, game design, web design, fashion design, industrial design, transportation design, product design, interior design, package design, toy design, fashion, textile design, photography, film, video, costume design, set design and more. One credit in either Visual Arts, Performing Arts, or a combination is required for graduation. Underclassmen who are interested in being better prepared for AP are invited to take the class after taking Art Fundamentals. Please contact Cathy Burnett for more information.

## AP ART PORTFOLIO CLASS - REQUIRED FOR ALL STUDENTS TAKING ALL LEVELS OF ART PORTFOLIO CLASSES - Summer only

The expectation for students registered for AP Studio 11, 12, or Portfolio, is that they attend the one-week summer class that runs May 31, June 3, 4, 5, \& 6 from 9 am-4 pm. This 5-day intensive class informs and launches the work for the following year for AP students. There is a fee for this class. Please see Cathy Burnett for details.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :---: |
| 1.0 | 801 - Art Fundamentals | $9-10-11-12$ | Pathway to AP | 11 |
| 0.5 | 831 - Ceramics | $10-11-12$ |  | 11 |
| 0.5 | 811 - Design: Introduction to Photoshop and Adobe Illustrator | $10-11-12$ | Pathway to AP | 11 |
| 0.5 | 821 - Figure Drawing | $10-11-12$ | Pathway to AP | 11 |
| 0.5 | 817 - Experimental Drawing | $11-12$ | Pathway to AP | 11 |
| 0.5 | 819 - Fibers, Fashion Construction \& Design | $11-12$ | Pathway to AP | 11 |
| 0.5 | 841 - Painting | $11-12$ | Pathway to AP | 12 |
| 0.5 | 805 - Photography 1 | $11-12$ | Pathway to AP | 12 |
| 0.5 | 806 - Photography 2: New Genres/Alt. Processes | $11-12$ |  | 12 |
| 0.5 | 832 - 3D Sculptural Forms and Architecture | $10-11-12$ | Pathway to AP | 12 |
| 1.0 | 843 - AP Studio Art 11 | 11 | Pathway to AP | 12 |
| 1.0 | 845 - AP Art Portfolio Preparation | 12 |  | 13 |
| 1.0 | 844 - AP Studio 12 | 12 |  | 13 |

## ENGINEERING/ PROJECT LEAD THE WAY (PLTW)

The Engineering (Project Lead the Way) Program is designed to be taken all four years. It allows students to earn college credit for each of the courses and introduces students to the scope, rigor, and discipline of engineering prior to entering college. However, even if a student is not planning to pursue a four-year college degree, they will benefit greatly from the knowledge and thought processes that result from taking some or all of the courses provided in this program. Please note: Project Lead the Way students must have access to a computer with internet access and Microsoft Office.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 641 - PLTW: Introduction to Engineering and Design (IED) | $9-10-11-12$ | College credit available | 16 |
| 1.0 | 642 - PLTW: Principles of Engineering (POE) | $10-11-12$ | College credit available | 16 |
| 1.0 | 644 - PLTW: Civil Engineering and Architecture (CEA) | $11-12$ | College credit available <br> Offered 2025-2026 | 16 |
| 1.0 | 643 - PLTW: AP Computer Science Principles (CSP) | $11-12$ | College credit available <br> Offered 2024-25 | 17 |
| 1.0 | 650 - Rube Goldberg Machine Design | $10-11-12$ |  | 17 |
| 0.5 | 635 - Computer Science Discoveries | $9-10-11-12$ |  | 17 |

## ENGLISH

Pius XI's English curriculum is designed to not only hone students' analysis and writing abilities, but also emphasizes diverse perspectives in literature and those problem-solving and social skills critical for success in today's changing, global society. Pius XI students are required to successfully complete at least four credits of English prior to graduation.

Writing Tutor Summer Training Program: August 5 - 14, 2024

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 105 - English 9 | 9 | Grad Requirement | 17 |
| 1.0 | 104 - Accelerated English 9 | 9 | Offered to Freshmen in $75^{\text {th }}$ <br> Percentile or higher on English <br> Entrance Exam; Pathway to AP | 17 |
| 1.0 | 181 - English 10 | 10 | Grad Requirement | 17 |
| 1.0 | 180 - Accelerated English 10 | 10 | Pathway to AP | 17 |
| 0.5 | 172 - Research \& Presentation Skills | $11-12$ |  | 18 |
| 0.5 | 171 - Contemporary Literature | $11-12$ |  | 18 |
| 0.5 | 163 - Women's Literature | $11-12$ |  | 18 |
| 0.5 | 121 - Science Fiction \& Fantasy | $11-12$ |  | 18 |
| 0.5 | 173 - Creative Writing | $11-12$ |  | 18 |
| 0.5 | 174 - Multicultural Literature | $10-12-12$ | Applications and acceptance into <br> the program is required. Requires <br> travel overseas during Spring <br> Break. | 18 |
| 0.5 | LIT TOP - Literature Topics | $11-12$ | Application required | 18 |
| 1.0 | 150 - AP English Language and Composition | 12 | Application required | 19 |
| 1.0 | 155 - AP English Literature and Composition | $10-11-12$ | Instructor approval and <br> Application Required | 19 |
| 0.5 | 253 - Visual Journalism | Must complete summer <br> Writing Tutor course | 19 |  |
| 0.5 | WR TUT - Writing Center Tutor Program | $11-12$ |  | 19 |
| 0.5 | Writing Tutor Summer Training Program |  | 19 |  |

## FITNESS AND WELLNESS

The Fitness \& Wellness Program is designed to be taken for four years. Although state law requires only 1.5 credits of Physical Education and 0.5 credits of Health, we recommend that students view their coursework not in terms of credit hours, but instead as something they can pursue seven days a week, developing the skills, creating the routine, and acquiring the discipline for a healthy lifestyle.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 0.5 | 085 - Freshman Co-ed Physical Education | 9 | Grad Requirement | 19 |
| 0.5 | 084 - Contemporary Health Topics | $9-10$ | Grad Requirement | 20 |
| 0.5 | 086 - Sophomore Co-ed Physical Education | 10 | Grad Requirement | 20 |
| 0.5 | 090 - Racket Up \& Stick to It | $10-11-12$ |  | 20 |
| 0.5 | 091 - Competitive Team Activities | $10-11-12$ |  | 20 |
| $0.5 / 1.0$ | $095 / 096$ - Female Body Sculpting | $10-11-12$ | Semester / Year Course | 20 |
| $0.5 / 1.0$ | $093 / 094$ - Body Development | $10-11-12$ | Semester / Year Course | 20 |
| $0.5 / 1.0$ | $087 / 088$ - Athletics Physical Education | $10-11-12$ | Semester / Year Course | 20 |

## MATHEMATICS

The Mathematics program is designed to be taken for four years. Students must complete a full year of Algebra and two additional credits of mathematics for graduation. Most colleges and universities require three or four years of college preparatory mathematics; therefore, students are strongly encouraged to go beyond the minimum graduation requirement. Placement in all courses is determined by the student's ability and interest, as well as by consulting with the student's Mathematics teacher.
ACT preparation is emphasized throughout the math curriculum.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 313 - Algebra 1 | 9 | Grad Requirement | 21 |
| 1.0 | 311 - Accelerated Algebra 1 | 9 | Pathway to AP | 21 |
| 1.0 | 323 - Geometry | $10-11-12$ |  | 21 |
| 1.0 | 321 - Accelerated Geometry | $9-10-11$ | Pathway to AP | 21 |
| 1.0 | 332 - Algebra 2 and Trigonometry | $11-12$ |  | 21 |
| 1.0 | $343-$ AP Pre-Calculus | $10-11-12$ |  | 21 |
| 1.0 | 341 - AP Calculus AB | $11-12$ |  | 21 |
| 1.0 | 340 - AP Calculus BC | 12 |  | 21 |
| 1.0 | 350 - AP Statistics | $11-12$ |  | 22 |
| 1.0 | 344 - Integrated Math Applications | 12 |  | 22 |

## PERFORMING ARTS

The Performing Arts Program prepares passionate, dedicated high school performers for college entrance and careers in the performing arts. This program offers a four-year scoped and sequenced curricular program that empowers students with the technical and interpretive tools to communicate effectively through their medium of performance. Pius XI has a one-year fine arts requirement, as do many colleges and universities. One credit in either Visual Arts, Performing Arts or a combination is required for graduation.

| Credits | Courses | Year | Comments | Page |
| :---: | :---: | :---: | :---: | :---: |
| CHORAL MUSIC |  |  |  |  |
| 1.0 | 852 - Pius XI Chorus | 9-10-11-12 |  | 14 |
| 1.0 | 854 - Concert Choir | 10-11-12 | By Audition; Freshmen with director's discretion | 14 |
| 0.5 | 856 - Vocal Jazz Ensemble | 10-11-12 | By Audition; Freshmen with director's discretion | 14 |
| 0.5 | 853 - Musical Theater | 10-11-12 |  |  |
| INSTRUMENTAL MUSIC |  |  |  |  |
| 1.0 | 861 - Beginning Band | 9-10-11-12 |  | 14 |
| 1.0 | 863 - Percussion Ensemble | 9-10-11-12 |  | 15 |
| 1.0 | 862 - Symphonic Band | 9-10-11-12 | Instructor consent | 15 |
| 1.0 | 868 - Beginning Strings | 9-10-11-12 |  | 15 |
| 1.0 | 869 - Intermediate Strings \& String Orchestra | 9-10-11-12 | Instructor consent or audition | 15 |
| 1.0 | 858 - Beginning Piano | 9-10-11-12 |  | 15 |
| 1.0 | 859 - Intermediate Piano | 9-10-11-12 |  | 15 |
| PERFORMING ARTS (cont.) |  |  |  |  |
| Credits | Courses | Year | Comments | Page |
| DANCE (Can count for Fitness \& Wellness or Fine Arts credits) |  |  |  |  |
| 1.0 | 751 - Dance 1 | 9-10-11-12 |  | 13 |
| 1.0 | 752 - Dance 2 | 9-10-11-12 | By audition | 13 |


| 1.0 | 753 - Dance 3 | $9-10-11-12$ | By audition | 13 |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 751 - Dance 4 | $9-10-11-12$ | By audition | 14 |
| 1.0 | 755 - Dance 5 | $9-10-11-12$ | By audition \& experience | 14 |
| THEATER | $9-10-11-12$ |  | 15 |  |
| 0.5 | 790 - Basic Improvisation | $10-11-12$ |  | 15 |
| 0.5 | 791 - Advanced Improvisation | $9-10-11-12$ |  | 16 |
| 0.5 | 780 - Acting 1 | $10-11-12$ |  | 16 |
| 0.5 | 782 - Acting 2 | $10-11-12$ |  | 16 |
| 0.5 | 783 - Acting 3/4 | $10-11-12$ |  | 16 |
| 0.5 | 853 - Musical Theater | $9-10-11-12$ |  | 16 |
| 0.5 | 778 - Technical Theater Fundamentals |  |  |  |

## SCIENCE

The Science Program is designed to be taken for four years. The recommended science curriculum for all students includes the foundation of the "core three" courses: Biology, Chemistry, and Physics. Additional electives and Advanced Placement (AP) courses are also encouraged to enrich students' science backgrounds and prepare them for science beyond high school. Students can earn college credits through our Advanced Placement courses. Successful completion of Biology is a requirement for all students. Each student must obtain 3 credits in science as a graduation requirement.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 362 - Physical Science | $9-10-11-12$ |  | 22 |
| 1.0 | 373 - Biology | $9-10-11-12$ | Pathway to AP/Grad <br> Requirement | 22 |
| 1.0 | 376 - AP Biology | $11-12$ |  | 22 |
| 1.0 | 381 - Chemistry | $10-11-12$ | Pathway to AP | 22 |
| 1.0 | 392 - Physics | $10-11-12$ | Pathway to AP | 22 |
| 1.0 | 391 - AP Physics | $11-12$ |  | 23 |
| 1.0 | 369 - PLTW: Principles of Biomedical Science | $9-10-11-12$ | College credit available | 23 |
| 1.0 | 370 - PLTW: Human Body Systems | $10-11-12$ | College credit available | 23 |
| 1.0 | 371 - PLTW: Medical Interventions | $11-12$ | College credit available | 23 |
| 1.0 | BIOSLR - Students Understanding Principles of <br> Research Education through Medicine, Engineering and <br> Science (SUPREMES) | Application required | 23 |  |
| 0.5 | 365 - Biological Laboratory Investigations in Forensic Science | $10-11-12$ | Rotates with POPE/Physical <br> Forensic. Offered 2024-2025 | 23 |
| 0.5 | 367 - Physical Science Laboratory Investigations in Forensics | $10-11-12$ | Rotates with POPE/ Biological <br> Forensic Sci. Offered 2025-26 | 23 |
| 0.5 | 364 - Processes of Planet Earth (POPES) | Rotates with Biological <br> Forensic Sci. / Physical <br> Forensic. <br> Offered 2024-2025 | 23 |  |
| 10 | 366 - AP Environmental Science | $11-12$ | 24 |  |

## SOCIAL SCIENCE

The Social Sciences Program is designed to be taken, as required by the State, for a total of 3 credits, with students opting to take additional coursework based on individual interest. Students must take the one-semester Foundations of American Government or Accelerated American Government, United States History or AP US History and one semester of Economics. The Economics requirement can be fulfilled by taking Economics or AP Macro Economics. All students are encouraged to pursue advanced work in Social Sciences.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 411 - World History | 9 |  | 24 |
| 1.0 | 412 - AP Human Geography | $9-10$ |  | 24 |
| 0.5 | 421 - Foundations of American Government | 10 | Fulfills Government Grad <br> Requirement | 24 |
| 0.5 | 420 - Accelerated American Government | 10 | Recommended for AP US <br> History; fulfills Government <br> Grad. Requirement | 24 |
| 0.5 | 461 - Economics | $10-11-12$ | Fulfills Economics Grad. <br> Requirement | 24 |
| 1.0 | 460 - AP Macro Economics: Principles of Macroeconomics | $10-11-12$ | Fulfills Economics Grad. <br> Requirement | 24 |
| 0.5 | 456 - Introduction to Psychology | $11-12$ | $11-12$ | Application required |

## THEOLOGY

The Theology Department's four-year curriculum supports students in developing and deepening their relationship with God and using that relationship to interpret and guide their life in this world. Pius XI has a 4 credit Theology requirement for graduation.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 005 - Living Our Faith | 9 | Grad Requirement | 25 |
| 1.0 | 001 - Hebrew/Christian Scripture | 10 | Grad Requirement | 26 |
| 0.5 | 075 - Biblical Themes in Literature | $11-12$ |  | 26 |
| 0.5 | 031 - Christian Spirituality | $11-12$ |  | 26 |
| 0.5 | 041 - World Religions | $11-12$ |  | 26 |
| 0.5 | 065 - Catholic Social Justice (formerly Justice \& Liberation) | $11-12$ |  | 26 |
| 0.5 | 051 - Morality and Ethics | $11-12$ | Grad Requirement | 26 |
| 0.5 | 006 - Church History | $11-12$ |  | 26 |
| 0.5 | 071 - Christian Discipleship and Leadership | 12 |  | 26 |

## WORLD LANGUAGE

The World Languages Program is designed to be taken all four years for language proficiency. Some universities require two, or in some cases, three or four years of a single world language for admission. Opportunities for advanced study in language are offered and students may choose to study more than one language. The more levels taken at Pius XI, the more likely it is that a student can place higher into a college's program, where they would earn college credit for some or all of the prerequisite courses. A program is available for heritage Spanish speakers to help strengthen and develop their Spanish language skills.

| Credits | Courses | Year | Comments | Page |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 511 - French 1 | $9-10-11$ |  | 27 |
| 1.0 | 512 - French 2 | $9-10-11-12$ |  | 27 |
| 1.0 | 513 - French 3 | $9-10-11-12$ | Pathway to AP | 27 |
| 1.0 | 514 - French 4 | $10-11-12$ |  | 27 |
| 1.0 | 515 - AP French | 12 |  | 27 |
| 1.0 | 521 - Spanish 1 | $9-10-11$ |  | 27 |
| 1.0 | 522 - Spanish 2 | $9-10-11-12$ |  | 27 |
| 1.0 | 523 - Spanish 3 | $9-10-11-12$ | Pathway to AP | 27 |
| 1.0 | 524 - Spanish 4 | $10-11-12$ | Pathway to AP | 27 |
| 1.0 | 527 - Spanish for Heritage Speakers | $9-10-11$ | Pathway to AP | 28 |
| 1.0 | 525 - AP Spanish Language | 12 |  | 28 |

## COURSE DESCRIPTIONS

## VISUAL or PERFORMING ARTS

I.0 CREDIT REQUIRED FOR GRADUATION
1.0 Credit of Art \& Design OR Performing Arts is required for Graduation. 801 - Art Fundamentals is a prerequisite for all courses besides 831 - Ceramics. Dance Courses can count as Fitness \& Wellness Credits OR Performing Arts Credits. AP Courses are available to be taken upon meeting all requirements.

## ART \& DESIGN

## 801 - ART FUNDAMENTALS | 1.0 credit (AY)

Art Fundamentals is a yearlong foundation class and a prerequisite to the rest of our program. This class is the beginning of a student's artistic journey teaching them to see, to trust their eyes and hands and build confidence in their abilities. First semester a variety of strategies are taught through observational drawing. The second semester continues building upon skills gained in the first semester with the addition of color. We use drawing, painting and technology to create a finished painting by the end of the semester. Students are required to document their class work and homework assignments weekly. Required homework for class should take between 30 and 45 minutes per assignment.

## 83I - CERAMICS 0.5 credit (AS)

In this one-semester course, students will work with clay, and learn hand-building techniques including coil and slab construction. Students will study the glaze-making process through a variety of techniques. By the end of the semester, students will have had a "hands-on" experience and gain a basic understanding of both sculptural and functional aspects of working with clay. PREREQUISITE: Art Fundamentals or sophomore, junior or senior standing.

## $81 I$ - DESIGN: INTRODUCTION TO PHOTOSHOP AND ADOBE ILLUSTRATOR 0.5 credit (AS)

The focus of this one-semester course is to introduce students to industry-standard creative technologies, develop design-thinking abilities, sharpen creative problem- solving skills, and increase every student's technology literacy. Students will learn to employ the elements and principles of design to develop effective visual communication skills. Using a variety of media and techniques, including Adobe Photoshop and Illustrator, students will create visually compelling, conceptually sound, and informationally communicative designs that reflect their individual interests. Over the semester students, gain the abilities to create strong, effective compositions and translate their ideas to physical materials through print, vinyl/laser cutting, and other media. PREREQUISITE: 801 - Art Fundamentals.

## 82I-FIGURE DRAWING | 0.5 credit (AS)

The human figure is one of the most dynamic subject matters in the history of art. It is a universal form, which we all use to interact with the world around us. Artists have always used the figure for its expressive nature and its ability to communicate, thoughts, feelings, and ideas. Students are taught step by step the balance of speed and accuracy through careful observation of gesture, structure, and form. Students will explore the figure with a variety of media working directly from one another as a model. This course is a logical step after Art Fundamentals, and is a prerequisite for Painting and Experimental Drawing. PREREQUISITE: 801 Art Fundamentals.

## 817-EXPERIMENTAL DRAWING 0.5 credit (AS)

Drawing is a universal language. Experimentation is a process rooted in play and the exploration of the unknown. In this context, Experimental Drawing is designed to help students become re-acquainted with the joy, excitement and potential of mark making and the image making process as a way to communicate ideas. In this one-semester course, students will learn to coordinate their hands and eyes to explore and depict ideas and subjects that they are interested in. Students will develop an individualized repertoire of skills and techniques using both traditional and non-traditional drawing tools and media to create art that is significant in a personal level. PREREQUISITE: 801 - Art Fundamentals; ADDITIONALLY RECOMMENDED: 821 - Figure Drawing.

## 819 - FIBERS, FASHION CONSTRUCTION AND DESIGN | 0.5 credit (AS)

Fashion often starts out as outrageous and impractical as seen on runways in Milan and Paris. The emphasis of this one semester course engages students in constructing wearable art and sculptural fashion pieces using alternative materials and construction methods. The processes may include assemblage of found objects, sewing, paper maché, and hand-built materials. Experimentation and discovery with unusual materials will drive our methods as we work to construct original fashion pieces. Technical and
conceptual problem-solving skills will be developed in this class. This course is recommended for students interested in developing or adding to an AP 3D portfolio in fashion or sculpture. PREREQUISITE: 801 - Art Fundamentals. Additionally recommended - 831 Ceramics, 811 - Design or 821 - Figure Drawing.

## 84I-PAINTING|0.5 credit (AS)

In this one-semester, course students explore color as a driving force behind the evolution of their intuitive and technical abilities. Expanding upon their understanding of mixing, blending, and application, students will be guided through various painting strategies rooted in both historical art and contemporary practices. Students will work on a variety of sizes and surfaces using acrylic mediums. Interplay between realism and abstraction is the primary goal of the course with a particular emphasis on each student developing an individualized body of work that is personally relevant. PREREQUISITE: 801 - Art Fundamentals; ADDITIONALLY RECOMMENDED: 821 - Figure Drawing.

## 805 - PHOTOGRAPHY I | 0.5 credit (AS)

In this one semester course, students will learn to harness photography's ability to capture and reproduce light using both a nalog and digital technologies. Students will craft their own cameras; understand the physical mechanics and technology of 35 mm film cameras begin to develop a critical eye when taking photographs, and combine digital and analog processes. In this course, students will begin to challenge the status quo of photography. In class, discussions and visual projects will generate thoughts and images that question what photographs are capable of, what their role in society has come to be, and how images will continue to shape our world. Students will learn how to develop 35 mm film and images in the darkroom. They will also be asked to experiment with digital and paper negatives, transparencies, and other manipulation techniques. Photoshop is introduced as a tool for correcting and printing photographs. Students need to provide their own SLR 35mm film camera* and a digital camera (mobile phone, tablet, point-and-shoot, or DSLR).*Some cameras may be available for use from the Visual Art Department. PREREQUISITE: 801 - Art Fundamentals and Junior or Senior standing.

## 806 - PHOTOGRAPHY 2 I NEW GENRES ALTERNATIVE PROCESSES $\mathbf{0 . 5} \mathbf{~ c r e d i t ~ ( A S ) ~}$

Photography 2 builds upon the ideas and processes introduced in Photography 1. New Genres and Alternative Processes means that this class is geared towards experimentation and integration of various analogue and digital photographic techniques. Ideal students for this course are curious and possess a love of crafting images. Students will spend the semester building a body of work that showcases their unique voice through an exploration of content and processes. Students will be pushed both formally and conceptually while being allowed the time and resources they need to explore and research areas of personal interest. Juniors in this class can prepare an AP Portfolio in photography for college credit (submitted the following year). This class is excellent preparation for students pursuing AP Portfolio in photography, installation and time-based media. PREREQUISITE: 801 - Art Fundamentals and 805 Photography I

## 832-3D SCULPTURAL FORMS AND ARCHITECTURE 0.5 credit (AS)

Through idea building, experimentation and discovery students in this one semester course will build architectural models and sculptural forms. We will build using cut and folding methods and the laser cut materials to create and construct forms. Materials vary with each problem and the student's vision for a solution. Concepts covered include space, form, light, scale, movement, flow and structural integrity. This class is beneficial to students interested in architecture, set design, package design, environmental design, and sculpture. It is recommended for students interested in developing or adding to an AP 3D portfolio in any of those areas. PREREQUISITE: Art Fundamentals. This course is open to Sophomores, Juniors, and Seniors.

## 843 - AP STUDIO ART II (AP DRAWING \& PAINTING OR AP 2-D DESIGN OR AP 3-D DESIGN) | 1.0 credit (AY)

This is a portfolio course designed for the highly motivated junior level art student, who is ready to prepare a focused body of work for college admission and Advanced Placement credit. Concurrent enrollment in two of the junior level courses (Painting, Experimental Drawing, Photo 1, Fibers, Sculpture or Design) is strongly recommended. Students will create a 2-D design AP portfolio as they refine their technical skills and begin to work more conceptually by demonstrating sustained investigation through practice, experimentation and revision. The individualized body of work they create will prepare them to enter national competitions and compete for summer scholarships to prestigious art colleges and universities. Attendance at MIAD'S Portfolio Day, College Presentation Days, and Pius XI Fine Arts Day is mandatory. This course is not required for a student to take AP Art Portfolio. PREREQUISITE: Consent of instructor and two Junior-level courses (which may be taken concurrently with AP Studio 11). Also two of the following courses: Figure Drawing, Design, 3D Sculpture and Architecture. Summer Portfolio Prep class is strongly recommended for students enrolled in AP Studio 11. Forms will be available after registration. In order to have a successful, complete experience in this AP course, students must complete the AP portfolio. If a student does not complete the AP portfolio, they will not receive a weighted grade.

## 845 - AP ART PORTFOLIO PREPARATION | 1.0 credit (AY)

Portfolio is an individualized yearlong studio course designed for students to discover their visual voice through the continual refinement of their technical and conceptual skills. The emphasis is on completing a body of work in any medium, e.g. Drawing, Fashion, Architecture, Painting, Animation and Film, Photography, Sculpture, etc. The body of work students build will prepare them to enter national competitions, admission, and scholarships to prestigious art colleges and universities. The Context of Western Culture course is a critical component to success in this class and therefore, concurrent enrollment in AP Portfolio and Context of Western Culture is required. Attendance at MIAD's Portfolio Day, College Presentation Days, and Pius XI Fine Arts Days is mandatory. It is possible to earn between three and nine college credits by taking this course. PREREQUISITES: Consent of instructor; concurrent enrollment in Context of Western Culture, a Social Science .5 credit. Prerequisites also include at least three or more of the following courses: Figure Drawing, Design, Experimental Drawing, Painting, Photography, 3D Design, Fashion and Fibers, AP Studio 11. It is recommended that students have at least one art class per semester Freshman through Junior year. Summer Portfolio Prep class is strongly recommended for students enrolled in AP Portfolio. Forms will be available after registration. In order to have a successful, complete experience in this AP course, students must complete the AP portfolio. If a student does not complete the AP portfolio, they will not receive a weighted grade.

## 844 - AP STUDIO 12 | 1.0 credit (AY)

This course requires concurrent enrollment in AP Portfolio and is designed for the highly motivated senior who is preparing a focused body of work for college admission and AP credit with the potential to earn 6-9 college credits. Students will create an AP portfolio by demonstrating sustained investigation through practice, experimentation and revision. The individualized body of work they create will prepare them to enter national competitions and to compete for admission and scholarships to prestigious art colleges and universities. Attendance at MIAD'S Portfolio Day, College Presentation Days, and Pius XI Fine Arts Day is mandatory. AP credits can be earned in Drawing and Painting, 2-D Design, Photography, and/or 3-D Design. Most students in Studio 12 complete a 3D portfolio through Fashion Design, Architectural Design, Sculpture, Installation- using video, photography or sculpture. The completed work from these prior classes lay the groundwork and direction for the AP 3D Portfolio. PREREQUISITE: Consent of instructors; concurrent enrollment in AP Art Portfolio In order to have a successful, complete experience in this AP course, students must complete the AP portfolio. If a student does not complete the AP portfolio they will not receive a weighted grade. Prerequisites preferred for Studio 12 include Photography, Fashion and Fibers, 3-D Sculpture, and Architectural Design and Ceramics.

## PERFORMING ARTS

## DANCE

## 75I-DANCE I | 1.0 credit (AY)

Using a ballet-based approach, Dance 1 explores movement as a creative art form. Students will become acquainted and develop a basic understanding of dance fundamentals including terminology, placement and strength. Through dance ensemble work and improvisation, students use creative and critical thinking skills to create and communicate meaning through dance movement. No previous dance experience is necessary. Students will also explore jazz, hip hop and modern styles. Students will be introduced to the history of ballet, jazz, and modern dance genres as well as explore a variety of career opportunities in dance. This is a twosemester course that includes a performance opportunity at the end of the year.

## 752 - DANCE 2 | 1.0 credit (AY)

Dance 2 will emphasize the students' acquisition of intermediate movement skills and refined motor control. Students learn to take responsibility for their personal health and to care for their dance instrument. Through dance ensemble work, students continue to explore improvisation, dance elements and composition as both dancer and choreographer. Further awareness is enhanced through the study of dance history, the exploration of dance through a variety of cultural contexts and dance as a career choice.
PREREQUISITE: Audition

## 753 - DANCE 3 | 1.0 credit (AY)

Dance 3 students demonstrate a commitment to attaining an intermediate level of technical skill and performing with greater fluency, precision and articulation as well as a commitment to a dancers' personal fitness. Students will combine the use of improvisation, dance elements, choreographic principles and technical/theatrical elements to explore the creation of meaningful dance compositions. Students are encouraged to communicate personal feelings, thoughts, ideas and concepts
through the skillful use of dance movement and in the presentation of their choreography. Students will also analyze and evaluate in a constructive manner the impact of their choreography and work of others. Students will continue their study of dance through cultural and historical viewpoints. Dance 3 will prepare dancers for the audition process and inform dancers of the occupational opportunities available after high school. PREREQUISITE: Audition

## 754 - DANCE 4 | 1.0 credit (AY)

Dance 4 provides the student with the opportunity to develop an advanced level of dance technique and refine their skills as both performer and choreographer. This course is designed to prepare the student for continuing or pre-professional training in the disciplines of Dance. Students apply their creative and technical knowledge and skills through a variety of performance opportunities. Using expanded aesthetic criteria students analyze, synthesize and evaluate their choreography as well as works of others. Students will explore the current developments in dance and of the Twentieth Century. Studies include the purpose of dance, dance genres and styles, artistic conflicts and resolutions, innovations, social issues and significant contributors. Students will focus on the development and achievement of their personal dance goals. PREREQUISITE: Audition

## 755 - DANCE 5 | 1.0 credit (AY)

Dance 5 provides the student with the opportunity to develop a pre-professional level of dance technique and learn repertoire in a professional dance atmosphere. This course is designed to prepare the student for continued dance training following high school in professional or collegiate dance programs. Students apply their advanced technical knowledge to create original works and perform professional level repertoire in a variety of performance opportunities. Studies include the purpose of dance, dance genres and styles, artistic choices, and innovations as well as current dance topics and contributors. Students will focus on the development and achievement of their personal dance goals. PREREQUISITE: Audition

## CHORAL MUSIC

## 852 - PIUS XI CHORUS \| I. 0 credit (AY)

Choir is open to all singers at any grade level without audition. Students will learn all of the technical skills they need to be confident about singing. The Pius Choir sings a wide variety of musical styles. This group participates in the Pius XI concert season and performs occasionally in the community. For freshmen, the path to discovering choral music begins here. In addition, other performing experiences are offered, such as State Honors Choir auditions, Solo and Ensemble Festival, choral festivals and voice master classes.

## 854 - CONCERT CHOIR | 1.0 credit (AY)

This choir is an advanced ensemble of juniors and seniors who have shown exceptional musical achievement. Challenging choral repertoire from all major style periods will be studied and performed. This group participates extensively in the Pius XI concert season and performs frequently in the community. PREREQUISITE: Audition. Freshmen may enroll at the choir director's discretion.

## 856 - VOCAL JAZZ ENSEMBLE $\mathbf{0 . 5}$ credit (AS)

This class is comprised of juniors and seniors who are selected by audition. This group rehearses as a vocal jazz ensemble and works on solo jazz singing using repertoire from the Great American Songbook. They participate in the Pius XI concert season and perform in community events and more. To be in this course students must be enrolled in a larger choral ensemble.
PREREQUISITE: Audition. Freshmen may enroll at the choir director's discretion.

## 853 - MUSICAL THEATER | 0.5 credit (AS) "NEW"

This performance-oriented, interdisciplinary course provides a fundamental introduction to the art of musical theater. Course content will focus on the development of foundational skills in singing, acting, and dancing. Students will explore through discussion and written work how musical theater reflects society and how musicals connect to their own lives. PREREQUISITE: Acting 1 or Choir 1.

## INSTRUMENTAL MUSIC

## 86I-BEGINNING BAND \| I. 0 Credit (AY)

Beginning Band is for any student interested in learning how to play one of the following band instruments: Flute, Oboe, Clarinet, Bassoon, Saxophone, French Horn, Trumpet, Trombone, Euphonium, or Tuba but without prior experience. This course develops performance and music reading skills in a supportive, enjoyable ensemble experience. No prior experience playing an instrument or reading music is required - we start at the very beginning and learn to read and play as we go. The Beginning Band will perform in concerts during the Pius XI instrumental concert season. Attendance at these performances is required as is daily practice at home.

## 863 - PERCUSSION ENSEMBLE | 1.0 credit (AY)

This ensemble is for any student with at least one year of percussion experience on both mallet instruments and drums. This course develops an understanding and application of correct performance techniques on all percussion instruments. The percussion ensemble will perform as a drum line, as an ensemble, and as the percussion section of the Symphonic Band in concerts during the Pius XI instrumental concert season. All percussionists should sign up for Percussion Ensemble, as full band is part of the class experience.

## 862 - SYMPHONIC BAND \| $\mathbf{I} .0$ credit (AY)

This ensemble is for any student with prior experience on a wind, brass or percussion instrument. This course offers instruction in advanced playing techniques and repertoire. Students will rehearse and perform music from a wide variety of styles while honing their ensemble skills. The Symphonic Band will perform in concerts during the Pius XI instrumental concert season, and at the District and State Solo/Ensemble Festival. Attendance at the performances is required as is daily practice at home.
PREREQUISITE: Previous band experience or Instructor consent.

## 868 - BEGINNING STRINGS | 1.0 credit (AY)

This ensemble is for any student interested in learning how to play one of the following bowed instruments: violin, viola, cello, or double bass. This course offers beginning, fundamental technical skills and music reading in a supportive, enjoyable ensemble experience. No prior playing experience is necessary. Students will be introduced to different styles of music including folk and classical. The Beginning Strings will perform in concerts during the Pius XI instrumental concert season. Attendance at these performances is required as is daily practice at home.

## 869 - INTERMEDIATE STRINGS \& ORCHESTRA STRINGS \| 1.0 credit (AY)

This ensemble is for any student with at least one year of experience (two years' experience preferred) playing an orchestral string instrument (violin, viola, cello, or double bass). This course offers continuing instruction in fundamental and advanced technical skills and music reading in a supportive, enjoyable ensemble experience. Students will play in many styles of music including folk, classical, and contemporary, and will hone their ensemble skills. The Intermediate Strings and String Orchestra will perform in concerts during the Pius XI instrumental concert season and at the district solo and ensemble festival. PREREQUISITE: Audition and/or Instructor consent.

## 858 - BEGINNING PIANO | 1.0 credit (AY)

This course is designed for any student interested in learning how to play Piano - no prior musical experience is necessary. Students will learn the fundamentals of piano technique as well as music theory in a combination of individualized and group instruction. A fun and supportive learning environment, this course is the perfect start for a student wanting to take a music class! If you are interested and do not own a Piano/Keyboard, please contact the instructor.

## 859 - INTERMEDIATE PIANO \| $\mathbf{I} .0$ credit (AY)

Intermediate Piano is a level II class following Beginning Piano. Students will implement proper playing technique through the use of etudes, scales and repertoire. Students will also learn the correlation between repertoire and basic music theory such as melodies, harmonies, rhythm, form and textures. PREREQUISITES: Basic piano/keyboard skills, the ability to read sheet music, at least one year's worth of piano classes (Beginning Piano) or lessons. Audition which includes solo, scales, etudes or consent of instructor.

## THEATER

## 790 - BASIC IMPROVISATION 0.5 credit (AS)

In this course, students will explore the creation of characters and scenes through games, free-form exercises and script writing. Emphasis will be placed on learning and mastering the fundamentals of improvisation including: spontaneity, listening and responding to your partner, and making/accepting offers. Additionally, students will learn to critique and evaluate their own work and the work of their peers. Students will demonstrate their mastery of these skills in a final class performance in front of an audience.

## 791 - ADVANCED IMPROVISATION 0.5 credit (AS)

In this course, students will continue the exploration of character and improv techniques. Emphasis will be placed on developing the skills acquired during Basic Improvisation and expanding on them. The course will culminate in the production of an improvised show. PREREQUISITE: Basic Improv.

## 780 - ACTING I 0.5 credit (AS)

Acting 1 is a thorough, fundamental acting class. Students will explore the basic skills of acting as they learn how to create a truthful, sustained character in a scripted or improvised scene. The focus point of this class is the application of given circumstance, objective, action and obstacle in performing scenes from classic and contemporary plays. Students will explore thorough discussion and written work how plays reflect society and how they connect to their own lives. Hagen, Meisner, Stanislavsky, and Chekov techniques will be explored.

## 782 - ACTING 2 | 0.5 credit (AS)

Acting 2 is a rigorous, practical acting class. Students will explore improvisation, scenes, monologues and plays as tools for unlocking truthful, spontaneous behavior and refining their skills as actors. Emphasis will be on physical and emotional characterization with the application of previous techniques (given circumstance, objective, action and obstacle, as well as new skills introduces. Laban Movements, Thought exercise, The Masks, and Stanislavski Techniques will be explored. Students will demonstrate their mastery in a final performance and talkback with an invited audience. PREREQUISITE: Acting 1.

## 783 - ACTING $3 / 4$ | 0.5 credit (AS)

Acting $3 / 4$ can be taken twice, once as Acting 3 and once as Acting $4.3 / 4$ is a rigorous, practical acting class. Students will explore deep emotional character development and connection skills as actors. Emphasis will be on emotional characterization with the application of previous techniques (given circumstance, objective, action and obstacle, Laban, as well as new skills introduced. Students will demonstrate their mastery in a final performance and talkback. The Masks, and additional Stanislavski Techniques will be explored. PREREQUISITE: Acting 2 or teacher approval.

## 778 - TECHNICAL DESIGN IN THEATRE FUNDAMENTALS $\boldsymbol{0 . 5}$ credit (AS)

This is an introductory course in the theory and practice of technical design for the theatre. The primary goal of this class is to provide access to terms, concepts, and design principle applications for theatrical scenery, costume, makeup/hair, sound, and lighting design. The students will contribute to the construction of sets and designs for all shows. The students will learn how to safely and properly use various construction tools, both power tools and hand tools. Additional volunteer time outside of the normal class time may be requested of the student.

## 853 - MUSICAL THEATER | 0.5 credit (AS) "NEW"

This performance-oriented, interdisciplinary course provides a fundamental introduction to the art of musical theater. Course content will focus on the development of foundational skills in singing, acting, and dancing. Students will explore through discussion and written work how musical theater reflects society and how musicals connect to their own lives. PREREQUISITE: Acting 1 or Choir 1.

## ENGINEERING / PROJECT LEAD THE WAY

## ELECTIVE COURSES

We recommend at least one Engineering \& Technology course in your four years. AP Courses are available to be taken upon meeting all requirements.

## 641 - PLTW: INTRODUCTION TO ENGINEERING AND DESIGN (IED) | 1.0 credit (DS)

This course emphasizes the development of design and teaches problem-solving skills in a project- based environment. Teams of students use solid modeling computer design software to produce, analyze and evaluate models of project solutions.
PREREQUISITE: Concurrent enrollment in Algebra I or higher.

## 642 - PLTW: PRINCIPLES OF ENGINEERING (POE) \| I.0 credit (AY)

In this second-year course students design and program robotics devices, build and test various machines, and test different materials and systems. Students use math, science and technology to understand, design, and build their prototypes. The course also addresses concerns about the social and political consequences of technological change. PREREQUISITE: Concurrent enrollment in college preparatory mathematics and science. Satisfactory completion of 641 - IED.

644 - PLTW: CIVIL ENGINEERING AND ARCHITECTURE (CEA) | 1.0 credit (AY)
(2025-2026)
This yearlong course offers an overview of the fields of civil engineering and architecture, while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art software to solve real- world problems and present solutions to hands-on projects and activities in multiple formats, such as PowerPoint, brochures, posters and oral presentations. PREREQUISITE: Concurrent enrollment in college preparatory mathematics and science. Satisfactory completion of 641 - IED and 642 - POE.

## 643 - AP/PLTW COMPUTER SCIENCE PRINCIPLES (CSP) \| 1.0 credit (AY)

(2024-2025)
Using Python as a primary tool, students learn the fundamentals of coding, data processing, data security, and task automation, while learning to contribute to an inclusive, safe, and ethical computing culture. The course promotes computational thinking and coding fundamentals and introduces computational tools that foster creativity. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. PREREQUISITE: Satisfactory completion of IED and POE.

## 650 - RUBE GOLDBERG MACHINE DESIGN | 1.0 credit

A team of students will follow the Engineering Design Process to design and construct a complex machine to accomplish a particular task. The team will work throughout the year to research, sketch, build, and present the device. They will compete in the Rube Goldberg Machine Contest in early March. The students and teacher will decide on specific goals, objectives, and responsibilities for both individuals and the team. PREREQUISITE: One credit of science, completion of IED, concurrent enrollment in mathematics and science. Application required.

## 635 - COMPUTER SCIENCE DISCOVERIES (CODE.ORG) $\mathbf{0 . 5}$ credit (AS)

In this introductory computer science, course students will be empowered to create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving, and fun. Student will learn problem solving, programming, physical computing, user centered design, and data skills in order to build their own websites, apps, animations, games, and physical computing systems.

## ENGLISH

### 4.0 CREDITS REQUIRED FOR GRADUATION

105 - English 9 or 104 - Accelerated English 9 (if placed by entrance exam) is required to be taken Freshman Year. Visual Journalism counts as an Elective Course and not as an English Course. AP Courses are available to be taken upon meeting all requirements.

## 105 - ENGLISH 9 | 1.0 credit (DS)

In this yearlong, introductory English course, students will be exposed to a variety of literary classics in multiple genres: short stories, novels, plays, and poetry. Featured texts include, but are not limited to, Lorraine Hansberry's, A Raisin in the Sun, F. Scott Fitzgerald's, The Great Gatsby, and Langston Hughes', Thank You, Ma'am. Students will also master the essential skills necessary to craft complex paragraphs and essays. These fundamental reading and writing skills are an integral and vital component of all subsequent English courses.

## 104 - ACCELERATED ENGLISH 9 | 1.0 credit (DS)

This foundational course is designed for the freshman students who demonstrate ability and proficiency in reading and writing. The accelerated course is faster- paced, with more complex literature studied as compared to the standard English 9 course. Featured texts include, but are not limited to, Sandra Cisneros, A House on Mango Street, Markus Zusak's, The Book Thief, and two independent novel selections. PREREQUISITE: Top 85th percentile of class on English Entrance Exam.

## 181-ENGLISH IO 1.0 credit (DS)

Students will have the opportunity to read a variety of fiction and nonfiction texts and will be encouraged to connect their reading to themselves, other content discipline areas, other fiction and nonfiction texts, and ultimately to their larger global community. In addition, students will learn a variety of different essay modes including argumentative, persuasive, analytical, reader response, narrative, expository, and research writing.

## 180 - ACCELERATED ENGLISH 10 | 1.0 credit (DS) "NEW"

In this semester-long sophomore writing course, students will be given the opportunity to hone the writing skills established during freshman year, while broadening students' exposure to the myriad styles and genres of writing. Emphasis will be placed on writing with clarity, voice, organization, purpose, and audience. Students will become familiar with writing as a process, with peer evaluations and revision an integral part of class time. PREREQUISITE: Accelerated English 9 or Department Approval.

## 172-RESEARCH AND PRESENTATION SKILLS | 0.5 credit (DT)

This course prepares students for a variety of academic and formal situations in which presentations or public speaking is required. Students who intend on pursuing a career that will require an emphasis on professional communication, such as law, medicine, sales, or education would benefit from this class. Students, who feel self-conscious about their public speaking skills and are looking to improve before graduation, would greatly benefit from enrolling. Topics covered will include reducing speech anxiety, interviewing skills, conflict resolution, techniques of oral presentation, and tips for writing a college admissions essay. PREREQUISITE: Junior/Senior Course or Department Approval.

## I7I-CONTEMPORARY LITERATURE \| $\mathbf{0 . 5}$ credit (DT)

Juniors and seniors who take this semester-long course will analyze contemporary fiction and apply myriad approaches to literary interpretation. Featured literature selections include Yann Martel's, Life of Pi and Anthony Burgess', A Clockwork Orange. Students will also be challenged to fine-tune their digital literacy by interpreting literature through audiovisual writing. Students will depict their close readings and critical analysis of texts through sound, lyrics, and fine art, ultimately devising a product that blends their visual and audio interpretations of the feeling and imagery of the text into a single product. PREREQUISITE: Junior/Senior Course or Department Approval.

## 173-CREATIVE WRITING $\mathbf{0 . 5}$ credit (DT)

This course is designed for juniors and seniors who enjoy writing as a form of art and personal expression. In this course, students will explore the elements of numerous literary genres (short fiction, poetry, drama, film) and the power of both print and multimedia formats. To develop original writing pieces, students will engage in writing work- shops, literary element development lessons, writing/author studies, and peer reviews and conferences. To show evidence of writing development throughout the course, students will be required to engage in writing community activities that require sharing one's work and in publishing one's writing beyond the classroom setting. PREREQUISITE: Junior/Senior Course or Department Approval.

## 163 - WOMEN'S VOICES IN LITERATURE \| 0.5 credit (DT)

This one-semester course examines contemporary literature (short stories, novels, memoirs, and poetry) by women writers including Octavia Butler and Lindy West, who come from diverse social, cultural, economic, and personal perspectives. Students will become acquainted with the contribution of these women writers to the English literary tradition, with a particular focus on literature of dissent. Juniors and seniors who take this course can expect to complete rigorous reading and writing assignments, as well as participate in thoughtful class discussions, on a daily basis. PREREQUISITE: Junior/Senior Course or Department Approval.

## 174-MULTICULTURAL LITERATURE \| 0.5 credit (DT) "NEW"

In this one-semester course, you will examine literature from Black, Latinx, Indigenous, and/or Asian authors. The course will focus on diverse approaches to the themes of ancestry, family, authority, freedom and love. Multicultural Literature is intended to expand the horizons of our students, who, in previously literature classes, have been predominantly exposed to the literature from European backgrounds. PREREQUISITE: Junior/Senior Course or Department Approval.

## 121 - SCIENCE FICTION \& FANTASY 0.5 credit (DT) "NEW"

This one semester course offers an immersive exploration into the captivating realms of Science Fiction and Fantasy literature, providing you with a unique opportunity to delve into imaginative worlds and speculative futures. Through a diverse selection of novels, short stories, and critical essays, students will analyze the thematic elements, literary techniques, and cultural significance inherent in these genres. This course is designed to foster a love for imaginative storytelling, encourage critical thinking, and provide students with a broader perspective on the possibilities and implications of speculative fiction. PREREQUISITE: Junior/Senior Course or Department Approval

## LIT TOP - LITERATURE TOPICS $\boldsymbol{0 . 5}$ credit (DT - Term 3 only)

In this 2nd semester study-abroad English course, students will study the origin and historical context of a selected area overseas. We will read literature relevant to the time-period and cities that influenced the chosen topic. As a capstone experience at the end of this course, students will travel to those countries to study these works closely and engage in discussion revolving around the chosen topic. PREREQUISITE: To take this course, students must travel with the class to Europe. Applications and acceptance into program required. Open to Sophomores, Juniors, \& Seniors.

## 150-AP ENGLISH LANGUAGE AND COMPOSITION | 1.0 credit (AY)

In this AP English Language and Composition course, students will study the use of language through various forms. The primary goal of this course is to analyze the author's purpose by engaging in conversation through texts of various disciplines. Through the study of rhetoric, students will develop the ability to analyze effectively language in a variety of forms such as argumentative, synthesis, and rhetorical analysis. While interacting with the author's purpose of the text, the students will also discern how the author uses language to convey this message to the audience. Students will be required to brainstorm, create outlines, revise through several drafts, and utilize the Pius XI Writing Center regularly to engage in conversation about their writing. These conversations through writing are an integral component of the course and will be practiced through writing circles, peer conferences, and teacher conferences. PREREQUISITE: Academic record in previous English courses, an application and essay will be reviewed for acceptance into the course. To have a successful, complete experience in this AP course, students must complete the AP English Language \& Composition Exam. Applications and acceptance into the program is required.

## 155 - AP ENGLISH LITERATURE AND COMPOSITION | 1.0 credit (AY)

This yearlong course is designed for seniors who have shown exceptional interest and ability in the study of literature and writing. AP Literature and Composition is a rigorous course, which relies on the dedication and active participation of each student involved. The novels, short stories, plays and poems are college-level texts, as recommended by the College Board. College credit may be earned by completing the course and the AP Literature exam in the spring. PREREQUISITE: Academic record in previous English courses, an application and essay will be reviewed for acceptance into the course. To have a successful, complete experience in this AP course, students must complete the AP English Literature \& Composition Exam. Applications and acceptance into the program is required.

## 253 - VISUAL JOURNALISM (formerly YEARBOOK) \| 0.5 credit (AY)

Visual Journalism is a dynamic and comprehensive high school course designed to introduce students to the exciting world of journalistic storytelling through visual media. This course blends the principles of journalism with the power of visual communication, equipping students with the skills and knowledge necessary to convey information, evoke emotions, and tell compelling stories through images. By the end of the course, students will not only have acquired practical skills in visual journalism but will also develop a critical understanding of the ethical and societal implications of their work. The end result will be the creation of the school's yearbook. This course counts as an elective credit. PREREQUISITE: Sophomore, Junior, or Senior standing. Application required.

## WRITING CENTER TUTOR PROGRAM $\mathbf{0 . 5}$ credit/SEM (AY)

As a Pius XI writing tutor, students work with writers through any stage of the writing process on all forms of writing. Writing tutors engage in discussion that revolves around the formation of ideas and the structure of writing. Throughout this course, students not only help others to become better writers, but also, in turn, become better writers themselves. Writing tutors allocate 10 mods per cycle in their schedule for tutoring. PREREQUISITE: Completion of the writing tutor training before 1st year as a writing tutor; Junior or Senior standing course during the summer. Elective - Does not count toward English requirement for graduation. Application required.

## WRITING TUTOR SUMMER TRAINING PROGRAM $\mathbf{0 . 5}$ credit

This is a required course for students, before their junior or senior year, who have been accepted into the Writing Tutor Program. In this class, students read and analyze texts to understand the foundation and pedagogy behind being a writing tutor. After understanding the foundation, students work with all types of writing to understand how the process varies with each genre of writing. Students visit college Writing Centers such as Marquette University and UW-Madison to talk with university writing tutors on their experiences and practice mock conferences. Students also tutor incoming freshmen students through the writing process to practice their tutoring skills. This course is primarily based upon collaboration, discussion, and reflection. Course Dates: Aug. 5-14. Elective - Does not count toward English requirement for graduation.

## FITNESS AND WELLNESS

### 2.0 CREDITS REQUIRED FOR GRADUATION

085 - Freshman PE \& 086 - Sophomore PE are graduation requirements. An additional 0.5 credit of PE is required for graduation. 084 - Contemporary Health is required during Freshman or Sophomore year.

## 085 - FRESHMAN CO-ED PHYSICAL EDUCATION | 0.5 credit (DT)

In this semester-long survey course, students will be introduced to a variety of individual and team activities designed to promote interpersonal and social development. Activities will be centered on lifetime sports, improvement in coordination, muscular
strength, muscular endurance, and team- building skills. Students will participate in a weekly fitness class, which will enable them to better understand the importance of good cardiovascular fitness

## 084 - CONTEMPORARY HEALTH TOPICS | 0.5 credit (DT)

In this required one semester course, students will learn basic wellness information that can be applied throughout their lives. Students will study topics such as first aid, CPR, substance use and abuse, nutrition, relationships, and mental health. Students will learn current trends and statistics about these topics and will use this information to weigh options and help develop behaviors to make responsible decisions that promote a healthy lifestyle.

## 086 - SOPHOMORE CO-ED PHYSICAL EDUCATION | 0.5 credit (DT)

The focus of this one semester course will be to engage students in a variety of lifetime activities. Students will acquire a solid understanding of factors necessary to maintain a high level of fitness and wellness. In addition, students will participate in a weekly fitness class which will enable them to better understand the importance of good cardiovascular fitness. Fitness equipment, including the use of heart rate monitors, will enable students to evaluate and monitor their personal level of fitness.

## 090 - RACKET UP \& STICK TO IT $\mathbf{0 . 5}$ credit (DT)

The objective of this course is to introduce students to a number of lifetime activities centered on using rackets and sticks. The course will be divided into units including: Tennis, Pickle ball, Badminton, Table Tennis, Softball, Lacrosse, Hockey and Golf. Each unit is covered in three ways: instruction, fundamentals, and game/tournament play. Student input will be used in selecting units for individual classes.

## 091-COMPETITIVE TEAM ACTIVITIES | 0.5 credit (DT)

This course is designed for students interested in developing sport-specific leadership, fitness, and sportsmanship goals through different competitive team activities. Students will accomplish this through several different units including Basketball, Flag Football, Team Handball, Ultimate Frisbee, Floor Hockey, Eclipse Ball, Sabaki Ball, Kickball, Soccer, Softball and Volleyball. Student input will be used in selecting units for individual classes and organizing tournaments, game play and rule development.
This is an advanced class for highly skilled and motivated students.

## 095 / 096 - FEMALE BODY SCULPTING 0.5 OR I. 0 credit (DT)

This class, designed for women only, will focus on sculpting the major muscle groups of the body. Using TRX, free weights, resistance bands, core body exercises and cardiovascular activities, students will sculpt and tone their body in relation to their personal goals. Students will monitor their progress by keeping a log of their workouts. Individual goals are monitored and adjusted throughout the course. This course may be taken for a semester or an entire year.

## 093 / 094 - BODY DEVELOPMENT \| 0.5 OR I. 0 credit (DT)

This class is designed for students interested in developing their muscular strength and fitness through an intensive weight training program. The core program consists of learning and mastering the proper techniques for the bench press, squat, dead lift, and hang clean. Students will create attainable, yet challenging goals by tracking and managing their own daily workout progress. Athletes and non-athletes will benefit from this course. Using peer motivation, individuals will also work to achieve personal success with regard to the Pius XI weightlifting records. Students taking this class for repeat credits must carry a minimum level of credits in addition to this class. This class may be taken for a semester or an entire year.

## 087 / 088 - ATHLETICS PHYSICAL EDUCATION 0.5 OR I. 0 credit "NEW"

This class is for student athletes who participate in regular, rigorous physical training in Pius XI athletics or through communitybased club sports. Students will create attainable, yet challenging goals. Students will track and manage their progress and engage in routine teacher conferencing. This course will be in the student's schedule but is not assigned a course period. This course may be taken for a semester or an entire year. PREREQUISITE: Sophomore, Junior, or Senior Standing. Prior participation on high school level team or club sport. Students will complete an application which will require a coach's signature prior to the beginning of the school year.

## MATHEMATICS

### 3.0 CREDITS REQUIRED FOR GRADUATION

Algebra and two additional credits are required for graduation. AP Courses are available to be taken upon meeting all requirements.

## $313 / 311$ - ALGEBRA I: ACCELERATED AND STANDARD | 1.0 credit (DS)

This course provides students with the fundamental mathematical knowledge to deal successfully with later math and science courses. Students will study the real number system through a variety of topics including solving equations, graphing, using quadratic equations and more. There are two levels of Algebra: Accelerated and Standard. If students are interested in a very challenging study of math, they should take Accelerated Algebra. Both levels teach the same concepts, but Accelerated Algebra will include more complex and independent problem solving than Standard Algebra. Algebra is a Pius XI graduation requirement. PREREQUISITE: Placement based on entrance exam, standardized test scores, and previous grades. Students will need a TI-84+ (preferred) or a TI-84 Silver Edition Graphic Calculator for this class.

## 323 / 321 - GEOMETRY: ACCELERATED AND STANDARD 1.0 credit (DS)

In this course, students will work with various geometric tools to discover and learn about many geometric shapes, properties and relationships. In the process, students will learn the language of geometry and many of its practical applications. There are two levels of Geometry: Accelerated and Standard. Both levels teach the same concepts but Accelerated Geometry will also include mathematical proofs of the geometric theorems. The student's Algebra teacher will help the student select the appropriate level. Students will need a TI-84+ (preferred) or a TI-84 Silver Edition Graphic Calculator for this class.

## 332 - ALGEBRA $2 \&$ TRIGONOMETRY | 1.0 credit (DS)

In this course, students will strengthen their mathematical and problem-solving skills. Students will deepen their understanding of algebra and learn trigonometry, "the measurement of triangles." Students will use their new knowledge of this topic in many reallife applications. This course will prepare students for further study in college preparatory mathematics, including Pre-Calculus. PREREQUISITE: Algebra, Geometry, and the recommendation of a student's current math instructor. Students will need a TI-84+ (preferred) or a TI-84 Silver Edition Graphic Calculator for this class.

## 343 - AP PRE-CALCULUS | 1.0 credit (AY)

This course has multiple objectives, all of which should help prepare studentsfor Calculus. Specifically, students will study functions, function behavior, polynomials, trigonometry, and statistics in depth. Students will learn to identify, graph, and transform functions and polynomials. This course will extend students' knowledge of trigonometry and apply it to various realworld contexts. Students will develop a more solid comprehension and mastery of important mathematical skills and concepts to which they have already been exposed. PREREQUISITE: Accelerated Algebra and Accelerated Geometry and the recommendation of the current math instructor. Students will need a TI-84+ (preferred) or a TI-84 Silver Edition Graphic Calculator for this class. In order to have a successful, complete experience in this AP course, students must complete the AP Pre-Calculus Exam.

## 341-AP CALCULUS AB \| 1.0 credit (AY)

This course covers those topics identified by most colleges and the College Board for inclusion in the first semester of college scientific calculus. Students will focus on solving problems related to the mathematical concepts rather than on simply performing isolated mathematical operations. Students will view course content from numeric, algebraic and graphic perspectives with an emphasis on the communication of mathematical ideas. Students enrolled in the course are prepared to take the Advanced Placement Calculus AB Exam. PREREQUISITE: Grade of B or better in Pre-Calculus \& Trigonometry or the consent of the instructor. Students will need a TI-84+ (preferred) or a TI-84 Silver Edition Graphic Calculator for this class. In order to have a successful, complete experience in this AP course, students must complete the AP Calculus AB Exam.

## 340 - AP CALCULUS BC 1.0 credit (AY)

This course covers topics identified by the College Board for inclusion in the first and second semester of college calculus. Students will develop mathematical knowledge conceptually, and apply this knowledge to accurately solve diverse types of problems. Students will cover differential and integral calculus including limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. Students enrolled in this course are prepared to take the Advanced Placement Calculus BC Exam. PREREQUISITE: Successful completion of AP Calculus AB and consent of instructor. Students still need a TI-84+ (preferred) or a TI-84 Silver Edition Graphic Calculator for this class. In order to have a successful, complete experience in this AP course, students must complete the AP Calculus BC Exam.

## 350 - AP STATISTICS | 1.0 credit (AY)

AP Statistics introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Reference. AP Statistics is an elective course and does not replace any math course in the graduation requirements. This course may be taken alone or concurrently with Pre-Calculus or AP Calculus. PREREQUISITE: Grade of C or better in Algebra 2 \& Trigonometry or Pre-Calculus \& Trigonometry and/or recommendation of current math teacher. Students will need a TI-84+ (preferred) or a TI-84 Silver Edition Graphic Calculator for this class. To have a successful, complete experience in this AP course, students must complete the AP Statistics Exam.

## 344 - INTEGRATED MATH APPLICATIONS | 1.0 credit (DS)

This course will extend students' Algebra, Geometry, Trigonometry, and Statistics skills beyond what they have learned in their previous coursework. Students will engage in problem solving and project-based learning to apply their content knowledge and skills to real-world contexts. PREREQUISITE: Successful completion of Algebra 2 and Trigonometry OR Pre-Calculus and Trigonometry.

## SCIENCE

### 3.0 CREDITS REQUIRED FOR GRADUATION

Three credits including Biology are required for graduation. Biology can only be taken in Freshman or Sophomore Years. AP Courses are available to be taken upon meeting all requirements.

## 362 - PHYSICAL SCIENCE | 1.0 credit (DS)

Physical Science is a laboratory science course that explores the relationship between matter and energy. Students will investigate physical science concepts through an inquiry- based approach. Topics include properties and classification of matter, structure and properties of atoms, chemical bonding and reactions, motion, work, simple machines, and forces. This course will aid students in developing inquiry and problem-solving skills as well as developing a background knowledge for success in further science courses. Cannot be taken if successfully completed Chemistry or Physics.

## 373 - BIOLOGY | 1.0 credit (DS)

Biology is the study of living organisms and the Earth they live on. In this year-long course, students will begin by investigating the basic unit of life: the cell. As the course progresses, students will gain useful scientific skills through hands-on inquiry labs, that utilize biological tools, current technology, data collection and analysis. The knowledge and skills acquired in Biology will be applied to real-life concepts. Students will need a B or better in Biology in order to take AP Biology. PREREQUISITE: Placement based on entrance exam, standardized test scores, and previous grades or Sophomore standing.

## 376 - AP BIOLOGY | 1.0 credit (AY)

This rigorous year-long course gives students a grasp of science as a process of testing and revising ideas and to help students apply their knowledge and critical thinking skills to environmental and social concerns. Students will gain an understanding of the course content through extensive lab-work and the use of technology. Students will be required to do a considerable amount of reading on their own. PREREQUISITE: Completion of Biology and Chemistry with a grade of B or better in both. In order to have a successful, complete experience in this AP course, students must complete the AP Biology Exam.

## 38I-CHEMISTRY \| 1.0 credit (DS)

Chemistry is the study of matter and how it changes. In this class, students will perform a variety of laboratory investigations as a means of studying these changes and providing a foundation on which to build an understanding of concepts, such as how atoms are structured and how chemicals react and bond with one another. By studying how matter and energy interact, students will gain a greater understanding of the chemical nature of the world and how chemistry is a part of everyday life. PREREQUISITE: B or better in Algebra I or B or better in Physical Science or consent of instructor.

## 392 - PHYSICS | 1.0 credit (DS)

In this yearlong course students will view real-life situations conceptually and mathematically and explore the laws of physics that govern them. Each week students will work in the laboratory collecting and analyzing data while conducting experiments that will demonstrate, verify, and allow them to discover these laws of physics. PREREQUISITE: B or better in Algebra I or B or better in Physical Science or consent of instructor.

## 391-AP PHYSICS \| 1.0 credit (AY)

This Algebra-based course is the equivalent to a first- semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum), work, energy, and power, mechanical waves and sound. It will also introduce electric circuits. This material is organized around seven foundational big ideas in physics that structure the course. Focus on a series of learning objectives that combines physics content with one or more of seven fundamental science practices provides a more engaging and rigorous experience for AP Physics students. PREREQUISITE: Concurrent enrollment in an upper- level math class. Application and consent of instructor required. Successful completion of Physics is recommended but not necessary. In order to have a successful, complete experience in this AP course, students must complete the AP Physics Exam.

## 369 - PLTW: PRINCIPLES OF BIOMEDICAL SCIENCE \| 1.0 credit (AY)

In this year-long course, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve. Can be taken concurrently with Biology or after successful completion of Biology.

## 370 - PLTW: HUMAN BODY SYSTEMS | 1.0 credit (AY)

In this year-long course, students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken ${ }^{\circledR}$; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases. PREREQUISITE: C or better in Biology.

## 371 - PLTW: MEDICAL INTERVENTIONS | 1.0 credit (AY)

In this year-long course, students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. PREREQUISITE: C or better in PBS or HBS or AP Biology or concurrent enrollment in AP Biology.

## BIOSLR - STUDENTS UNDERSTANDING PRINCIPLES OF RESEARCH THROUGH MEDICINE, ENGINEERING AND SCIENCE (SUPREMES) | 1.0 credit

In this year-long course, students will gain educational experience in biomedical research, clinical research, and technology development in funded laboratories at the Medical College of Wisconsin, Marquette University, Children's Hospital of Wisconsin Research Institute and Zablocki Milwaukee VA Medical Center. Students will be introduced to new technologies, cutting-edge research, and exciting laboratory practices, guided and taught by highly skilled, established faculty investigators. PREREQUISITE: Junior or Senior standing, application required.

## 365 - BIOLOGICAL LABORATORY INVESTIGATIONS IN FORENSIC SCIENCE 0.5 credit (DS)

(2024-2025)
In this one-semester course, you will actively explore, analyze and apply biological concepts related to the science of crime scene investigation and how it applies to law. Topics of study will include evaluation of evidence, hair and blood analysis, forensic botany, entomology, and anthropology, DNA and fingerprint technology, and a virtual autopsy experience. Please be aware that some of the topics covered are of a sensitive nature.

## 367 - PHYSICAL SCIENCE LABORATORY INVESTIGATIONS IN FORENSICS 0.5 credit (DS)

(2025-2026)
In this one-semester course, you will actively explore, analyze and apply physical science concepts related to the science of crime scene investigation and how it applies to law. Topics of study will include evaluation of evidence, fiber, textile, glass, soil, and handwriting analysis, tool mark and impression evidence, and forensic toxicology. Please be aware that some of the topics covered are of a sensitive nature.

## 364 - PROCESSES OF PLANET EARTH (POPE) \| 0.5 credit (DS)

(2024-2025)
In this one-semester course, students will study the earth and the universe. Students will learn about the origin, composition and physical features of our planet. Through hands-on lab investigation, class discussion, experiments and technology, students will analyze and describe the Earth's interconnected systems and examine how the Earth's materials, landforms and continents change over time. Topics include earthquakes and plate tectonics, Earth's geological history, the atmosphere, weather, rivers and streams and the impact on the environment.

## 366 - AP ENVIRONMENTAL SCIENCE | 1.0 credit (AY)

The goal of this year-long course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The Earth itself is one interconnected system, and humans affect this system. Environmental problems have a cultural and social context. Our very survival depends on developing practices that will achieve sustainable systems. In this course students will identify and analyze environmental problems, both natural and human-made. Students will learn to evaluate the relative risks associated with these problems and alternative solutions for resolving or preventing them. PREREQUISITE: Completion of Biology and C or better in Algebra 1; To have a successful, complete experience in this AP course, students must complete the AP Environmental Exam.

## SOCIAL SCIENCE

### 3.0 CREDITS REQUIRED FOR GRADUATION

Three credits including American Government (Sophomore Year), US History (Junior Year), and Economics courses are required for graduation. AP Courses are available to be taken upon meeting all requirements.

## 4II - WORLD HISTORY | 1.0 credit (DS)

This full-year course is designed to take students around the world on a journey through time. In each unit students will analyze history, geography, and culture through different points of view, historical evidence, and enduring themes that lead to the state of the modern world. This is a fast-paced course designed to challenge students to think beyond what they've already learned in history, using complex texts and communicating through advanced level writing and discussion. PREREQUISITE: Freshman or Sophomore Standing.

## 412 - AP HUMAN GEOGRAPHY | 1.0 credit (AY) "NEW"

This full-year course is designed to explore how humans have understood, used, and changed the surface of Earth. Students will use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use. In addition, the course exposes students to economic theories and models as well as world religions and the origins and diffusion of languages. PREREQUISITE: Freshman or Sophomore Standing and Department Approval. To have a successful, complete experience in this AP course, students must complete the AP Human Geography Exam.

## 421 - FOUNDATIONS OF AMERICAN GOVERNMENT | 0.5 credit (DT)

This is a one-semester course in which students will study the Constitution as the basis for our political system, along with federal, state and local governments. This course is required as a prerequisite for U.S. History and is required for graduation. PREREQUISITE: Sophomore Standing.

## 420 - ACCELERATED AMERICAN GOVERNMENT | 0.5 credit (DT)

This one-semester course helps students develop the skills and strategies necessary for achieving success in social science Advanced Placement courses. The course focuses on the structure, formation and function of American government and the early history of the United States. This course will introduce content in more depth than the Foundations of American Government class. PREREQUISITE: Sophomore Standing and Department Approval; Recommended for path to AP US History.

## 46I-ECONOMICS | 0.5 credit (DT)

In this one-semester course students will gain an understanding of the "economic way of thinking" and how it is used in life decisions. Economic thinking focuses on how to meet people's unlimited wants with limited resources. It will be applied to the study of personal investing, the stock market, different business enterprises and the role of prices in the economy. This course is important for all students, especially for those who are up to the challenge of unpacking the economic questions in life. Economics or AP Macroeconomics is required for graduation PREREQUISITE: Sophomore, Junior or Senior standing.

## 460 - AP MACROECONOMICS I. 0 credit (AY)

This is a full-year course offered to sophomores, juniors and seniors. The course is designed to help students develop critical-thinking skills through the understanding, application, and analysis of fundamental economic concepts. Students will be expected to apply economic logic to a wide variety of real-world and hypothetical situations. The goal is to understand the "linkages" describing the chain of events leading to economic conclusions. This AP course can be taken even if a student has passed the regular Economics course. Economics or AP Macroeconomics is required for graduation. PREREQUISITE: Sophomore, Junior or Senior standing and completed application and Department Approval. In order to have a successful, complete experience in this AP course, students must complete the AP Macroeconomics Exam.

## 456 - INTRO TO PSYCHOLOGY 0.5 credit (DT)

This one-semester course is designed to introduce students to the study of the behavior and mental processes of human beings. Students will learn about psychological principles and phenomena seen in real life, as well as research methods used to study human behavior. The course will instill knowledge, skills, and attitudes that can be applied to the student's own life. PREREQUISITE: Junior or Senior standing

## 455 - AP PSYCHOLOGY | 1.0 credit (AY)

This course will dive deep into the systematic and scientific study of human behavior and mental processes. Students will learn psychological theories, principles, and phenomena with an emphasis on applying those concepts to real life. Students will also learn about the research methods and data analysis psychologists use to explain human behavior. This college level course offers the possibility of obtaining AP credit and requires significant independent work, but will instill knowledge, skills and attitudes to the student's own life. PREREQUISITE: Junior or Senior standing and completed application and Department Approval. To have a successful, complete experience in this AP course, students must complete the AP Psychology Exam.

## 43I - US HISTORY: 1800 - PRESENT I 0 credit (DS)

This is a general survey, full-year course of the history of the United States, covering the period from 1787 to the recent past. Students will learn about the political, social, and economic factors that shaped America. US History or AP US History is required for graduation. PREREQUISITE: Junior standing and Foundations of American Government

## 434-AP UNITED STATES HISTORY \| I. 0 credit (AY)

This full-year, Advanced Placement course is an in- depth study of the history of the United States from the age of discovery to the present. It emphasizes the political, social, and economic factors that shaped American institutions. This course is taught at a college level and requires significant independent effort on the part of the student. US History or AP US History is required for graduation. PREREQUISITE: Junior standing, Successful completion of Accelerated American Government and/or Department Approval. To have a successful, complete experience in this AP course, students must complete the AP US History Exam.

## 415 - DIVERSITY AND HUMAN RIGHTS | 0.5 credit (DT)

This is a one-semester course designed to expand our understanding of human rights, what that means, and how they are both honored and violated. The centerpiece of this course is the Universal Doctrine of Human Rights, established after World War II. The diversity component will analyze the history of American diversity to its present-day situations and attempt to find the vessels that bring understanding and resolution. PREREQUISITE: Junior or Senior standing.

## 465-SOCIOLOGY | 0.5 credit (DT)

This one semester course, examines the fundamental concepts of Sociology. Its main purpose is for students to develop an understanding of how larger social forces affect our everyday lives and behavior. Some of the topics discussed will be conflict, interactionist and functionalist theory, labeling, sociological imagination, aspects of culture, research methods, communication and social norms. PREREQUISITE: Junior or Senior standing.

## 85I - THE CONTEXT OF WESTERN CULTURE 1700 TO PRESENT - Art History $\mathbf{0 . 5}$ credit (AS)

In this one-semester course students will investigate issues, define movements, and contextualize the history of art through cultural happenings. Students will research the interaction of art and recent society with emphasis on Modern through Contemporary periods. This course covers the biographical and societal contributions of major artists, the development of notable mediums, changes in critical attitudes towards art, and prepares students for college-level Art History and theory. The Advanced Placement Test is optional. This course is required for AP Portfolio students and is open to all interested Juniors and Seniors. A class museum visit to Chicago is required. This course counts towards a student's Social Science credit requirements.

## THEOLOGY

### 4.0 CREDIT REQUIRED FOR GRADUATION

One credit of Theology is required to be taken each year. 005 - Living Our Faith, 001 - Hebrew/Christian Scripture, \& 051 - Morality and Ethics are required for graduation.

## 005 - LIVING OUR FAITH | 1.0 credit (DS)

This course is designed to provide students with the basic teachings of the Catholic faith, and to help them understand how those teachings and practices help them grow in love of God, self, and others. Students will come to understand that the Catholic Church is
a community of people who believe in the reality of God and shape their lives accordingly. Graduation requirement. PREREQUISITE:
Freshman standing.

## 00I-HEBREW / CHRISTIAN SCRIPTURE \| 1.0 credit (DS)

In this course students will examine biblical roots as their ancestors' paths are traced from their early understanding of God through their deepening appreciation of God's salvation, be introduced to Jesus the Christ, and learn how Jesus came to fulfill the Hebrew expectations for the Messiah. In this course connections will be made between the faith journeys of our ancestors and a student's faith journey and relate to modern-day issues within the Catholic Church and the world. Graduation requirement. PREREQUISITE: Sophomore standing.

## 075 - BIBLICAL THEMES IN LITERATURE 0.5 credit (DT)

This course will examine major life themes found both in the Bible and modern or contemporary literature. Some of the themes that will be discussed are love, forgiveness, journey of the hero, conflict, and salvation, amongst others. Students will read The Gospel of John, a selection of short stories, poetry as well as selected novels. The purpose of this course is to gain an appreciation for life themes that have been present since the beginning of civilization and are still relevant today. This course will seek to find answers to humanity's struggles and rejoice in humanity's triumphs. PREREQUISITE: Junior or Senior standing.

## 04I-WORLD RELIGIONS 0.5 credit (DT)

This course introduces the student to the major religious traditions of the world. Course includes a rationale for studying world religions and cultures, a brief overview of ancient religions, indigenous religions and contemporary religions. Study will focus on the major founders (where applicable), beliefs, scriptures, practices, and ethics of the traditions as well as contemporary issues, and interfaith dialogue around common issues of concern to the traditions. PREREQUISITE: Junior or Senior standing.

## 03I - CHRISTIAN SPIRITUALITY $\mathbf{0 . 5}$ credit (DT)

Spirituality represents a calling and longing that all people experience. Independent of personal religious beliefs, each of us desires to live a life of purpose, meaning, and personal fulfillment. This class will explore the many paths to finding and following God. Christian thought and tradition offer the opportunity to examine the lives of those who have responded to God's call to become holy examples of discipleship and love. We will study and reflect on the writings of influential spiritual leaders who discerned, often through trial and error, God's plan for their lives. In addition, we will focus on the call to live a life that matters through our relationships with God, self and others. PREREQUISITE: Junior or Senior standing.

## 065 - CATHOLIC SOCIAL JUSTICE (formerly JUSTICE AND LIBERATION)| 0.5 credit (DT)

In this course students will examine scriptural writings related to themes such as diversity, gender, economics and non-violence in an attempt to help them think about and discuss how these themes are still very much part of our world today. Students will also explore how the Gospel message of justice and liberation, as expressed in Catholic Social Teaching, continues to challenge them to respond. PREREQUISITE: Junior or Senior standing.

## 05 I - MORALITY AND ETHICS 0.5 credit (DT)

This course is designed to help students understand and evaluate their own personal morality through prayer experiences, reflection and class discussions. Students will critically examine contemporary ethical issues such as lying, cheating, teen sex, abortion, euthanasia and the death penalty in light of the Catholic faith, Scripture and the inherent dignity of the human person. Graduation requirement. PREREQUISITE: Junior or Senior standing.

## 07I - CHRISTIAN DISCIPLESHIP AND LEADERSHIP $\boldsymbol{0 . 5}$ credit (DT)

This is a one semester course designed to use a practical and pastoral approach to theological questions such as: What does it mean to be a Disciple of Jesus in a modern complex world? What are the challenges and benefits to being a Disciple of Jesus? What does it mean to be a servant leader? Students will examine their own faith journey as they compare and contrast lives and experiences of others to better understand their own path. Through research, readings and reflections students will make connections between contemporary leaders and Jesus as a leader. PREREQUISITE: Senior standing. Application required.

## 006 - CHURCH HISTORY $\mathbf{0 . 5}$ credit (DT)

"Foundations of Church History" is a Theology course that will examine the individuals and major events that have shaped the Catholic Church. Students will explore the roots of Catholic doctrines as well as the evolution of thought in the Church. By looking at the past, we will better understand the present. PREREQUISITE: Junior or Senior standing.

## WORLD LANGUAGES

### 2.0 CREDITS REQUIRED FOR GRADUATION

Two credits of the same World Languages is required for graduation.

## 5II-FRENCH I | 1.0 credit (DS)

In French I students will begin to acquire skills in speaking, writing, and comprehending spoken and written French. Students will perform conversation activities in real-life situations, engage in language and culture projects, interpret music and videos, and perform online activities to increase their communication skills and knowledge of Francophone cultures.

## 512 - FRENCH $2 \mid 1.0$ credit (DS)

In French II students will continue to develop their speaking, listening, reading, and writing skills. Students will perform a variety of activities and projects to increase their proficiency, including many authentic speaking assessments. Students will continue to explore the cultures of France and other Francophone countries through cultural projects and web-based activities. PREREQUISITE: Successful completion of French I or placement exam.

## 513-FRENCH 3 | 1.0 credit (DS)

In French III students will expand and strengthen their skills in speaking, listening, reading, and writing. Students will implement their speaking skills in various real-life situations. Students will analyze important works of French literature, art, current events, music, and film. They will also be creating their own compositions to demonstrate their knowledge of vocabulary and grammar.
PREREQUISITE: Successful completion with a C or higher of French II.

## 514 - FRENCH 4 | 1.0 credit (DS)

In French IV students will speak and hear French almost exclusively. This course is designed to emphasize the use of French for active communication. As it is instructed entirely in French, the goal is to perfect the student's speaking, listening, reading, and writing skills. Students will develop expanded vocabulary and higher-level grammatical structures adequate for interpreting authentic French- language resources. This course also develops the students' ability to express themselves with reasonable fluency in various situations and contexts. PREREQUISITE: Successful completion with a C or higher of French III.

## 515-AP FRENCH| 1.0 credit (AY)

French language study culminates with Advanced Placement French. This course is designed to emphasize the use of French for active communication. It is designed to perfect the student's speaking, listening, and writing skills in preparation for the French language AP exam. PREREQUISITE: This course needs instructor approval and is conducted as an independent study. To have a successful, complete experience in this AP course, students must complete the AP French Language Exam.

## 52I-SPANISH I| 1.0 credit (DS)

In Spanish 1, students will begin to acquire skills in speaking, writing, and comprehending spoken and written Spanish. Students will engage in partner conversation activities, projects, writing, reading, and listening tasks, and online activities to acquire language skills and cultural knowledge of the Spanish-speaking world. Emphasis is on the acquisition of authentic communication skills and an abundance of vocabulary and grammar skills in order to be successful in Spanish II.

## 522 - SPANISH 2 | 1.0 credit (DS)

In Spanish II students will continue to focus on building vocabulary and grammar knowledge to speak and understand basic Spanish. In this course students will perform a variety of class activities and create projects to develop their skills in listening, speaking, reading and writing. Students will continue to broaden their knowledge of the Spanish-speaking world through cultural projects and Internet activities. PREREQUISITE: Successful completion of Spanish I or placement exam.

## 523 - SPANISH 3 | 1.0 credit (DS)

In Spanish III students will expand what they have learned in Spanish I and II. The emphasis will be on conversation and reading. Students will be expected to use the language and be able to function appropriately in various situations as they increase their knowledge of Spanish vocabulary and grammar. Students will be reading literary passages and articles on current events, watching Spanish films, and studying the cultures of various regions. Students will also be using Internet resources to acquire new language skills and cultural knowledge. PREREQUISITE: Successful completion with a C or higher of Spanish II and instructor consent.

## 524 - SPANISH 4 | 1.0 credit (DS)

The fourth year of Spanish focuses on allowing students to practically apply their language skills, using the foundation established in the first three years. The course focuses on interpersonal (speaking/writing) skills, presentational (speaking/writing), and interpretive skills (listening/reading). The course is conducted primarily in Spanish and students will expand their vocabulary,

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improve their conversational skills, and refine their pronunciation. Through the study of various themes, students will discuss aspects of history and culture of several Spanish-speaking countries. Juniors who take Spanish IV are highly encouraged to take AP Spanish during their Senior year. PREREQUISITE: Successful completion with C or higher of Spanish III or Spanish for Heritage Speakers and instructor consent.

## 527 - SPANISH FOR HERITAGE SPEAKERS \| 1.0 credit (DS)

Heritage Speakers is a program that has been developed for students who speak, read and/or write in Spanish at home. The course is designed on a rotating two- year curriculum so a student can enter either phase of the program their first or second year of high school. The purpose of this course is to strengthen and develop a student's language skills as a heritage speaker of Spanish. The course explores literature, vocabulary and grammar by way of thematic units focusing on specific countries and cultures throughout the Spanish speaking world, including Latinos in the United States. By taking this course, students will reinforce their reading comprehension, grammar, composition and presentational speaking skills. PREREQUISITE: Native or near-native ability in spoken Spanish and instructor consent.

## 525 - AP SPANISH LANGUAGE \| I. 0 credit (AY)

Spanish language study culminates with Advanced Placement Spanish. This course is designed to emphasize the use of Spanish for active communication. As it is instructed entirely in Spanish, the goal is to perfect the student's aural/oral skills, reading comprehension, grammar and composition in preparation for the AP Spanish Language Exam. Students will develop an active vocabulary adequate for reading current news articles, magazines, contemporary literature and other daily authentic source materials in the target language without dependence on a dictionary. The course develops the students' ability to express themselves with reasonable fluency in various situations and contexts. PREREQUISITE: Successful completion of Spanish IV with a B or better, consent of instructor, and completed application. Students must demonstrate proficiency at an adequate level to enroll. To have a successful, complete experience in this AP course, students must complete the AP Spanish Language Exam.

