Proviso Township High Schools
District 209

Board of Education

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MESSAGE FROM THE SUPERINTENDENT

Dear ONE Proviso TEAM,

On behalf of the Board of Education and the administration, I am happy to welcome you to the 2018-2019 school year. I am honored to have the opportunity to be part of this wonderful school community and serve as a support system for the hard work performed by leaders with this Curriculum Handbook. I look forward to the exciting year planned at D209 as we are committed to providing a rich academic education to all students by offering a broad range of courses to pursue global readiness. PTHS D209’s rigorous standards-based curriculum and school-wide expected learning outcomes are designed to build upon the basic concepts and skills, as well as to stimulate challenging learning, so that students are prepared for college, careers and to serve as contributing members of a dynamic global society.

The Curriculum Handbook is designed to help students and parents gather the necessary information for making critical selections to complete their academic learning plans. The district believes in providing the highest quality education, where learning, leadership, service, and research-based practices ensure equitable and meaningful opportunities for all students. Therefore, vigilant study of this handbook will provide course descriptions of both required and elective classes, as well as requirements for high school graduation, college entrance requirements and career preparation. The idea centers on providing all stakeholders with a foundation aligned to the following guiding principles: Equity, Empowerment and Excellence. I am honored to say that your participation in last year’s listening, learning, planning, and researching tours allowed us the opportunity to make immediate improvements and determine the best course of action for our core business which is to enhance our levels of academic achievement for the district.

We have embraced ONE GOAL: to transform Proviso. We have seen substantial support for our educational plan through the establishment of the district’s mission, vision, core beliefs, and goals. Our efforts for D209 remain aggressive with a collaborative yet results-oriented spirit. We believe that as ONE PROVISO, we will offer all students a quality education that maximizes their full potential.

We are looking forward to establishing Proviso’s pathways to success and the hard work on curriculum by our professional staff will increase academic achievement for all students.

Sincerely,

Jesse J. Rodriguez, Ph.D.
Superintendent
ONE TEAM, ONE GOAL, ONE PROVISO.

MISSION

To provide the highest quality education, where learning, leadership, service, and research-based practices ensure equitable and meaningful opportunities for all students.

Vision

Through expectations of excellence and by providing equitable educational opportunities to empower each student, our graduates are prepared for college, careers and to serve as contributing members of a dynamic global society.

Goals

- ENHANCE ACADEMIC ACHIEVEMENT
- EMPOWER STUDENTS, FAMILIES, AND COMMUNITIES
- ENSURE EFFECTIVE AND EFFICIENT OPERATIONS
Proviso’s curriculum and instructional programs are based on a set of learning outcomes for all students. These outcomes profile the successful citizen of the 21st century.

Students should view these outcomes as skills, aptitudes, and understandings they will pursue while at Proviso and that they will be able to demonstrate as a result of their schooling.

The graduate of Proviso will possess the following skills and talents:

**Essential Skills**

1. **Communication**
   - When **reading**, the student understands, interprets, and uses various fiction and nonfiction printed materials (technical manuals, important works of literature, textbooks) for learning.
   - In **writing**, the student produces a variety of written work (letter to an employer, an essay, a memorandum) appropriate for different purposes and audiences. The student uses accepted standards of written expression.
   - When **speaking and listening**, the student expresses and supports a viewpoint and listens with tolerance, openness, and understanding to other viewpoints.

2. **Mathematics and Science Concepts and Processes**
   - The student understands and applies mathematical and scientific concepts and strategies to interpret information and to define and solve problems.

3. **Technology Awareness and Use**
   - The student uses technological tools and applies technology to organize, manage, and produce new information.

4. **Career Awareness**
   - The student identifies, investigates, and describes career opportunities. The student sets and appropriately pursues career goals.

**Creative and Reasoning Skills**

1. **Problem Solving**
   - The student exhibits dispositions necessary for complex, challenging work (flexibility, persistence).
   - The student applies critical and creative thinking skills and problem-solving models to understand, innovate, solve, and evaluate.

2. **Investigation and Research**
   - The student develops a research question and uses established procedures/practices in a field of study to investigate, conduct research, experiment, and report results (scientific inquiry, historical research).
   - The student uses technological tools and applications to conduct research, analyze, and present data.
   - The student understands the conditions and climate necessary for investigative work, establishes and reaches goals, and self-evaluates.

3. **Aesthetic Appreciation and Creative Expression**
The student demonstrates an appreciation of the fine arts.
The student produces an original work that expresses an individual viewpoint or interpretation of learning in a student-selected medium or performance area (painting, dance, multimedia presentation, piece of writing).

**Responsible Citizenship**

1. **Cooperation and Group Work**
   - The student demonstrates effective human relations skills in interpersonal communications.
   - The student shares ideas, supports team effort, resolves conflicts, and builds consensus.
   - The student shows knowledge of group dynamics and demonstrates effective group roles (leader, recorder, listener, supporter, organizer).

2. **Diversity**
   - The student demonstrates knowledge of the worth and contribution of diverse people and groups.
   - The student appreciates diverse cultures and languages.
   - The student promotes the participation and involvement of all individuals in school and community projects.

3. **Stewardship and Service**
   - The student acts in ways that protect, preserve, and conserve both physical and human resources.
   - The student participates in school/community action projects to improve the quality of life for both local and world communities.
   - The student understands the physical, mental, emotional, social, economic, and psychological aspects of interpersonal family relationships.

4. **Historical Knowledge and Civic Responsibility**
   - The student uses historical knowledge to understand and interpret current events and to make informed decisions.
   - The student applies knowledge of local, state, national, and world history, geography, and government to school and community issues.
   - The student is a citizen, first and foremost, of the world.

5. **Responsible Decision Making**
   - The student uses information and decision-making models to understand the choices, costs, and benefits of actions which affect the wellbeing of self and others.
   - The student shows knowledge of the role of exercise and nutrition to promote overall health and wellbeing.

6. **Positive Attitude and Work Ethic**
   - The student engages in challenging tasks, persists despite the difficulty of the task, completes tasks, and shares the workload with others as a team member.
   - The student demonstrates punctuality and consistent attendance.
STUDENT SERVICES

THE LIBRARIES

The Proviso High School District libraries feature resources for study and research which support the informational needs of students and faculty. Through the online catalog, students can access print, digital and audio books for pleasure reading and study. Resources for research include several subscription databases which provide access to a wealth of reference, newspaper and magazine articles, videos, primary sources, and scholarly journals. Students may use the libraries before, during and after-school. The librarians provide support for students and teachers through library orientation, database training, and lessons to support digital literacy.

STUDENTS WITH SPECIAL NEEDS AND SPECIAL PROGRAMS

In accordance with federal and state laws and regulations, Proviso Township High Schools provide a variety of programs for students who receive IEP services. The programs offered at Proviso Township High Schools include placement in the least restrictive environment (LRE) for academic and social needs. Additionally, Proviso Township High Schools offer a transitional skills program that emphasizes community training and application of life skills to prepare students for their post-secondary plans.

Proviso Township High schools offers programs for students who receive Limited English Proficient services through the English Language Learners program. Students who still need educational support after graduating Proviso Township High Schools may attend a transitional program and continue their education. Questions regarding these programs and services can be directed to the building administration of the school your child attends.

PROVISO DISTRICT STUDENT SERVICES

The student services teams at Proviso Township High Schools consist of deans, school counselors, psychologists, and social workers. The student services teams are professional educators with a mental health perspective who understand and respond to the challenges presented by today’s diverse student population. They provide proactive leadership that engages all stakeholders in the delivery of programs and services to help the student achieve success in school.

Student services are an integral part of the total educational program. Practitioners align and work with the district’s mission to provide opportunities for successful experiences, so that upon graduation, the satisfied student may pursue any avenue of choice.

Today’s school counselors are vital members of the Career, Technical and Education team. They help all students in the areas of academic achievement; personal/social development and career development, ensuring today’s students become the productive, well-adjusted adults of tomorrow. This mission is accomplished through the design, development, implementation and evaluation of a comprehensive, developmental and systematic school-counseling program. School Counselors guide all students through three parallel paths that lead to one destination: success. Rather than providing a service just to students who need them, school counselors manage comprehensive programs for every student. Students and parents are encouraged to meet regularly with school service personnel as needed.

School social workers use the approach of working with relationships between people and their environment and utilizing prevention strategies and interventions designed to contribute to the overall health of the school.
environment. Prevention, focusing on the total wellness of the student body, and intervention, targeting those students at risk, are combined to promote a school climate that encourages all students to learn and to develop social competence. Through assessment, crisis intervention, and coordination of community services, school social workers help students, families, and school systems overcome barriers that interfere with learning.

The student services team collaborates in a systemic approach to manage student academic, social and environmental success meeting the needs of all children and families in the Proviso Township School District.

**Student Service professionals specialize in supporting student needs.**

<table>
<thead>
<tr>
<th>WHO</th>
<th>SERVICE</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL COUNSELOR</td>
<td>Each Student will be assigned to a counselor. You will meet with your</td>
<td>• Career Exploration</td>
</tr>
<tr>
<td></td>
<td>counselor in class meetings. Freshmen will meet regularly with their</td>
<td>• Assessments</td>
</tr>
<tr>
<td></td>
<td>counselors in small groups. Your counselor is your tour guide through</td>
<td>• Credit Requirements</td>
</tr>
<tr>
<td></td>
<td>the transition process to adult life.</td>
<td>• Transcripts</td>
</tr>
<tr>
<td>DEAN</td>
<td>Each student will be assigned a dean by grade level. Students will see</td>
<td>• Dress Code</td>
</tr>
<tr>
<td></td>
<td>deans for any school rule or code violations.</td>
<td>• Truancy</td>
</tr>
<tr>
<td>SOCIAL WORKER</td>
<td>A student will see a social worker if they are mandated through an IEP</td>
<td>As assigned or needed</td>
</tr>
<tr>
<td></td>
<td>or 504 plan. Also, students will see social worker for issues outside</td>
<td>• Mediation</td>
</tr>
<tr>
<td></td>
<td>of school.</td>
<td></td>
</tr>
<tr>
<td>PSYCHOLOGIST</td>
<td>A student will see a psychologist if they need to complete academic or</td>
<td>Screening or testing.</td>
</tr>
<tr>
<td></td>
<td>emotional assessments.</td>
<td></td>
</tr>
</tbody>
</table>

**College and Career Centers**

The Proviso schools each have a College and Career Center (CCC) to assist students in determining their career interests and learning styles. The centers are equipped with computers, Internet access, software programs, and a wealth of print career resources. All students will complete a variety of interest, career, and learning style inventories. Based on the results of these inventories, students will have a clearer sense of how they must prepare in high school and in postsecondary training to meet their career goals. Naviance is the online tool for students to research colleges and careers. Students can learn more from their respective counselor and/or the College and Career Counselor.
GRADUATION REQUIREMENTS

The Board of Education determines high school graduation requirements that will provide each student ample opportunity to achieve the purpose for which the School District exists and that meet the minimum graduation requirements contained in State law. Unless otherwise exempted, each student must successfully accomplish the following in order to graduate from high school:

- Complete all District graduation and course requirements that are in addition to the State requirements.
- Complete all courses as provided in The School Code, 105 ILCS 5/27-22, according to the year in which a student entered the 9th grade.
- Complete all minimum requirements for graduation as specified by Illinois State Board of Education rule, 23 Ill.Admin.Code § 1.440.
- Pass an examination on patriotism and principles of representative government, proper use of the flag, methods of voting, and the Pledge of Allegiance.

Twenty-Two (22) credits are required for graduation from Proviso East and Proviso West High Schools beginning with the Class of 2016.

Proviso East and Proviso West

<table>
<thead>
<tr>
<th>Courses</th>
<th>Minimum Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>1.0 Algebra and 1.0 Geometry are required</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>1.0 U.S. History and .5 Civics are required</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>4</td>
</tr>
<tr>
<td>.5 Health required</td>
<td></td>
</tr>
<tr>
<td>Consumer Education</td>
<td>.5</td>
</tr>
<tr>
<td>May be satisfied with Criminal Justice or Consumer Math</td>
<td></td>
</tr>
<tr>
<td>Foreign Language, Fine Arts, and/or Vocational</td>
<td>1</td>
</tr>
<tr>
<td>(2.0 foreign language recommended for college bound, NCAA)</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>
Proviso Math and Science Academy

Twenty-five (25) credits are required for graduation from Proviso Math and Science Academy. In addition, each student must complete a total of 144 hours (36 hours per school year) of community service during their high school career.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Graduation Requirement</th>
<th>Graduation with Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Science</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Wellness</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>World Language</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fine Arts/Pre-Engineering</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Research</td>
<td>1</td>
<td>3.5 (Includes Successful Completion of Research Mentorship)</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>27.5</td>
</tr>
</tbody>
</table>

All courses at PMSA are classified as honors, dual credit, Pre-IB, IB, and/or Advanced Placement, with the exception of wellness and credit recovery courses.

**Special Graduation Circumstances**

**Early Graduation**
The Superintendent or designee shall implement procedures for students to graduate early, provided they finish 7 semesters of high school and meet all graduation requirements.

**Students with Individualized Education Plans**
A student with a disability who has an Individualized Education Plan prescribing special education, transition planning, transition services, or related services beyond the student’s 4 years of high school, qualifies for a certificate of completion after the student has completed 4 years of high school. The student is encouraged to participate in the graduation ceremony of his or her high school graduation class. The Superintendent or designee shall provide timely written notice of this requirement to children with disabilities and their parents/guardians.

**Veterans of World War II, the Korean Conflict, or the Vietnam Conflict**
Upon application, an honorably discharged veteran of World War II, the Korean Conflict, or the Vietnam Conflict will be awarded a diploma, provided that he or she: (1) resided within an area currently within the District at the time he or she left high school, (2) left high school before graduating in order to serve in the U.S. Armed Forces, and (3) has not received a high school diploma or General Educational Development (GED) diploma.
GRADE WEIGHTING

The following weighted grades are in effect in selected courses. The purpose of weighted grades is to enhance the class rank of students who do satisfactory work in the most challenging courses. The weight of individual courses is determined by the points assigned to the grade a student earns in a course.

Proviso’s system of grade weighting divides courses into four categories. The nature of these categories, the courses within each category, and the points awarded to grades in each category are explained below.

Category I
This category includes every course whose prerequisite is described in this handbook as “Enrollment in Special Education” or “Placement by Staffing”. The following points are awarded in this category:

A = 3.5    B = 2.5    C = 1.5    D = .5    F = 0

Category II
This category includes the vast majority of curricular offerings. Fundamentally, these courses are the minimum requirements for entry into college. The following points are awarded to grades in this category:

A = 4.0    B = 3.0    C = 2.0    D = 1.0    F = 0

Category III
This category includes honors courses deemed more challenging due to complexity of academic concepts, accelerated pace of instruction, or advanced level of instruction. The following points are awarded to grades in this category:

A = 5.0    B = 4.0    C = 3.0    D = 1.0    F = 0

Category IV
Advanced Placement Courses are designed to be the equivalent of courses usually taken the first year of college. Students participating in AP courses are strongly encouraged to take the AP examination. Colleges and universities will award college credit if specified minimum scores are achieved on the exam. The following points are awarded for this category.

A = 5.5    B = 4.5    C = 3.5    D = 1.5    F = 0

STUDENT ASSIGNMENT/COURSE LOAD

Students attending Proviso East and Proviso West are assigned six (6) courses per semester. Students attending Proviso Math and Science Academy are assigned seven (7) courses per semester.
OPPORTUNITIES FOR COLLEGE CREDIT

Students have the opportunity to earn college credit through three types of coursework.

Advanced Placement (AP)
Advanced Placement is a program created by the College Board which offers college level curricula and examinations to high school students. Students who obtain high scores on the AP exams may be granted college credit from their selected colleges or universities. AP courses offered at Proviso contain “AP” in their titles.

Dual Credit and Dual Enrollment
Proviso Township High Schools partners with Triton College to offer Dual Enrollment and Dual Credit courses.

Dual Credit
Students earn college and high school credit for specific classes taken at Proviso for which the school has an approved Dual Credit agreement. These classes double as high school courses and college courses, and are taught by teachers who are qualified to teach both. The Dual Credit program is open to academically talented students who are currently enrolled in, or are interested in taking, AP (Advanced Placement) courses. Students receive high school credit for the class, and Triton College credit without ever having to attend Triton! Courses with a dual credit option are denoted with “DC” next to their titles in this catalog. Students should contact their counselor for information regarding eligibility and registration.

Dual Enrollment
Talented Juniors and seniors can enroll at Triton and attend classes while still in high school. A listing of approved courses is contained on page
Eligible students must
• Complete the Dual Enrollment Application
• Take the ACCUPLACER
• The assessment can be waived with ACT test scores of (20) in English and Writing and a score of (23) in Math. (All students planning to enroll in the Nursing Assistant Program must earn a score of (80) in the reading portion of the placement test to qualify)
• Obtain written permission from a high school administrator and a parent or guardian and meet with a College Counselor

Benefits of earning college credit while still in high school include:
• Better preparedness for college
• Reduction of the number of college classes taken after high school graduation
• Utilization of college resources and services, including the library, computer and academic labs, and tutoring services (Dual Enrollment)
• Participation in college campus activities (Dual Enrollment)
• Access to campus facilities (Dual Enrollment)

Dual Credit Forms can be found here: http://www.triton.edu/Content.aspx?id=24885
PROVISO EAST AND PROVISO WEST COURSE DESCRIPTIONS

CAREER & TECHNICAL EDUCATION

CTE is at the forefront of preparing youth to succeed in fast-growing, high-paid jobs in high-growth industries around the country. According to the Bureau of Labor Statistics Occupational Outlook Handbook, many of the fastest-growing jobs through 2024 will be in CTE fields. Many of the highest-paid jobs are also in fields for which CTE prepares students, including engineering, technology, health care, energy, architecture, IT and marketing. Proviso Township currently offers courses in IT, Business, Human Development, Culinary Arts, Industrial Technology and Engineering.

Business

Antoinette Rayburn, CTE Program Manager arayburn@pths209.org
Heather Wickey, Department Chair, Proviso West hwick@pths209.org
Andre Zabrodsky, Department Chair, Proviso East azabrodsky@pths209.org

The philosophy of the Business Education department is that students will apply real-life applications in learning. They will develop skills that they can use in college and careers. These skills are technology based and rooted in the Common Core Mathematics standards.

<table>
<thead>
<tr>
<th>Current Code</th>
<th>Course</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>B516</td>
<td>Digital Literacy*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>One Year Group 1 Course</td>
</tr>
<tr>
<td>B268</td>
<td>Web Design &amp; Media Dev I</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Digital Literacy</td>
</tr>
<tr>
<td>B269</td>
<td>Web Design &amp; Media Dev II</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>Web Design I</td>
</tr>
<tr>
<td>B261</td>
<td>Business &amp; Technology Concepts</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B239</td>
<td>Computer Concepts &amp; Software Applications</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B232</td>
<td>Accounting I</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>B261 or B239</td>
</tr>
<tr>
<td>B264</td>
<td>Entrepreneurship</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>B261 or B239</td>
</tr>
<tr>
<td>B513</td>
<td>Sports &amp; Entertainment Marketing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>B261</td>
<td></td>
</tr>
<tr>
<td>B514</td>
<td>Business Law</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Sports &amp; Entertainment or Acctg I</td>
</tr>
<tr>
<td>B390</td>
<td>Inter-Related Co-Op</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Any sequence of 2 business courses</td>
</tr>
</tbody>
</table>

Other courses, exclusive of CTE pathway.

<table>
<thead>
<tr>
<th>Current Code</th>
<th>Course</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>B511</td>
<td>Consumer Ed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Not CTE Course, State req.</td>
</tr>
</tbody>
</table>
Digital Literacy B516 (10008A001)

Grades 9-10
2 semesters – 1.0 Credit
Prerequisite: None
This foundation-level course prepares students to use technology in a proficient and responsible manner in school, in the workforce, and in everyday life. The goal of the course is to teach and assess basic computer concepts and skills so that students can use computer technology in everyday life to develop new social and economic opportunities for themselves, their families and their communities. Topics include: appropriate and responsible use of technology, computer basics, understanding and navigating the web, security, privacy, collaboration, evaluating content, legal issues, ethical issues, digital citizenship, productivity tools and careers. Emphasis is placed on keyboard techniques, accuracy development, and problem-solving. Students will format documents using a word processing program, access information using the internet and learn to organize and analyze data using a database and spreadsheet program. Time will be made available for students to prepare assignments that require the use of these software applications. The course focuses on the essential skills to begin computing with confidence, be more productive at home, school and work, stay safe online, use technology to complement your lifestyle, and consider careers where you can put your skills to work. Technology use is a vital employability skill for entry-level and upper-level management positions. Students may be provided with the opportunity to seek industry-recognized digital literacy certifications.

Web Design & Media Development I B268 (10201A001)

Grades 10-12
2 Semesters – 1.0 Credit
Prerequisite: B516 and / or an introductory computer technology course
Web Design and Media Development I is designed to prepare students to plan, design, create and maintain web pages and sites. Students will learn the fundamentals of web page design using HTML, HTML editors, and graphic editors as well as programming tools such as JavaScript. Students will work in a project-based environment to create a working website. Students will learn to create pages, add hyperlinks, make tables and frames, create forms, integrate images, and set styles. Students will use image-editing programs to manipulate scanned images, computer graphics, and original artwork. Instruction will include creating graphical headers, interactive menus and buttons, and visually appealing backgrounds. Students will use hardware and software to capture, edit, create, and compress audio and video clips.

Web Design & Media Development II B269 (10201A002)

Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Web Design and Media Development I
Web Page and Interactive Media Development II is for students who have completed Web Page and Interactive Media Development I. Instruction will include using multimedia authoring applications and programming tools such as JavaScript to create a website that combines text, hyperlinks, images, video, and sound. Instruction will include using hardware and software to capture, edit, create, and compress audio and video clips as well as create animated text, graphics, and images. Other topics will include using tables to align images with text, creating newspaper-style columns, and inserting side menus and call-outs. Students will learn how to use templates, cascading style sheets and interactive elements to enhance web pages. Students will learn to create dynamic forms that include multiple-choice questions, comment boxes, and buttons. Students will learn how to connect to a database and retrieve and write data. Students are encouraged to develop a portfolio project that demonstrates their expertise in areas such as multimedia authoring, web development, audio and video editing, and advanced JavaScript applications to create interactive web pages.
**Business and Technology Concepts** B261 (12001A001)
Grades 9 – 10
2 semesters – 1.0 Credit
Prerequisite: None
This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

**Computer Concepts and Software Applications** B239 (10004A001)
Grades 9 – 10 or permission of administration
2 semesters – 1.0 Credit
Prerequisite: None
Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

**Accounting I** B232 (12104A001)
Grades 10 – 12
2 semesters – 1.0 Credit
Prerequisite: Entry level course. Computer Concepts or Business and Technology Concepts.
Accounting I is a course that assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included.

**Entrepreneurship** B264 (12053A001)
Grades 11 – 12
2 semesters – 1.0 Credit
Prerequisite: B239 Computer Concepts and Software Applications
Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial
planning, finance and accounting, and communication. Several topics surveyed in Business Management courses may also be included.

**Sports and Entertainment Marketing** B513 (12163A000)
Grade 12
Semester Course – 0.5 Credit
Prerequisite: Intro Level Business Course
Sports and Entertainment Marketing courses introduce students to and help them refine marketing and management functions and tasks that can be applied in amateur or professional sports or sporting events, entertainment or entertainment events, and the sales or rental of supplies and equipment.

**Business Law** B514 (12054A001)
Grade 12
Semester Course – 0.5 Credit
Prerequisite: Intro Level Business Course
Introduces law and the origins and necessity of the legal system; provides insight into the evolution and development of laws that govern business in our society; develops an understanding of how organization and operation of the legal system impact business; develops an understanding of rights and duties within the business environment; and includes contractual responsibility, protection of individual rights in legal relationships relative to warranties, product liability, secured and unsecured debts, negotiable instruments, agencies, employer-employee relations, property ownership and transfer, landlord and tenant, wills and estates, community property, social security, and taxation.

**Inter-Related Cooperative Education** B390 (22153A001)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: (any sequence of two courses in Business)
Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students’ abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.

**Consumer Education** B511 (I22210A000)
Grades 9 - 12
Semester Course – 0.5 credit
Prerequisite: None
Consumer Economics/Personal Finance courses provide students with an understanding of the concepts and principles involved in managing one’s personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also provide an overview of the American economy.
**Family and Consumer Science**

Antoinette Rayburn, CTE Program Manager  [arayburn@pths209.org](mailto:arayburn@pths209.org)
Tracy McCormick, Department Chair Proviso East  [tmccormick@pths209.org](mailto:tmccormick@pths209.org)
Katherine Derning-Connelly, Department Chair Proviso West  [kderning@pths209.org](mailto:kderning@pths209.org)

FCS courses are developed around real and ongoing concerns of families and communities, and they include concepts for resolving these concerns through ethical action. The most difficult problems facing adolescents and adults are human problems of family, work, and community (Laster, 1998b). FCS is concerned with action-oriented questions of what to do about practical issues affecting people. These questions require ethical judgments about what to do for the good of self and others, now and in the future. Concerns that are examined include: family and community action issues; human and community development; family, career, and community connections; interpersonal relationships; human development; nutrition and wellness; and resource management. Family and community concerns require students to draw from many disciplines: art, social psychology, economics, politics, cultural anthropology, philosophy, history, sociology, linguistics, biology, physics, and chemistry.

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<th>Course</th>
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<td>X</td>
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**Nutrition and Culinary Arts** H280 (16054A001)
Intro to Pathway
2 semesters – 1.0 Credit
Prerequisite: none
This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompass': food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.

Culinary Occupations I  H281 (16052A001)
Grades 10 – 12
2 semesters – 1.0 Credit
Prerequisite: Nutrition and Culinary Arts/Grade C or better
This course provides terminology, culinary math, and practical experiences needed for the development of culinary competencies and workplace skills. Safety and sanitation instruction and classroom application will prepare students for an industry recognized sanitation exam. Classroom experiences will develop skills to work in the front of the house, back of the house, and work stations. Additional content may include: event planning, customer service and relations, food service styles, baking and pastry arts, hors d’oeuvres, and breakfast cookery. Students will be provided opportunity training experiences on commercial equipment

Culinary Occupations II  H282 (16055A001)
Grades 11 – 12
2 semesters – 1.0 Credit
Prerequisite: Culinary Occupations I
Culinary Occupations II places special emphasis for students to develop operational management skills- including design and organization of food service systems in a variety of settings, human relations, and personnel training and supervision. Additional topics include: food cost accounting; taking inventory; advertising; monitoring consumer and industry trends; and individualized mastery of culinary techniques. Training experiences involve equipment and facilities simulating those found in business and industry. Students also learn about Global Cuisine in two sections; First The Americas, followed by Europe, the Mediterranean, the Middle East and Asia.

Textiles and Design I & II  H291 (19201A001)
Intro to Pathway
2 semesters – 1.0 Credit
Prerequisite: none
This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

This project-based course focuses on the implementation and recognition of design principles in selecting, constructing, altering, and remodeling textile products. Project management skills, including efficient use of time, materials, technique, and tools are incorporated throughout the course. Topics include: engineered fabric constructions; fiber and textile trends; color theory; principles of design; fabric finishes; industry construction techniques; use of industry tools, equipment, and terminology; knowledge of resources and vendors; research and
evaluation of textile products for special needs populations; impacts of technology; construction, alteration and re-design skills; and simple flat pattern design and recognition.

**Textiles and Design Occupations H292 (19204A002)**

*Grades 11 – 12*

2 semesters – 1.0 Credit

Prerequisite: Textiles and Design I & II

The Textile and Design Occupations course focuses on the study and application of functional and aesthetic design, human factors research, production planning, manufacturing processes, quality assessment, and distribution systems of textile products. Additional topics include: consumer and industry textile trends; industry specific terminology; advanced design applications; project development, management, and supervision; safety codes and procedures; portfolio development and presentation; client relationships; and individualized mastery of textile/design skills.

**Human Development and Family Wellness I & II H295 (19052A001)**

*Grades Intro to Pathway*

2 semesters – 1.0 Credit

Prerequisite: none

This course focuses on the development and wellness of individuals and families throughout the life cycle and addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio. Topics include human development and wellness theories, principles, and practices; life cycle expectations and issues, including biological, physiological, social, and psychological needs and concerns of aging adults; community services, agencies, and resources; roles, responsibilities, and functions of families, family members and caregivers; family issues, including ethics, human worth and dignity, change, stress, neglect and abuse, and care of the care-giver; individual and family wellness planning; and fostering intergenerational relationships. Practical experiences related to these topics are included through a variety of activities such as volunteer experiences, service learning, and intergenerational event planning opportunities. Information on a variety of human and family services careers are incorporated throughout.

**Early Childhood Education H296 (19153A001)**

*Grades 11-12*

2 semesters – 1.0 credit

Prerequisite: Human Development and Family Wellness I & II

This course prepares students to guide the development of young children in an educational setting through classroom and job shadowing experiences. Course content includes child development, care, and education issues. Project-based learning experiences include planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements of teaching young children. Students will research the requirements of early childhood education careers and develop/expand their career portfolio.

**Additions:**

*Certifications – CPR/1st Aide (Infant/Toddler), SIDS, SBS, Gateways ECE Level 1*

**Early Childhood Development H297 (19199A000)**

Grade 12

Semester Course – 0.5 Credit

Theory and principles of human growth and development from conception through adolescence. In-depth study of the inter-relatedness of physical, cognitive, social and emotional aspects of development in the context of the family, gender, culture, language, ability, diversity, and society. Special emphasis will be on theories of Piaget, Vygotsky, Erikson, Maslow, and Skinner. Field observations required
**FCS Cooperative Work Program** H390 (22153A002)

*Grade 12*

2 semesters – 2.0 Credits

Prerequisite (any sequence of two courses in FCS specifically early childhood focus)

Family Consumer Sciences Cooperative Education is designed for students interested in pursuing careers in occupations in the field family and consumer sciences. Classroom instruction focuses on providing students with workplace skills, post-secondary education opportunities related to the job/career pathway, developing and maintaining positive workplace relationships, planning for the future, legal protection and responsibility, professional organizations, and advancing skills related to the job. Classroom and worksite instruction is based on the duties of the FCS occupation. Students are released from school for their paid cooperative education work experience, participate in 200 minutes per week or related classroom instruction, and supervised on-the-by a qualified instructor ½ hour or more per week per student. A qualified, certified FCS instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

**Human Services**

**Cosmetology I** H601 (19101A001)

*Grade 11*

2 semesters – 3.0 Credits

The Cosmetology program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. Cosmetology I provides introduces students to the requirements to become a licensed cosmetologist. It offers students instruction in both theory and practical application in the following areas: tools and their use, shampoo, understanding chemicals and use, types of hair, sanitation, hygiene, skin diseases and conditions, anatomy and physiology, electricity, ethics, nail technology and esthetics as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act. Knowledge, skills, and activities completed in this course will help prepare students for Cosmetology II, while earning hours towards licensure.

**Cosmetology II** H602 (19101A002)

*Grade 12*

2 semesters – 3.0 Credits

Prerequisite: Cosmetology I or barbering

The Cosmetology program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. Cosmetology II will build upon the knowledge and skills attained in Cosmetology I and will provide instruction, which may be a combination of classroom instruction and hands on experience in the following areas: practical chemical application/hair treatment, hair styling/hair dressing, and shop management, sanitation and interpersonal relations as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act, as well as labor and compensation laws. Instruction may also include instruction in nail technology, esthetics, individualized skill development, and career planning. This course offers a curriculum of advanced theoretical and practical skill development to prepare students for the cosmetology licensure examination and progression to obtain the 1500 hours of study in cosmetology.

*(Students that take Cosmetology and Barbering are required to take both sessions through to completion.)*
Barbering I H604 (19192A001)

Grade 11
2 semesters – 3.0 Credits
This is the first year of a two-year program in Barbering. The barbering program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. This course offers students curriculum in both theory and practice in the following areas as they relate to the practice of barber science and art: anatomy; physiology; skin diseases; hygiene and sanitation; barber history; barber law; hair cutting and styling; shaving, shampooing, and permanent waving; massaging; and barber implements as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act. Knowledge, skills, and activities completed in this course will help prepare students for Barbering II, while earning hours towards licensure.

Barbering II H605 (19192A002)

Grade 12
2 semesters – 3.0 Credits
Prerequisite: Barbering I or Cosmetology I
This is the second year of a two-year program in Barbering. The barbering program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. It offers advanced theoretical and practical skill development to prepare students for the barbering license exam. Training will cover at a minimum: anatomy; physiology; skin diseases; hygiene and sanitation; barber history; barber law; hair cutting and styling; shaving, shampooing, and permanent waving; massaging; bleaching, tinting, and coloring; and barber implements as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act, as well as labor and compensation laws. Knowledge, skills, and activities completed in Barbering I and II will prepare students to take the licensure exam and progression to obtain the 1500 hours of study in barbering.

(Students that take Cosmetology and Barbering are required to take both sessions through to completion.)
The philosophy of Technology and Engineering is taken directly from Project Lead the Way: We believe all students – beginning at a young age – need access to real-world, applied learning experiences that empower them to gain the skills they need to thrive in college, career, and beyond. Through our programs, students develop in-demand, transportable skills – such as problem solving, critical and creative thinking, collaboration, and communication – that they will use both in school and for the rest of their lives, on any career path they take.

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<tr>
<th>Code</th>
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<td>9 10 11 X</td>
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<td>T273</td>
<td>Principles of Engineering-PLTW</td>
<td>9 10 X X X</td>
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<tr>
<td>T276</td>
<td>Computer Integrated Manufacturing – PLTW</td>
<td>X X X 9 10 11 12</td>
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<td>T275</td>
<td>Engineering Design &amp; Development - PLTW</td>
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<tr>
<td>T300</td>
<td>Automotive Technician I</td>
<td>X X X</td>
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<tr>
<td>T277</td>
<td>Automotive Technician II</td>
<td>X X X Auto Tech I (2 period course)</td>
</tr>
<tr>
<td>T390</td>
<td>Inter-Related Coop</td>
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Project Lead the Way (PLTW) – Pre-Engineering

From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. Through course offerings like Computer Integrated Manufacturing, Environmental Sustainability, and Civil Engineering and Architecture, PLTW Engineering empowers students in grades 9-12 to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers.

The program engages students in collaborative, real-world activities like working with a client to design a home, programming electronic devices or robotic arms, or exploring algae as a biofuel source. As students work together to design and develop solutions to local and global challenges, they engage in problem-solving strategies and critical and creative thinking. And by pushing themselves to rework and refine their projects, PLTW Engineering students learn that perseverance is key to learning and innovation.

The program’s sequence of courses empowers students to develop in-demand knowledge and skills they’ll use in high school and for the rest of their lives, on any career path they take. A few ways PLTW Engineering students are applying their learning to make a difference:

- Developing safety improvements for infant car seats
- Transforming a vintage Airstream trailer into a green teacher’s lounge
- Designing a wilderness search-and-rescue system
- Blending passions for design and music through a career in custom-guitar manufacturing
- Inventing a product that’s now for sale through an international robotics company
Introduction to Engineering Design T272 (21006A001)
Grades 9 – 10
2 semesters – 1.0 Credit
Prerequisite: Algebra I (*can be taken simultaneously*)
This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

Principles of Engineering T273 (21004A001)
Grades 9 – 11
2 semesters – 1.0 Credit
Prerequisite: Algebra I (*can be taken simultaneously*)
This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes helps students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

Computer Integrated Manufacturing T276 (21010A001)
Grades 11 – 12
Year Course – 1.0
Prerequisite: Introduction to Engineering Design, Principles of Engineering
Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system.

Engineering Design and Development T275 (21006A001)
Grade 12
Year Course- 1.0 Credits
Prerequisite: Introduction to Engineering Design, Principles of Engineering, Computer Integrated Manufacturing
The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

Automotive & Transportation

Automotive Technician I T300 (20104A001)
Grades 10 – 11
2 semesters – 1.0 Credit
This course introduces students to the basic skills needed to inspect, maintain, and repair automobiles and light trucks that run on gasoline, electricity, or alternative fuels. Instructional units include engine performance, automotive electrical system, integrated computer systems, lubrication, exhaust and emission control, steering and suspension, fuel systems, cooling system, braking, and power train.
**Automotive Technician II T277 (20104A002)**

Grades 11 – 12  
2 semesters (double period) – 2.0 Credits  
Prerequisite: T231  

This course is a continuation of and builds on the skills and concepts introduced in Automotive Technician I. This course includes instructional units in alternative fuel systems, computerized diagnostics, new vehicle servicing, automotive heating and air conditioning, transmissions, testing and diagnostics, drive train and overall automobile performance.

**Inter-Related Cooperative Education T390 (22153A001)**

Grade 12  
2 semesters – 2.0 Credits  
Prerequisite: (any sequence of two courses in Applied Tech)  

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students’ abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations.
The English Department is dedicated to providing students with personalized learning in order to foster accountability and develop grade level literacy skills for success in all endeavors. As students demonstrate a variety of proficiency levels within the attainment of aligned career and college readiness standards across all grade levels, the English Department meets students where they are in the enhancement of their literacy and technological skill development. Thus, it is the expectation that through consistent application of the newly learned and acquired skills, within each course, students are expected to transfer that knowledge to other content areas and to real world situations.

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**English I Regular E135 (01001A000)**  
Grade 9  
2 semesters – 1.0 Credit  
Prerequisite: None  
This is the standard year-long, English course for freshmen, focusing on the integration of writing, reading, speaking and listening skills. Students will learn to read for both appreciation and meaning while striving to become critical and creative thinkers and speakers. This course emphasizes the stretching of reading lexile levels so that students are successful at reading literature, conducting research, and composing essays. Students will (1) examine the types of literature, including the short story, non-fiction, poetry, novel, and drama (2) complete research projects, utilizing technology and various resources (3) practice oral skills through presentations and (4) write developed compositions, in narrative, argumentative, expository, and creative writing formats. Specific grammar and punctuation rules will be addressed through continued skill development and writing.

**English I Honors E103 (01001A000)**  
Grade 9  
2 semesters – 1.0 Credit  
Prerequisite: Placement Test Score or Teacher recommendation  
This is a fast-paced course for the student who is self-motivated and performs well when challenged with a very rigorous English curriculum that demands analysis and higher order thinking skills. It is a skill-building course laying the foundation for students desiring to perform successfully on AP (Advanced Placement) courses. The course content will stress in-depth writing assignments, critical thinking development, critical analysis of literature, and speaking skills. It will offer components of literature, composition, and research as in English I Regular, but in more depth and using a variety of instructional strategies.

**English II Regular E022 (01002A000)**  
Grade 10  
2 semesters – 1.0 Credit  
Prerequisite: English I  
This is a full-year course designed for the comprehensive / regular level sophomore English student. It employs a thematic approach to literature including contemporary and traditional novels. Through the study of various genres of literature, students will develop skills to determine the author’s intent and theme and recognize the techniques used by the author to deliver his or her message. Students will write argumentative, narrative, and expository compositions. Emphasis will be placed upon grammar and mechanics as well as reading skills. Students are expected to complete a research paper during the second semester. Student-selected academies will also merit various types of assessments and assignments experienced by students enrolled in a respective academy.

**English II Honors E023 (01002A000)**  
Grade 10  
2 semesters – 1.0 Credit  
Prerequisite: English I Honors or Teacher Recommendation  
This rigorous academic course includes: (1) a variety of expository multi-paragraph writings, the study of formal outlining and bibliography preparation, the construction of a brief formal documented research paper using the MLA / APA Writing Style with an outline and bibliography, and the writing of expository, narrative, persuasive, and impromptu themes (2) extensive study of usage, sentence structure, and style (3) the improvement of reading skills with emphasis upon discovering meaning through context while citing text (4) the study of approaches to literature: the study of literary style, the study of drama as literature, and readings of acknowledged literary value. Student-selected academies will also merit various types of assessments and assignments experienced by students enrolled in a respective academy.
English III Regular E031 (01003A000)
Grade 11
2 semesters – 1.0 Credit
Prerequisite: English II
This is a required junior-level course. This course is designed to introduce students to American Literature. Students will explore a variety of literature while answering essential questions that provide a framework for relating the literature to their worlds. The Common Core Standards significantly impact the instruction during the year. Units of study are divided into the following time periods: early America, the eighteenth century, the early-nineteenth century, early twentieth century, and the latter part of the twentieth century. Students in this course are introduced to a variety of literary selections, which will assist them in transitioning to the collegiate level. Students use literature to enhance their analytical and critical thinking skills. Students learn the techniques of writing through the study of literature. They practice the following: use of literary devices, clear and concise writing patterns, appropriate word choice and diction.

English III Honors E041 (01003A000)
Grade 11
2 semesters – 1.0 Credit
Prerequisite: English II Honors or Teacher Recommendation
This is a required junior-level course. This course is designed to introduce students to American Literature. Students will explore a variety of literature while answering essential questions that provide a framework for relating the literature to their worlds. The Common Core Standards significantly impact the instruction during the year. Enrichment opportunities are provided to students to prepare them for college level reading and writing through increased exposure to literature and more authentic writing and speaking assessments throughout the year. Units of study are divided into the following time periods: early America, the eighteenth century, the early-nineteenth century, early twentieth century, and the latter part of the twentieth century. Students in this course are introduced to a variety of literary selections, which will assist them in transitioning to the collegiate level. Students use literature to enhance their analytical and critical thinking skills. Students learn the techniques of writing through the study of literature. They practice the following: use of literary devices, clear and concise writing patterns, appropriate word choice and diction.

English IV Regular E150 (01004A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: English III
This is a senior level course designed to provide students with a foundation for further study on the collegiate level. Preparing students to be both, career ready and college ready, this course is a fast-paced and in-depth survey course for college-bound as well as for non-college bound seniors who will write critical and comparative analyses through novels, poetry, drama, and film and real world applications. Units are divided according to major literary movements. The focus of study within the units applies the appropriate skills within the Common Core Standards.

English IV Honors E049 (01004A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: English III Honors or Teacher Recommendation
This is a senior level course designed to provide students with a foundation for further study on the collegiate level. Preparing students to be both, career and college ready, this course is a fast-paced and an in-depth survey course for college-bound as well as for non-college bound seniors who will write critical and comparative analyses through
novels, poetry, drama, film, and real world applications. Enrichment opportunities are provided to students to prepare them for college level writing through a research unit and other research opportunities outlined by Common Core. Students in this sequence will study additional reflective literature independently. The focus of study applies the appropriate skills within the Common Core Standards.

**Film as Humanities E248 (9A000)**

*Grade 12*

*Semester course – 0.5 credits*

*Prerequisite: 3rd year of high school*

This introductory course offers an introduction to the film medium with emphasis on aesthetics, theory and methods of critical analysis. Students will examine film as an art form, as a medium for communicating ideas and as a social and cultural force. This course focuses on film and the art of critical viewing. Students will view a variety of films from different decades, cultures, and genres; focus on and analyze the language of film; and write critical reviews of films. Students will read literary critiques relating to films, which they will discuss and respond to in writing.

*NOTE: This course meets Fine Arts and/or academic core English elective graduation requirement.*

**Multi-Cultural Literature E039 (01064A000)**

*Grade 10 – 12*

*Semester course – 0.5 credits*

*Prerequisite: English I & English II equivalent*

This is a one-semester elective course, which concentrates on the works of and issues representative of various ethnic groups and cultures (Hispanic, African-American, Japanese, Irish, etc.) as they immigrated to the United States. A study of novels, poetry, and short stories incorporate citing textual evidence through close reading.

**AP English Language and Composition E068 (01005A000)**

*Grade 11*

2 semesters – 1.0 Credit

*Prerequisite: 2 English credits; and/or teacher recommendation*

This is a college-level language and composition course that examines prose and its rhetorical effect and intent so that students may focus on a study of style (tone, diction, syntactical, and rhetorical devices). Students will also study other literary aspects such as figurative language, sound devices, prosody, form, and structure. This course will prepare students for the AP examination in Language and Composition which offers college credit if the student scores a specific level on the AP test. This is a fast-paced course that focuses on nonfiction and composition and develops critical thinking skills. All students are required to take the AP English test.

**AP English Literature and Composition E069 (01006A000)**

*Grade 12*

2 semesters – 1.0 Credit

*Prerequisite: 3 English credits; and/or teacher recommendation*

The purpose of this course is to offer students a college-level literature and language course in which students study the literature of various periods and use their broad reading background in discussions of literary topics. The students will be engaged in close reading of selected texts to deepen their understanding of the ways writers use language to provide both meaning and pleasure for the readers. Also, students will be responsible for developing the ability to analyze imagery, symbolism, and tone in analytical writing. Another priority of the class is to prepare students for the AP exam in Literature and Composition which offers college credit if the student scores a specific level on the test. (This is a very fast-paced course that covers a great number of novels, short stories, poetry, dramas, and very fast-paced course that covers a great number of novels, short stories, poetry, dramas, and expository prose.) All students are required to take the AP Literature and Composition test.
**Composition** E027 (01103A000)

*Grade 12*

*Semester course – 0.5 credits*

*Prerequisite: 3 English Credits*

This is a one-semester course in creative writing, including poetry as well as traditional expository, narrative, and argumentative forms. It will foster individual expression, encourage joy in writing, and demand analysis and editing of the writing product. In addition, students will have the opportunity to examine the craft, the art, and the product of successful contemporary writers.

**American Studies Honors** G062 (04149A000)

*Grade 11*

2 semesters (double period) – 2.0 Credits

*Prerequisite: English 2 and World Civilizations*

This year-long course meets two consecutive periods each day, allowing juniors to earn credit for English III Honors and United States History Honors by emphasizing student inquiry into the cultural, political, economic, social, and intellectual history of the United States. Students will participate in extensive discussion, writing, analytical reading, and self-determined projects to prepare them for later academic work. The required examination on the American government is included in the first semester. Students will also be required to complete a year-long community service/action project in which they research an issue within their community, create a solution, and present the solution to the community for consideration.

**Theatre** PA14 (05052A000)

*Grades 9-12*

*Semester Course – 0.5 Credit*

*Prerequisite: None*

This course is an introduction to theatre and basic acting and is designed to increase students' understanding, appreciation, and ideas of theatre. The following are covered during the semester: principles of improvisation, theatre history and theatre as an art form are covered during the semester. Stage blocking, monologues, ensemble acting, short dramas, basic make-up and basic stage craft are covered in the second semester. Students will participate in class forum discussions, writing and sharing of theatre critiques. Reading, writing, rehearsing and memorizing are vital to success in Theatre Arts. The class is interactive and collaborative. Play attendance and critiques are required each quarter. Contribution on some level to the school play(s) is also required.

**Drama** E033 (05055A000)

*Grades 11-12*

*Semester Course – 0.5*

*Prerequisite: 2 English credits*

Drama promotes students' experiences and skill development in one or more aspects of theatrical production, concentrating on acting and performance skills. The course begins with activities that are introductory in nature. The course progresses into more advanced activities focusing on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions.
Public Speaking E029 (01551A000)
Grades 11-12
Semester Course – 0.5 Credit
Prerequisite: none
Public Speaking enables students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

Journalism E482 (11101A000)
Grades 11-12
Semester Course – 0.5
Prerequisite: English 1 and Teacher Recommendation
Journalism, typically associated with the production of a school newspaper, yearbook, or literary magazine, emphasizes writing style and technique as well as production values and organization. This course introduces students to the concepts of newsworthiness and press responsibility; develops students’ skills in writing and editing stories, headlines, and captions; and teaches students the principles of production design, layout, and printing. Photography and photojournalism skills may be included.

Contemporary Literature E032 (01062A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: English I and Teacher Recommendation
Contemporary Literature is designed to improve students’ language arts and critical thinking skills, focusing on contemporary literature in a variety of genres including lyric poetry, young adult fiction, cultural studies, modern drama, and modern short stories and novels. Students determine the underlying assumptions and values within the selected works, reflect upon the influence of societal events and social attitudes, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.
The English Language Development Standards “on multiple theories and approaches in an effort to describe language use in academic contexts; this is the language that language learners must acquire and negotiate to participate successfully in school”. Utilizing both the Common Core Standards and the English Language Development Standards the high school content for our English language learners focuses on language and academic skills attainment. Students take the same content and assessed on the same skills as their grade level peers. Courses offer the same high school credit towards graduation and college acceptance as their grade level peers as well. Courses with and * denote courses for new arrivals to the United States.

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**Strategic Reading** E718 (01067A000) *(formerly Communications 1 & 2)*
Grades 9-12
Semester course – .5 credit
Prerequisite: Placement by assessment
Part of our newcomers programming, the Strategic Reading curriculum is an intensive reading class designed to improve and enhance reading comprehension in fiction and nonfiction text. The class will emphasize fluency, vocabulary (academic and social) development, reading strategies, and provide students with a variety of topics to explore.

**ELL Literature and Composition 1** E891 (01008A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Placement by assessment
English Learners whose literacy composite lies within the entering range (0-1.9) will concentrate on acquiring high frequency academic vocabulary, developing reading strategies and fluency, and phonics skills, responding to literary passages from various genres, writing simple sentences across the curriculum, and practicing grammar.

**ELL Literature and Composition 2** E892 (01008A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Placement by assessment
English Learners whose literacy composite lies within the beginning range (2.0-2.9) will concentrate on acquiring academic vocabulary, developing reading strategies and skills, analyzing short literary passages from various genres, writing simple sentences and paragraphs across the curriculum, and practicing grammar.

**ELL Literature and Composition 3** E893 (01008A000)
Grades 9-12
Year Course – 1.0 Credit
Prerequisite: Placement by assessment
English Learners whose literacy composite lies within the range (3.0 -3.4) will further their academic English growth through the development of academic language within the content areas, enhance reading and writing strategies, and respond effectively to argumentative, narrative, and expository prompts.

**ELL Literature and Composition 4** E894 (01008A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Placement by assessment
English Learners whose literacy composite lies within the range (3.5 -4) and are striving to meet the new English language exit criteria will further their academic English growth through the development of academic language within the content areas, enhance reading and writing strategies, and respond effectively to argumentative, narrative, and expository prompts.
**EL Bridging** E850 (01008A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Placement by assessment
Students who are striving to meet the new English Learner exit criteria of 4.2 writing composite and a 5.0 overall composite proficiency level will continue to develop academic language within the content areas, enhance reading and writing strategies, and respond effectively to argumentative, narrative, and expository prompts. Placement in EL Communications correlates to the students’ oral and literacy composite proficiency level as demonstrated on the W-APT or ACCESS for ELLs exam.

**World Civilization Sheltered** G891 (04051A000)
Grades 9, 10
2 semesters – 1.0 Credit
Prerequisite: None
This course is designed to provide students with inquiry skills, and background knowledge necessary to critically analyze cultural, political, economic, social, and intellectual events in World History. The course takes a chronological approach to teaching World History and will teach students how to use primary sources, documentary material, statistical tables, graphs, maps and charts as historical evidence. Analytical and discussion skills are designed to prepare students for later academic work. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

**U.S. History Bilingual** G804 (04101A000)
Grade 10
2 semesters – 1.0 Credit
Prerequisite: None
This course is designed to provide students with inquiry skills, and background knowledge necessary to critically analyze cultural, political, economic, social, and intellectual events in American History. The course takes a chronological approach to teaching U.S. History and will teach students how to use primary sources, documentary material, statistical tables, graphs, maps and charts as historical evidence. Analytical and discussion skills are designed to prepare students for later academic work. English learners may receive sensory, graphic, and interactive support. Instruction primarily occurs in Spanish with an emphasis on the development of cognates and academic vocabulary.

**U.S. History Sheltered** G892 (04101A000)
Grade 10
2 semesters – 1.0 Credit
Prerequisite: None
This course is designed to provide students with inquiry skills, and background knowledge necessary to critically analyze cultural, political, economic, social, and intellectual events in American History. The course takes a chronological approach to teaching U.S. History and will teach students how to use primary sources, documentary material, statistical tables, graphs, maps and charts as historical evidence. Analytical and discussion skills are designed to prepare students for later academic work. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.
**Criminal Justice Sheltered** G895 (04163A000)

Grade 11
2 semesters – 1.0 Credit
Prerequisite: None

This course is a survey of the criminal justice system, including agencies, legal terminology and processes involved in the administration of criminal justice. It provides an overview of police, prosecution, courts, juvenile justice and correctional system. An analysis of crimes and their proof in context of practical fact situations along with the problems of an administration of justice in a democratic society are also discussed. In addition, students will study consumer issues related to contracts, credit, purchasing goods and services, check writing, personal budgeting and career planning. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

**Strategic Math** M894 (02003A000) *(formerly Communications 1 & 2)*
Grades 9 - 12
Semester course – .5 credit
Prerequisite: Placement by assessment

Part of our newcomers programming, the Strategic Math curriculum is comprised of evidence-based programs and approaches to help students develop their procedural fluency and conceptual understanding of high school math concepts as outlined by the common core state standards.

**Algebra 1 Sheltered** M891 (02052A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite: None

Students will be exposed to a variety of complex and abstract topic; foundations for Algebra, solving equations, solving inequalities, linear functions, systems of equations and inequalities, exponents and exponential functions, quadratic functions and equations, and data analysis and probability. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

**Algebra 1 Bilingual** M802 (02052A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite: None

Students will be exposed to a variety of complex and abstract topic; foundations for Algebra, solving equations, solving inequalities, linear functions, systems of equations and inequalities, exponents and exponential functions, quadratic functions and equations, and data analysis and probability. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.
Geometry Sheltered M892 (02072A000)
Grade 10
2 semesters – 1.0 Credit
Prerequisite: None
Students will be exposed to a variety of complex and abstract topics; tools of geometry, reasoning and proofs, parallel and perpendicular lines, congruence triangles, relationships in triangles, quadrilaterals, proportions and similarities, right triangles and trigonometry, transformations and symmetry, circles, areas of polygons and circles, expanding surface area and volume, and probability and measurements. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

Geometry Bilingual M803 (02072A000)
Grade 10
2 semesters – 1.0 Credit
Prerequisite: None
Students will be exposed to a variety of complex and abstract topics; tools of geometry, reasoning and proofs, parallel and perpendicular lines, congruence triangles, relationships in triangles, quadrilaterals, proportions and similarities, right triangles and trigonometry, transformations and symmetry, circles, areas of polygons and circles, expanding surface area and volume, and probability and measurements. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

Algebra 2 Bilingual M804 (02106A000)
Grade 10-12
2 semesters – 1.0 Credit
Prerequisite: Completion of Algebra and Geometry
Trigonometry/Algebra courses combine trigonometry and advanced algebra topics, and are usually intended for students who have attained Algebra I and Geometry objectives. Topics typically include right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; complex numbers; numerical tables; field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; and properties of higher degree equations. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

Algebra 2 with Trigonometry Sheltered M892 (02106A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Completion of Algebra
Covering the topics of both Trigonometry and Analytic Geometry, this course prepares students for the eventual work in Calculus. Topics typically include the study of right trigonometric and circular functions, inverses and graphs; trigonometric identities and equations; solution of right and oblique triangles; complex numbers; numerical tables; vectors, the polar coordinate system; equations and graphs of conic sections; rotations and transformation; and
parametric equations. English learners may receive sensory, graphic and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts in needed.

**Biology Sheltered** S891 (03051A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: None
Sheltered Biology deals with the study of living things and attempts to develop the students’ understanding of the basic biological principles. Emphasis is placed upon the chemical and physical basis of life, the continuity of life, the fundamental processes, evolution of life, and the interdependence of living things. In addition to reading for information and class discussion, emphasis is placed on laboratory experiences. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

**Biology Bilingual** S802 (03051A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: None
Biology Bilingual concentrates on the study of living things and attempts to develop the students’ understanding of the basic biological principles. Emphasis is placed upon the chemical and physical basis of life, the continuity of life, the fundamental processes, evolution of life, and the interdependence of living things. In addition to reading for information and class discussion, emphasis is placed on laboratory experiences. English learners may receive sensory, graphic, and interactive support. Instruction primarily occurs in Spanish with an emphasis on the development of cognates and academic vocabulary.

**Chemistry Sheltered** S892 (03101A000)
Grades 10, 11
2 semesters – 1.0 Credit
Prerequisite: Successful completion of Biology
English learners in this course study principles of atomic and molecular structure, bonding, and stoichiometry, states of matter, kinetic molecular theory and solutions. Corresponding laboratory experiments include volumetric and gravimetric analyses, a qualitative study of reactions, visible spectrophotometry, and problem-based analyses. It is intended for all students whose majors require general chemistry, including science majors and pre-professionals. This course also satisfies a general education laboratory science requirement for students with previous chemistry experience. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

**Chemistry Bilingual** S803 (03101A000)
Grades 10, 11
2 semesters – 1.0 Credit
Prerequisite: Successful completion of Biology
English learners in this course study principles of atomic and molecular structure, bonding, and stoichiometry, states of matter, kinetic molecular theory and solutions. Corresponding laboratory experiments include volumetric and gravimetric analyses, a qualitative study of reactions, visible spectrophotometry, and problem-based analyses. It’s intended for all students whose majors require general chemistry, including science majors and pre-professionals.
This course also satisfies a general education laboratory science requirement for students with previous chemistry experience. English learners may receive sensory, graphic, and interactive support. Instruction primarily occurs in Spanish with an emphasis on the development of cognates and academic vocabulary.

**Physics Sheltered** S893 (03151A000)
Grades 11,12
2 semesters – 1.0 Credit
Prerequisite: Successful completion of Chemistry Sheltered or Bilingual

English learners in this course study the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study in this class includes examination of sound, light, and magnetic and electric phenomena. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

**Earth Science Sheltered** S894 (03001A000)
Grades 11,12
Prerequisite: Successful completion of Chemistry Sheltered or Bilingual

English learners in this course study principles of the environment on earth and the earth’s environment in space. While presenting the concepts and principles essential to students’ understanding of the dynamics and history of the earth, this class explores oceanography, geology, astronomy, meteorology, and geography. English learners may receive sensory, graphic, and interactive support. Instruction occurs in English, but native language support may be used to clarify concepts if needed.

**ESL Tutorial** E815 (01008A000)
Grades 9-12
Semester course – .5 credit
Prerequisite: Placement by assessment

Part of our newcomers programming, the curriculum reinforces concepts introduced in other content area courses and supports students’ transition from their previous educational background to their new high school. It provides a flexible program of instruction combining comprehensive diagnostic and placement assessment, intensive English language and content instruction, and counseling with a strong emphasis on helping students becoming successful high school students.

**Advanced Collaboration and Communication for Education Support and Success English Learners** (ACCESS-EL) X118 (22005A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Placement by Special Education and English Language Learners Staff

Students’ time in ACCESS is divided into skill development and academic need. Depending on the academic needs in question the class allocates 60% of the time to skill development and 40% to academic need. Note that this percentage may vary considerably based upon any one student’s immediate need. Students are expected to come to class prepared to complete specific instructions related to skills designed to achieve academic success. The remainder of the class time focuses on completion of academic work.
The Fine Arts Department provides opportunities for students to engage in personal art experiences as preparation for creative careers and responsible citizenship. We cultivate students’ abilities to think, collaborate and creatively problem solve.

Courses in Visual Arts, Band and Choir are offered.

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<thead>
<tr>
<th>Current Code</th>
<th>Course</th>
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<th>10</th>
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<td>A131</td>
<td>AP Studio Art: General Portfolio</td>
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<td>X</td>
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<td>2 art credits and teacher recommendation</td>
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<td>A132</td>
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<td>A503</td>
<td>Ceramics 2</td>
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<td>Marching Band</td>
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<td>C346</td>
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<td>X</td>
<td>X</td>
<td>Audition and Beginning Band</td>
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<td>Audition and 3 years of band</td>
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<td>Dance - Flag</td>
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<td>X</td>
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<td>X</td>
<td>Audition</td>
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AP Studio Art—General Portfolio A131 (05171A000)
Grade 11-12
2 semesters – 1.0 Credit
Prerequisite: Upper level emphasis courses and teacher recommendation
Designed for students with a serious interest in art, AP Studio Art—General Portfolio courses enable students to refine their skills and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses typically emphasize quality of work, attention to and exploration of a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive aspects of the student’s art. AP Studio Art—General Portfolio evaluations require submission of artwork exemplifying talent in drawing, painting, photography, design, and sculpture.

AP Studio Art—Digital Design Portfolio A132 (05171A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: Upper level emphasis courses and teacher recommendation
Designed for students with a serious interest in art, AP Studio Art—Digital Portfolio courses enable students to refine their skills and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses typically emphasize quality of work, attention to and exploration of a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive aspects of the student’s art. AP Studio Art—Digital Design Portfolio evaluations require submission of artwork exemplifying talent in photography and digital design.
**Ceramics 1** A502 (05159A000)  
Grade 10-12  
Semester Course – 0.5 Credit  
Prerequisite: Art Foundations  
Ceramics/Pottery 1 focuses on creating three-dimensional works out of clay and ceramic material using hand building techniques. Particular attention is paid to the characteristics of the raw materials, their transformation under heat, and the various methods used to create and finish objects. Students will explore various artists, themes, movements, and styles of ceramic art.

**Ceramics 2** A503 (05159A000)  
Grades 11-12  
Semester Course- 0.5 Credit  
Prerequisite: Art Foundations  
Ceramics /Pottery 2 focuses on creating advanced three-dimensional works out of clay. Attention is paid to the raw materials, transformation under heat, and the various finishes. Students will explore further the process of hand building and also gain experience using the potter's wheel to create ceramic pieces. Students will continue to explore various artists, themes, movements and styles of ceramic art.

**3-D Sculpture** A206 (05158A000)  
Grades 11-12  
2 Semesters - 1.0 Credit  
Prerequisite: Art Foundations, Ceramics 1  
An exploration of traditional and non-traditional sculptural tools and materials. The study of 3-D artists and the history of three-dimensional art are also main components of this art course.

**Art Foundations** A101 (05154A000) formerly Creative Art Comprehensive  
Grades 9-12  
2 semesters – 1.0 Credit  
Prerequisite: None  
This course provides students with the knowledge and opportunity to explore an art form and to create individual personalized works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, processes and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Students focus on the creation of art, and may also include the study of major artists, art movements, contemporary themes and styles of art.

**Art Foundations Introduction** A100 (05154A000) formerly Creative Art Comprehensive Introduction  
Grades 9-12  
1 semester Course- 0.5 Credit  
Prerequisite: none  
** 1 Semester offering of ART FOUNDATIONS** See course description above.
**Drawing and Painting** A300 (05155A000) formerly **Creative Art—Drawing/Painting**
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Creative Art-Comprehensive
Drawing and Painting focuses on drawing and painting techniques. The emphasis is on but not limited to two-dimensional work, students typically work with various media (such as pencil, chalk, watercolor, tempera, acrylics, etc.) to create personalized artwork. Students will also explore various artists, art movements, contemporary themes and styles of drawing and painting.

**Digital Photography Studio** A111 (05167A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Art Foundations
Digital Photography exposes students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters and camera angles. Students will learn the elements of photography and study composition. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. This course also covers major photographers, art movements, and styles. Additionally, students will learn to manipulate their photographs in creative ways using computer generated photo-editing programs.

**Digital Photography** A512 (05167A000)
Grades 10-12
1 semester – 0.5 credit
Prerequisite: Art Foundations
**1 semester offering of Digital Photography Studio** See description above.

**Advanced Studio** A105 (05155A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Teacher rec and previous art credits
This course is designed for the serious artist who is creating a personalized body of work in preparation for Advanced Placement Studio Art class.

**Digital Imaging** A270 (5168A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Digital Photography
This class builds on students' knowledge of tools, techniques and processes of video and digital photography. Students will create and edit their own photos and videos using digital editing software. They will view and critique their own work as well as professional artists work. They will consider how media affects their lives.
Beginning Band C341 (05101A000) formerly General Band
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: None
Beginning Band develops students’ technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles (concert, marching, orchestral, and modern styles). Instruments are furnished at no charge to members of this class. Students must purchase their own mouthpiece. Approximate cost $25.

Concert Band C346 (05102A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Audition and Beginning Band
Concert Band is designed to promote students’ technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances. This course develops the skills of 9th and 10th grade students with some performance experience. The ensemble style gives the students structures instrumental band experience.

Contemporary (Jazz) Band C339 (05105A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Audition and Concert Band
Contemporary (Jazz) Band courses help students develop their techniques for playing brass, woodwind, percussion, and string instruments, as well as guitars and keyboards, focusing primarily on contemporary stage band literature styles, such as traditional jazz, and jazz improvisation. Jazz band students must be members of one of the larger instrumental organizations.

Advanced Concert Band C347 (05102A000)
Grades 9-12
Prerequisite: Audition and previous band pathway
2 semesters – 1.0 Credit
Advanced Concert Band continues the development of instrumental techniques and performances at the advanced level.

Marching Band C345 (05103A000)
Grades 9-12
Prerequisite: Audition
2 semesters – 1.0 Credit
Courses in Marching Band are intended to develop students’ technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances. The Marching Band presents concerts, participates in various community parades, and school assemblies. The Marching Band also performs shows at home games as part of half-time entertainment.

Beginning Chorus C317 (05110A000) formerly Chorus 1
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: None
Beginning Chorus provides the opportunity to sing a variety of choral literature styles for men’s and/or women’s voices. The course is designed to develop vocal techniques and the ability to sing parts. Focuses on the fundamentals of sight-reading, diction, and vocal blend. This course offers students insight into the choir performance experience. Choir robes and attire are provided.

**Chorus 2**  C321 (05110A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Beginning Chorus
Chorus 2 is an advanced version of Beginning Chorus. Students will have the opportunity to sing a variety of choral literature for men's and women's voices. Students will continue to develop vocal techniques and the ability to sing parts. Continues to focus on the fundamentals of sight-reading, diction and vocal blend. This advanced course offers students the insight into the choir performance experience. Choir robes and attire are provided.

**Vocal Ensembles** (Madrigal Singers) C310 (05111A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Audition
Vocal Ensemble courses are intended to develop vocal techniques and the ability to sing parts in small ensemble or madrigal groups. Course goals may include the development of solo singing ability and may emphasize one or several ensemble literature styles. The Madrigal singers are a select group of students that are dedicated to rehearsals beyond the regular school day. Madrigals perform music of the Renaissance period and related styles of cappella literature. These students present an annual Madrigal Dinner as well as perform at school assemblies and programs, community events, choral festivals, workshops, competitions, and the state and local Solo-Ensemble contests. Students must also be enrolled in one of the large performance organizations or receive special exemption from the choir director.

**Dance- Flag**  C121 (05049A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: Audition
This class teaches and provides rehearsal for the Dance and Flag routines that are performed with the marching band. Students must audition for this class.

**Music History/Appreciation** C502 (05116A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: None
Music History/Appreciation course surveys different musical styles and periods with the intent of increasing students’ enjoyment of musical styles and/or developing their artistic or technical judgment. Music History/Appreciation courses may also focus on developing an understanding of a particular style or period. This course is designed to help students explore the world of music and develop an understanding of the role music plays in their lives.
# Health and Wellness

Tracy McCormick, Department Chair Proviso East [tmccormick@pths209.org](mailto:tmccormick@pths209.org)
Katherine Derning-Connelly, Department Chair Proviso West [kderning@pths209.org](mailto:kderning@pths209.org)

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<th>Code</th>
<th>Course</th>
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<th>12</th>
<th>Prerequisite</th>
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<tr>
<td>P150</td>
<td>Advanced Aquatics</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>16 years old by the end of semester taken; pass a basic swimming skills test</td>
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<td>P408</td>
<td>*Driver Education</td>
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<td>Must have passed 6 credit hours prior to enrollment. Be at least 15 years old. Be enrolled in a school in the same district as your Driver's Ed course. Must attend at least 80% of the classroom portion</td>
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<td>Lifetime Fitness</td>
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<td>X</td>
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**Freshman Physical Education** P369 (08001A000)

Grade 9
Semester course – 0.5 credits
Prerequisite: None
This is a semester course with an introduction to team and individual sports, fitness strategies, and aquatics. Aquatics will focus on water safety and basic swim. Students will be introduced to the basic skills and vocabulary needed to participate successfully in the activities. Students will learn the proper execution of all resistance and weight-lifting equipment.

**Sophomore Physical Education** P373 (08001A000)

Grade 10
Semester course – 0.5 credits
Prerequisite: Freshman Physical Education
This is a semester course with an enhancement to team and individual sports, fitness strategies and aquatics. Students will develop their team-building skills through the connection of team sports. They will improve their fitness
levels through the application of personal fitness strategies. They will continue their basic skill development in aquatics with a focus on stroke development, deep water swimming and underwater swimming.

**Junior / Senior Physical Education** P380 (08001A000)
Grades 11-12
Semester course – 0.5 credits
Prerequisite: Sophomore Physical Education
This course is designed to enhance the skills, techniques and strategies used for individual and team sports. Students will create, apply and execute offensive and defensive strategies for sport related activities. Individual fitness principles, strategies, and techniques will be developed through the designing of individualized fitness plans.

**Traditional Physical Education** P330 (08002A000)
Grades 11 -12
Semester course- 0.5 credits
Prerequisite: Freshman Physical Education
This course is designed to enhance the skills, techniques, and strategies used in team and individual sports. Students will learn, create, and apply offensive and defensive strategies for sport related activities. Students will also develop individual fitness principles, strategies, and techniques to guide them towards a lifetime of fitness.

**Lifetime Fitness** P340 (08005A000)
Grades 11-12
Semester course – 0.5 credits
Prerequisite: Freshman and Sophomore Physical Education
This course is designed to integrate the fitness principles used to improve individual fitness levels. Students will develop an individual fitness plan which involves the five elements of fitness, muscular, and cardiovascular endurance, muscular strength, flexibility, and BMI. This course will especially meet the training needs of our student-athletes.

**Modified Physical Education** P403 (08007A000)
Grades 9-12
Semester course – 0.5 credits
Prerequisite: None
Modified classes are for students with permanent/temporary disabilities so that they may maintain a higher degree of proficiency. This course is a modification of physical education activities intended to meet the individual needs of persons with permanent/temporary disabilities. Individualized physical fitness programs are modified within medical guidelines for each student. The students work to develop and refine motor skills, hand-eye coordination, balance and flexibility to maintain mobility. Social skills are integrated in all activities, and students are encouraged to maximize their abilities as they engage in a variety of modified sport activities.

**Introduction to Aquatics** P151 (08010A000)
Grades 10-12
Semester Course – 0.5
Prerequisite: passing grade in previous semester of PE
This class is designed for students with little to no experience in the water. They will be introduced to basic concepts of stroke technique, water safety, and introductory lifesaving techniques.

**Advanced Aquatics** P150 (08010A000)
Grades 10-12
Semester Course – 0.5
Prerequisite: Basic Swimming Skills
During this semester-long course, students will be instructed in basic swimming skills, and will hone their leadership abilities in a pool facility. This course also includes instruction in the latest techniques in water safety, swimming and non-swimming rescues, CPR, Automated External Defibrillator (AED), and First Aid Training for the professional rescuer. Successful students may earn lifeguarding certification through Starfish Aquatics Institute.

**PE Leaders** P375 (22101A000)
Grade 11
2 semesters – 1.0 Credit
Prerequisite: Sophomore PE with B or better; Application
This year long course is offered to students who are interested in developing leadership skills within a Physical Education environment. Students will concentrate on skill development, game strategies, skill analysis, officiating rules and techniques, teaching progressions and methods of organizing and administering various types of activity classes. A strong emphasis is placed upon the development of responsibility for self and others, leadership skills, and peer teaching.

*This course is a prerequisite for the Senior Leaders course.*

**Senior Leaders** P376 (22101A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: PE Leaders
Students who successfully complete the PE Leaders course will be enrolled as a Senior Leader the following year. Students enrolled will utilize their leadership qualities by assisting a Physical Education teacher in a freshman or sophomore PE class. Responsibilities include leading warm-up activities, officiating game play, helping students with skill development and being a positive role model to younger students.

**Physical Education Equivalent** (08014A000)
These courses award physical education credit for other at-school activities, such as marching band or cheerleading. (Dance is included under the Fine and Performing Arts subject area.)

**Health Education** P396 (08051A000)
Grades 9-12
Semester course – 0.5 credits
Prerequisite: None
This course fulfills the health education requirement for graduation as stipulated in Section 861 of The School Code of Illinois. Students study human ecology and health, human growth and development, human sexuality, prevention and control of disease (including HIV/AIDS education), public and environmental health, consumer health, mental health and illness, personal health habits, nutrition, and dental health. Other topics include the use and abuse of alcohol, drugs, and tobacco and their short- and long-term effects on one’s health and wellness.

**Driver Education in the Classroom** P408 (08151A000)
Grades 10-12
Semester course – 0.5 credits towards Physical Education requirement
Prerequisite: Freshman Physical Education, 80 % attendance rate during previous school year
The Driver Education program, consists of two phases of instruction, classroom and behind-the-wheel (optional). It is designed to develop safe, courteous and skillful drivers. To enter the driver education program students must have completed freshman physical education and maintained an 80% attendance rate during the school year prior to taking this course. The classroom phase emphasizes the importance of students developing desirable attitudes toward the responsibilities associated with the operation of a vehicle. At the end of this course students receive their permit, which must be held nine (9) months before they can be issued a license. Lastly, Illinois Law determines
eligibility: Pursuant to Section 27-24.2 of the School Code, no student shall be permitted to enroll in a driver education course provided by a public school district or a nonpublic school unless he or she has either: 1) received a passing grade in at least eight courses (which may include courses completed in grade 8) during the previous two semesters or, in the case of block scheduling that reduces the number of courses taken per semester, in at least half the courses taken during the previous two semesters.

Driver Education behind the Wheel P408, P712 (08199A000)
Grades 10-12
Prerequisite: 15 years of age, classroom instruction, Driving Permit
Behind-the-Wheel instruction is an optional 6 hour course. Instruction is made available to students, but it is not required for graduation. The permit allows the students to begin the required 50 hours of behind-the-wheel instruction with their parent and the 6-hour behind-the-wheel school phase either before or after school, during the school day (if class schedule permits) or during the summer.
Fees: $175.00 user fee payable to Proviso Township High Schools, a $20.00 application fee for permit payable to the Secretary of State; and a $15.00 workbook fee are required. All fees are subject to change depending on Illinois Law.
The philosophy of the mathematics department of Proviso Township is that students will learn challenging mathematics concepts in alignment with the Common Core Standards. Students will also achieve career and college readiness in math. Learning will be enhanced by the use of technology and students will acquire problem-solving skills.

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<th>Current Code</th>
<th>Course</th>
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<td>M119</td>
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<td>Teacher recommendation</td>
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</table>

*Fulfills consumer education requirement

**Algebra 1** M018, M108, M110, M210, M802, M891 (02052A000)

Grades 9
2 semesters – 1.0 Credit
Prerequisite: None
This course serves as a basis for all college preparatory courses that follow and for college courses within the fields of agriculture, business, engineering, law, life sciences, medicine, physical sciences, and several social sciences. An
Algebra I course typically include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

**Algebra 1 Honors** M145 (02052A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite: Departmental recommendation
This course covers the same topics outlined for Algebra but in greater depth and breadth. It is for students with above average ability and genuine interest in mathematics. It uses an in-depth study approach and makes it possible for students to prepare for and complete Calculus while in high school.

**Geometry** M146, M803, M892 (02072A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Sophomore standing or departmental recommendation
Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

**Geometry Honors** M147 (02072A000)
Grade 10
2 semesters – 1.0 Credit
Prerequisite: Algebra Honors or departmental recommendation
This course covers all of the same topics outlined in Geometry but in greater depth and breadth.

**Algebra II/Trigonometry** M148 (02106A000)
Grade 10-11
2 semesters – 1.0 Credit
Prerequisite: Completion of Algebra and Geometry
Trigonometry/Algebra courses combine trigonometry and advanced algebra topics, and are usually intended for students who have attained Algebra I and Geometry objectives. Topics typically include right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; complex numbers; numerical tables; field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; and properties of higher degree equations.

**Algebra II/Trigonometry Honors** M149 (02106A000)
Grades 10-11
2 semesters – 1.0 Credit
Prerequisite: Geometry Honors or departmental recommendation
This course covers all of the topics in Algebra II/ Trigonometry but in greater depth and breadth.
**Pre-Calculus Honors** M152 (02110A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Trigonometry/Algebra

Pre-Calculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

**Statistics** M190 (2202A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: Completion of Algebra and Geometry

Probability and Statistics courses focus on descriptive statistics, with an introduction to inferential statistics. Topics typically include event probability, normal probability distribution, collection and description of data, frequency tables and graphs, measures of central tendency and variability, random variables, and random sampling. Course topics may also include covariance and correlation, central limit theorem, confidence intervals, and hypothesis testing.

**AP Statistics** M155 (02203A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Trigonometry/Algebra

Following the College Board’s suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce 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 inference. All students are required to take the AP Statistics test.

**AP Calculus AB** M153 (02124A000)
Grade 11 - 12
2 semesters – 1.0 Credit
Prerequisite: Trigonometry/Algebra Honors or Pre-calculus Honors or department recommendation

Following the College Board’s suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. These courses introduce calculus and include the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of-change problems); and integral calculus (including antiderivatives and the definite integral). All students are required to take the AP Calculus test.

**AP Computer Science A** M154 (10161A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Teacher Recommendation

AP Computer Science A emphasizes object-oriented programming methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first-semester course in computer science. It also includes the study of data structures and abstraction.

**Business Mathematics** M135 (02157A000)
Grades 11-12
Semester Course – 0.5 Credit
Prerequisite: Geometry
Student will review and apply mathematical operations with whole numbers, decimals, fractions, ratios, and percent. They will understand terminology relating to personal and business mathematics applications and apply basic math skills to the solution of both personal and business applications.

**Consumer Mathematics** M134 (02157A000)
Grades 11 –12
Semester Course – 0.5 Credit
Consumer Math courses reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

**AP Computer Science Principles** M156 (10161A000)
Grade 11-12
2 semesters – 1.0 Credit
Prerequisite: Algebra 2 with trig or AP Computer Science A or Project lead the Way
AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts.

**College Prep Math** 085 M585 (02110A000)
Grade 12
Semester Course – 0.5 Credit
Prerequisite: Math 055, Accuplacer score 61 EA or higher, ACT score of 20 or SAT score 520-540.
Concepts in factoring, rational expressions and equations, functions, relations, systems of equations, inequalities, radical expressions and equations, quadratic equations, special right triangles and Pythagorean Theorem.

**College Algebra (Dual Credit)** M119 (02110A000)
Grade 12
1 semester - .5 credit
Prerequisite: Dev Ed Math 085
This is a dual credit math course (MAT 110) through Triton College. In this course, students will examine the operations on real numbers: factoring, polynomials, rational expressions, complex numbers, topics from the theory of equations, polynomials, exponential and logarithmic functions, systems of equations, and conic sections.
The NJROTC Program was established by Public Law in 1964 and may be found in Title 10, U.S. Code, Chapter 102. Instructors who are retired Navy, Marine Corps, and Coast Guard officers and enlisted personnel conduct the program at accredited secondary schools throughout the nation. The NJROTC curriculum emphasizes citizenship and leadership development, as well as our maritime heritage, the significance of sea power, and naval topics such as the fundamentals of naval operations, seamanship, navigation, and meteorology. Classroom instruction is augmented throughout the year by community service activities, drill competition, field meets, flights, visits to naval activities, marksmanship training, and other military training. The Navy provides uniforms, textbooks, training aids, travel allowance, and a substantial portion of instructors’ salaries.

Participation in the NJROTC...
- Promotes patriotism.
- Develops informed and responsible citizens.
- Promotes habits of orderliness and precision.
- Develops a high degree of personal honor, self-reliance, and individual discipline.
- Promotes an understanding of basic elements and requirements for national security.
- Develops respect for and an understanding of the need for constituted authority.
- Provides information on the military services as a possible career.
- Develops leadership potential.
- Provides an alternative to gangs.
- Promotes high school completion.
- Provides incentive to live healthy and drug-free.

Credit earned in the NJROTC program fulfills required credit in Physical Education.

<table>
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<th>Current Code</th>
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<th>Prerequisite</th>
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Naval Science 1 N100 (09101A000)
Grades 9-12
2 semesters – 1.0 Credit
Prerequisite: None
Naval Science 1 introduces students to the meaning of citizenship, the elements of leadership, and the value of scholarship in reaching life goals; promote an awareness of the importance of a healthy lifestyle, including physical fitness, a proper diet, and managing stress; drug awareness; providing the principles of health and first aid, geography and survival skills; and an overview of Naval ships and aircraft. These elements are pursued at the fundamental level.

Naval Science 2 N200 (09102A000)
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite: Grade of C or higher in Naval Science 1
Naval Science 2 builds on the general introduction provided in Naval Science 1, further develops the traits of citizenship and leadership, and introduces cadets to the technical areas of naval science and the role of the U.S. Navy in maritime history and the importance of the world’s oceans to the continued well-being of the United States. Students will be introduced to seamanship and elements of navigation.

Naval Science 3 N300 (09103A000)
Grades 11, 12
2 semesters – 1.0 Credit
Prerequisite: Grade of C or higher in Naval Science 2
Naval Science 3 broadens the understanding of students in the operative principles of military leadership. The concept and finance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives and the importance of power and national security. Students gain a more in-depth knowledge of naval ships and aircraft.

Naval Science 4 N400 (09104A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: Grade of C or higher in Naval Science 3
Naval Science 4 focuses primarily on practical leadership techniques and implementation. The intent is to assist seniors in understanding leadership and improving their leadership skills by putting them in positions of leadership, under supervision, then let them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. Seniors are mentored/guided in their preparation for life after high school to include college preparation, scholarship applications, and the variety of choices that are available to them. In addition, Naval Science 4 introduces Cadets to the study of current world affairs, regional studies and cultural awareness.
The philosophy of the Proviso Township Science Department is that our program is a “student centered” science program that includes an approach to learning that engages students physically and cognitively in a rich and rigorous inquiry-driven program, where students operate as “Student Scientists”. The major goal of our program is to develop substantive science literacy and analytical skills in all students. Our program will provide students with opportunities to expand, change, enhance, and modify the ways in which they view the world. Teachers will provide an environment that promotes students’ thinking, honesty, curiosity, and questioning. Students will be empowered to express and share points of view, solve problems, and make decisions based upon collection of evidence.

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<td>S173</td>
<td>AP Biology</td>
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<td>Pass Biology (S178 or S172) &amp; Chemistry (S181 or S182). Teacher recommendation preferred.</td>
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<tr>
<td>S179</td>
<td>AP Chemistry</td>
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<td>S189</td>
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<td>S187</td>
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**Biology S178 (03051A000)**
Grade 9
2 semesters – 1.0 Credit
Prerequisite: None
Biology is designed to provide information regarding the fundamental concepts of life and life processes. The course includes (but is not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

**Biology Honors S172: (03051A000)**
Grade 9
2 semesters – 1.0 Credit
Prerequisite: Placement Test or Teacher Recommendation
Biology is designed to provide information regarding the fundamental concepts of life and life processes. The course includes (but is not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. The class will be heavily oriented toward laboratory investigation and critical thinking skills. Students should have above average abilities in reading and science to be enrolled in this class.

**AP Biology S173: (03056A000)**
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Successful completion of Biology and Chemistry or Teacher Recommendation
This course adheres to the curriculum recommended by the College Board and is designed to parallel college-level introductory biology course. The course also stresses basic facts and their synthesis into major biological concepts and themes. In addition, the course encompasses four big ideas. 1) The process of evolution drives diversity 2) Biological systems utilize free energy. 3) Using systems store, retrieve, transmit and respond to information. 4) Biological systems interact. This AP Biology course includes college-level laboratory experiments.

**Chemistry S181 (03101A000)**
Grade 10
2 semesters – 1.0 Credit
Prerequisite: Biology
This course involves studying the composition, properties, and reactions of substances. The class explores such concepts as the behaviors of solids, liquids, and gases, acid/base and oxidation/reduction reactions, atomic structure, chemical formulas and equations, thermochemistry, and nuclear chemistry is also studied.

**Chemistry Honors S182 (03101A000)**
Grade 10
2 semesters – 1.0 Credit
Prerequisite: Biology and Teacher Recommendation
This course involves studying the composition, properties, and reactions of substances. The class explores such concepts as the behaviors of solids, liquids, and gases, acid/base and oxidation/reduction reactions, atomic structure, chemical formulas and equations, thermochemistry, and nuclear chemistry is also studied. Topics are covered at a faster pace with in-depth quantitative reasoning as the focus of each topic of study. Independent student projects and scientific investigations are course requirements.
AP Chemistry S179 (03106A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Biology, chemistry, and teacher recommendation

This course follows the curriculum recommended by the College Board. Students who enroll in this class have already completed a high school chemistry class and a second-year algebra class. In addition, the course encompasses 6 big ideas. 1) All matter is composed of atoms. 2) Physical and chemical properties of matter. 3) Chemical reactions involve the rearrangement of atoms. 4) Molecular collisions determine the rates of chemical reactions. 5) Thermodynamics describes the role energy plays in physical and chemical changes. 6) Equilibrium represents a balance between enthalpy and entropy. The lab for this course is equivalent to a typical college chemistry course.

Earth Science S188, S705 (03001A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: None

This course offers insight into the environment on earth and the earth’s environment in space. While presenting the concepts and principles essential to students’ understanding of the dynamics and history of the earth, this class explores oceanography, geology, astronomy, meteorology, and geography.

Physics S184 (03151A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Biology & Chemistry

This course involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study in this class includes examination of sound, light, and magnetic and electric phenomena.

Physics Honors S185 (03151A000)
Grade 11-12
2 semesters – 1.0 Credit
Prerequisite: Biology, Chemistry and teacher recommendation

This course involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study in this class also includes examination of sound, light, and magnetic and electric phenomena. In addition, this course focuses on emphasizing the development of critical thinking associated with effective laboratory investigation.

AP Physics S189 (03156A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Physics & science and math teacher recommendations

This course is designed by the College Board to parallel college-level physics courses that serve as a partial foundation for science or engineering majors. This course primarily focuses on mechanics and electricity and magnetism; with
approximately equal emphasis on these two areas. The coursework is more intensive and more analytical than AP Physics B courses and requires the use of calculus to solve the problems posed.

**AP Environment Science** S177 (03207A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Biology, Chemistry and teacher recommendation
This course is designed by the College Board to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems (both natural and human made), evaluate the relative risks associated with the problems, and examine alternative solutions for resolving and/or preventing them. Topics covered include science as a process, ecological processes and energy conversions, earth as an interconnected system, the impact of humans on natural systems, cultural and societal contexts of environmental problems, and the development of practices that will ensure sustainable systems.

**Physiology** S187 (03055A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: Biology, Chemistry and teacher recommendation
The course examines all major systems, tissues, and muscle groups in the human body to help students understand how these systems interact and their role in maintaining homeostasis. The course also covers such topics as cell structure and function, metabolism, and the human life cycle.

**Astronomy and Space Science** S191 (03004A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: None
This course offers students the opportunity to study the solar system, stars, galaxies, and interstellar bodies. The course introduces and uses astronomic instruments and typically explores theories regarding the origin and evolution of the universe, space, and time. Students typically learn about time zones, latitude and longitude, atmosphere, weather, climate, matter, and energy transfer. Advanced topics include the study of the use of remote sensing, computer visualization, and computer modeling to enable earth scientists to understand earth as a complex and changing planet.

**Forensic Science** S193 (03201A000)
Grades 11-12
2 semesters – 1.0 Credit
Prerequisite: None
The course investigates the history of forensic science, methods of investigating a crime scene, types of evidence, analysis of fingerprints, hair, fibers, drugs, glass, soil, and blood. In addition, the students explore agencies that offer forensics services typical of labs and careers in forensic science. The class relies heavily on labs, text readings of forensic journals, and videos.
**Aviation Physics S196 (03199A000)**

Grades 11-12

2 semesters – 1.0 Credit

Prerequisite: Teacher recommendation

This course involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study in this class also includes examination of sound, heat, light, and magnetic and electric phenomena. In addition, this course focuses on emphasizing the development of critical thinking associated with effective laboratory investigation. The course also encompasses special topics in aviation where students study the systems of an aircraft and become familiar with its instruments so they can fly an aircraft, according to the rules set forth by the FAA, on a flight simulator.
### Social Science

George Bunn, District Chair  
[gbunn@pths209.org](mailto:gbunn@pths209.org)

<table>
<thead>
<tr>
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*Fulfills Consumer Education requirement

Suggested sequence class of 2020 and beyond

**Freshman**  
- **Required**
  - World Civilizations
  - World Civilizations Honors
  - AP World History

**Sophomore**  
- **Optional Electives**
  - Elective/Criminal Justice (satisfies Consumer Ed)
  - Geography Honors/Criminal Justice Honors (satisfies consumer ed)
  - AP Human Geography

**Junior**  
- **Required**
  - US History
  - American Studies Honors
  - AP US History

**Senior**  
- **Civics required**
  - Civics/Elective
  - AP Government (satisfies Civics)
  - AP European History
**World Civilizations** G100 (04051A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite: none
World Civilizations provides students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments.

**World Civilizations Honors** G101 (04051A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite: Placement Test or Teacher Recommendation
World Civilizations honors provides students with an in-depth study of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments.

**AP World History** G103 (04057A000)
Grades 9-10
2 semesters – 1.0 Credit
Prerequisite: Placement Test or Teacher Recommendation
Following the College Board’s suggested curriculum designed to parallel college-level World History courses, AP World History courses examine world history from 8000 BCE to the present with the aim of helping students develop a greater understanding of the evolution of global processes and contracts and how different human societies have interacted. These courses highlight the nature of changes in an international context and explore their causes and continuity.

**World Geography** G084 (04001A000)
Grades 9-10
Semester Course - .5 Credit
Prerequisite: none
Students are provided with an overview of world geography. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

**World Geography Honors** G185 (04001A000)
Grades 9-10
Semester Course - 0.5 Credit
Prerequisite: none
Students are provided with an in-depth study of world geography. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

**AP Human Geography** G104 (04004A000)
Grades 9-10
2 semesters – 1.0 Credit
Prerequisite: Placement Test or Teacher Recommendation
The AP Human Geography Course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about methods and tools geographers use in their research and applications.
Criminal Justice G092  (04163A000)
Grades 10-12
Semester Course - 0.5
Prerequisite: none
This course is a survey of the criminal justice system, including agencies, legal terminology and processes involved in the administration of criminal justice. It provides an overview of police, prosecution, courts, juvenile justice and correctional system. An analysis of crimes and their proof in context of practical fact situations along with the problems of an administration of justice in a democratic society are also discussed. In addition, students will study consumer issues related to contracts, credit, purchasing goods and services, check writing, personal budgeting and career planning.

Criminal Justice Honors G093  (04163A000)
Grades 10-12
Semester Course - 0.5
Prerequisite: none
This course takes a close examination of the criminal justice system, including agencies, legal terminology and processes involved in the administration of criminal justice. It provides an overview of police, prosecution, courts, juvenile justice and correctional system. An analysis of crimes and their proof in context of practical fact situations along with the problems of an administration of justice in a democratic society are also discussed. In addition, students will study consumer issues related to contracts, credit, purchasing goods and services, check writing, personal budgeting and career planning.

African-American History G122 (04107A000)
Grades 10-12
Semester Course – 0.5 Credit
Prerequisite: World Civilization
This course examines the history, politics, economics, society and/or culture of African Americans in the United States. This course may focus primarily on the history of individuals of African Ancestry and take a more comprehensive approach to studying the contemporary issues affecting African Americans.

Latin American History G385 (04107A000)
Grade 10-12
Semester Course – 0.5 Credit
Prerequisite: World Civilization
Latin American History examines the history politics, society and culture of countries located in Latin America. This course may focus primarily on the history of individuals and groups of people in Latin America and take a concentrated focus on the contemporary issues affecting Latin Americans and Hispanics.

U.S. History G107 (04101A000)
Grade 11
2 semesters – 1.0 Credit
Prerequisite: World Civilization
This course is designed to provide students with inquiry skills, and background knowledge necessary to critically analyze cultural, political, economic, social and intellectual events in American History. The course takes a chronological approach to teaching U.S. History and will teach students how to use primary sources, documentary
material, statistical tables, graphs, maps, and chats as historical evidence. Analytical and discussion skills designed to prepare students for later academic work.

**American Studies Honors** G062 (04063A000)

Grade 11

2 semesters (double period) – 2.0 Credits

Prerequisite: English 2, and World Civilization

This year-long course meets two consecutive periods each day, allowing juniors to earn credit for English III Honors and United States History Honors by emphasizing student inquiry into the cultural, political, economic, social, and intellectual history of the United States. Students will participate in extensive discussion, writing, analytical reading, and self-determined projects to prepare them for later academic work. The required examination on the American government is included in the first semester. Students will also be required to complete a year-long community service/action project in which they research an issue within their community, create a solution, and present the solution to the community for consideration.

**AP U.S. History** G106 (04104A000)

Grade 11

2 semesters – 1.0 Credit

Prerequisite: World Civilization

The course is intended for qualified students wishing to take a college-level U.S. History course while still in high school, composed of a chronological survey based on seven recurring historical themes with emphasis on the incorporation of historical thinking skills as constructed by the College Board in its revision of this course in 2014 and again in 2015. An important objective is preparing students for the AP U.S. History Examination. Students typically take this course junior year, but may elect to take the course senior year. This course satisfies the U.S. History graduation requirement.

**Civics Regular** G090 04161A000

Grades 11-12

Semester Course – 0.5 Credit

Prerequisite: World Civilization

Civics courses examine the rights, roles, powers, and responsibilities of individuals and institutions in the political system. Students will evaluate the opportunities and limitations of participation in elections, voting, and electoral process; analyze the impact of constitutions, laws, and agreements on the maintenance of order, justice, equality and liberty; explain how the US Constitution established a system of government that has powers, responsibilities, and limits that have changed over time and are still contested while promoting the common good and protecting rights.

**Civics Honors** G190 (04161A000)

Grades 11-12

Semester Course – 0.5 Credit

Prerequisite: World Civilization

In Civics Honors, students analyze the rights, roles, powers, and responsibilities of individuals and institutions in the political system. Students will evaluate the opportunities and limitations of participation in elections, voting, and electoral process; analyze the impact of constitutions, laws, and agreements on the maintenance of order, justice, equality and liberty; explain how the US Constitution established a system of government that has powers, responsibilities, and limits that have changed over time and are still contested while promoting the common good and protecting rights.
**AP Government** 0261 (04150A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: US History and Teacher Recommendation
This course gives students an analytical perspective on government and politics in the United States. It includes the study of general concepts used to interpret US government and politics and the analysis of specific examples. Students will become familiar with the variety of theoretical perspectives and explanations for various behaviors and outcomes.

**AP European History** G110 (04056A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: US History and Teacher Recommendation
Following the College Board’s suggested curriculum designed to parallel college-level European History courses, AP European History courses examine European civilization from the High Renaissance period to the recent past and also expose students to the factual narrative. In addition, these courses help students develop an understanding of some of the principal themes in modern European history and the abilities to analyze historical evidence and to express that understanding and analysis in writing.

**Issues in America** G194 (04106A000)
Grade 12
2 semesters – 1.0 Credit
Prerequisite: World Civilization, U.S History
Issues in America studies the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

**Psychology** G098 (04254A000)
Grade 12
Semester Course – 0.5 Credit
Prerequisite: U.S History, World Civilization
Psychology introduces students to the study of individual human behavior. The course content typically includes (but not limited to) an overview of the field of psychology topics. Including, The field of psychology, Brain, body and behavior, sensation and perception, motivation and emotion, consciousness, and principles of learning.

**Sociology** G097 04258A000
Grade 12
Semester Course – 0.5 Credit
Prerequisite: U.S History, World Civilization
Sociology introduces students to the study of human behavior in society. The course provides an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.
The World Languages Department is dedicated to providing students with skills to learn a second (or third) language. Emphasizing reading, speaking and writing, our program provides our students with the knowledge to communicate in another language. We explore cultures through art, literature, customs and history.

We offer courses in French and Spanish.

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French I L065 (06121A000)

Grades 9-12
2 semesters - 1.0 Credit
Prerequisite: None
Designed to introduce students to French language and culture, French I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. French culture is introduced through the art, literature, customs, and history of the French-speaking people.

French II L066 (06122A000)

Grades 10-12
2 semesters - 1.0 Credit
Prerequisite: Successfully complete French I with C or higher or pass placement test.
French II courses build upon skills developed in French I, extending students’ ability to understand and express themselves in French and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s).
French III L067 (06123A000)
Grades 11-12
2 semesters -1.0 Credit
Prerequisite: Successfully complete French II with C or higher or pass placement test.
French III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

Spanish I L080 (06101A000)
Grades 9-12
2 semesters -1.0 Credit
Prerequisite: None
Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

Spanish II L081 (06102A000)
Grades 9-12
2 semesters -1.0 Credit
Prerequisite: Successfully complete Spanish I with C or higher or pass placement test.
Spanish II courses build upon skills developed in Spanish I, extending students’ ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

Spanish II Honors L084 (06102A000)
Grades 9-12
2 semesters -1.0 Credit
Prerequisite: Successfully complete Spanish I with an A or B or instructor recommendation.
Spanish II Honors focuses on extending students’ ability to understand and express themselves in Spanish and increasing their vocabulary (both social and academic). Students will engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

Spanish III L082 (06103A000)
Grades 10-12
2 semesters -1.0 Credit
Prerequisite: Successfully complete Spanish II with a C or higher or pass a placement test.
Spanish III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster
understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

**Spanish III Honors** L085 (06103A000)
Grades 10-12
2 semesters -1.0 Credit
Prerequisite: Successfully complete Spanish II with an A or B or instructor recommendation.
Spanish III Honors focuses on having students express increasingly complex concepts both verbally and in writing while showing spontaneity. Comprehension goals for students include attaining more facility and faster understanding when listening to the language spoken at normal rates, ability to paraphrase or summarize written passages, and conversing easily within a variety of situations.

**Spanish IV Honors** L083 (06104A000)
Prerequisite: Successfully complete Spanish III with and A or B or instructor recommendation
Spanish IV courses focus on advancing students’ skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

**Spanish I for Native Speakers** L096 (06106A000)
Grades 9-12
2 semesters -1.0 Credit
Prerequisite: Placement Test
Spanish for Native Speakers courses support, reinforce, and expand students’ knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Spanish for Native Speakers courses often move faster than do regular Spanish foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

**AP Spanish Language and Culture** L086 (06112A000)
Grades 11-12
2 semesters -1.0 Credit
Prerequisite: Complete Spanish III with an A or B and instructor recommendation in FY18-19 or Complete Spanish for Native Speakers in FY17-18.
Designed by the College Board to parallel third-year college-level courses in Spanish Composition and Conversation, AP Spanish Language courses build upon prior knowledge and develop students’ ability to understand others and express themselves (in Spanish) accurately, coherently, and fluently in both formal and informal situations. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.
AP Spanish Literature and Culture L076 (06113A000)
Grades 11-12
2 semesters -1.0 Credit
Prerequisite: Complete Spanish III with an A or B and Instructor recommendation in FY18-19 or Complete Spanish for Native Speakers in FY17-18.
Designed by the College Board to parallel college-level Introduction to Hispanic Literature courses, AP Spanish Literature courses cover representative works from the literatures of Spain and Spanish America, encompassing all genres. The courses build students’ Spanish language proficiency so that they are able to read and understand moderately difficult prose and express critical opinions and literary analyses in oral and written Spanish (an ability equivalent to having completed a third-year college-level Spanish Language course). vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
**Special Education**

Vanessa Schmitt, Director,  vschmitt@pths209.org
Dean Lodovico, Department Chair Proviso East dlodovico@pths209.org
Linda Reed, Department Chair Proviso West lreed@pths209.org

We believe that all students can learn. We provide special education students with equal access to regular education programs and facilities. Decisions regarding programs and placement are based on what is best for the student and provided within the school of attendance whenever possible. Special education students are taught in the least restrictive environment by qualified staff utilizing individualized methods and materials reflecting best practices. Diagnostic and support services should be made available to students in a manner which is non-discriminatory and recognizes the individual needs and differences of children, their families, their culture, and the community in which they live.

**ACCESS (Resource)**
The purpose of the ACCESS Program is to provide Resource assistance to students with Individualized Education Plans (IEPs) with their classes in the general education setting. The program provides strategies for students to organize, prioritize and process their assignments. This time is also used for test accommodations to be provided. A student may collaborate with the Access teacher to strengthen individual learning processes and develop methods for demonstrating mastery of a subject. This class meets for one class period during the academic day. It is weighted as an elective course and does not interfere with graduation requirements.

**Co-Teaching**
These classes are made up of two or more teachers delivering instruction at the same time in the same physical space to a heterogeneous group of students (Friend and Cook, 2004). Students are provided access to the general education curriculum and general education setting. Students will have the opportunity to be taught in an intense, individualized manner, while in their least restrictive environment. Co-Teaching classes are available at Proviso East and Proviso West in core content areas across all grade levels. Co-Teaching courses may also be utilized between special education and ELL programming.

**Instructional (Formerly Cross-Categorical)**
Instructional Program provides special education services within the special education setting to students who required specialized small group instruction and/or intensive case management. This program provides a level of intervention in a general education school building that exceeds the services provided in the resource program. These classrooms are located at Proviso East and Proviso West High Schools and provide differentiated academic instruction at each student’s individual academic level using specialized research based materials and methods in a least restrictive public school setting. It is the goal to increase instruction in the general education setting with continued support.
Advanced Collaboration and Communication for Education Support and Success (ACCESS) X119

Grades 9-12
2 semesters – 1 credit
Prerequisite: Placement by staffing
Students' time in ACCESS is divided into skill development and academic need. Depending on the academic needs of the student, the class allocates 40% of the time to skill development and 60% to academic need. Note that this percentage may vary considerably based upon any one student's immediate need. Students are expected to come to class prepared to complete specific instructions related to skills designed to achieve academic success. The remainder of the class time focuses on completion of academic work and addressing IEP goals.

Employability Skills (formerly Cooperative Work Training) T713 (22152A000)

Grades 11, 12
2 semesters – 1 credit
Prerequisite: Placement by staffing
Employability Skills courses help students match their interests and aptitudes to career options with a focus on using employment information effectively, acquiring and improving job-seeking and interview skills, composing job applications and resumes, and learning the skills needed to remain in an advance within the workplace. Course content may also include consumer education and personal money management topics.
Miscellaneous - Workplace Experience T714 (22998A000) (formerly Cooperative Work Training 2
Grades 11, 12
Year course – 1 credit
Prerequisite: Placement by staffing
Miscellaneous—Workplace Experience courses provide students with work experience in a field related to their interests. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Note: if the particular subject area is known, use the code associated with the Workplace Experience course within that subject area.

Strategic Reading E718 (01066A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite:
Strategic Reading courses are intended to improve a student’s vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note-taking of for understanding and evaluating the important points of a text.

English/Language Arts 1 E714 (01001A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite:
English/Language Arts (9th grade) courses build upon students’ prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.

English/Language Arts II E715 (01002A000)
Grade 10
2 semesters – 1.0 Credit
Prerequisite:
English/Language Arts II (10th grade) courses usually focus on composition and literature. Typically, students learn about the different audiences of written compositions. Students study various works of literature and work on improving their reading rate and comprehension, in addition to developing skills to help determine the author’s intent and theme. Students also continue to reinforce grammar, speaking, listening, and vocabulary usage.

English/Language Arts III E716 (01003A000)
Grade 11
2 semesters – 1.0 Credit
Prerequisite:
English/Language II (11th grade courses) continue to develop students’ writing skills, emphasizing clear, logical writing patterns, word choice, and usage as students work on writing extended writing passages. Students continue reading books of literature to improve reading rate and comprehension.
English/Language Arts IV E717 (01004A00)
Grade 12
2 semesters – 1.0 Credit
Prerequisite:
English/Language Arts IV (12th grade) courses combine composition and literature as students compare and analyze selected literature as they continue to develop their language arts skills. Typically, students write multi-paragraph essays, but may also write one research project.

Informal Mathematics M713 (02001A000)
Grade 9
2 semesters – 1.0 Credit
Prerequisite:
Informal Mathematics courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and highlight the connections among mathematical topics and between mathematics and other disciplines. These courses approach the teaching of general math, pre-algebra, and pre-geometry topics by applying numbers and algebraic concepts and relationships to real world problems.

M714 General Math M714 (02003A000)
Grade 10
2 semesters – 1.0 Credit
Prerequisite:
General Math courses reinforce and expand students’ foundational math skills, such as arithmetic operations using rational numbers, area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.

Consumer Math M715 (02157A000)
Grade 11
2 semesters – 1.0 Credit
Prerequisite:
Consumer Math courses reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

Freshman

Earth Science S714 (03001A000)
Grades 9-11
2 semesters – 1.0 Credit
Prerequisite:
Earth Science courses offer insight into the environment on Earth and the earth’s environment in space. While presenting concepts and principles essential to students’ understanding of the dynamics and history of the Earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography. Students also
participate in lab experiments that provide application to earth science concepts and the interaction between humans and Earth.

**Biology S713 (03051A000)**
Grades 9-10
2 semesters – 1.0 Credit
Prerequisite:
Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. Biology labs focus on cell processes and life functions of living organisms.

**Physical Science S715 (03159A000)**
Grades 10-12
2 semesters – 1.0 Credit
Prerequisite:
Physical Science courses involve study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.

**World History—Overview G715 (04051A000)**
Grade 9
2 semesters – 1.0 Credit
Prerequisite:
World History—Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, scientific, and cultural developments. World History—Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.

**World Geography G714 (04001A000)**
Grade 10
2 semesters – 1.0 Credit
Prerequisite:
World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

**US History—Comprehensive G716 (04101A000)**
Grade 11
2 semesters – 1.0 Credit
Prerequisite:
US History—Comprehensive courses provide students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.
Health Education P396 (08051A000)
Grades 9-10
Semester Course – 0.5 Credit
Prerequisite:
Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

Driver’s Education—Classroom Only P408 (08151A000)
Grades 11-12
Semester Course – 0.5 Credit
Prerequisite:
Drivers’ Education—Classroom Only courses provide students with the knowledge and responsibilities to become safe drivers on America’s roadways. Topics in these courses include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver’s capability (including alcohol and other drugs).
PROVISO MATH AND SCIENCE ACADEMY COURSE DESCRIPTIONS

ALL COURSES AT PMSA ARE CLASSIFIED AS HONORS, DUAL CREDIT, PRE-IB, IB, AND/OR ADVANCED PLACEMENT, WITH THE EXCEPTION OF WELLNESS AND CREDIT RECOVERY COURSES.

Advanced Placement Coursework

All PMSA students are required to complete a minimum of one Advanced Placement course prior to graduation.

PMSA Pre-IB Program Course Descriptions

Prerequisite: Acceptance into the PMSA Pre-IB Program (for Grade 9); Successful completion of PMSA Pre-IB Program Grade 9 Courses (for Grade 10)

These courses mirror the core 9th and 10th grade PMSA honors courses (English, Science, Mathematics and Social Sciences) but are designed to further prepare students for more rigorous academic work and assessments in the 11th and 12th grade years. PMSA Pre-IB Program courses focus on in-depth exploration of themes and topics in the various academic areas, are student-centered, and include project-based experiential learning components. Additionally these courses are developed with an emphasis on global awareness and international mindedness.

Students in the PMSA Pre-IB Program may be required to complete Acceleration Summer School Courses (as determined by departmental recommendation) to enter into and/or remain eligible for continuing in the PMSA Pre-IB Program.

Except for those students exempted by state or District 209 Board of Education waiver, students in the PMSA IB Diploma Programme must take zero period wellness.

IB Diploma Programme Course Descriptions\(^1\)

Enrollment in IB Diploma Programme courses requires admission into the PMSA IB Diploma Programme and registration as a candidate for the IB Diploma, which is a 2-year commitment. At least three (and no more than four) IB courses must be taken at the Higher Level (HL). The default HL courses are IB Language A: language and literature, IB History, and IB Biology.

Individual IB Diploma Programme courses may also be taken for an IB Certificate and require the permission of the current academic course instructor, parent permission and signed acknowledgement of and adherence to the PMSA IB Diploma Programme Preliminary Academic Honesty Policy.

Except for those students exempted by state or District 209 Board of Education waiver, students in the PMSA IB Diploma Programme must take zero period wellness.

Completion of the IB Diploma Programme entitles the student to graduation with Distinction. in the PMSA IB Diploma Programme must take zero period wellness.

\(^1\) The course descriptions are based on information from the individual subject descriptions available at http://www.ibo.org and from the IB DP Subject Guides.

Proviso Township High Schools District 209
### IB Diploma Programme Student Plan

The chart below outlines a sample course progression and yearly requirements designed to meet both PMSA and Proposed IB Diploma Programme requirements.

<table>
<thead>
<tr>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellness 3</td>
<td>Wellness 4</td>
</tr>
<tr>
<td><em>(Must be taken Zero-Period)</em></td>
<td><em>(Must be taken Zero-Period)</em></td>
</tr>
<tr>
<td>IB English A – Language &amp; Literature 1 HL</td>
<td>IB English A – Language &amp; Literature 2 HL</td>
</tr>
<tr>
<td>IB World Language 1 French B SL or Spanish B SL/HL</td>
<td>IB World Language 2 French B SL or Spanish B SL/HL</td>
</tr>
<tr>
<td>IB History 1 HL</td>
<td>IB History 2 HL</td>
</tr>
<tr>
<td>IB Biology 1 HL</td>
<td>IB Biology 2 HL</td>
</tr>
<tr>
<td>IB Math Studies 1 or IB Mathematics 1</td>
<td>IB Math Studies 2 or IB Mathematics 2</td>
</tr>
<tr>
<td>IB Psychology*</td>
<td>PMSA Math Elective*</td>
</tr>
<tr>
<td>TOK 1</td>
<td>TOK 2</td>
</tr>
<tr>
<td>[CAS]/[EE]^2</td>
<td>[CAS]/[EE]^5</td>
</tr>
</tbody>
</table>

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2 CAS (Creativity, Activity, Service) and EE (Extended Essay) are IB Diploma Core Requirements that students must satisfy, but these requirements are not scheduled subjects during their school day.
### English

**4 Credits Required**

**Required Courses:** English I – Survey of English; English II – American Literature; English III – World Literature; English IV – Literary Criticism (Or Pre-IB, IB, AP or Dual Credit course equivalents)

<table>
<thead>
<tr>
<th>Course</th>
<th>Fresh.</th>
<th>Soph.</th>
<th>Junior</th>
<th>Senior</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>English I – Survey of English (E160)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-IB English I – British Literature</td>
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<td></td>
<td></td>
<td>Acceptance into the PMSA Pre-IB Program</td>
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<tr>
<td>English II – American Literature (E611)</td>
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<td>English I</td>
</tr>
<tr>
<td>Pre-IB English II – American Literature (E611)</td>
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<td></td>
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<td>Pre-IB English I – British Literature</td>
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<tr>
<td>English III – World Literature (E360)</td>
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<td>English II</td>
</tr>
<tr>
<td>Advanced Placement (AP®) – English Language and Composition (E560)</td>
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<td>English II and Department Recommendation OR English III and</td>
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<tr>
<td>IB Language A: Language and Literature - DP Year 1 (E621)</td>
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<td></td>
<td></td>
<td>Acceptance into the IB Diploma Programme/Permission of instructor</td>
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<tr>
<td>IB Language A: Language and Literature - DP Year 2 (E622)</td>
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<td></td>
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<td>IB Language A: language and literature - DP Year 1</td>
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<tr>
<td>College Rhetoric (E460)</td>
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<td>English III with concurrent enrollment in English IV</td>
</tr>
<tr>
<td>College Rhetoric (Dual Credit) (E461)</td>
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<td></td>
<td>English III with concurrent enrollment in English IV; must meet qualification requirements</td>
</tr>
<tr>
<td>Creative Writing (E470)</td>
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<td></td>
<td>English III with concurrent enrollment in English IV</td>
</tr>
<tr>
<td>Creative Writing (Dual Credit) (E471)</td>
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<td></td>
<td></td>
<td>English III with concurrent enrollment in English IV; must meet qualification requirements</td>
</tr>
<tr>
<td>Journalism (E480)</td>
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<td></td>
<td></td>
<td>English III with concurrent enrollment in English IV</td>
</tr>
<tr>
<td>Journalism (Dual Credit) (E481)</td>
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<td></td>
<td></td>
<td>English III with concurrent enrollment in English IV</td>
</tr>
<tr>
<td>English IV – Literary Criticism (E490)</td>
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<td></td>
<td></td>
<td></td>
<td>English III</td>
</tr>
<tr>
<td>English IV – Literary Criticism – (Dual Credit) (E491)</td>
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<td></td>
<td></td>
<td></td>
<td>English III; must meet qualification requirements established by Triton</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>English III and Department Recommendation</td>
</tr>
</tbody>
</table>

**ALL COURSES AT PMSA ARE CLASSIFIED AS HONORS, DUAL CREDIT, PRE-IB, IB, AND/OR ADVANCED PLACEMENT, WITH THE EXCEPTION OF WELLNESS AND CREDIT RECOVERY COURSES.**

**English I – Survey of English**  **E160  01001A000**

*Grade 9*

*Year course – 1.0 credit*

*Prerequisite: None*
This course explores thematic, universal questions central to works of world literature with an emphasis on how the use of language shapes meaning and the human experience. The pace, complexities, and demands of this curriculum require that students have a demonstrated capacity for abstract thought, as well as a natural curiosity about language, literature, and the writing process. Through a study of poetry, short stories, novels, essays, myth, and philosophy, students debate and answer essential questions addressing common themes of creation, heroism, happiness, honor, justice, and love. Composition exercises reflect individual responses to the themes and literature studied along with a mastery of evidence-based argumentation. Students are challenged to develop unique approaches to composition that balance mechanics with a consideration of audience, purpose, and form. Oral expression takes the form of classroom discussion, formal speech, informative presentation, dramatic interpretation, and group interaction.

**Pre-IB English I – British Literature    E610 01056A000**

*Grade 9  
Required  
Year course – 1.0 credit  
Prerequisite: Acceptance into the PMSA Pre-IB Program*

Course content includes in-depth study of British literature chosen from the appropriate IB list of texts and authors, and it is designed to improve students’ accuracy and fluency in the English language. The pace, complexities, and demands of this curriculum require that students have a demonstrated capacity for abstract thought, as well as a natural curiosity about language, literature, and the writing process. Through a study of poetry, short stories, novels, essays, myth, and philosophy, students debate and answer essential questions addressing common themes of creation, heroism, happiness, honor, justice, and love. Composition exercises reflect individual responses to the themes and literatures studied along with a mastery of evidence-based argumentation. Students are challenged to develop unique approaches to composition that balance mechanics with a consideration of audience, purpose, and form. Oral expression takes the form of classroom discussion, formal speech, informative presentation, dramatic interpretation, and group interaction.

**English II – American Literature    E260 01054A000**

*Grade 10  
Year course – 1.0 credit  
Prerequisite: English I*

This rigorous course focuses on classic American literature and informational pieces. Texts, class discussions, and projects will focus on the rich cultural, philosophical, and political diversity of a people trying to realize their dreams. Composition emphasis will focus on the proof of an arguable thesis and the development of rhetorical analysis. Attention will be paid to the development of a cogent and clear style. An analytical research paper relevant to American culture and ideas will develop the skills of research, organization, and synthesis. Additionally, students will study formal outlining and bibliography preparation. Review and further development of English conventions and usage are integrated within each instructional unit to help strengthen students’ writing abilities.

**Pre-IB English II – American Literature    E611 01054A000**

*Grade 10  
Required  
Year course – 1.0 credit  
Prerequisite: Pre-IB English I – British Literature*

Course content includes in-depth study of American literature chosen from the appropriate IB list of texts and authors, and it is designed to improve students’ accuracy and fluency in the English language. Texts, class discussions, and projects will focus on the rich cultural, philosophical, and political diversity of a people trying to realize their dreams. This rigorous course includes a variety of expository multi-paragraph writings; the study of formal outlining and bibliography preparation; the construction of a brief formal documented research paper with outline and bibliography; and the writing of expository, narrative, persuasive, and impromptu themes. Composition emphasis
will focus on the proof of an arguable thesis and the development of persuasive arguments. Attention will be paid to the development of a clear style. An analytical research paper relevant to American culture and ideas will develop the skills of research, organization, and synthesis. Review and further development of English conventions and usage are integrated within each instructional unit to help strengthen students’ writing abilities.

**English III – World Literature**  
*Grade 11*  
*Required*  
*Year course – 1.0 credit*  
*Prerequisite: English II*  
Students will explore a variety of literary selections from ancient to modern times from countries around the world, including an emphasis on British literature. Students will improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. There is also a significant focus on College and Career Readiness Standards, as well as those associated with the Common Core. Enrichment opportunities are provided to students to prepare them for college-level reading and writing through increased exposure to literature and more authentic writing and speaking assessments throughout the year.

**Advanced Placement (AP®) – English Language and Composition**  
*Grades 11, 12*  
*Required if taken in lieu of English III – World Literature or English IV – Literary Criticism in senior year*  
*Year course – 1.0 credit*  
*Prerequisite: English II and Department Recommendation OR English III, Departmental Recommendation*  
The AP® English Language and Composition course is designed to give students multiple opportunities to work with the rhetorical situation, examining the author’s purposes as well as the audience and the subjects in texts. Students write in a variety of modes for a variety of audiences, developing a sense of personal style and an ability to analyze and articulate how the resources of language operate in any given text. Because students live in a highly visual world, they also study the rhetoric of visual media such as photographs, films, and advertisements. In concert with the College Board’s English course description, the course teaches “students to read primary and secondary sources carefully, to synthesize material from these texts in their own compositions and to cite sources using conventions recommended by professional organizations such as the Modern Language Association (MLA).” Students work within the framework of World and American literature to develop critical reading skills, which determine the sequence of reading instruction in this course. Students are given the opportunity to read many great writers, thereby enhancing the literary experience. This class prepares students for the AP® English Language and Composition Exam. Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

**IB Language A: Language and Literature - DP Year 1**  
*Grade 11*  
*Required for IB Diploma Programme*  
*Year course – 1.0 credit*  
*Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)*  
Through a study of language and literature, students will be able to better see and understand the world in which they live. Students will be encouraged to question meaning by focusing on the language of texts. Students will critically study and interpret written and oral, literary and non-literary texts. Students will conduct a formal analysis of texts to include the idea that meaning is contextual. Students will undertake the study of the cultural development and usage of the English language as well as its media and literature. Students will be required to analyze texts and to present their ideas. Year 1 topics include: language & the individual, language & social relations, language & power, textual bias, stereotypes, persuasive language.
IB Language A: Language and Literature - DP Year 2  E622  01007A000
Grade 12
Required for IB Diploma Programme
Year course – 1.0 credit
Prerequisite: IB Language A: language and literature - DP Year 1
Students will continue to critically study and interpret various types of texts, questioning meaning and focusing on language. Year 2 topics include: critical study of literature, literary terminology, the influence of formal elements of the text, genre and structure, understanding attitudes and values and their impact on readers, close reading, The changing historical cultural and social contexts in which texts are written and received. Formal assessments will include an individual oral commentary and a further oral activity. Additionally, students are required to sit the IB examinations in May, which include a comparative textual analysis, an essay and two written tasks.

College Rhetoric  E460  01103A000
Grade 12
Elective
Year course – 1.0 credit
Prerequisite: English III with concurrent enrollment in English IV
This course examines philosophy more deeply from both a historical perspective and applying our modern understanding of the physiology of the brain to cognitive development. The focus is on students' writing skills and their ability to compose different types of papers for a range of purposes and audiences. Examples include narrative, persuasive, and expository styles of writing. This course will provide students with a foundation for further study at the collegiate level.

College Rhetoric (Dual Credit)  E461  01103A000
Grade 12
Elective
Year course – 1.0 credit
Prerequisite: English III with concurrent enrollment in English IV; must meet qualification requirements established by Triton College
This course examines philosophy more deeply from both a historical perspective and applying our modern understanding of the physiology of the brain to cognitive development. The focus is on students' writing skills and their ability to compose different types of papers for a range of purposes and audiences. Examples include narrative, persuasive, and expository styles of writing. This course will provide students with a foundation for further study at the collegiate level. Successful completion of this course will earn students Triton College credit.

Creative Writing  E470  01104A000
Grade 12
Elective
Semester course – 0.5 credits
Prerequisite: English III with concurrent enrollment in English IV
This course introduces students to the concepts of creative writing, particularly, imagery in poetry and scene in creative non-fiction. Students also have the opportunity to participate in a spoken word event.
Creative Writing (Dual Credit)  E471  01104A000  
Grade 12  
Elective  
Semester course – 0.5 credits  
Prerequisite: English III with concurrent enrollment in English IV; must meet qualification requirements established by Triton College  
This dual credit course introduces students to an in-depth analysis of creative writing, particularly, imagery in poetry and scene in creative non-fiction. Students also have the opportunity to participate in a spoken word event.

Journalism  E480  01155A000  
Grade 12  
Elective  
Semester course – 0.5 credits  
Prerequisite: English III with concurrent enrollment in English IV  
This course introduces techniques of news writing, including gathering information, interviewing, writing, editing, and reporting. Students will assess how these techniques are affected by stereotypes, nonverbal cues, vocabulary, and stylistic choices. As students prepare copy for publication in PMSA’s newspaper, The Voice, they will write and edit news stories, features, editorials, columns, and reviews. This course will also emphasize effective interpersonal and team-building skills.

Journalism (Dual Credit)  E481  01155A000  
Grade 12  
Elective  
Semester course – 0.5 credits  
Prerequisite: English III with concurrent enrollment in English IV; must meet qualification requirements established by Triton College  
This dual credit course introduces techniques of news writing, including gathering information, interviewing, writing, editing, and reporting. Students will assess how these techniques are affected by stereotypes, nonverbal cues, vocabulary, and stylistic choices. As students prepare copy for publication in PMSA’s newspaper, The Voice, they will write and edit news stories, features, editorials, columns, and reviews. This course will also emphasize effective interpersonal and team-building skills.

English IV – Literary Criticism  E490  01004A000  
Grade 12  
Required  
Year course – 1.0 credit  
Prerequisite: English III  
Through active reading, students will read and analyze American, ethnic, and foreign short stories, as well as novels to explore various narrative forms, perspectives, voices, modes, and approaches to fiction. Students will lead discussions on structure, symbolism, and other literary devices to determine the impact of the author’s choices in developing elements of story. Writing skills are developed through essays of literary analysis and character narratives. English IV – Literary Criticism, is designed for students who enjoy reading fiction, engaging in intellectual inquiry, and participating in dynamic discussions of complex issues. In addition to practicing the methods of close reading and discussion-leading, students will deeply evaluate author’s arguments in critical essays.

English IV – Literary Criticism – (Dual Credit)  E491  01004A000  
Grade 12  
Required if taken in lieu of English IV
Year course – 1.0 credit
Prerequisite: English III; must meet qualification requirements established by Triton College
This is a dual credit course. Through active reading, students will read and analyze American, ethnic, and foreign short stories, as well as novels to explore various narrative forms, perspectives, voices, modes, and approaches to fiction. Students will lead discussions on structure, symbolism, and other literary devices to determine the impact of the author’s choices in developing elements of story. Writing skills are developed through essays of literary analysis and character narratives. English IV – Literary Criticism, is designed for students who enjoy reading fiction, engaging in intellectual inquiry, and participating in dynamic discussions of complex issues. In addition to practicing the methods of close reading and discussion-leading, students will evaluate author’s arguments in critical essays.

Advanced Placement (AP®) – English Literature and Composition E570 01006A000
Grade 12
Required if taken in lieu of English IV
Year course – 1.0 credit
Prerequisite: English III and Department Recommendation
AP English Literature and Composition is a college preparatory reading and writing class that will enable students to develop critical standards for evaluating works of literary merit. Forms of written evaluation by students include literary analysis and argument. The first semester of the course will examine the individual journey toward self-expression; the second semester will explore the nature of conflict. This course will prepare students for the AP® Exam in Literature and Composition. Triton College dual credit may be available. Students in this course are required to take the AP® Exam associated with this content area. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.
## Social Science

**3 Credits Required**

*Required Courses: Global Studies, American Government, United States History (Or Pre-IB, IB, AP or Dual Credit course equivalents)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Fresh.</th>
<th>Soph.</th>
<th>Junior</th>
<th>Senior</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-IB Global Studies (G160)</td>
<td>X</td>
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<td></td>
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</tr>
<tr>
<td>Advanced Placement (AP®) – World History (G540)</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>Department Recommendation</td>
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<tr>
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Pre-IB Global Studies  G160  04061A000
Grade 9
Required
Year course – 1.0 credit
Prerequisite: None
In this course, students will gain an appreciation for various approaches to historical analysis, which includes social, political, economic, and intellectual history. This course asks students to analyze how history and culture inform our understanding of the world today and how global interdependence, far from being a new phenomenon, has unfolded over the course of thousands of years. The course emphasizes such skill areas as expository writing, oral communication, and evaluation of primary sources, map analysis, research techniques, and critical thinking dispositions. This course is taken freshman year and is a prerequisite for all future social studies classes.

Advanced Placement (AP®) – World History  G540  04057A000
Grade 9-12
Required if taken in lieu of Pre-IB Global Studies
Year course – 1.0 credit
Prerequisite: Departmental Recommendation
The purpose of the Advanced Placement World History course is to help students develop a greater understanding of global processes and contacts in different types of human societies. Students will develop the skills necessary to critically examine human society in the present and the past, as a whole and in its parts. Students will use the tools of political, social, cultural, environmental, and economic historians to analyze the world in which they live. No more than twenty percent of this course will focus on European history. Students in this course are required to take the AP ® Exam. Fee: Cost of the AP ® Exam fee per the College Board rate. Reduced fee waivers may apply.

American Government  G260  04151A000
Grade 10
Year course – 1.0 credit
Prerequisite: Global Studies
This course is designed to study American government and politics including the fundamental principles of government, the role of the President and Congress, American political culture, public opinion, political participation, elections and campaigns, interest groups, the media and the policy-making process. Additionally, emphasis is placed on developing a sound understanding of the philosophical and institutional foundations of the American political system. Students will briefly examine the structures and processes of other selected governments and political philosophies. Development of analytical and evaluative skill is emphasized as well as the application of theory to contemporary issues and events.
*This course satisfies Illinois Public Law 195 (Constitution Test).

Pre-IB American Government  G611  04151A000
Grade 10
Required
Year course – 1.0 credit
Prerequisite: Pre-IB World Studies European History
This course is designed to study American government and politics including the fundamental principles of government, the role of the President and Congress, American political culture, public opinion, political participation, elections and campaigns, interest groups, the media and the policy making process. Additionally, emphasis is placed on developing a sound understanding of the philosophical and institutional foundations of the American political
system. Students will examine the structures and processes of other selected governments and political philosophies in preparation for more in-depth studies of selected topics in subsequent years. Development of analytical and evaluative skill is emphasized as well as the application of theory to contemporary issues and events.

*This course satisfies Illinois Public Law 195 (Constitution Test).

**United States History  G360  04101A000**

*Grade 11  
Required  
Year course – 1.0 credit  
Prerequisite: American Government  
This is a survey course that traces the key historic and social developments of the American experience from its pre-colonial origins to the present. Students acquire an understanding of American culture by studying the political and economic systems, the development of value systems, and interactions among the many groups that live in the United States. The course emphasizes such skill areas as map analysis, evaluation of primary sources, library research techniques, expository writing, and multi-media presentations.  
*This course satisfies Illinois Public Law 195 Consumer Education requirements.

**United States History (Dual Credit)  G361  04101A000**

*Grade 11  
Required if taken in lieu of United States History  
Year course – 1.0 credit  
Prerequisite: American Government; must meet qualification requirements established by Triton College  
This is an in-depth survey course that traces the key historic and social developments of the American experience from its pre-colonial origins to the present. Students will acquire a deeper understanding of American culture by studying the political and economic systems, the development of value systems and interactions among the many groups that live in the United States. Students will experience in depth, map analysis, evaluation of primary sources, library research techniques, expository writing and multi-media presentations. Students who pass this class will receive college credit from Triton College.  
*This course satisfies Illinois Public Law 195 Consumer Education requirements.

**Advanced Placement (AP®) – United States History  G550  04104A000**

*Grade 11  
Required if taken in lieu of United States History  
Year course – 1.0 credit  
Prerequisite: American Government and Department Recommendation; Dual Credit students must meet qualification requirements established by Triton College  
This AP U.S. History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history from the settlement of the New World to the recent past. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials— their relevance to a given interpretive problem, reliability, and importance—and to weigh the evidence and interpretations presented in historical scholarship. This course develops the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Triton College dual credit may be available. Students in this course are required to take the AP® Exam.  
Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.  
*This course satisfies Illinois Public Law 195 Consumer Education requirements.
IB History - DP Year 1  G621  04054A000
Grade 11
Required for IB Diploma Programme
Year course – 1.0 credit
Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)
This course introduces the understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretations. It also helps students to gain a better understanding of the present through critical reflection upon the past. It requires students to make comparisons between similar and dissimilar solutions to common human situations, whether they be political, economic or social. It invites comparisons between, but not judgments of, different cultures, political systems and national traditions. Students will study the history of the United States, Canada and Latin America. Topics will include: Causes, Course, and Effects of the American Civil War; Causes and Effects of 20th Century Wars; The Great Depression and the Americas; Civil Rights and Social Movements in the Americas Post-1945.

Applied Anthropology  G370  04251A000
Grades 11, 12
Elective
Year Course - 1.0 credit
Prerequisite: Department Recommendation
Anthropology is the study of the origin, the behavior, and the physical, social, and cultural development of humans. This course examines these tenets within the context of modern life with a particular emphasis on urban societies.

Psychology  G460  04254A000
Grades 11, 12
Elective
Semester course – 0.5 credits
Prerequisite: Grade 11 or 12 standing
This semester course explores the concepts, theories, perspectives, phenomena, personality, abnormal psychology, and behaviors associated with the subfields and research of psychology. Students will analyze methods psychologists use to study various types of behaviors and meet the processes and evaluate the validity and significance of their contributions.

Contemporary American History  G470  04106A000
Grades 11, 12
Elective
Semester course – 0.5 credits
Prerequisite: Grade 11 or 12 standing
This class is designed to give students the background and skills needed to understand the most pressing political, economic, and social issues and events of the day. The course presents dynamic and emerging events by providing historical and geographic context. Current issues stress a historical approach but focus on how historical themes are active in current events. Students will continue to hone their social studies skills to analyze events, view them critically, and formulate their own opinions on the events and their responsibility for them.

Economics  G480  04201A000
Grades 11, 12
Elective
Semester course – 0.5 credits
Prerequisite: Grade 11 or 12 standing
This class covers both microeconomics and macroeconomics. The first half of the course includes an emphasis on the basic theories and principles of economics and their relationship to consumer issues, consumer behavior, related topics. The second half of the course is broader in scope and deals with national, multinational, and global economic questions. The course satisfies the consumer education requirement.

Advanced Placement (AP®) – Macroeconomics  G575  04204A000
Grades 11, 12
Elective
Semester course – 0.5 credits
Prerequisite: Department Recommendation
AP® Macroeconomics students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. They will also examine how individuals, institutions, and influences affect people, and how those factors can impact society through employment rates, government spending, inflation, taxes, and production. The equivalent of a 100-level college-level class, this course prepares students for the AP Exam and for further study in business, political science and history. This course has been authorized by the College Board to use the AP designation. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

Advanced Placement (AP®) – Microeconomics  G585  04203A000
Grades 11, 12
Elective
Semester course – 0.5 credits
Prerequisite: Department Recommendation
AP® Microeconomics studies the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. They will also learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behaviors under various conditions. Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of a 100-level college course, AP Microeconomics prepares students for the AP Exam and for further study in business, history, and political science. This course has been authorized by the College Board to use the AP designation. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

IB Economics - DP Year 1  G631  04206A000
Grade 11
IB Diploma Programme Elective
Year course – 1.0 credit
Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)
The study of Economics centers around scarcity, resources and human wants. Economics uses scientific methodologies (quantitative and qualitative) and explores theories of macroeconomics and microeconomics in application to real-world issues. Through the study of economics, students will develop international mindedness and global awareness as well as self-awareness of their responsibilities at the local through the international level with a view to resolving economic issues. Topics studied include: Macroeconomics, Microeconomics, International Economics, Development Economics. Students produce a commentary portfolio (based on news articles).
IB Psychology - DP     G651   04257A000
Grade 11, 12
IB Diploma Programme Elective
Year course – 1.0 credit
Prerequisite: Psychology is the systemic study of behavior and mental processes. With roots in both natural and social science, it uses a variety of research methodologies in order to attempt to develop an understanding of modern society. Students will examine the biological, cognitive and socio-cultural influences on human behavior in order to lead to a better understanding of human nature and behavior. Students will also explore the numerous ethical implications of psychological research. Students will become aware of the benefits of psychological research, will follow ethical practices in their own research, and be able to understand alternative explanations of behavior. Students are required to conduct a simple experiment and produce a report on it. Additionally, students are required to sit the IB examinations in May.

Advanced Placement (AP®) – European History     G560   04056A000
Grade 10, 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Department Recommendation
This college-level course studies the history of Europe from the Renaissance to the present. Reading and writing analysis will emphasize intellectual, cultural, social, and economic history as well as political and diplomatic developments. The course prepares students for the Advanced Placement examination of the College Board. Triton College dual credit may be available. Students in this course are required to take the AP® Exam.
Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

Advanced Placement (AP®) – Human Geography     G570   04004A000
Grade 10, 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Department Recommendation
The purpose of the AP® Human Geography course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and application. Upon successful completion of the course, students will have developed skills that enable them to do the following:
• Understand and explain the implications of associations and networks among phenomena in places
• Recognize and interpret the relationships among patterns and process at different scales of analysis
• Define regions and evaluate the regionalization process
• Characterize and analyze changing interconnections among places
• Interpret maps and analyze geospatial data
Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

Advanced Placement (AP®) – Psychology     G580   04256A000
Grade 10, 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Department Recommendation
The AP® Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. They will explore how psychologists use research methods and critical analysis to explore human behavior. Also, they will discuss how biological, cognitive and cultural factors converge and facilitate acquisition, development and use of language. Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

**IB History - DP Year 2  G622  04054A000**

*Grade 12*

*Required for IB Diploma Programme*

*Year course – 1.0 credit*

*Prerequisite: IB History - DP Year 1*

Students will continue the study of the history of the United States, Canada and Latin America as well as their involvement in and impact on global events. Topics will include: Results of the Great Depression and Links to Military Expansion in Asia and Europe, Move to Global War, and the Cold War. Students will undertake an individual Historical Investigation. Additionally, students are required to sit the IB examinations in May, which include source-based and essay papers.

**IB Economics - DP Year 2  G632  04206A000**

*Grade 12*

*IB Diploma Programme Elective*

*Year course – 1.0 credit*

*Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)*

IB Economics - DP year 2 continues the exploration of scarcity, resources and human wants. Students refine their practice of scientific methodologies (quantitative and qualitative) and continue to explore theories of macroeconomics and microeconomics in application to real-world issues. Through the study of economics, students will develop international mindedness and global awareness as well as self-awareness of their responsibilities at the local through the international level with a view to resolving economic issues. Topics studied include: Macroeconomics, Microeconomics, International Economics, Development Economics. Students produce a commentary portfolio (based on news articles). Additionally, students are required to sit the IB examinations in May, which include extended response and data response questions.
5 Credits Required

Common Pathways:

- OR
- Integrated Math I, Integrated Math II, Integrated Math III, Pre-Calculus (Dual Credit), (1 - Math Elective)
- OR
- (Or Pre-IB, IB, AP or Dual Credit course equivalents)

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*Students must meet qualification requirements established by Triton College to receive Dual Credit.

ALL COURSES AT PMSA ARE CLASSIFIED AS HONORS, DUAL CREDIT, PRE-IB, IB, AND/OR ADVANCED PLACEMENT, WITH THE EXCEPTION OF WELLNESS AND CREDIT RECOVERY COURSES.
Pre-IB Summer Acceleration Integrated Math I  M661  02301A000
Grade  Rising Freshman – (Summer prior to Freshman year)
Required by Placement Test/Departmental Recommendation
Semester course – 0.5 credit
Prerequisite: Acceptance into the PMSA Pre-IB Program AND Placement Test/Departmental Recommendation
This course serves as a preparation for PMSA Pre-IB Integrated Math I. This course will address an introduction to
the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections
among mathematical topics and between mathematics and other disciplines. This course will involve the study of
linear and exponential functions (with domains in the integers), including application and interpretation of statistics
and real-world situations. Students reason about functions and the number and nature of solutions to equations,
systems of equations, inequalities and systems of inequalities.

Integrated Math I  M170  02302A000
Grade 9
Year course – 1.0 credit
Prerequisite: None
Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning,
and emphasize the connections among mathematical topics and between mathematics and other disciplines. Integrated Math I covers the following topics: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Integrated Math I involves the study of linear and exponential functions (with domains in the integers), including
application and interpretation of statistics and real-world situations. Students reason about functions and the
number and nature of solutions to equations, systems of equations, inequalities and systems of inequalities. Students
deﬁne congruence using transformational geometry. Students apply transformations to linear, exponential, piece-
wise, absolute value, square root and cube root functions. They explore these function types represented
algebraically, graphically, numerically in tables, and by verbal descriptions. Students practice solving problems and
expressing solutions in multiple ways while learning how various mathematics disciplines are connected.

Pre-IB Integrated Math I  M662  02302A000
Grade 9
Required
Year course – 1.0 credit
Prerequisite: Acceptance into the PMSA Pre-IB Program, Pre-IB Summer Acceleration Integrated Math I OR
Placement Test
This course will emphasize the teaching of mathematics as problem solving, communication, and reasoning, and
emphasize the connections among mathematical topics and between mathematics and other disciplines. Pre-IB
Integrated Math I covers the following topics: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Pre-IB Integrated Math I involves the study of linear and exponential functions (with domains in the integers),
including application and interpretation of statistics and real-world situations. Students reason about functions and
the number and nature of solutions to equations, systems of equations, inequalities and systems of inequalities.
Students deﬁne congruence using transformational geometry. Students apply transformations to linear, exponential,
piece-wise, absolute value, square root and cube root functions. They explore these function types represented
algebraically, graphically, numerically in tables, and by verbal descriptions. Students practice solving problems and
expressing solutions in multiple ways while learning how various mathematics disciplines are connected.
It will also involve the study of quadratic and exponential functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent radical, rational and quadratic expressions to reveal information using properties of exponents, completing the square, and/or factoring. Students define similarity using transformational geometry and use this definition to prove geometric theorems. Students learn and apply trigonometric ratios, the Pythagorean Theorem and the relationship between sine and cosine to solve problems. Students recognize, calculate and use conditional probability and independence. This course focuses on increasing students’ complete mathematical understanding as they work with geometric relationships, coordinate planes, trigonometric ratios, and quadratic functions.

**Advanced Pre-IB Integrated Math I  M162  02061A000**
*Grade 9*
*Required if taken in lieu of Pre-IB Integrated Math I*
*Year course – 1.0 credit*
**Prerequisite: Placement Test**
This course prepares students to take the International Baccalaureate at the subsidiary or higher level. Topics include the integration of operations and properties of number sets; trigonometric functions, equations, graphs, algebra and coordinate geometry; some linear equations, polynomial and quadratic functions and equations; logarithmic functions, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure. The multi-period sequence of integrated math replaces the traditional algebra1, geometry, algebra 2 sequence of courses, and covers the following topics during a 3 or 4 year sequence: algebra, functions, geometry from both synthetic and algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

**Pre-IB Summer Acceleration Integrated Math II  M663  02055A000**
*Grade (Rising Sophomores - Summer prior to Sophomore year)*
*If Required by Compass Test/Departmental Recommendation*
*Semester course – 0.5 credit*
**Prerequisite: PMSA Pre-IB Integrated Math I AND Departmental Recommendation**
This course will bridge Pre-IB Integrated Math I and Pre-IB Integrated Math II and is designed to prepare the student for the following topics: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure. This course will involve the study of quadratic and exponential functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent radical, rational and quadratic expressions to reveal information using properties of exponents, completing the square, and/or factoring.

**Integrated Math II  M171  02302A000**
*Grades 9, 10*
*Year course – 1.0 credit*
**Prerequisite: Integrated Math I OR Placement Test**
Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. Integrated Math II covers the following topics: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Integrated Math II involves the study of quadratic and exponential functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent radical, rational and quadratic expressions to reveal information using properties of exponents, completing the square, and/or factoring. Students define similarity using transformational geometry and use this definition to prove geometric theorems. Students learn and
apply trigonometric ratios, the Pythagorean Theorem and the relationship between sine and cosine to solve problems. Students recognize, calculate and use conditional probability and independence. This course focuses on increasing students’ complete mathematical understanding as they work with geometric relationships, coordinate planes, trigonometric ratios, and quadratic functions.

**Pre-IB Integrated Math II M664 02303A000**

*Grade 10 Required Year course – 1.0 credit*

**Prerequisite: Pre-IB Integrated Math I, Pre-IB Summer Acceleration Integrated Math II OR Placement Test**

This course will emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. It covers the following topics: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Pre-IB Integrated Math II involves the study of quadratic and exponential functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent radical, rational and quadratic expressions to reveal information using properties of exponents, completing the square, and/or factoring. Students define similarity using transformational geometry and use this definition to prove geometric theorems. Students learn and apply trigonometric ratios, the Pythagorean Theorem and the relationship between sine and cosine to solve problems. Students recognize, calculate and use conditional probability and independence. This course focuses on increasing students’ complete mathematical understanding as they work with geometric relationships, coordinate planes, trigonometric ratios, and quadratic functions.

It will also involve the study of polynomial, rational, logarithmic and trigonometric functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent polynomial, rational, trigonometric and logarithmic expressions to reveal information and key features. Students make geometric constructions and apply geometric concepts and trigonometric ratios to describe, model and solve problems. Students distinguish among sample surveys, experiments and observational studies to determine and interpret data.

With this course, students further explore quadratic functions and extend learning to polynomial functions. Students extend their understanding of arithmetic and geometric sequences to series, and their knowledge of trigonometric ratios to trigonometric functions. Additionally, students explore distributions of data, confidence intervals, and statistical significance.

**Advanced Pre-IB Integrated Math II M262 02061A000**

*Grade 10 Required if taken in lieu of Pre-IB Integrated Math II Year course – 1.0 credit*

**Prerequisite: Advanced Pre-IB Integrated Math I**

This course prepares students to take the International Baccalaureate at the subsidiary or higher level. Topics include the integration of operations and properties of number sets; trigonometric functions, equations, graphs, algebra and coordinate geometry; some linear equations, polynomial and quadratic functions and equations; logarithmic functions, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure. The multi-period sequence of integrated math replaces the traditional algebra1, geometry, algebra 2 sequence of courses, and covers the following topics during a 3 or 4-year sequence; algebra, functions, geometry from both synthetic and algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.
Pre-IB Summer Acceleration Integrated Math III  M664  02303A000
Rising Juniors – (Summer prior to Junior year)
Elective - This course is for students who choose to accelerate their math skills during summer.
Year course – 1.0 credit
Prerequisite: Pre-IB Integrated Math 2
This course prepares students to take the International Baccalaureate at the subsidiary or higher level. Topics include the integration of operations and properties of number sets; trigonometric functions, equations, graphs, algebra and coordinate geometry; some linear equations, polynomial and quadratic functions and equations; logarithmic functions, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure. The multi-period sequence of integrated math replaces the traditional algebra 1, geometry, algebra 2 sequence of courses, and covers the following topics during a 3 or 4 year sequence; algebra, functions, geometry from both synthetic and algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure. This course is for students who choose to accelerate their math skills during summer.

Integrated Math III  M172  02303A000
Grades 10, 11
Required
Year course – 1.0 credit
Prerequisite: Integrated Math II
Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. Integrated Math III covers the following topics: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Integrated Math III involves the study of polynomial, rational, logarithmic and trigonometric functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent polynomial, rational, trigonometric and logarithmic expressions to reveal information and key features. Students make geometric constructions and apply geometric concepts and trigonometric ratios to describe, model and solve problems. Students distinguish among sample surveys, experiments and observational studies to determine and interpret data.

With this course, students further explore quadratic functions and extend learning to polynomial functions. Students extend their understanding of arithmetic and geometric sequences to series, and their knowledge of trigonometric ratios to trigonometric functions. Additionally, students explore distributions of data, confidence intervals, and statistical significance.

Advanced Integrated Math III  M363  02303A000
Grades 10, 11
Required if taken in lieu of Integrated Math III
Year course – 1.0 credit
Prerequisite: Integrated Math II, Departmental Recommendation
Advanced Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. Advanced Integrated Math III covers the following topics: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Advanced Integrated Math III involves the study of polynomial, rational, logarithmic and trigonometric functions represented algebraically, graphically, numerically in tables and by verbal descriptions. Students write equivalent
polynomial, rational, trigonometric and logarithmic expressions to reveal information and key features. Students make geometric constructions and apply geometric concepts and trigonometric ratios to describe, model and solve problems. Students distinguish among sample surveys, experiments and observational studies to determine and interpret data.

With this course, students further explore quadratic functions and extend learning to polynomial functions. Students extend their understanding of arithmetic and geometric sequences to series, and their knowledge of trigonometric ratios to trigonometric functions. Additionally, students explore distributions of data, confidence intervals, and statistical significance.

**IB Mathematics - DP Year 1  M631  02132A000**

*Grade 11*

*Required for IB Diploma Programme if taken in lieu of IB Mathematical Studies - DP Year 1*

*Year course – 1.0 credit*

*Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates), Integrated Math III*

IB Mathematics focuses on introducing important mathematical concepts through the development of mathematical techniques. Students will be introduced to these concepts in a comprehensible and coherent way. Students will be able to apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context. Moreover, the primary aim of all IB Mathematics courses is that the students enjoy mathematics and appreciate its elegance and power. Topics of study include statistics and probability, algebra, functions, trigonometry.

Each student will be introduced to the mathematics exploration, in which he/she will take a considered approach to various mathematical activities and explore different mathematical ideas on a topic of his/her choice. (Additionally, students are required to take the IB examinations in May, which include short response and extended response questions.)

**Mathematical Studies  M173  02109A000**

*Grade 11*

*Required*

*Year course – 1.0 credit*

*Prerequisite: Integrated Math II*

Mathematical Studies is intended to provide students with the skills to cope with the mathematical demands of a technological society, course topics include linear, quadratic, and exponential functions, solutions, and graphs; skills in computation, estimation, and development of algorithms; data analysis, including collection, calculation, and presentation of statistics; set operations and logic; business techniques, including progressions and linear programming; and geometry and trigonometry.

**IB Mathematical Studies - DP Year 1  M621  02131A000**

*Grade 11/12*

*Required for IB Diploma Programme if taken in lieu of IB Mathematics - DP Year 1*

*Year course – 1.0 credit*

*Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates), Integrated Math III*

IB Mathematical Studies emphasizes the applications of mathematics with a focus on statistical techniques. This course is designed for students of varied mathematical backgrounds and abilities, giving them the opportunity to gain understanding and learn the concepts and techniques to enable them to solve problems in a variety of settings. Students will learn important concepts and techniques and gain an understanding of various mathematical topics (including number and algebra, descriptive statistics, logic/sets/probability, statistical
applications, geometry and trigonometry, mathematical models, intro to differential calculus). Students will undertake a project involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements. Students will be able to apply the skills and techniques learned in Mathematical Studies to the needs of their other DP courses or in their post-secondary studies. (Additionally, students are required to take the IB examinations in May, which include short response and extended response questions.)

**Pre-Calculus (Dual Credit) M461 02110A000**

*Grade 11, 12*

*Required if taken in lieu of Mathematical Studies, otherwise Elective*

*Year course – 1.0 credit*

*Prerequisite: (Integrated Math II, Department Recommendation)*

*Students must meet qualification requirements established by Triton College*

Operations on real and complex numbers, functional representation, systems of equations, determinants, mathematical induction, and theory of equations and inequalities are covered. Also included is an introduction to the basic ideas of the relational aspects of plane trigonometry.

**Discrete Mathematics M641 02102A000**

*Grade 12*

*Elective*

*Year course – 1.0 credit*

*Prerequisite: (Integrated Math III, Mathematical Studies) OR (Integrated Math III, Pre-Calculus (Dual Credit))*

Discrete Mathematics courses include the study of topics such as number theory, discrete probability, set theory, symbolic logic, Boolean algebra, combinatorics, recursion, basic algebraic structures, graph theory, consumer mathematics, numeral systems, and geometry in nature and in daily life.

**IB Mathematical Studies - DP Year 2 M622 02131A000**

*Grade 12*

*Required for IB Diploma Programme*

*Year course – 1.0 credit*

*Prerequisite: IB Mathematical Studies - DP Year 1*

IB Mathematical Studies emphasizes the applications of mathematics with a focus on statistical techniques. This course is designed for students of varied mathematical backgrounds and abilities, giving them the opportunity to gain understanding and learn the concepts and techniques to enable them to solve problems in a variety of settings. Students will learn important concepts and techniques and gain an understanding of various mathematical topics (including number and algebra, descriptive statistics, logic/sets/probability, statistical applications, geometry and trigonometry, mathematical models, intro to differential calculus). Students will undertake a project involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements. Students will be able to apply the skills and techniques learned in Mathematical Studies to the needs of their other DP courses or in their post-secondary studies. (Additionally, students are required to take the IB examinations in May, which include short response and extended response questions.)

**IB Mathematics - DP Year 2 M632 02132A000**

*Grade 12*

*Required for IB Diploma Programme*

*Year course – 1.0 credit*

*Prerequisite: IB Mathematics - DP Year 1*

Students will continue the study of important mathematical concepts through the development of mathematical techniques. Students will be able to apply the mathematical knowledge they have acquired to solve realistic
problems set in an appropriate context. Topics of study include calculus and vectors. Students will complete the mathematics exploration introduced in Year 1. (Additionally, students are required to take the IB examinations in May, which include short response and extended response questions.)

**Calculus M470  02121A000**  
*Grades 11, 12*  
*Elective*  
*Year course – 1.0 credit*  
**Prerequisite:** (Pre-Calculus) OR (Pre-Calculus (Dual Credit)) OR (Integrated Math III, Mathematical Studies) OR (Integrated Math III, Pre-Calculus (Dual Credit))

This course develops concepts related to differential and integral calculus. Both have mathematical and physical importance, and as such, particular emphasis is placed on both theory and application using an inquiry-based approach. This course includes the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus.

**Calculus (Dual Credit) M471  02121A000**  
*Grades 11, 12*  
*Elective*  
*Year course – 1.0 credit*  
**Prerequisite:** (Pre-Calculus (Dual Credit)) OR (Integrated Math III, Mathematical Studies)  
*Students must meet qualification requirements established by Triton College*

This course is the first course in a three-part calculus sequence. Introduces the concept of a limit process, which is central too much of modern mathematics. Develops the differential and integral calculus of elementary functions from the limit idea. Develops applications to geometry, physics, economics and other sciences. This course includes the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus.

**Advanced Placement (AP®) – Calculus AB M560  02124A000**  
*Grades 11, 12*  
*Elective*  
*Year course – 1.0 credit*  
**Prerequisite:** (Pre-Calculus (Dual Credit), Department Recommendation) OR (Integrated Math III, Mathematical Studies, Department Recommendation)  
*Dual Credit students must meet qualification requirements established by Triton College*  
*Students must meet qualification requirements established by Triton College*

This course is intended for the mature student interested in earning college credit. Students investigate differential and integral calculus with algebraic and transcendental functions. Special emphasis is given to techniques of integration and application to maxima and minima, related rate, curve sketching, area and volume problems. Analytic geometry is also studied with emphasis on equations of curves. Students interested in pursuing careers in engineering, medicine, and the sciences should consider this course necessary for these careers.

Explore the key concepts, methods, and applications of single-variable calculus including functions, graphs, and limits, derivatives, integrals, and the Fundamental Theorem of Calculus. Become familiar with concepts, results, and problems expressed in multiple ways including graphically, numerically, analytically, and verbally. Use technology to help solve problems, experiment, interpret results, and support your conclusions. Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.
Advanced Placement (AP®) – Calculus BC M550 02125A000
Grades 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Advanced Placement (AP®) - Calculus AB, and Department Recommendation
*Dual Credit students must meet qualification requirements established by Triton College
Explore the key concepts, methods, and applications of single-variable calculus including all topics covered in AP® Calculus AB (functions, graphs, and limits, derivatives, integrals, and the Fundamental Theorem of Calculus) as well as additional topics in differential and integral calculus, such as parametric, polar and vector functions, and series. Become familiar with concepts, results, and problems expressed in multiple ways including graphically, numerically, analytically, and verbally. Use technology to help solve problems, experiment, interpret results, and support your conclusions. Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

Computer Science I M370 10155A000
Grades 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Junior/Senior-level standing
An introduction to the theory and practice of computer programming, the emphasis of this course is on techniques of program development within the object-oriented paradigm. Topics include control structures, objects, classes, inheritance, simple data structures, and basic concepts of software development. Currently, Java is the programming language used in the course. This course has a required lab component.

Computer Science (Dual Credit) M371 10155A000
Grades 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Junior/Senior-level standing, must meet qualification requirements established by Triton College
The course is an introduction to computer-based problem solving and algorithm development. Students receive an introduction to computer programming through the use of flowcharts, pseudocode, structure charts, and program coding and debugging using a block structured high-level programming language. Selection, repetition, and sequence control structures are implemented. Arrays, files and records are introduced. The topics include program design and implementation, algorithm analysis, standard data structures, and object-oriented programming design. Currently, the course is taught using the Java programming language. This course has a required lab component.

Advanced Placement (AP®) – Computer Science A M570 10157A000
Grades 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Junior/Senior-level standing and Department Recommendation; Dual Credit students must meet qualification requirements established by Triton College
AP Computer Science A is based on the syllabus developed by the College Board. Students are introduced to the formal concepts of object-oriented computer programming, including program design, control structures, data structures and algorithms using the Java programming language. Students will gain an understanding of the history of computing, and the nature of hardware and software, the software design process, and the basics of object-oriented programming, as well as the ethical considerations of computer science. They will also gain a familiarity with Java classes, objects, and data types; basic Java syntax; constructor, accessor, and mutator methods; decision and
looping statements; and logical operators, among others. Students will have the opportunity to further develop and refine their programming skills by focusing on the techniques of data abstraction, including encapsulation and inheritance. In particular, the emphasis is on the organization of information and the implementation of common data structures such as arrays and array lists, as well as various searching and sorting methods through such structures. Students also explore recursion and the close relationship between data structures and algorithms including basic complexity analysis and comparisons between several different methods.

In addition, AP® Computer Science A is a course designed to enhance students' logical problem solving abilities. Not only does it increase student understandings of the Java language, but it also builds analytical skills that are valuable in the field of computer science, in other academic courses, and in life in general. This class will enable students to significantly increase their computer science and programming skills - skills that are needed in an ever-increasing array of college courses and workplaces. Throughout this course, students are encouraged to work individually and collectively to solve problems, share solutions, and make important discover. Triton College dual credit may be available. Students in this course are required to take the AP® Exam associated with this content area. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

Statistics M380 02201A000
Grades 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Integrated Math II, Junior or Senior level standing
This course provides a foundation of statistical analysis; probability, data analysis, statistical inference, distributions, statistical tests and the principles of regression are topics of study. Particular emphasis is given to applications of these tools and techniques in the areas of science, medicine, business, and the social sciences.

Statistics (Dual Credit) M381 02201A000
Grades 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Integrated Math II, Junior or Senior level standing
*Students must meet qualification requirements established by Triton College
Fundamentals of descriptive statistics, including frequency distributions, central tendency and variability, graphic methods, and correlation and regression are covered. Students will use a statistical package such as SAS or the capabilities of the TI graphing calculator.

Advanced Placement (AP®) – Statistics M580 02203A000
Grades 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Integrated Math II, Department Recommendation, Junior or Senior level standing
*Students must meet qualification requirements established by Triton College
Learn about the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Develop analytical and critical thinking skills as you learn to describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences. Triton College dual credit may be available. Students in this course are required to take the AP® Exam associated with this content area. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.
# Science

## 4 Credits Required

**Required Courses:** Physics, Chemistry, Biology, and choice of Elective (Or Pre-IB, IB, AP or Dual Credit course equivalents)

<table>
<thead>
<tr>
<th>Course</th>
<th>Fresh.</th>
<th>Soph.</th>
<th>Junior</th>
<th>Senior</th>
<th>Prerequisite</th>
</tr>
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<tbody>
<tr>
<td>Physics (S160)</td>
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<tr>
<td>Pre-IB Physics (S610)</td>
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<td>Acceptance into the PMSA Pre-IB</td>
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<td>Physics</td>
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<td>PMSA Pre-IB Physics</td>
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<td>X</td>
<td>Chemistry</td>
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<tr>
<td>Advanced Placement (AP®) – Biology (S580)</td>
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<td>Chemistry, Department Recommendation; Dual Credit students must meet qualification</td>
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All courses at PMSA are classified as Honors, Dual Credit, Pre-IB, IB, and/or Advanced Placement, with the exception of Wellness and Credit Recovery courses.

**Physics S160 03151A000**

*Grade 9*

*Year course – 1.0 credit*

*Prerequisite: None*

Physics is the study of the fundamental behavior of the physical universe on both large and small scales. This course examines topics involving motion, momentum, energy, wave, and particle behavior using principles and strategies of inquiry. Particular emphasis is placed on physics in the modern era, studying the impact of physics and technology on our society, and the application of data analysis strategies and tools to the study of real-world data.
Pre-IB Physics  S610  03151A000
Grade 9
Required
Year course – 1.0 credit
Prerequisite: Acceptance into the PMSA Pre-IB Program
Physics is the study of the fundamental behavior of the physical universe on both large and small scales. This course examines topics involving motion, momentum, energy, wave, and particle behavior using principles and strategies of inquiry. Particular emphasis is placed on physics in the modern era, studying the impact of physics and technology on our society, and the application of data analysis strategies and tools to the study of real-world data. Additionally, PMSA Pre-IB Physics incorporates in-depth inquiry and more opportunities for student centered activities.

Chemistry  S270  03101A000
Grade 10
Required
Year course – 1.0 credit
Prerequisite: Physics
Students will use measurement and observation skills while investigating the composition of substances and the changes they undergo. This honors level chemistry course emphasizes the strategies and techniques of scientific investigation, problem solving, and critical thinking. This is accomplished through extensive use of demonstrations, classroom discussions, laboratory investigations, and textbook materials. Topics are covered at a faster pace with in-depth quantitative reasoning used as the focus for each topic of study. Topics include classification of matter and changes, conservation of matter and energy, gas behavior, principles of atomic theory, nuclear chemistry, periodic properties of the elements, chemical bonding, the mole and stoichiometry, chemical reactions, acids and bases, solutions and introductory thermochemistry. Independent student projects and scientific investigations are course requirements.

Pre-IB Chemistry  S611  03101A000
Grade 10
Required if taken in lieu of Chemistry
Year course – 1.0 credit
Prerequisite: PMSA Pre-IB Physics
Students will use measurement and observation skills while investigating the composition of substances and the changes they undergo. This course emphasizes the strategies and techniques of scientific investigation, problem solving, and critical thinking. This is accomplished through extensive use of demonstrations, classroom discussions, laboratory investigations, and textbook materials. Topics are covered at a faster pace with in-depth quantitative reasoning used as the focus for each topic of study. Topics include classification of matter and changes, conservation of matter and energy, gas behavior, principles of atomic theory, nuclear chemistry, periodic properties of the elements, chemical bonding, the mole and stoichiometry, chemical reactions, acids and bases, solutions and introductory thermochemistry. Independent student projects and scientific investigations are course requirements. Additionally, PMSA Pre-IB Chemistry incorporates in-depth inquiry and more opportunities for student centered activities.

Biology  S380  03051A000
Required
Grade 11
Year course – 1.0 credit
Prerequisite: Chemistry
This course deals with the study of living things and attempts to develop understandings of basic biological principles. Emphasis is placed upon the chemical and physical basis of life, the continuity of life, the fundamental life processes, evolution of life, and the interdependence of living things and the environment. The program will be heavily oriented toward laboratory investigation and critical thinking skills. Students should have above average abilities in reading, science, and critical thinking skills to be enrolled in this course.

**Advanced Placement (AP®) – Biology**  
Codes: 03056A000  
Grades 11, 12  
Required if taken in lieu of Biology, otherwise elective if taken in senior year  
Year course – 1.0 credit  
Prerequisite: Chemistry, Department Recommendation; Dual Credit students must meet qualification requirements established by Triton College OR Biology, Departmental Recommendation  
AP® Biology includes topics that are regularly covered in a college introductory biology course and differs significantly from the standards-based, high school biology course with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work performed by students, and the time and effort required of the students. The textbook used by AP® Biology is also used by college biology majors and the kinds of labs done by AP® students are equivalent to those done by college students. AP® Biology is a course that aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

**IB Physics**  
Codes: 03157A000  
Grade 11  
Elective  
Year course – 1.0 credit  
Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)  
Students will seek to explain the universe itself from the very smallest particles to vast galaxies via theoretical, experimental and technological physics. Students will make observations, use and develop models in order to try to understand observations, and subsequently use and develop theories that attempt to explain the observations. Through the study of sciences, students will become aware of how scientists work and communicate with each other. Students will approach the scientific method in a practical manner although possibly in different forms. Through the overarching theme of the “Nature of Science” this knowledge and skills will be put into the context of the way science and scientists work in the 21st Century and the ethical debates and limitations of creative scientific endeavor.

Core topics include: measurements and uncertainties, mechanics, thermal physics, waves, electricity and magnetism, circular motion and gravitation, atomic/nuclear/particle physics, and energy production. Options for study include relativity, engineering physics, imaging, and astrophysics. Students will undertake an Individual Investigation (possible tasks include laboratory investigation, use of spreadsheet for analysis and modeling, graphic analysis of data, hybridization of spreadsheet/database with lab investigation, interactive and open-ended simulation). Additionally, students are required to sit the IB examinations in May, which include multiple choice, short answer and extended response questions.

**IB Chemistry**  
Codes: 03107A000  
Grade 11  
Elective  
Year course – 1.0 credit  
Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)  
Students will study the chemical principles which underpin both the physical environment in which we live and all biological systems. Through the study of sciences, students will become aware of how scientists work and communicate with each other. Students will approach the scientific method in a practical manner although possibly in different forms. Through the overarching theme of the “Nature of Science” this knowledge and skills will be put
into the context of the way science and scientists work in the 21st Century and the ethical debates and limitations of creative scientific endeavor.

Core topics include: stoichiometric relationships; periodicity; chemical bonding and structure; energetics/thermochemistry; chemical kinetics; equilibrium; acids and bases; redox processes; organic chemistry; measurement and data processing. Options for study include materials, biochemistry, energy, and medicinal chemistry. Students will undertake an Individual Investigation (possible tasks include laboratory investigation, use of spreadsheet for analysis and modeling, graphic analysis of data, hybridization of spreadsheet/database with lab investigation, interactive and open-ended simulation). (Additionally, students are required to take the IB examinations in May, which include short response and extended response questions.)

IB Biology - DP Year 1  S621  03057A000
Grade 11
Required if taken in lieu of Biology as an IB Diploma Programme requirement
Year course – 1.0 credit
Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)
Students will study the living world from the molecular level through the ecosystem level and investigate the way living systems function. Through the study of sciences, students will become aware of how scientists work and communicate with each other. Students will approach the scientific method in a practical manner although possibly in different forms. Through the overarching theme of the “Nature of Science” this knowledge and skills will be put into the context of the way science and scientists work in the 21st Century and the ethical debates and limitations of creative scientific endeavor.

In this hands-on course, students will design investigations, collect data, develop manipulative skills, analyze results, collaborate with peers and evaluate and communicate their findings. Students will undertake a Group 4 Project (Students will be given a variety of topics to choose from and they will analyze a topic or problem, which can be investigated in each of the science disciplines). Students will develop the skills to work both independently and cooperatively. Topics include: Cell Biology; Molecular Biology; Genetics, Biotechnology and Bioinformatics.

IB Biology - DP Year 2  S622  03057A000
Grade 12
Required for IB Diploma Programme
Year course – 1.0 credit
Prerequisite: IB Biology - DP Year 1
Students will continue their study of living systems through the scientific method (following the same approach and philosophy as DP Year 1). Topics include: Ecology; Evolution and Biodiversity; Human Physiology; Plant Biology. (Additionally, students are required to take the IB examinations in May, which include short response and extended response questions.)

Engineering & Design  S460  21006A000
Grade 12
Elective
Semester course – 0.5 credits (If used as a senior year science requirement, this course must be taken with one semester of Human Genetics)
Prerequisite: Biology
This course examines the principles and applications of computer-aided design to solve various problems of design and engineering. Structural design and robotics engineering are two areas of particular emphasis.

Human Genetics  S470  03059A000
Grade 12
Elective
Semester course – 0.5 credits  (If used as a senior year science requirement, this course must be taken with one semester of Engineering & Design)
Prerequisite: Biology
This course introduces basic human genetic principles and contemporary issues in biotechnology. Addresses the ethical, political and social implications of biological advances in the area of genetics. Topics include genetic counseling, gene therapy, stem cell research, cloning, forensics, paternity testing, genetic disorders and cancer.

Anatomy and Physiology   S480   03053A000
Grade 12
Elective
Year course – 1.0 credit
Prerequisite: Biology
This course is a comprehensive college preparatory elective science course. Topics will include the organization of the human body, basic biochemistry, cells and tissues, integumentary system, skeletal system, muscular system, nervous system, special senses, endocrine system, cardiovascular system, lymphatic and immune system, respiratory system, digestive system, urinary system, reproductive system, development and inheritance. Laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments and computer simulations.

Advanced Design Applications   T460   21054A002
Grade 12
Elective
Year course – 1.0 credit
Prerequisite: Foundations of Technology, Technology & Society, Technological Design
This course focuses on the three dimensions of technological literacy knowledge, ways of thinking and acting, and capabilities with the goal of students developing the characteristics of technologically literate citizens. It employs teaching/learning strategies that enable students to explore and deepen their understanding of "big ideas" regarding technology and makes use of a variety of assessment instruments to reveal the extent of understanding.

Advanced Placement (AP®) – Physics 1   S560   03163A000
Grade 12
Elective
Year course – 1.0 credit
Prerequisite: Senior Level Standing and Department Recommendation; Dual Credit students must meet qualification requirements established by Triton College
Designed by the College Board, AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. Triton College dual credit may be available. Students in this course are required to take the AP ® Exam. Fee: Cost of the AP ® Exam fee per the College Board rate. Reduced fee waivers may apply.

Advanced Placement (AP®) – Chemistry   S570   03101A000
Grade 12
Elective
Year course – 1.0 credit
Prerequisite: Biology, and Department Recommendation; Dual Credit students must meet qualification requirements established by Triton College
This course is a science elective that gives students an opportunity to earn credit for one year of general chemistry based on performance on the College Board Advanced Placement (AP®) Exam in chemistry. This rigorous mathematics-based course will further develop student’s ability to solve chemistry problems through laboratory and
classroom experiences. Topics covered include matter and measurements, atomic structure, basic concepts of quantum theory, bonding, periodic trends, stoichiometry of reactions, thermochemistry, kinetic molecular theory, concepts of the liquid and solid states, solutions, redox reactions, acid-base theories, kinetics, free energy, entropy and equilibria. Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

**Forensics S440 03202A000**

*Grade 12  
Elective  
Year course – 1.0 credit  
Prerequisite: Biology*

In Forensic Science we present the philosophical, rational, and practical framework that supports a case investigation. We outline the unifying principles of forensic science, discuss what a forensic scientist might consider during an investigation. We also discuss the experimental methods and some of the ways in which a forensic analysis can be confounded. This class is not an overview of the disciplines that comprise the Forensic Science, but rather the umbrella under which the practical work resides. Students will work through interactive exercises and discuss various scenarios with the instructors and their fellow classmates in a discussion forum. The explanation and clarification of assumptions and inferences will be emphasized. At the end of the class, students will take a final examination in which they will be asked to demonstrate their knowledge of specific information that has been presented and also to extend that knowledge in considering questions about specific cases.

**Robotics I (Dual Credit) 21009A000**

*Grades 9-12  
Year Course – 1.0 Credit  
Prerequisite: None*

Robotics course develops and expands students’ skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers. This course will fulfill CTE requirement and will receive college credit at Triton. Course will be taught by Triton Adjunct professor and co-taught with PMSA teacher that has an Engineering background. Student will receive 2 credit hours per semester from Triton. Course will be taught after school from 3:30 to 5:00 twice a week.
## 2 Credits Required

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<tr>
<th>Course</th>
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**ALL COURSES AT PMSA ARE CLASSIFIED AS HONORS, DUAL CREDIT, PRE-IB, IB, AND/OR ADVANCED PLACEMENT, WITH THE EXCEPTION OF WELLNESS AND CREDIT RECOVERY COURSES.**

**Visual Arts I A160 05155A000**  
*Grades 9-12*  
*Elective*  
*Year course – 1.0 credit*  
*Prerequisite: None*  
This course focuses on the elements and principles of design and composition. Students will participate in a variety
of studio activities, which may include (but are not limited to) drawing, painting, ceramics and collage. Skills and knowledge are further developed through art criticism, art history, and aesthetics.

**Visual Arts II**  **A260**  **05154A000**  
*Grades 10-12*  
*Elective*  
*Year course – 1.0 credit*  
*Prerequisite: Visual Arts I OR Department Recommendation*  
Students who enjoyed Visual Arts I and wish to continue their art education are encouraged to take Visual Arts II. Students will participate in a variety of studio activities, which may include (but are not limited to) drawing, painting, printmaking, ceramics, and collage. Students will build on the skills and knowledge learned in Visual Arts I while participating in more challenging studio projects. This course focuses on studio production with art history, art criticism, and aesthetics as reinforcing concepts.

**Digital Imaging**  **A270**  **05168A000**  
*Grades 10-12*  
*Elective*  
*Year course – 1.0 credit*  
*Prerequisite: None*  
This class introduces students to the basic tools, techniques, and processes of digital still photography and video production. Students will create and edit their own photographs and videos. They will also view and critique professional work and consider how media affects their lives.

**Advanced Placement (AP®) – Studio Art: Drawing**  **A550**  **05172A000**  
*Grades: 11-12*  
*Elective*  
*Prerequisite: Visual Arts II or department recommendation; Dual Credit students must meet qualification requirements established by Triton College*  
AP Studio Art prepares serious art students for college level coursework in the Arts. They will learn how to assemble slide portfolio of their work that can be used for the AP® Studio assessment. Many colleges also require a slide portfolio for admission and scholarship consideration related to the Arts in a variety of fields such as architecture, graphic design, photography, and traditional studio. Preparing a slide portfolio and cohesive body of work is an essential skill that any serious art student must have to effectively compete for college and career opportunities in the visual arts. Triton College dual credit may be available. Students in this course are required to take the AP® Exam.  
*Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.*

**IB Visual Arts - DP Year 1**  **A611**  **05173A000**  
*Grade 11*  
*Required for IB Diploma Programme*  
*Year course – 1.0 credit*  
*Prerequisite: Art 1 and Acceptance into the IB Diploma Programme/Permission of instructor (Certificate Candidates)*  
Students will explore the various impacts and value of visual arts (including sociopolitical, ritual, spiritual, decorative) in wide spectrum of societies and cultures. This course encourages students to challenge their own creative and cultural expectations and boundaries, and develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence in their own artistic endeavors. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with, and critically reflect upon a wide range of contemporary practices and media.
Through all of the above, students will have the opportunity to develop an appreciation for multicultural artistic diversity with a view to becoming critically informed makers and consumers of visual culture. Topics of study include: Personal and Artistic Identity, Reading: Text and Visual Images, Arts Influences and are Influenced by History & Culture, Curating Exhibitions.

**IB Visual Arts - DP Year 2  A612  05173A000**

*Grade 12*

*Required for IB Diploma Programme*

*Year course – 1.0 credit*

*Prerequisite: IB Visual Arts - DP Year 1*

IB Visual Arts - DP Year 2 continues the goals of IB Visual Arts - DP Year 1 in the development of students’ technical proficiency as well as their critical and analytic interpretive skills. Topics of study include: Investigating Global Arts Activism, Contributions to the IB Tile Mural. Students will present their art processes and products during the Visual Arts Exhibition in February. Additionally, students are required to complete a comparative study (a critical and contextual investigation of artworks and artifacts from different cultural contexts) and are required to submit a process portfolio (evidence of their own creative experimentation, exploration, manipulation and refinement), which includes work from at least two art-making forms.

**Chorus  C160  05110A000**

*Grades 9-12*

*Elective*

*Year course – 1.0 credit*

*Prerequisite: None*

This course emphasizes the development of vocal talent in a mixed ensemble. There are a minimum number of performances required per year for successful completion of this course.

**Advanced Chorus  C161  05111A000**

*Grades 9-12*

*Elective*

*Year course – 1.0 credit*

*Prerequisite: Audition and/or Chorus*

Advanced Chorus is open to students of all grade levels with intermediate training in performance of three and four part literature. Students must perform in a minimum of one concert each semester to receive credit towards their grade for this course. Selected students perform at school assemblies and programs, community events, choral festivals and workshops, competitions, and the state and local Solo-Ensemble competitions.

**Advanced Chorus II  C261  05111A000**

*Grades 10-12*

*Elective*

*Year course – 1.0 credit*

*Prerequisite: Advanced Chorus*

Advanced Chorus is open to students of all grade levels with intermediate training in performance of three and four part literature. Students must perform in a minimum of one concert each semester to receive credit towards their grade for this course. Selected students perform at school assemblies and programs, community events, choral festivals and workshops, competitions, and the state and local Solo-Ensemble competitions.

**Advanced Chorus III  C361  05111A000**

*Grades 11-12*
Elective
Year course – 1.0 credit
Prerequisite: Advanced Chorus II
Advanced Chorus is open to students of all grade levels with intermediate training in performance of three and four-part literature. Students must perform in a minimum of one concert each semester to receive credit towards their grade for this course. Selected students perform at school assemblies and programs, community events, choral festivals and workshops, competitions, and the state and local Solo-Ensemble competitions.

Advanced Chorus IV  C461  05111A000
Grades 12
Elective
Year course – 1.0 credit
Prerequisite: Advanced Chorus III
Advanced Chorus is open to students of all grade levels with intermediate training in performance of three and four-part literature. Students must perform in a minimum of one concert each semester to receive credit towards their grade for this course. Selected students perform at school assemblies and programs, community events, choral festivals and workshops, competitions, and the state and local Solo-Ensemble competitions.

Instrumental Music  C170  05106A000
Grades 9-12
Elective
Year course – 1.0 credit
Prerequisite: None
Instrumental Music introduces the principles and techniques for playing musical instruments within a structured ensemble performance environment. Instruments are based on student choices from the wind, and percussion families. There are a minimum number of performances required per year for successful completion of this course.

Band  C180  05101A000
Grades 9-12
Elective
Year course – 1.0 credit
Prerequisite: Departmental Recommendation or Instrumental Music
This course develops advanced playing skills in the formalized setting of an orchestra and/or band. Types of instruments includes woodwinds, brass, and percussion. There are a minimum number of performances required per year for successful completion of this course.

Advanced Band  C181  05102A000
Grades 9-12
Elective
Year course – 1.0 credit
Prerequisite: Audition and Departmental Recommendation or Band
This advanced course develops advanced playing skills in the formalized setting of an orchestra and/or band. Types of instruments includes woodwinds, brass, and percussion. There are a minimum number of performances required per year for successful completion of this course.

Advanced Band II  C281  05102A000
Grades 10-12
Elective
Year course – 1.0 credit
Prerequisite: Advanced Band
This advanced course develops advanced playing skills in the formalized setting of an orchestra and/or band. Types of instruments includes strings, woodwinds, brass, and percussion. There are a minimum number of performances required per year for successful completion of this course.

Advanced Band III  C381  05102A000
Grades 11
Elective
Year course – 1.0 credit
Prerequisite: Advanced Band II
This advanced course develops advanced playing skills in the formalized setting of an orchestra and/or band. Types of instruments includes strings, woodwinds, brass, and percussion. There are a minimum number of performances required per year for successful completion of this course.

Advanced Band IV  C481  05102A000
Grades 12
Elective
Year course – 1.0 credit
Prerequisite: Advanced Band III
This advanced course develops advanced playing skills in the formalized setting of an orchestra and/or band. Types of instruments includes strings, woodwinds, brass, and percussion. There are a minimum number of performances required per year for successful completion of this course.

Music Theory  C190  05113A000
Grades 9-12
Elective
Year course – 1.0 credit
Prerequisite: None
This course explores fundamental music theory from both historical and modern perspectives including a study of the impact of technology on the development of music. Students will learn to write musical notation, terminology and chord progression. Tonal and atonal musical styles are emphasized.

Advanced Placement (AP®) – Music Theory  C550  05114A000
Grades 11-12
Elective
Year course – 1.0 credit
Prerequisite: Departmental Recommendation and Music Theory or Placement Exam
A major component of any college music curriculum is a course introducing the first-year student to musicianship, theory, musical materials, and procedures. Such a course may bear a variety of titles (Basic Musicianship, Elementary Theory, Harmony and Dictation, Structure of Music, etc.). It may emphasize one aspect of music, such as harmony; more often, however, it integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition and, to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony are considered an important part of the theory course.

The student’s ability to read and write musical notation is fundamental to this course. It is also strongly recommended
that the student will have acquired at least basic performance skills in voice or on an instrument. The ultimate goal of this AP Music Theory course is to develop a student’s ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of this goal may be best promoted by integrated approaches to the student’s development of: aural skills listening exercises sight-singing skills performance exercises, written skills through written exercises compositional skills creative exercises, analytical skills and analytical exercises.

The course seeks first to instill mastery of the rudiments and terminology of music, including hearing and notating: pitches• intervals• scales and keys• chords• meter and rhythm. It addresses these basic concepts through listening to a wide variety of music, including not only music from standard Western tonal repertoire but also twentieth-century art music, jazz, popular music, and the music of non-Western cultures. Students in this course are required to take the AP ® Exam. Fee: Cost of the AP ® Exam fee per the College Board rate. Reduced fee waivers may apply.

Theatre I A180 05055A000
Grades 9-12
Elective
Year course – 1.0 credit
Prerequisite: None
This course will introduce students to the basic tools, techniques, and processes of acting and play production. Students will learn about improvisation, creating a character, script analysis, creative writing, memorization techniques, theater history, dramatic structure, and staging and rehearsing scenes.

Theatre II A280 05053A000
Grades 10-12
Elective
Year course – 1.0 credit
Prerequisite: Theatre I OR Department Recommendation
Students will continue to develop their skills in acting, play production, and creative writing. They will produce a showcase of scenes to perform for the public.

Theatre III A380 05053A000
Grades 11-12
Elective
Year course – 1.0 credit
Prerequisite: Theatre I OR Department Recommendation
Students will continue to develop their skills in acting, play production, and creative writing. They will produce a showcase of scenes to perform for the public.

Theatre IV A480 05053A000
Grades 12
Elective
Year course – 1.0 credit
Prerequisite: Theatre I OR Department Recommendation
Students will continue to develop their skills in acting, play production, and creative writing. They will produce a showcase of scenes to perform for the public.
**Course** | **Fresh.** | **Soph.** | **Junior** | **Senior** | **Prerequisite**
--- | --- | --- | --- | --- | ---
Introduction to Engineering Design (T470) | X | X | | | Offered in alternating years
Principles of Engineering (PLTW) | X | X | | | Offered in alternating years
Engineering Design & Development (PLTW) | | | X | X | Principles of Engineering and Introduction to Engineering Design
Aerospace Engineering (PLTW) | X | X | | | Principles of Engineering and Introduction to Engineering Design
Digital Electronics (PLTW) | X | X | | | Principles of Engineering and Introduction to Engineering Design
Computer Integrated Manufacturing (PLTW) | X | X | | | Principles of Engineering and Introduction to Engineering Design
Technological Design (T360) | X | X | | | Technology & Society OR Departmental Recommendation

**Introduction to Engineering Design** **T470** **21006A001** Project Lead the Way (PLTW) CTE Course

*Grade 9, 10*
*Elective*
*Year course – 1.0 credit*
*Prerequisite: None*
*Offered in alternate years*

This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software. Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

**Principles of Engineering** **21004A001** Project Lead the Way (PLTW) CTE Course

*Grade 9, 10*
*Elective*
*Year course – 1.0 credit*
*Prerequisite: None*
*Offered in alternate years*

This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes helps students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.
Engineering Design & Development  21007A002  Project Lead the Way (PLTW) CTE Course
Grade 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Principles of Engineering and Introduction to Engineering Design
This course is an advanced course in which students demonstrate mastery of knowledge and skills from previous pre-engineering courses to develop an original product or machine design. In groups using project-based learning, students research, design, and construct a solution to an engineering problem. Students apply principles developed in the preceding courses and are guided by an industry mentor. Students must present progress reports, submit a final written report, and defend their solutions to a panel of outside reviewers at the end of the course. Students are placed in management situations in production operations to develop leadership and entrepreneurship skills. Students are responsible for scheduling, pricing, procuring materials and equipment, and the maintaining of equipment. The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

Aerospace Engineering  21013A001  Project Lead the Way (PLTW) CTE Course
Grade 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Principles of Engineering and Introduction to Engineering Design
Through hands-on engineering projects developed with NASA, students learn about aerodynamics, astronautics, space-life sciences, and systems engineering (which includes the study of intelligent vehicles like the Mars rovers Spirit and Opportunity). This course propels students’ learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles.

Digital Electronics  21008A000  Project Lead the Way (PLTW) CTE Course
Grade 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Principles of Engineering and Introduction to Engineering Design
Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices.

Computer Integrated Manufacturing  21010A001  Project Lead the Way (PLTW) CTE Course
Grade 11, 12
Elective
Year course – 1.0 credit
Prerequisite: Principles of Engineering and Introduction to Engineering Design
This course applies principles of robotics and automation in manufacturing through computer control. The course builds on computer solid modeling skills developed in Introduction to Engineering Design. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in
automated manufacturing and design analysis are included. Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system.

**Technological Design  T360  21054A001**
*Grades 11-12*
*Elective*
*Year course – 1.0 credit*

**Prerequisite: Technology & Society OR Departmental Recommendation**

In Technological Design, engineering scope, content, and professional practices are presented through practical applications. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and innovate designs. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. This course is an essential experience for students who are interested in technology, innovation, design, and engineering.

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### Wellness

**4 Credits Required**

*Required Courses: Wellness I, Health, Wellness II, Driver Education in the Classroom, Wellness III, Wellness IV (Or Pre-IB, IB, AP or Dual Credit course equivalents)*

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<thead>
<tr>
<th>Course</th>
<th>Fresh.</th>
<th>Soph.</th>
<th>Junior</th>
<th>Senior</th>
<th>Prerequisite</th>
</tr>
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<tbody>
<tr>
<td>Wellness I (P170)</td>
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<td>Health (P180)</td>
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<td>Wellness I</td>
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<td>Driver Education in the Classroom (P280)</td>
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<td>Wellness I, must pass 8 classes in previous 2 semesters</td>
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<tr>
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<td>15 years of age, Driver Education in the Classroom, Driving Permit</td>
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<td>Wellness III (P370)</td>
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<td>Wellness II</td>
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<tr>
<td>Wellness IV (P470)</td>
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<td>Wellness III</td>
</tr>
<tr>
<td>Wellness IV (Dual Credit) (P471)</td>
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<td>Wellness III, must meet qualification requirements established by Triton</td>
</tr>
</tbody>
</table>

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**Wellness I  P170  08001A000**

*Grade 9*

*Required*

*Semester course – 0.5 credits (This course must be taken with one semester of Heath)*

**Prerequisite: None**

This course is the initial course of a 4-part sequence that focuses on all aspects of wellness and personal development, including emotional health and social maturity. In addition, students will have the opportunity to
develop skills in recreational sports and fitness/conditioning activities. Content and processes are designed to be age-appropriate for students at this level.

**Health** P180  08051A000  
Grade 9  
Required  
*Semester course – 0.5 credits  (This course must be taken with one semester of Wellness I)*  
Prerequisite: None  
This course is designed to promote awareness of physical, mental, and social developmental needs for optimal health. Topics covered within Health Education courses include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, relationships, sex ed. and first aid) and consumer health issues.

**Wellness II** P270  08001A000  
Grade 10  
Required  
*Semester course – 0.5 credits  (This course must be taken with one semester of Driver Education in the Classroom, unless Driver Education in the Classroom is taken during the summer prior to sophomore year)*  
Prerequisite: Wellness I  
This course is the second part of a sequence that focuses on all aspects of wellness and personal development, including emotional health and social maturity. In addition, students will have the opportunity to develop skills in recreational sports and fitness/conditioning activities. Content and processes are designed to be age-appropriate for students at this level.

**Driver Education in the Classroom** P280  08151A000  
Grade 10  
Required  
*Semester course – 0.5 credits  (This course must be taken with one semester of Wellness II)*  
Prerequisite: Wellness I and must successfully complete 8 classes in the previous 2 semesters of coursework  
The Driver Education program, consisting of two phases of instruction - classroom and behind the wheel (optional) - is designed to develop safe, courteous, and skillful drivers. To enter the driver education program, students must have completed freshman physical education and maintained a 90% attendance rate during the school year prior to taking this course. Topics in this course include legal obligations and responsibility; rules of the road and traffic procedure; safe driving strategies and practices; and the physical and mental factors affecting the driver’s capability “including alcohol and other drugs. At the end of this course, students receive their permit, which must be held three (3) months before they can be issued a license. NOTE: This course meets the driver education requirement for graduation.

**Driver Education Behind-the-Wheel**  
Grades 10-12  
Elective  
Credit: Students do not receive credit for Driver Education Behind-the-Wheel.  
Prerequisite: 15 years of age, Driver Education in the Classroom, Driving Permit  
Behind-the-Wheel instruction is an optional course, offered for 6 hours. Instruction is made available to students, but it is not required for graduation. The permit allows the students to begin the required 50 hours of behind-the-wheel instruction with their parents and the 6-hour behind-the-wheel school phase outside of the regular school day, and/or during the summer. Students who show a proficiency in the classroom and behind-the-wheel phases (minimum of grade B) may earn the opportunity to take their actual road test with their PMSA instructor. Students
that achieve this level of excellence will receive a certificate of completion entitling them to receive their license without any further testing.

Fees: $175.00 user fee payable to Proviso Township High Schools, a $20.00 application fee for permit payable to the Secretary of State, and a $15.00 workbook fee are required.

**Wellness III**  **P370  08001A000**
*Grade 11*
*Required*
*Year course – 1.0 credit*
*Prerequisite: Wellness II*
This course is the third part of a sequence that focuses on all aspects of wellness and personal development, including emotional health and social maturity. In addition, students will have the opportunity to develop skills in recreational sports and fitness/conditioning activities. Content and processes are designed to be age-appropriate for students at this level.

**Wellness IV**  **P470  08001A000**
*Grade 12*
*Required*
*Year course – 1.0 credit*
*Prerequisite: Wellness III*
This course is the final part of a sequence that focuses on all aspects of wellness and personal development, including emotional health and social maturity. In addition, students will have the opportunity to develop skills in recreational sports and fitness/conditioning activities. Content and processes are designed to be age-appropriate for students at this level.
Students in this course will receive CPR training.
Fee: CPR certification fee may apply

**Wellness IV (Dual Credit)**  **P471  08001A000**
*Grade 12*
*Required if taken in lieu of Wellness IV*
*Year course – 1.0 credit*
*Prerequisite: Wellness III, must meet qualification requirements established by Triton College*
This dual credit course is the final part of a sequence that focuses on all aspects of wellness and personal development, including emotional health and social maturity. In addition, students will have the opportunity to develop skills in recreational sports and fitness/conditioning activities. Content and processes are designed to be age-appropriate for students at this level.
Students in this course will receive CPR training.
Fee: CPR certification fee may apply
Research & Theoretical Studies

1 Credit Required

*Required Course: Research Core – Social Science OR Research Core – Science OR IB Theory of Knowledge (IB students only)*

The Research curriculum provides students with multiple opportunities to pursue areas of study that are of personal interest. This includes, but is not limited to, mentorships in the areas of medicine, physics, chemistry, biology, the arts, languages, mathematics, technology, and business. This placement is dependent upon the availability and interests of both students and mentors.

The two-tiered graduation system differentiates according to the depth of the research commitment. Students choosing to pursue an area of significant research and committing to produce and defend the work and the product will after successful completion of Research Core, apply for placement in Senior Research Mentorship. Students who successfully complete the 2-year research program and defend their research will be awarded Graduation with Distinction honors.

<table>
<thead>
<tr>
<th>Course</th>
<th>Fresh.</th>
<th>Soph.</th>
<th>Junior</th>
<th>Senior</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Core – Social Science</td>
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<td>11th grade standing</td>
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<td>Acceptance into the IB Diploma Programme/Permission of Instructor</td>
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<td>IB Theory of Knowledge - DP Year 2 (G642)</td>
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<td>IB Theory of Knowledge - DP Year 1</td>
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<tr>
<td>Research Mentorship (R480)</td>
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<td>Successful completion of Research Core, completed application, minimum 3.5 GPA, and teacher recommendations</td>
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</table>

ALL COURSES AT PMSA ARE CLASSIFIED AS HONORS, DUAL CREDIT, PRE-IB, IB, AND/OR ADVANCED PLACEMENT, WITH THE EXCEPTION OF WELLNESS AND CREDIT RECOVERY COURSES.

Research Core – Social Science  **R360**  **04261A000**

**Grade 11**

*Required – (Choice of Research Core Social Science or Research Core Science)*

*Year course – 1.0 credit*

*Prerequisite: Junior level standing*

Students will conduct research in this course with an emphasis on the social sciences. Research and inquiry are core tenets of the Academy program. Students will explore real world problems of their choice using qualitative and quantitative methods. Final assessments will be the presentation of a poster at the annual Research Symposium.

Research Core – Science  **R370**  **03212A000**

**Grade 11**

*Required – (Choice of Research Core Social Science or Research Core Science)*

*Year course – 1.0 credit*

*Prerequisite: Junior level standing*

Students will conduct research in this course with an emphasis on sciences. Research and inquiry are core tenets of the Academy program. Students will explore real world problems of their choice using qualitative and quantitative methods. Final assessments will be the presentation of a poster at the annual Research Symposium.
IB Theory of Knowledge - DP Year 1  G642  04304A000
Grade 11
Required for IB Diploma Programme
Year course – 1.0 credit
Prerequisite: Acceptance into the IB Diploma Programme/Permission of Instructor (Certificate Candidates)
What do we know? How do we know that we know it? What are the different ways in which we know? The Theory of Knowledge course uses critical thinking and inquiry-based instruction to delve deeply into the nature and process of knowing and by doing so, enhances and enriches the study of all the other subject areas. Students will explore the distinction between personal and shared knowledge, identify the eight different ways of knowing and connect these to areas of knowledge (e.g. mathematics, science, arts, history, ethics, religious and indigenous knowledge systems).

IB Theory of Knowledge - DP Year 2  G642  04304A000
Grade 12
Required for IB Diploma Programme
Year course – 1.0 credit
Prerequisite: IB Theory of Knowledge - DP Year 1
IB Theory of Knowledge - DP Year 2 continues the exploration of the nature of knowledge and ways of knowing as well as continuing the development of students' critical and analytic skills. Additionally, students are required to complete an essay on an IB title (from a list of six prescribed by the IB) and are required to present upon a knowledge question raised by a substantive real-life situation of their own interest. The presentation can be done either individually or as a member of a small group (3 person maximum).

Research Mentorship (with Distinction)  R480
Grade 12
Elective
Year course – 2.5 credits
Prerequisite: Successful completion of Research Core, completed application, minimum 3.5 GPA, and teacher recommendations
Research and inquiry are central foci of the work at the Proviso Mathematics and Science Academy. Students will work alongside scientists and other professionals to engage in meaningful, real-world efforts. Students may very well engage in research efforts that follow personal interests. The PMSA Research Mentorship Program provides an opportunity for students to obtain individualized guidance from a professional in the local community. Students will collaborate with a mentor knowledgeable in similar fields of study, research interests, and extracurricular activities. At its heart, research is simply a matter of trying to answer questions. This class will examine how those questions are developed, various manners in which answers can be uncovered, and the interpretations discovered from the answers. As a final assessment, students are required to create a poster and defend their research at the annual Research Symposium.
**World Languages**

**2 Credits Required**

*Required Courses: Two credits of the same language*

<table>
<thead>
<tr>
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<th>Senior</th>
<th>Prerequisite</th>
</tr>
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<tr>
<td>French I (L160)</td>
<td>X</td>
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<tr>
<td>French II (L260)</td>
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<td>French II</td>
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<tr>
<td>French IV (L460)</td>
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<td>French III</td>
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<tr>
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<td>Placement test</td>
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*All courses at PMSA are classified as honors, dual credit, Pre-IB, IB, and/or Advanced Placement, with the exception of wellness and credit recovery courses.*
French I  L160  06121A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: None
This course requires no previous language experience. This course is a communicative-based introduction to French language integrated with French/Francophone culture. It is a “French first” class in that initial instruction takes place in the target language first and student participation is encouraged to be in the target language as much as possible. By the end of French 1, the student will be able to communicate in French in a basic manner (discuss him/herself and his/her family and friends, discuss likes/dislikes/needs, make and respond to simple requests, etc.) with both native and non-native French speakers.

French II  L260  06122A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: 8th grade placement test or successful completion of French I
This course integrates the continued acquisition of French grammar and vocabulary with an exploration of issues of immigration, assimilation and citizenship (specifically in regard to French/ Francophone countries). At the French 2 level, the expectation is that students will attempt to interact in French in the classroom both with the instructor and their peers. By the end of French 2, the student will be able to communicate in a basic manner in French with both native and non-native French speakers and be conversant on issues of immigration, assimilation and citizenship.

French III  L360  06123A000
Grades 10-12
Elective
Year course – 1 credit
Prerequisite: French II
This course integrates the acquisition of advanced French grammar and vocabulary with the study of the culture of a specific Francophone country. At the French 3 level, the expectation is that students will interact predominantly in French in the classroom. By the end of French 3, the student will be able to communicate passably in French with both native and non-native French speakers and be conversant on the literature, arts and history of a specific Francophone country.

French IV  L460  06124A000
Grades 11-12
Elective
Year course – 1 credit
Prerequisite: French III
This course integrates advanced communicative French with the study of French/Francophone literature, art and history. At the French 4 level, the expectation is that students will interact exclusively in French in the classroom. By the end of French 4, the student will be able to communicate comfortably in French with both native and non-native French speakers and be conversant on a variety of topics (especially literature, the arts and history).

Advanced Placement (AP®) – French Language and Culture  L560  06132A000
Grades 11-12
Elective
Year course – 1 credit
Prerequisite: French III, Department Recommendation; Dual Credit students must meet qualification requirements established by Triton College
The AP® French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. This course develops students’ awareness and appreciation of products, practices and perspectives of French/Francophone culture via authentic artifacts. Instruction and student interaction are exclusively in French. Triton College dual credit may be available. Students in this course are required to take the AP® Exam. Fee: Cost of the AP® Exam fee per the College Board rate. Reduced fee waivers may apply.

IB Language B French - DP Year 1 L611 06131A000
Grade 11
Elective; Constitutes Year 1 of the IB Diploma Programme Language Acquisition Requirement
Year course – 1.0 credit
Prerequisite: Acceptance into the IB Diploma Programme/Permission of instructor (Certificate Candidates)
The acquisition of an additional language opens the door to cross-cultural communication and understanding. Students are encouraged to develop their communicative skills, their global awareness, and their respect for cultural diversity. Students will study a language and its culture(s) via three mandatory themes (communication & media, global issues, social relationships) as well as two additional themes (selected from the following: health, leisure, customs & traditions, cultural diversity, science & technology). Students will work toward developing the skills that will be assessed. Students will work toward intercultural understanding, and using and appreciating the language studied. Students will be assessed both informally and formally throughout year 1. Formal assessments will include interactive oral activities. Additionally those students taking the course at the HL level will begin the study literature written in the target language.

IB Language B French - DP Year 2 L612 06131A000
Grade 12
Elective; Constitutes Year 2 of the IB Diploma Programme Language Acquisition Requirement
Year course – 1.0 credit
Prerequisite: IB Language B French - DP Year 1
Students will continue to develop their acquisition of language and to expand and refine their communicative skills, their global awareness, and their respect for cultural diversity. Students will continue to study a language and its culture(s) via the themes introduced in year 1. By the end of the two-year course of studies, students will be able to demonstrate intercultural understanding, understand and use the language and appreciate its culture(s), be aware of and appreciate differences of cultural perception, gain a basis for further study, enjoyment and/or employment courtesy of knowledge of another language and its culture(s). Students will be assessed both informally and formally throughout year 2. Formal assessments will include an individual oral and an interactive oral activity. Students are required to sit the IB examinations in May, which include text-handling exercises, a written exercise, and an inter-textual reading (with a written task). Additionally those students taking the course at the HL level will have an additional written exercise and added length/depth of response requirements included on the examination.

Spanish I L170 06101A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: None
This course requires no previous language experience. Students learn basic communication skills through speaking, reading, and writing practice. By the end of Spanish I, students will be able to understand main ideas in both fiction and non-fiction texts appropriate to level 1. In addition, students will be able to communicate in Spanish in a basic manner (discuss him/herself and his/her family and friends, discuss likes/dislikes/needs, made and respond to
simple requests, etc) with both native and non-native Spanish speakers. The course also covers cultural topics related to Spanish speaking countries in Latin America.

Spanish II     L270   06102A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: 8th grade placement test or successful completion of Spanish I
This course is designed to improve language skills from Spanish I. Students build larger vocabularies and improve sentence structure; they will create original conversations and paragraphs. Also, they will read cultural selections that will improve their conversational and writing skills.

Spanish II Heritage Speakers     L275   06106A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: 8th grade placement test
This course was created specifically for Spanish heritage speakers. The goal of this class is to expand student proficiency in Spanish in all four-skill areas: listening, speaking, reading, and writing. In addition, the course explores the historical, political, and cultural aspects of Spanish speaking countries.

Spanish III     L370   06103A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: 8th grade placement test or Spanish II
This course concentrates on the acquisition of high intermediate to advanced linguistic skills in speaking, reading and writing Spanish, building on what was learned in Spanish I and Spanish II. Students will be able to communicate passably in Spanish with both native and non-native Spanish speakers. In addition, students will be conversant on such topics as literature, arts, and history of Spain.

Spanish III Heritage Speakers     L375   06106A000
Grades 10-12
Elective
Year course – 1 credit
Prerequisite: Spanish II Heritage Speakers
This course is a continuation of Spanish II Heritage Speakers. The goal of this class is to further expand student proficiency in Spanish in all four skill areas (listening, speaking, reading, and writing) through the exploration of historical, political, and cultural aspects of Spanish speaking countries.

Spanish IV     L470   06104A000
Grades 11-12
Elective
Year course – 1 credit
Prerequisite: Spanish III
This course refines student abilities to speak, read, and write in the Spanish language. By the end of Spanish IV, students will be able to communicate comfortably in Spanish with both native and non-native Spanish speakers and be conversant on a variety of topics related to the arts in Spanish speaking countries.

Spanish IV Heritage Speakers     L475   06106A000
Grade 11-12
Elective
Year course – 1 credit
Prerequisite: Spanish III Heritage Speakers, Department Recommendation
This course was created specifically for Spanish heritage speakers. The goal of this class is to refine student proficiency in Spanish in all four skill areas, listening, speaking, reading, and writing through the study of a variety of topics related to the arts in Spanish speaking countries.

Advanced Placement – (AP®) Spanish Language and Culture   L570   06112A000
Grades 10-12
Elective
Year course – 1 credit
Prerequisite: Spanish IV, Spanish III Heritage Speakers, Department Recommendation; Dual Credit students must meet qualification requirements established by Triton College
The AP® Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. This course develops students’ awareness and appreciation of products, practices and perspectives of Hispanic culture via authentic artifacts. Instruction and student interaction are exclusively in Spanish. Triton College dual credit may be available. Students in this course are required to take the AP ® Exam. Fee: Cost of the AP ® Exam fee per the College Board rate. Reduced fee waivers may apply.

IB Language B Spanish - DP Year 1   L621   06111A000
Grade 11
Elective; Constitutes Year 1 of the IB Diploma Programme Language Acquisition Requirement
Year course – 1.0 credit
Prerequisite: Acceptance into the IB Diploma Programme/Permission of instructor (Certificate Candidates)
The acquisition of an additional language opens the door to cross-cultural communication and understanding. Students are encouraged to develop their communicative skills, their global awareness, and their respect for cultural diversity. Students will study a language and its culture(s) via three mandatory themes (communication & media, global issues, social relationships) as well as two additional themes (selected from the following: health, leisure, customs & traditions, cultural diversity, science & technology). Students will work toward developing the skills that will be assessed. Students will work toward intercultural understanding, and using and appreciating the language studied. Students will be assessed both informally and formally throughout year 1. Formal assessments will include interactive oral activities. Additionally those students taking the course at the HL level will begin the study literature written in the target language.

IB Language B Spanish - DP Year 2   L622   06111A000
Grade 12
Elective; Constitutes Year 2 of the IB Diploma Programme Language Acquisition Requirement
Year course – 1.0 credit
Prerequisite: IB Language B Spanish - DP Year 1
Students will continue to develop their acquisition of language and to expand and refine their communicative skills, their global awareness, and their respect for cultural diversity. Students will continue to study a language and its culture(s) via the themes introduced in year 1. By the end of the two-year course of studies, students will be able to demonstrate intercultural understanding, understand and use the language and appreciate its culture(s), be aware of and appreciate differences of cultural perception, gain a basis for further study, enjoyment and/or employment courtesy of knowledge of another language and its culture(s). Students will be assessed both informally and formally throughout year 2. Formal assessments will include an individual oral and an interactive oral activity. Students are required to sit the IB examinations in May, which include text-handling exercises, a
written exercise, and an inter-textual reading (with a written task). Additionally those students taking the course at the HL level will have an additional written exercise and added length/depth of response requirements included on the examination.

Mandarin Chinese I  L180  06401A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: None
This is a beginning level course that will introduce the student to a variety of areas of Mandarin Chinese (simplified). In this course, the student will learn listening, speaking, reading, and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese-speaking world and their culture, people, geographical locations and histories.

Arabic I  L190  06721A000
Grades 9-12
Elective
Year course – 1 credit
Prerequisite: None
This is a beginning level course that will introduce the student to a variety of areas of Arabic (simplified). In this course, the student will learn listening, speaking, reading, and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Arabic-speaking countries and their culture, people, geographical locations and histories.
Core Beliefs

• High expectations for all students, faculty, and staff yield positive self-worth, responsible behavior, and superior performance.

• All learning environments are positive places to learn, grow, and work.

• Collaboration with students, families, and community partners adds value.

• Leadership, accountability, and transparency are keys to our success.

Guiding Principles

EMPOWERMENT
To create sustainable partnerships in supporting academic achievement for all learners.

Distributive and transformational leadership behaviors from all stakeholders stems “from the Board Room to the Classroom.”

EQUITY
To remove the predictability of success or failure that currently correlates with any academic or social factor.

Interrupt inequitable practices, examine biases, and create inclusive school environments for all.

EXCELLENCE
All learners have access to rigorous content and are held to mastery supported by opportunities for interventions and/or enrichment.

All programs demonstrate a return of investment.
ONE TEAM, ONE GOAL, ONE PROVISO