

Roman Catholic High School

Course Catalog

2022-2023





March 2022

Dear Students,

Our school motto, *Fides et Scientia*, (Faith and Science) demands that we look for truth through reason. At Roman Catholic High School, each of our courses is designed to help our young men find truth through rigorous reflection across many academic disciplines. Thus, the course selection period is one of the most important times in the school year. It is a responsibility that requires time, patience, knowledge, and careful consideration. Because the courses which you select impact your overall academic profile, the process of course selection should be taken seriously.

After reading the following pages, you will have a better understanding of the learning goals, course requirements, and specific content of the various academic courses offered at Roman Catholic High School. For some courses, certain requirements/prerequisites are listed. Others will require administrative and/or departmental approval. Please involve your parents/guardians, subject area teachers, and guidance counselors in your decision making process.

Once your course selection has been made and the roster has been built, roster changes will not be made (with the exception of the few specific academic reasons listed in the Academic Policies and Procedures portion of this document) unless initiated by the administration or faculty to support student achievement.

Finally, please remember to challenge yourself! Raise the bar while keeping your goals at the forefront. Choose your courses wisely. Should you need assistance, please do not hesitate to ask.

Sincerely,

Mr. Buck

Assistant Principal for Academic Affairs

GRADUATION REQUIREMENTS

Courses	<u>Minimum</u> Credit Requirement
Theology	4
English	4
Mathematics	3
Social Studies	3
Science	3
Additional Mathematics, Social Studies, or Science Elective	1
Health/Physical Education	1
World Languages	2
Elective Requirements	5

Note: Students must take at least six (6) courses every year.

GRADE POINT AVERAGE

The GPA will be calculated on the final grade per course using the weighted scale below. The average GPA of all courses is calculated and will be reported on the transcript. Semester-long courses will be counted into the GPA.

Grade	AP	Honors	CP	Academic
100	6.0	5.5	5.0	4.5
99	6.0	5.5	5.0	4.5
98	6.0	5.5	5.0	4.5
97	6.0	5.5	5.0	4.5
96	5.7	5.2	4.7	4.2
95	5.7	5.2	4.7	4.2
94	5.7	5.2	4.7	4.2
93	5.4	4.9	4.4	3.9
92	5.4	4.9	4.4	3.9
91	5.4	4.9	4.4	3.9
90	5.1	4.6	4.1	3.6
89	5.1	4.6	4.1	3.6
88	5.1	4.6	4.1	3.6
87	4.8	4.3	3.8	3.3
86	4.8	4.3	3.8	3.3
85	4.8	4.3	3.8	3.3
84	4.5	4.0	3.5	3.0
83	4.5	4.0	3.5	3.0
82	4.5	4.0	3.5	3.0
81	4.2	3.7	3.2	2.7
80	4.2	3.7	3.2	2.7
79	4.2	3.7	3.2	2.7
78	3.9	3.4	2.9	2.4
77	3.9	3.4	2.9	2.4
76	3.9	3.4	2.9	2.4
75	3.6	3.1	2.6	2.1
74	3.6	3.1	2.6	2.1
73	3.6	3.1	2.6	2.1
72	3.3	2.8	2.3	1.8
71	3.3	2.8	2.3	1.8
70	3.3	2.8	2.3	1.8
69 & Below	0	0	0	0

DETERMINATION OF CLASS RANK

Rank in class, both current and cumulative, is determined by a Quality Point Quotient based on the grade and course level. Class rank is indicated on the student's permanent record and is the official index of academic achievement on the transcripts sent to colleges, businesses, and other agencies outside the school. Taking additional courses to achieve more Quality Points and increase rank is offset by the Quotient. The chart below identifies the points awarded for a course level in relation to the final grade.

Grade:	<u>AP</u>	<u>HON</u>	<u>CP</u>	<u>ACA</u>
100	<u>54</u>	<u>48</u>	<u>44</u>	<u>40</u>
99	<u>53</u>	<u>47</u>	<u>43</u>	<u>39</u>
98	<u>52</u>	<u>46</u>	<u>42</u>	<u>38</u>
97	<u>51</u>	<u>45</u>	<u>41</u>	<u>37</u>
96	<u>50</u>	<u>44</u>	<u>40</u>	<u>36</u>
95	<u>49</u>	<u>43</u>	<u>39</u>	<u>35</u>
94	<u>48</u>	<u>42</u>	<u>38</u>	<u>34</u>
93	<u>47</u>	<u>41</u>	<u>37</u>	<u>33</u>
92	<u>46</u>	<u>40</u>	<u>36</u>	<u>32</u>
91	<u>45</u>	<u>39</u>	<u>35</u>	<u>31</u>
90	<u>44</u>	<u>38</u>	<u>34</u>	<u>30</u>
89	<u>43</u>	<u>37</u>	<u>33</u>	<u>29</u>
88	<u>42</u>	<u>36</u>	<u>32</u>	<u>28</u>
87	<u>41</u>	<u>35</u>	<u>31</u>	<u>27</u>
86	<u>40</u>	<u>34</u>	<u>30</u>	<u>26</u>
85	<u>39</u>	<u>33</u>	<u>29</u>	<u>25</u>
84	<u>38</u>	<u>32</u>	<u>28</u>	<u>24</u>
83	<u>37</u>	<u>31</u>	<u>27</u>	<u>23</u>
82	<u>36</u>	<u>30</u>	<u>26</u>	<u>22</u>
81	<u>35</u>	<u>29</u>	<u>25</u>	<u>21</u>
80	<u>34</u>	<u>28</u>	<u>24</u>	<u>20</u>
79	<u>33</u>	<u>27</u>	<u>23</u>	<u>19</u>
78	<u>32</u>	<u>26</u>	<u>22</u>	<u>18</u>
77	<u>31</u>	<u>25</u>	<u>21</u>	<u>17</u>
76	<u>30</u>	<u>24</u>	<u>20</u>	<u>16</u>
75	<u>29</u>	<u>23</u>	<u>19</u>	<u>15</u>
74	<u>28</u>	<u>22</u>	<u>18</u>	<u>14</u>
73	<u>27</u>	<u>21</u>	<u>17</u>	<u>13</u>
72	<u>26</u>	<u>20</u>	<u>16</u>	<u>12</u>
71	<u>25</u>	<u>19</u>	<u>15</u>	<u>11</u>
70	<u>24</u>	<u>18</u>	<u>14</u>	<u>10</u>
69	<u>23</u>	<u>17</u>	<u>13</u>	<u>9</u>
68	<u>22</u>	<u>16</u>	<u>12</u>	<u>8</u>
67	<u>21</u>	<u>15</u>	<u>11</u>	<u>7</u>
66	<u>20</u>	<u>14</u>	<u>10</u>	<u>6</u>
65	<u>19</u>	<u>13</u>	<u>9</u>	<u>5</u>
64	<u>18</u>	<u>12</u>	<u>8</u>	<u>4</u>
63	<u>17</u>	<u>11</u>	<u>7</u>	<u>3</u>
62	<u>16</u>	<u>10</u>	<u>6</u>	<u>2</u>
61	<u>15</u>	<u>9</u>	<u>5</u>	<u>1</u>
60	<u>14</u>	<u>8</u>	<u>4</u>	<u>0</u>

**ACADEMIC
POLICIES
AND
PROCEDURES**

ACADEMIC REGULATIONS

To pass a course, a student must earn a grade of 70 or higher in that course. A failure in any course must be remediated by attending Diocesan Summer School. A senior with any failures at the end of the senior year will not take part in the graduation ceremony, nor will he receive a diploma until the failure(s) is/are remediated in Diocesan Summer School. There is a separate fee for each summer school course.

ACADEMIC HONORS

Superior scholastic achievement entitles a student to Honors status. An Honors listing is published at each report period and is based on the quarter grades. First Honors is achieved with a general average of 93 and no grade lower than a 90. Second Honors is achieved with a general average of 88 and no grade lower than an 85.

ADVANCED PLACEMENT

Some departments offer Advanced Placement (AP) courses in their discipline. All students enrolled in an AP course must take the AP test in May on the date specified by the College Board. Subject to the requirements of the college they wish to enter, students may receive college credit on the basis of their AP examination results. **There is an additional fee for each AP class, typically charged in the second semester.** Students must complete the AP application form to be considered for AP classes.

CANCELLATION OF CLASSES

The school reserves the right to cancel or postpone any course for which there is inadequate enrollment, lack of physical facilities, or staffing limits. Alternate course selections (chosen by students during the course selection process) will be substituted for students who request a cancelled course.

COURSE REQUESTS

Selection of courses should be done only after serious, careful, and thoughtful consultation among students, parents, teachers, and counselors. The Assistant Principal for Academic Affairs will discuss the process early in the second

semester and forms for course selection for the next school year will be distributed at that time. Shortly after, the Assistant Principal for Academic Affairs will visit students in their English or Theology courses to collect completed forms. Course request verification will take place in May. Students will have a short window to make a request change if needed. More details about request changes will be available at that time.

CURRICULUM

In an attempt to meet the interests and needs of its students, Roman Catholic High School offers a curriculum of required and elective courses on different academic levels indicating their degree of difficulty.

ROSTER CHANGES

The roster is built and staffing decisions are made based on student requests during the course selection period. In order to ensure the best possible academic environment, roster changes will not be granted. The following exceptions apply:

1. School Error (e.g. a student is rostered for a course he did not request or student is missing a graduation requirement)
2. The school offers a new course option after the course selection period has ended.
3. The student has applied to a college that has a course requirement the student has not yet met (e.g. four years of a foreign language).

Roster changes will not be granted to accommodate a student's teacher preference, time preference, or lunch period preference. Dissatisfaction with a course or teacher, academic difficulties in a course, displeasure with a schedule, or a change of mind are not valid reasons for requesting a course change. It is also important to realize that after school activities and/ or employment do not constitute a valid reason for a change in one's roster. No requests will be honored to arrange a roster to allow an early dismissal for reasons of employment, extracurricular activities, or other non-academic reasons.

**COURSES
BY
DEPARTMENT**

BUSINESS, COMPUTERS, AND INFORMATION TECHNOLOGY (BCIT):

ACCOUNTING

Honors, College Prep

This course is aimed at the college-bound student considering business-related fields. Students will receive training of two types of business-proprietaryships and corporations. Course utilizes personal computers using web-based textbook and workbook, and online accounting software. Each type of business is presented in a complete accounting cycle covering analyzing transactions, journalizing, posing petty cash, financial statements, and adjusting and closing entries. Accounting concepts are introduced using business theory and practical applications. In addition to focusing on the accounting functions within business, the student will gain a valuable introduction to general business topics: business ethics, technology, legal issues, careers in accounting, and relevant personal financial skills.

BUSINESS LAW

Honors, College Prep

Business Law is a background course that will enable the students to recognize their rights and responsibilities as a citizen in the American society. This course stresses the fact that law involves basic rules of conduct for everyone and shows the application of law to the common problems of the individual. The students will gain knowledge and respect for both the legal system as well as the free enterprise system of economics. They will be exposed to a comprehensive study of the many facets of the US legal system such as its history, criminal law, civil law, consumer law, contract law, insurance, credit, real estate, and other practical areas of interest. Guest Speakers will be scheduled throughout the course.

Honors track includes in-depth writing, additional readings, and case analysis.

PERSONAL FINANCE

College Prep

The objective of the Personal Finance course is to provide students with basic financial tools and knowledge that will enable them to build the lives they envision. The course will cover financial responsibilities, planning for the future, budgets, income and careers, spending and credit, saving and investing.

ENTREPRENEURSHIP

Honors

The Entrepreneurship course focuses on recognizing a business opportunity, starting a business, operating and maintaining a business. Students will be exposed to the development of critical thinking, problem solving, and innovation in this course as they will either be the business owner or individuals working in a competitive job market in the future. Using simulations such as Virtual Business Personal Finance and Entrepreneurship, students will experience real world scenarios and use strategies covered in the course to help them make sound financial and entrepreneurial decisions.

IT FUNDAMENTALS

College Prep

This course provides an introduction to a wide range of IT concepts that span across the spectrums of Hardware, Software, Networking and Security. Overall the content of the course focuses on common IT skills that are applicable in all fields in the IT world. Beyond the IT skills gained in this course, much of the content is based around problem solving skills and best practices when presented with different kinds of problems with the goal of sharpening critical thinking skills.

MACROECONOMICS

Advanced Placement

AP Macroeconomics is an introductory college-level macroeconomics course. Students cultivate their understanding of the principles that apply to an economic system as a whole by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like economic measurements, markets, macroeconomic models, and macroeconomic policies. All students are required to take and to pay for the Advanced Placement Examination.

ELA (ENGLISH LANGUAGE ARTS):

ENGLISH LANGUAGE ARTS I

Honors

This honors course is intended for the highly motivated learner. It is a foundation course designed to increase the student's knowledge of all genres of literature as it strengthens and develops essay skills with an emphasis on the structures of grammar. Critical thinking and strong organizational skills are necessary for the significant amounts of independent work required.

College Prep

This course provides the student with the opportunity to develop an appreciation and understanding of the literary genres through discussion and writing. He will be expected to master the elements of grammar and sentence structure as outlined in the Grammar for Writing Program, as he develops his essay skills. Intensive vocabulary study and emphasis on SAT preparation will be required.

Academic

The basic objectives of the course are similar to those outlined in College Prep; however, the teacher will modify the objectives whenever appropriate to accommodate the student's needs. Despite the modifications, this course is intended for the college-bound student.

ENGLISH LANGUAGE ARTS II

Honors

This course is an accelerated course designed for the highly motivated, active learner. (Placement in this course will be assigned by the freshman Honors English teacher according to performance). Building upon ELA I, A wide selection of fiction and nonfiction texts will be studied in order to gain a fuller understanding of major literary themes and genres spanning the globe. A large portion of class time will be devoted to development of essay writing: personal, reflective, expository, argumentative, persuasive, comparison and contrast, and analytical. Additionally, the student will master the structures and mechanics of grammar

while he continues to build his vocabulary and increase his basic understanding of successful SAT-taking strategies. Oral presentations based on independent research will be required. The student will be given opportunities to conduct subject-appropriate research on the Internet. Overall, Honors English II is a comprehensive communications course.

College Prep

The student will study a wide array of literary genres and works in order to gain a better understanding of world literary themes. He will be expected to master the structures of grammar as outlined in the Grammar for Writing Program and demonstrate this mastery in a series of essays. Additionally, he will continue to work on his SAT strategies, vocabulary development, oral presentation skills, and independent electronic research techniques. Overall, this course lays the foundation for active, independent learning while promoting mastery of oral and written communications.

Academic

The course objectives and expectations are similar to those for College Prep: the major difference will be the amount of independent work required and the speed at which the material will be read, taught, or researched. This course is designed for the college-bound student.

ENGLISH LANGUAGE ARTS III

Advanced Placement

This Advanced Placement course (AP Language and Composition) will use many of the same essays and poetic forms as the honors track. However, the number of required readings will be increased in order to conform to the requirements of the Advanced Placement Examination in Language and Composition. In addition, classroom activities will center around extemporaneous composition writing based on difficult reading material (more often than not, nonfiction material), a skill needed for success in the AP examination. Grammatical elements, rhetorical modes, and significant vocabulary studies are special features of this course. In order to lay a solid foundation for the Advanced Placement Literature coursework, the sonnet and the novel will be stressed, particularly the difference between types of sonnets and the difference between the American novels of the 19th and 20th

century. All students are required to take and to pay for the Advanced Placement Examination.

Honors

Course material will be made to challenge the reading and writing abilities of the students. Focusing primarily (but not solely) upon the literature of America from the Colonial Period to the Modern Period , this course invites the student to contemplate the relevance of American history on our country's literature as well as some uniquely American themes within a global content. Additionally, the student will continue to work on his SAT strategies, vocabulary development, oral presentation skills, and independent electronic research techniques. This course aims to see the student become a fully active, independent learner as well as a skilled communicator of the written and the spoken word.

College Prep

The course content is the same as the honors track. The material is covered at a slightly slower pace. The extra reading and writing assignments will be fewer. This course is designed for the college-bound student.

Academic

The course content is similar to the College Prep course, although the reading and writing assignments will be adjusted to meet student's needs. This course is designed for the college-bound student.

ENGLISH LANGUAGE ARTS IV

Advanced Placement

This Advanced Placement course will use some of the same essays and poetic forms as the honors track. However, the number of required readings will be increased in order to conform to the requirements of the Advanced Placement Examination in Literature and Composition. There is also a summer reading requirement before the class begins. In addition, classroom activities will center around extemporaneous composition writing based on difficult reading material, a skill needed for success in the AP examination. Grammatical elements and significant vocabulary studies are special features of this course. All students are required to take and to pay for the Advanced Placement Examination.

Honors

This course will provide the student with a sense of global literary history. Readings will chronologically unfold the spectrum of thought from classical writers to contemporary authors. Selections will be made to challenge the reading and writing ability of the students. All of the readings will be geared toward well-designed writing assignments that will be modeled in class before they are assigned.

College Prep

This course is similar in design to the Honors level, although course texts, vocabulary development, and writing assignments will be varied to meet the needs of students. This course is designed for those students who are college bound.

Academic

Various text selections will be presented in a way that allows the student to gain an appreciation of our global literary heritage, which is appropriate to the student's learning style and skills. In addition, strong emphasis will be placed on the basic communication skills needed in practical life situations. This course is designed for those students who are college bound.

FINE ARTS:

STUDIO ART I

College Prep

This course is an introduction to Art. The basic fundamentals of the elements and principles of design are taught. Students will work with a variety of materials and subject matters. Emphasis is placed on studio production, supplemented with art history, aesthetics, and criticism. Class production and homework are required.

STUDIO ART II

College Prep

In this course students are introduced to a more sophisticated approach to ideas, and subject matters. The basic fundamentals taught in Art I are applied in a more creative and developed manner. Experimentation in new media and graphic design is taught.

STUDIO ART III

Honors

In this course, students will continue the exploration of processes and techniques taught in Art I and II. Coursework combines the creative use of various media with student investigation of artistic styles and concepts. Students begin larger scale, sustained works. The design and development of individual projects is introduced and encouraged. Art careers and college applications are discussed.

STUDIO ART IV

Honors

In this course, students will work towards building a cohesive portfolio. Projects highlight students' conceptual interests, technical development and quality, and exploration of personal style. Throughout the year, students evaluate the impact of different media and techniques on personal expression, while identifying the processes that best suit their own goals. Students engage in critique

and peer-to-peer assessment, with emphasis on employing the vocabulary of formal analysis. Art careers and college applications are discussed.

PAFA PROGRAM

Prerequisite: Good background in drawing; presentation of the student's portfolio and approval of the department chair. Students in grades 9 through 12 may be eligible to participate.

Honors

Roman Catholic High School offers advanced art classes through a program at the Pennsylvania Academy of the Fine Arts (PAFA). The John McShain Charities, Inc. and John H. Ball sponsors this program.

Students have the opportunity of earning college credits. Classes are attended after the end of the regular school day for a period of 2½ hours once a week. Each semester consists of 15 weeks. Students receive marks on their report cards at the end of each semester. The curriculum is based on the fundamentals of Art accompanied by demonstrations, critiques, and visits to the museum. Drawings are made from natural objects from the Academy's Nature Lab, as well as casts and live models.

The school may withhold marks if the student has been absent more than the allotted time according to PAFA regulations. Students will not be dropped from the program during the term; failure to improve in attendance will result in being prohibited from enrolling the following term.

INTRO TO MUSIC

College Prep

This course is designed to give the beginning student a basic-level instrumental music education through participation in band. The daily objective of the course is to develop strong fundamental skills playing one of the band instruments and to learn and apply basic music theory such as pitch and rhythm notation, major and minor scales, expressive phrasing, and ensemble coordination. Students in this class will participate in limited performance opportunities throughout the year. As a member of the band program, each student is expected to pursue individual

growth as a musician and also to uphold their social responsibility as an integral member of the group.

INTERMEDIATE MUSIC

College Prep

This course is designed to advance the skills and knowledge of students who already have some experience playing an instrument in band. This class facilitates progressive improvement to musicianship in a variety of musical styles. Daily objectives of the course include developing formal knowledge and understanding of music theory, technical skill development on an instrument, and performance of ensemble repertoire. Students in this class will participate in limited performance opportunities throughout the year. As a member of the band program, each student is expected to pursue individual growth as a musician and also to uphold their social responsibility as an integral member of the group.

ADVANCED MUSIC I

Honors

This course is designed to facilitate an enriching and diverse music education for students who have substantial experience and demonstrable achievement playing instrumental music. The daily objective of the course is to foster and promote musical growth through the playing of an instrument in varied contexts and stylistic traditions. This class provides a number of performance opportunities for the student in a variety of settings. As a member of the band program, each student is expected to pursue individual growth as a musician and also to uphold their social responsibility as an integral member of the group.

ADVANCED MUSIC II

Honors

This course is designed to facilitate an enriching and diverse music education for students who demonstrate the highest dedication and achievement to instrumental music performance. The daily objectives of the course include rigorous ensemble rehearsal as well as deeper dives into music theory and its practical applications. This class provides a number of performance opportunities for the student in a variety of settings. As a member of the band program, each student is expected to pursue individual growth as a musician and also to uphold their social responsibility as an integral member of the group.

DIGITAL PHOTOGRAPHY

Honors

This course introduces students to the specialized techniques used in digital photography at an advanced level. Students will learn and apply such concepts as depth of field, shutter speed, and use of light. In conjunction with digital photography, the students will be exposed to the digital darkroom. Through the use of Photoshop, students will learn how to improve their post-production photographs. Students will also learn how to manipulate pictures to create special photographic effects.

College Prep

This course introduces students to the specialized techniques used in digital photography at the fundamental level. Students will learn and apply such concepts as depth of field, shutter speed, and use of light. In conjunction with digital photography, the students will be exposed to the digital darkroom. Through the use of Photoshop, students will learn how to improve their post-production photographs. Students will also learn how to manipulate pictures to create special photographic effects.

DIGITAL VIDEO

Honors

This course will focus on the basics of digital video production. Specific course topics include: basics of project management for digital video production; fundamentals of video composition; video production elements and terminology; preparation of video files for TV and Web; and understanding the Adobe Premiere Pro interface and production process. Students will be expected to create video content for Roman's weekly news program, website, and social media accounts. Assignments will be given and each student is responsible to complete them in a specific time period. NOTE: Students will be required to produce content outside of the scheduled class time as necessary and should be comfortable appearing in videos that will be shown to members of the Roman community.

HEALTH AND PHYSICAL EDUCATION:

PHYSICAL EDUCATION/HEALTH

College Prep

The following aspects of health, sports and physical fitness are included in this course: Physical Fitness, Basketball, Volleyball, Recreational Football, Street Hockey, Cooperative Activities, Low Impact Aerobics, Mental and Social Health, Communicable Diseases, Alcohol, Drugs, Cigarettes, Nutrition, Personal Hygiene, and AIDS.

INTRODUCTION TO SPORTS MEDICINE

Honors

This reading and writing intensive course will introduce the student to the ever-changing and growing world of sports medicine. Course content will range from the historical beginnings of sports medicine to the various disciplines within today's modern sports medicine team. Emphasis will be placed on classroom lectures and hands-on practice of manual techniques.

FITNESS FOR LIFE

College Prep

Students will learn about the importance of maintaining life-long physical wellness by reviewing health concepts, body systems, and exercise science. A frequent work-out component is included in the class.

MATHEMATICS:

ALGEBRA I

Honors

This course meets the needs of those students who have superior mathematical capabilities, as demonstrated by their performance on the RCHS placement test, the Terra Nova test, and elementary school transcripts. It introduces the important aspects of algebra and develops an appreciation of civilization's dependence on mathematics. Topics from geometry will be introduced.

College Prep

This course meets the needs of those students who have an above average ability in mathematics as demonstrated by their performance on the RCHS placement test, the Terra Nova test, and elementary school transcripts. It introduces the important aspects of algebra and develops an appreciation of civilization's dependence on mathematics.

Academic

This course meets the needs of those students who have an average ability in mathematics, as demonstrated by their performance on the RCHS placement test, the Terra Nova test, and elementary school transcripts. The students will receive a firm mathematical foundation, which will significantly contribute to their ability to function effectively in a technical environment.

ALGEBRA II

Honors

This course builds on the foundation laid in Honors Algebra I, providing a continuation in quadratics, complex numbers, and simultaneous equations. Students will study conic sections, probability, matrices, and the fundamentals of plane and solid geometry.

College Prep

An intermediate course for those students with above average abilities in mathematics who are preparing for college. The course continues where Algebra I finishes and introduces quadratics, complex numbers, simultaneous equations, the parabola, circle, ellipse, and hyperbola. Stress is placed on solving word problems.

Academic

This course prepares students for college who have average abilities in mathematics. It reviews and strengthens the concepts treated in Algebra 1, especially equations of first and second degree. Irrational numbers and the quadratic formula are introduced. Stress is placed on applying algebraic equations to everyday life.

GEOMETRY

Honors

For students with advanced mathematical capabilities, this course covers terminology, construction, and reasoning, as well as distance, area, volume, congruence, and similarity. Solid geometry, coordinate, and space geometry are treated. Critical thinking is an integral part of the course.

College Prep

Terminology, construction, and reasoning are used with triangles and circles. Congruence, similarity, area, and volume are stressed. Proofs are introduced. Solid geometry is treated. Critical thinking is a very important part of this course.

Academic

This course provides a useful mathematical foundation for those whose plans include attendance at a business school or in a program of a technical nature. Generally, content is comparable to that of the higher tracks, but the material is presented in a manner that allows the student to learn at his own pace. Greater effort is placed in practice and reinforcement of important concepts; remediation is used as needed.

PRE-CALCULUS

Honors

This course prepares the students for the rigors of AP Calculus senior year. The properties of trigonometric functions and their graphs, trigonometric identities and equations, the Laws of Sines and Cosines, and vector applications are covered along with the properties of exponential and logarithmic functions, the straight line and conic functions. *Please note that a T.I Graphic Calculator is required.*

College Prep

This course T.I. prepares the students for the rigors of Calculus senior year. The properties of trigonometric functions and their graphs, trigonometric identities and equations, the Laws of Sines and Cosines, and vector applications are covered along with the properties of exponential and logarithmic functions, the straight line and conic functions. *Please note that a T.I. Graphic Calculator is required.*

CALCULUS

Advanced Placement

AP Calculus deals with the differentiation and integration of the algebraic, trigonometric and other transcendental functions and their applications, including curve sketching, optimization problems areas, volumes, and related rates. All students will be required to take and pay for the Advanced Placement Examination. *Please note that a T.I Graphic Calculator is required.*

STATISTICS

Advanced Placement

AP Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes evident in the content, skills, and assessment in the AP Statistics course: exploring data, sampling and experimentation, probability and simulation, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. All students will be required to take and pay for the Advanced Placement Examination.

College Prep

In this course, students will be introduced to the major concepts of probability, interpretation of data, and statistical problem solving. Students will analyze existing data as well as data collected through a survey, observational study or experiment. They will then display the data in different ways, analyze it, and draw conclusions based on the results.

SCIENCE:

PHYSICS FIRST

College Prep, Academic

This course provides an investigative approach to the basic concepts of physics. Topics include the metric system, the laws of motion and factors affecting motion, forces, use of forces, simple machines, the nature of matter, electricity and magnetism, simple circuits, energy, the ecology of energy, sound, light, lenses and mirrors, and research on current events in science. Many topics require use of simple algebra and a simple calculator. Lab investigations and demonstrations are included to provide hands-on experience for increased understanding of the various concepts. The College Prep course has an enhanced pacing with the content and is more reading and writing intensive.

BIOLOGY

Advanced Placement

This advanced placement course is designed for honors juniors and seniors and aims to provide the students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Emphasis is on developing and understanding of concept, which requires the application of the chemistry and physics principles in the area of biology. Students will develop analytical and critical thinking skills. Students will grasp science as a process rather than an accumulation of facts. All students are required to take and pay for the Advanced Placement Examination.

Honors

This course offers a comprehensive investigation of living systems. It emphasizes both, the similarities and the uniqueness of living things as well as the social implications of modern biology, microbiology, molecular biology, heredity, and genetics. There will be more stress placed upon the biochemistry of living systems such as ecology, ecosystems, evolution zoology, botany and human biology. This course will also develop general scientific principles through laboratory investigations, which are an integral part of this course. The students will be

required to read and follow lab procedures, as well as write comprehensive laboratory reports.

College Prep, Academic

This course provides a view of the world of living things, emphasizing the social implications of biology and the appreciation of life. Topics include cellular biology and genetics, ecology and evolution. There is less stress placed upon the chemistry of living systems and more direction given toward the development of general biochemical concepts. Students will be required to read and follow lab procedures, as well as to write comprehensive lab reports.

CHEMISTRY

Honors

The course provides a survey of various fields of chemistry, developing a solid foundation of fundamental laws and principles through a problem-solving approach. Topics include a general background and history of chemistry, the mathematics and language of chemistry, chemical kinetics, atomic and molecular structure, periodic law and its application, properties of gases, and the universal gas law. The students are required to write comprehensive laboratory reports. A scientific calculator is required. Note that merely signing up for the course does not guarantee acceptance.

College Prep, Academic

This course is focused on the study and investigation of the structure of matter. Thus, the course begins with the study of matter in terms of composition, classification, chemical reactions, the Periodic Table and periodic properties. The course will also include the mole concept, stoichiometry, oxidation-reduction and the gas laws. Laboratory investigations are offered to enhance the different concepts taught in chemistry by providing students with the opportunity to discover, to analyze problems, and to use different forms of laboratory techniques. The students are required to write comprehensive laboratory reports and a scientific calculator is required. The College Prep course has an enhanced pacing with the content and is more reading and writing intensive.

PHYSICS

Honors

This is an intense course that offers a highly mathematical approach to the principles of physics. Trigonometry and algebra are used extensively for problem solving physics problem topics including Newtonian mechanics, wave energy, optics, thermal energy, electricity, magnetism and simple circuits. Regular research is required on recent and current events in physics. One major project with comprehensive research and visual aids is required each semester. Frequent laboratory investigations and classroom demonstrations enhance the understanding of concepts. Students maintain lab manuals and periodically write/type formal lab reports. Extensive use of computer based research, calculator based experiments, and PowerPoint presentations fill out the course. *Scientific calculators or apps are required for the course.*

ANATOMY & PHYSIOLOGY

Honors

This course corresponds to a college seminar class of the anatomy and physiology of the human body. Classes consist of student discussions and teacher clarification of the structures and functions of the human body from the most basic cells to the most complicated systems. Integral to the course are formal research and student presentations, which require the use of technology, such as the web, PowerPoint, and other audio-video equipment. Frequent lab investigations and dissections enhance student understanding. All labs require formal write-ups in a lab manual. Occasional field trips round off the course.

ASTRONOMY

College Prep

The course is a general introduction to the part of contemporary astronomy. The course gives special attention to the exciting discoveries of the past few years. Topics include the planets, the Sun, concepts of time and scale, asteroids, meteors and comets, the Apollo missions, the Hubble Space Telescope, past and present astronomers as well as current events. Documentary films and online discussions

are utilized as well. The College Prep course has an enhanced pacing with the content and is more reading and writing intensive.

ENGINEERING

Honors, College Prep

This introductory course is provided for upperclassmen pursuing a future in an engineering field. Students will learn about different engineering fields including mechanical, civil, electrical, and technology and how they connect and work together. Topics also include the history of engineering in Philadelphia. Students hear lectures from a military engineering college professor in a video lecture series. Half of the course includes hands on practice with 3D computer aided design software, SOLIDWORKS. Writing assignments and mechanics of equilibrium are an intense part of this course. Several field trips are planned for the students to connect to engineering outside the classroom.

SOCIAL STUDIES:

WORLD HISTORY

Honors

This course is designed for the outstanding and highly motivated student. A history of major world civilizations designed to explore the development of the modern global community and the spread of ideologies and cultures. The curriculum employs transnational themes to provide connections which transcend time, space and disciplines and which promote the use of critical historical, global, and economic literacy skills to explore global patterns of change over time. Acquiring these skills will enable students to analyze and interpret historical events in depth.

College Prep, Academic

This course is designed for the motivated college-bound student. A history of major world civilizations designed to explore the development of the modern global community and the spread of ideologies and cultures. The curriculum employs transnational themes to provide connections which transcend time, space and disciplines and which promote the use of critical historical, global, and economic literacy skills to explore global patterns of change over time. Acquiring these skills will enable students to analyze and interpret historical events in depth.

AMERICAN GOVERNMENT AND POLITICS

Honors

Designed for the outstanding and highly motivated student, this course is a comprehensive examination of the supreme and fundamental characteristics of the American Governmental system. Its study involves the origins, development, principles, organization, powers, functions, and actual workings and processes of American Government. This course utilizes critical civic, economic, and historical literacy skills to explore global patterns of change over time.

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American Governmental system. Its study involves the origins, development, principles, organization, powers, functions, and actual workings and processes of American Government. This course utilizes critical civic, economic, and historical literacy skills to explore global patterns of change over time.

UNITED STATES HISTORY

Advanced Placement

Designed for the outstanding, highly motivated, student, this course is a survey of political, economic, and social history of the United States from a European colony into a present day superpower. The material is presented at an accelerated pace, emphasizing critical thinking and writing skills necessary for completion of the national Advanced Placement test. Emphasis will be placed on independent reading and research skills necessary for college social studies course work. All students are required to take and pay for the U.S. History Advanced Placement Exam.

Honors

Designed for the outstanding student, this course is a survey of the political, economic, and social history of the United States from the early days of colonization through the Civil War era, ending with the events of the late 1990's. The course encourages critical thinking, discussion, and student research. America's role in developing a global society is presented through the use of newspapers, magazines, films and text in an effort to promote a common appreciation of diverse opinions and a deep respect for cultural diversity.

College Prep, Academic

This course is a college preparatory social history survey of the United States from colonial days to the present. Reading, writing, and thinking skills are incorporated into the lessons in an effort to promote a common appreciation of diverse opinions and a deep understanding of America's role in the world community. An integrated use of technology is used incorporating Internet and Database research.

COMPARATIVE GOVERNMENT

Advanced Placement

The AP course in Comparative Government and Politics introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. Comparison assists both in identifying problems and in analyzing policymaking. All students are required to take the Comparative Government Advanced Placement Exam.

Honors, College Prep

This reading and writing intensive course builds upon the students' knowledge from freshman and sophomore social studies classes. It challenges each student to develop his understanding of the global community and enables him to see how political structures influence international relations, economic and global policies; as well as the events in the 21st century world driving those systems. Studying the political and economic positions of major countries throughout the world will provide students with the critical information they need to deliberate and make vital decisions regarding public affairs.

PSYCHOLOGY

Advanced Placement

This course is designed to introduce students to the systematic and scientific 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 sub-fields within psychology. Within the course a special focus will be given to the following topics: History and Research Methods, Physiological Psychology, Sensation, Perception, Memory, Learning, Stress & Health, Cognition, Intelligence, Personality, Mental illness, Treatment Methods, Emotion/Motivation, and Social Psychology. Emphasis will be placed on independent reading and research skills necessary for college level social science work. All students are required to take and pay for the AP Psychology Examination.

Honors, College Prep

This reading and writing intensive course is designed to introduce the study of psychology. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. Methods which psychologists employ in their science and practice are also explored. Within the course a special focus will be given to the following topics: History and Research Methods, Physiological Psychology, Sensation, Perception, Memory, Learning, Stress & Health, Cognition, Intelligence, Personality, Mental illness, Treatment Methods, Emotion/Motivation, and Social Psychology.

AFRICAN AMERICAN STUDIES

Honors

This course explores the cultural, political and social history of African Americans from the Middle Passage through contemporary American life. Through this course students will develop a deeper understanding of the intricate ways in which African Americans have influenced and shaped the history and culture of the United States. In this course, students will examine the historical approaches to understanding the experiences and contributions of African Americans in the United States.

THEOLOGY:

THEOLOGY I

Honors, College Prep

1st Semester - The Revelation of Jesus Christ in Scripture: This course gives students a general knowledge and appreciation of the Sacred Scriptures. Through the study of the Bible they will come to encounter the Living word of God, Jesus Christ. Students will learn about the Bible, its development and content, and how God is its author. Particular attention will be focused on the gospels, where students may grow to know and love Jesus Christ more personally.

2nd Semester - Who is Jesus Christ: This course introduces students to the mystery of Jesus Christ, the living Word of God. Students will understand that Jesus, the Second Person of the Blessed Trinity, is the ultimate Revelation about God, from God.

Required is 20 hours of Christian Community Service.

THEOLOGY II

Honors, College Prep

1st Semester - The Mission of Jesus Christ (The Paschal Mysteries): This course helps students understand all that God has done for humanity through his son, Jesus Christ. God has planned, from all eternity, for human beings to share everlasting happiness with him. This is accomplished only through redemption in Christ.

2nd Semester - Jesus Christ's Mission Continues in the Church: This course helps students understand that they encounter the Living Jesus Christ in and through the Church. The Church was founded by Christ through the Apostles. It is sustained by him through the Holy Spirit. The Church is the living Body of Christ.

Required is 20 hours of Christian Community Service.

THEOLOGY III

Honors, College Prep

1st Semester -Catholic Morality: This course is intended to present morality as a personal response to almighty God. It explores conscience, laws, and decision-making skills based on the Commandments, corporal and spiritual works of mercy, and the beatitudes, in order to serve as a guide for the formation of Catholic morality. Its purpose is to instill in the student confidence in his ability to make correct moral Catholic choices.

2nd Semester - Sacraments as Privileged Encounters with Jesus Christ The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life.

Required is 20 hours of Christian Community Service.

THEOLOGY IV

Honors, College Prep

The course outline presents a development of the Church through its 2000-year history focusing on the people of God who make up the Church. It, then, challenges the student to take an active role in the Church community through the living out of a personal vocation of service to God and the Church. This course was purposely developed as a challenge for the teacher and students through the study of these people to recognize the contemporary personalities and issues of importance in Church life today. A personal vocation in the church as single, lay, religious or cleric only makes sense in the context of the long tradition we share. Active participation by the students in the Church is to be the end result of this yearlong course.

Required is 20 hours of Christian Community Service.

WORLD LANGUAGES:

SPANISH I

College Prep

Spanish I is an introductory course in the fundamentals of the Spanish language and culture with emphasis on developing the ability to read, speak, write and understand the Spanish language. The student is also exposed to an overview of Spanish culture through films, music and current events.

SPANISH II

College Prep

Spanish II provides a systematic review and expansion of Spanish grammar and vocabulary as well as the student's written and oral proficiency in the subject. The previous exposure to Spanish and Latino culture is enhanced through individual and group research and projects.

SPANISH III

Honors

Those students who possess a better than average aptitude and attitude towards Spanish are invited to continue their course of study in Spanish III, which exposes the student to advanced grammatical concepts and more intensive exposure to spoken and written Spanish, especially with respect to practical situations and daily conversation. The course also begins to familiarize the student with Spanish literature and poetry.

SPANISH IV

Honors

The course is designed for those serious students who have above average competency in the basic skill areas as well as a genuine appreciation for the language and culture. Emphasis is given to the refining of grammatical structures, writing, reading, and conversation skills as well as to further development of studies in literature, history, civilization and art. Stress is placed on the application of acquired skills especially communication skills.

SPANISH IV: MEDICAL & BUSINESS SPANISH

Honors

The course is intended for those students who are serious about learning Spanish and who are interested in entering the health care and/or business fields. The course is designed to teach students vocabulary and basic sentence structures in order to enable them to develop their own dialogue as it relates to these fields. Students will also learn about cultural similarities and differences of Spanish speaking individuals.

ITALIAN I

College Prep

Italian I is an introductory course designed to expose the students to the fundamentals of the Italian language and to the history, art, literature, music and the contemporary life of the Italian people. The emphasis of the course is on enabling the students to acquire the necessary skills to speak, write, read proficiently, and understand the Italian language at its basic level.

ITALIAN II

College Prep

The second year of Italian focuses on the review and expansion of Italian grammar and vocabulary as well as the written and oral proficiency of the language. Emphasis is placed, also, on exposing the students to Italian art, history, literature and culture.

ITALIAN III

Honors

The third level of Italian focuses on the expansion and refinement of all language skills. The course will introduce the student to Italian literature, history and art. Particular emphasis will be placed on communicative skills.

ITALIAN IV

Honors

This course is offered to those students who possess a genuine interest in learning the Italian language and culture and who have demonstrated to possess a better than average aptitude and attitude toward Italian. This course is intended to further enhance all the basic skills and to continue to expose students to Italian literature, history and culture. Major emphasis is placed on developing communicative skills.

LATIN I

Honors

An intensive course in which students learn to appreciate the importance of Latin to the study of English and to Romance Languages. The course, through its concentration on vocabulary, structure and syntax, helps the development of memory, logical thinking and academic discipline. An appreciation of Roman History and culture is taught through translation and research.