Curriculum Guide 2024-2025



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Roger Bacon Mission Statement

Rooted in the Franciscan values of holiness and learning, self-discipline and compassion, Roger Bacon is a Catholic high school which develops the hearts, minds, and bodies of its young men and women in a caring and challenging environment.

Academic Programs

Roger Bacon High School offers three academic programs in order to challenge the abilities of all students. Freshman placement is determined on the basis of grades, teacher recommendations, and placement test results. At the end of each year, teachers and the student services staff evaluate students to ensure that they are performing at their highest potential. Adjustments are made as needed in consultation with parents. Because students progress at different levels in different classes, it is common to be placed in more than one academic program; for example, a student may take honors level math and science and college prep level history and English.

Assisi Scholar Program

This program is designed to foster a small community of learners who take advanced courses across subject areas. Students apply for the program at the end of their freshman year. Students enroll in honors or AP® level courses for math and English all four years and may select a STEM or Humanities Pathway for junior and senior year in which they focus on AP® level courses in either science or social sciences. Students will complete 4 credits each in English, Math, and Science; 3-4 credits in Social Studies; 2-3 credits of a world language; and quality academic electives. In their junior and senior years, students complete the AP Capstone™ Diploma Program, "comprised of courses that develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students ultimately conduct independent research and inquiry in order to produce and defend their scholarly work" (College Board). Their senior year they also participate in a school sponsored pilgrimage to Assisi, Italy.

College Preparatory Program

This program is designed to meet the academic curriculum requirements for acceptance at four-year colleges and universities. Students will complete 4 credits each in English, Math, and Science; 3-4 credits in Social Studies; 2-3 credits of a world language; and quality academic electives.

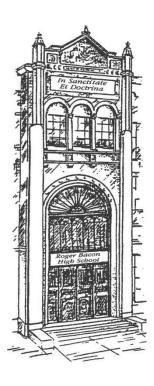
College/Career Program

This program is designed to prepare students for post-secondary experiences including community colleges, the military, or other post-secondary training. Students will complete 4 credits in English and Math (including at least Algebra II); 3-4 credits in Science and Social Studies; and quality academic electives.

Grading Scale

A numeric grade is given on report cards for each quarter and each semester exam. In order to pass a subject, students must have a year-end average of 70. The grading scale is listed below:

| A 100-93 | |
|--------------|--|
| 3 92-85 | |
| C84-75 | |
| D74-70 | |
| 69 and below | |



Graduation Requirements

Roger Bacon requires a minimum of 24 credits to graduate including the following courses:

4 credits of English 4 credits of Theology 4 credits of Math 1 credit of Fine Arts

4 credits of Science ½ credit of Physical Education

3 credits of Social Studies including: ½ credit of Health

- ½ credit of World History
- 1 credit of Government
- 1 credit of American History
- ½ credit of Economics *

Ohio Graduation Testing Requirements

In order to earn a high school diploma in the state of Ohio, students must meet requirements in the courses they complete and the tests they take. Students also must earn two seals designated by the Ohio Department of Education & Workforce. Roger Bacon students must meet the following graduation requirements in addition to completing the required classes:

- Competency scores in ELA 2 and Algebra I, as determined by the IOWA tests in Reading, Writing, Vocabulary, and Math
- Citizenship Seal OR Science Seal, as determined by a passing score on the IOWA tests in Social Studies OR Science
- Community Service Seal, earned by completing the Senior Service Project

Senior Service Project

In an effort to make religious teachings more applicable to the real-world experience of its students and to help students extend their concerns beyond their immediate area of involvement, Roger Bacon requires students to perform 20 hours of community service. This service must be completed between the summer prior to their senior year and third quarter senior year.

The following are required for participation in graduation:

- Complete Community Service Seal
- Not fail more than two classes in senior year
- Meet all financial obligations
- Attend a senior retreat

^{*} Starting with the class of 2026, 1/2 credit of Economics will be required for graduation.

Course Sequence

Freshman Year Sequence

| Honors | College Preparatory | College/Career |
|----------------------------|---------------------|--------------------|
| Theology 9 | Theology 9 | Theology 9 |
| Honors English 9 | CP English 9 | English 9 |
| Honors Algebra I <u>OR</u> | CP Algebra I | Algebra I, Part I |
| Honors Geometry | | |
| Honors Biology | CP Biology | Integrated Science |
| Honors World History | CP World History | World History |
| Freshman Seminar | Freshman Seminar | Freshman Seminar |
| World Language | World Language | Electives |

| Elective Options | Health, PE, Fine Arts, Technology |
|------------------|---|
| | 1 110011011, 1 2, 1 1110 111101, 1 001111010 0, |

^{*} World History and Freshman Seminar are each semester courses.

Sophomore Year Sequence

| Assisi Scholar | College Preparatory | College/Career |
|-------------------------|------------------------|---------------------|
| Theology 10 | Theology 10 | Theology 10 |
| Honors English 10 | CP English 10 | English 10 |
| Honors Algebra II | CP Geometry | Algebra I, Part II |
| Honors Chemistry | CP Chemistry | Biology |
| AP® U.S. Government and | CP U.S. Government and | U.S. Government and |
| Politics | Politics | Politics |
| World Language | World Language | World Language |

| Elective Options | Health, PE, Fine Arts, Science/Technology |
|-------------------------|---|
| | |

Assisi Scholar Program Notes:

- Assisi Scholars are expected to take Honors Precalculus their junior year. This may require taking two math classes sophomore year, depending on their placement freshman year.
- **Starting with the class of 2026,** at the end of sophomore year, students select a Traditional, STEM, or Humanities pathway, which will determine their required courses for grades 11 and 12.
 - Traditional leading to the <u>Academic Honors Diploma</u>
 - STEM leading to the <u>STEM Honors Diploma</u>
 - Humanities leading to the <u>Arts Honors Diploma</u> or <u>Social Science and Civic Engagement</u> <u>Honors Diploma</u>

Junior Year Sequence

Assisi Scholar Program

| Traditional Path | STEM Path | Humanities Path |
|-----------------------|---------------------------------|-----------------------------|
| Theology 11 | Theology 11 | Theology 11 |
| AP® Capstone: Seminar | AP® Capstone: Seminar | AP® Capstone: Seminar |
| Honors Precalculus | Honors Precalculus | Honors Precalculus |
| AP® Physics I | AP® Physics I | CP Physics |
| AP® U.S. History | CP American History | AP® U.S. History |
| World Language | World Language <u>OR</u> | World Language |
| | electives | |
| Electives | AP® Computer | Fine Arts or Social Studies |
| | Programming OR STEM | Electives |
| | Electives | |

| Elective Options | Fine Arts, Science/Technology, English, Social Studies, Theology |
|-------------------------|--|
| 1 | |

Junior year - Assisi Scholars must take AP® Capstone: Seminar, Honors Precalculus, and an AP® level science <u>or</u> social studies class. Physics is a Prerequisite for students who plan to take AP® Calculus AB their senior year. Please note that a third year of a world language is *strongly recommended* for all students.

College Preparatory and College/Career Programs

| College Preparatory | College/Career |
|-----------------------------|-------------------|
| Theology 11 | Theology 11 |
| CP English 11 | English 11 |
| CP Algebra II | Geometry |
| CP Physics | Materials Science |
| CP American History | American History |
| World Language or electives | World Language |

| Elective Options | Fine Arts, Science/Technology, English, Social Studies, Theology |
|-------------------------|--|
| | |

Senior Year Sequence

Assisi Scholar Program

| Traditional Path | STEM Path | Humanities Path |
|---------------------------|------------------------|--------------------------|
| Theology 12 | Theology 12 | Theology 12 |
| AP® Capstone: Research | AP® Capstone: Research | AP® Capstone: Research |
| AP® Calculus AB <u>OR</u> | AP® Calculus AB | AP® Statistics |
| AP® Statistics | | |
| AP® Biology <u>OR</u> | AP® Biology OR AP® | Anatomy and Physiology |
| AP® Chemistry | Chemistry | or Environmental Science |
| AP® Psychology <u>OR</u> | STEM elective | AP® Psychology OR |
| AP® World History | | AP® World History |
| CP Economics * | CP Economics * | CP Economics * |
| Electives | Electives | Honors Modern Literature |

Senior year - Assisi Scholars must take AP® Capstone: Research, an AP® level math, and an AP® level science <u>or</u> social studies class. Honors Modern Literature is *strongly encouraged* for all students.

College Preparatory and College/Career Programs

| College Preparatory | College/Career |
|-----------------------------|--|
| Theology 12 | Theology 12 |
| CP English 12 | English 12 |
| CP Pre-Calculus <u>OR</u> | Algebra II |
| CP Probability & Statistics | |
| CP Anatomy & Physiology | CP Chemistry OR |
| OR | CP Physics <u>OR</u> Environmental Science |
| Environmental Science | |
| CP Economics * | Economics * |
| World Language or electives | World Language or electives |

| Elective Options Fine Arts, Science/Technology, English, Social Studies, The | logy |
|--|------|
|--|------|

^{*} Economics is a graduation requirement starting with the class of 2026 and may be taken junior or senior year.

Academic Clusters

Electives allow students to explore different fields of interest. The following Academic Clusters are recommended for students wishing to learn more about different career paths.

Business STEM

Publications Engineering I and II

Graphic Design Robotics

Website Design I and II 3-D Design
Economics Intro to Computer Programming

Entrepreneurship Environmental Science

CP Probability and Statistics AP® Statistics
AP® Calculus AB

AP® Computer Science A

Medicine or Health Sciences AP® Physics

Ethics in Science AP® Biology

CP Anatomy and Physiology AP® Chemistry

AP® Physics AP® Biology Arts

AP® Chemistry Theater Production

AP® Psychology Stage Acting
Stage Directing

Law, Advocacy, and Justice Graphic Design

Contemporary World Issues Photography Land I

Contemporary World Issues Photography I and II
Public Speaking Studio Art Portfolio

Harlem Renaissance AP® Art and Design AP® US Government and Politics

Earning College Credit

Roger Bacon offers opportunities for students to earn a total of **59 college credits** by taking courses on campus.

| Course | AP® | College Credit |
|---------------------------|--------|---|
| | Credit | |
| AP® Capstone: Seminar | Yes | |
| AP® Capstone: Research | Yes | |
| Honors Modern Literature | No | 3 credits through Mount St. Joseph University |
| | | for students also enrolled in AP® Research |
| AP® Calculus AB | Yes | |
| AP® Statistics | Yes | |
| AP® Computer Science A | Yes | |
| AP® Biology | Yes | 8 credits through Mount St. Joseph University |
| AP® Chemistry | Yes | |
| AP® Physics I | Yes | |
| AP® US History | Yes | 6 credits through Mount St. Joseph University |
| AP® United States | Yes | |
| Government and Politics | | |
| AP® Psychology | Yes | |
| AP® World History: Modern | Yes | 6 credits through Mount St. Joseph University |
| AP® Art and Design 2-D | Yes | |
| AP® Art and Design 3-D | Yes | |
| AP® Art and Design | Yes | |
| Drawing | | |

Updated 1/17/24



AP® Credit

Students taking AP® courses take an AP® exam at the end of the year. Students earning a 3 or higher on an AP® exam may earn college credit. Usually students earn 3 college credits, but some institutions may award up to 6 credits for an AP® score of a 4 or 5. Policies vary by institution. The exam fee is set by the College Board and was \$89 per exam (\$137 for AP® Capstone exams) in the 2023-24 school year. To find out how many credits a particular college or university will award, go to the following link: https://apstudent.collegeboard.org/creditandplacement/search-credit-policies.

Early College Credit

Students taking a class approved for early college credit through Mount St. Joseph University earn college credit if they earn a grade of a C or better for the final grade in the corresponding course at Roger Bacon. Courses are taught on our campus by Roger Bacon faculty members approved by Mount St. Joseph University. The cost is \$50 per credit hour.

College Credit Plus

Students who take a course at a public Ohio college or university may be able to count the credit earned towards a high school graduation credit. Students interested must apply to the university or college and be accepted. In addition, they apply to the Ohio Department of Education and Workforce for funds to cover the cost of the program. This option is free of charge to students, but funds from the state are limited, and the application is due the April prior to the year the course will be taken. More information about College Credit Plus is available at the Roger Bacon Guidance website: https://www.rogerbacon.org/academics/school-counseling/college-credit-plus.

These notes relate to the course descriptions on the following pages:

- ➤ Each semester-long course is worth .5 credit, with the exception of Physical Education for which .25 credit is earned.
- ➤ Each year-long course is worth 1 credit.
- "TR" indicates a teacher recommendation is required for a student to sign up for a class.
- ➤ "AP®" indicates Advanced Placement courses that have been audited and approved by the College Board. Students enrolled in AP® courses are required to take the AP® exam at the end of the year and may earn college credit depending on their score.

Business Courses

Entrepreneurship

.5 Credit Semester

Open to grades 10-12

This course introduces students to entrepreneurship by having them work with a mentor to identify a problem, develop a solution, and pitch it, providing an opportunity for them to practice and develop essential workforce skills. Students will also fine tune their resume, practice interview skills, and hear from a variety of guest speakers. Students who complete this course successfully will earn the Ohio Means Jobs Readiness Seal, indicating they have the personal strengths, strong work ethic, and professional experience employers need.

Business Internship

.5 Credit Semester

Open to grade 12

Students serving as office aides for select areas at Roger Bacon High School not only have the opportunity to contribute to their school but to earn a high school credit through this field experience. Students will work with a supervisor to clearly define learning goals in communication, production, and professionalism, and determine alignment of skills learned with potential career interests. Students will document their learning through assembling a portfolio and presenting a self-evaluation of what they have learned and contributed to their placement at the end of the semester. To apply for this opportunity, students should make an appointment to talk to their counselor.

Start by doing what is necessary; then do what is possible. And suddenly you are doing the impossible. ~ St. Francis of Assisi

English Courses

Freshman Seminar

.5 Credit Semester

Freshman Seminar is designed to prepare all students for success in their freshman year and beyond. In a workshop environment, students will learn the following concepts and skills: iPad and SpartanLink use, study habits, notetaking, test taking, public speaking, conducting research, communication protocols for emails, setting appointments with teachers, and appropriate use of social media.

English 9

1 Credit Year

English 9 is a survey of a variety of literary genres, with an emphasis on reading comprehension and an exploration of central ideas, themes, and character development. Students develop critical thinking through class discussion, informative and argumentative writing, and mini-research projects. Students will learn the basic structure of the five-paragraph essay and MLA documentation, practice grammar skills, and develop their vocabulary.

CP English 9

1 Credit Year

CP English 9 is a survey of a variety of literary genres, with an emphasis on exploration of central ideas, themes, character development, and point of view. Students develop critical thinking through class discussion, informative and argumentative writing, and mini-research projects. Students will learn the basic structure of the five-paragraph essay and MLA documentation, practice grammar skills, and develop their vocabulary.

Honors English 9

1 Credit Year

Honors English 9 is a survey of a variety of literary genres, with an emphasis on exploration of central idea and themes, character development, and point of view. Students develop critical thinking through class discussion, informative and argumentative writing, and mini-research projects. Students will build upon strong writing skills by writing five-paragraph essays using MLA documentation, practice grammar skills, and develop their vocabulary.

English 10

1 Credit Year Prerequisite: English 9

English 10 is a survey of a variety of literary genres from many countries, with an emphasis on reading comprehension and an exploration of central idea and themes, character development, and point of view. Students develop critical thinking through class discussion and writing. Students build upon the structure of the five-paragraph essay in their narrative, informative, argumentative, and research writing, with a focus on improving organization, development, and clarity of their writing. Students continue to practice grammar skills and develop their vocabulary.

CP English 10

1 Credit Year Prerequisite: English 9

CP English 10 is a survey of a variety of literary genres from many countries, with an emphasis on central ideas, themes, character development, and point of view. Students develop critical thinking and synthesize different perspectives through class discussion, text annotations, and writing. Students build upon the structure of the five-paragraph essay in their narrative, informative, argumentative, and research writing, with a focus on improving the organization, development, clarity, and style of their writing. Students continue to practice grammar skills and develop their vocabulary.

Honors English 10

1 Credit Year Prerequisite: English 9 and TR

Honors English 10 is a survey course that engages students in becoming skilled readers of prose, poetry, and informational texts. Students develop critical thinking and synthesize different perspectives through class discussion, text annotations, and writing. As students work to become skilled writers who compose for a variety of purposes, they will build upon the structure of the five-paragraph essay in their narrative, informative, and argumentative writing, with a focus on improving the organization, development, clarity, and style of their writing. In order to help prepare students for AP® Capstone: Seminar in their junior year, students extend their citation skills and are introduced to scholarly databases and technical writing. Students continue to practice grammar skills and develop their vocabulary.

English 11

1 Credit Year Prerequisite: English 10

English 11 spans American literature from the Colonial period to contemporary times, exploring the cultural, historical, and social contexts that influenced these texts. Students develop critical thinking and evaluation skills through both in-person and online discussion as well as academic writing of informative, argumentative, and research essays. With teacher support and scaffolding, students continue to refine the development, clarity, and style of their writing, moving beyond the five-paragraph essay to 3-5 page essays. Students develop research skills through database research, annotated bibliographies, and critical literary analysis. This course also features an increased emphasis on the college application process, including ACT preparation and the college essay.

CP English 11

1 Credit Year Prerequisite: English 10

CP English 11 spans American literature from the Colonial period to contemporary times, exploring the cultural, historical, and social contexts that influenced these texts. Students develop critical thinking and evaluation through both in-person and online discussion as well as academic writing of informative, argumentative, and research essays. Students continue to refine the development, clarity, and style of writing, moving beyond the five-paragraph essay to 3-5 page essays. Students enhance research skills through database research, annotated bibliographies, and critical literary analysis. This course also features an increased emphasis on the college application process, including ACT preparation and the college essay.

AP® Capstone: Seminar

1 Credit Year Prerequisite: CP or Honors English 10 and TR

AP® Capstone: Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Students learn to investigate a problem or issue, analyze arguments, compare different perspectives, synthesize information from multiple sources, and work alone and in a group to communicate their ideas in both oral presentations and formal writing.

English 12

1 Credit Year Prerequisite: English 11

English 12 spans British literature from the Anglo-Saxon period through the 21st century, exploring the cultural, historical, and social contexts that influenced these texts. Students develop critical thinking and evaluation through both in-person and online discussion as well as academic writing. Through teacher support and scaffolding, peer conferencing, and revision, students continue to refine the development, clarity, and style of their writing in 3-5 page informative, argumentative, and research essays. Students develop their research skills through database research, annotated bibliographies, and critical literary analysis.

CP English 12

1 Credit Year Prerequisite: English 11

English 12 spans British literature from the Anglo-Saxon period through the 21st century, exploring the cultural, historical, and social contexts that influenced these texts. Students develop critical thinking and evaluation through both in-person and online discussion as well as academic writing. Through peer conferencing and revision, students continue to refine the development, clarity, and style of their writing in 5-7 page informative, argumentative, and research essays. Students develop their research skills through database research, annotated bibliographies, and critical literary analysis.

AP® Capstone: Research

1 Credit Year Prerequisite: AP® Capstone: Seminar and TR

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

Honors Modern Literature

.5 Credit Semester Prerequisite: CP English 11 or AP® Seminar and TR Open to grade 12

This course focuses on reading, analyzing, and writing about fiction, poetry, and drama from the 20th and 21st centuries from a range of countries. Students will engage in close reading, discussion, and writing to examine the choices writers make regarding structure, figurative language, imagery, and symbolism in order to create style and explore themes. Students enrolled in AP® Research may earn college credit through Mount St. Joseph University.

Gothic Literature

.5 Credit Semester

Open to grades 11-12

Since the 18th century, Gothic literature has gripped the imaginations of both writers and readers alike. This course will focus on the major themes and elements found in Gothic literature from the 19th century to the present and how prominent writers produce suspenseful environments for their readers. Using a selection of texts and a variety of approaches we will explore the levels of meaning and narrative strategies in Gothic texts.

Legends and Folklore from around the World

.5 Credit Semester

Open to grades 11-12

Every culture celebrates its origin, history, famous people, monsters, and events. These short tales of lost loves, ghosts, knights, magic creatures, and creepy urban legends will take students on a trip around the world. Students will put their creative writing skills and storytelling skills to work to they create their own folklore. This class is designed to inform, amaze, and entertain.

Harlem Renaissance

.5 Credit Semester

Open to grades 11-12

In this course, students study and examine the literature, speeches, art, music and ideologies of the Harlem Renaissance Movement in the United States and trace the impact of this cultural movement on future generations. This course promises to uplift, encourage, and celebrate the foundations of Renaissance writing and culture in the United States.

Publications

.5 Credit Semester Prerequisite: TR

Open to grades 11-12

This course is designed to introduce students to the fundamentals of publications and journalism. The class will work together to produce the *Troubadour*, the Roger Bacon yearbook. Publications skills will include the following: computer-assisted graphics design, writing, and desktop publishing. Students may take this class more than once.

Creative Writing

.5 Credit Semester

Open to grades 11-12 and to grade 10 with TR

This course is devoted to developing the writing skills of the students in creative compositions and the study of both prose and poetry. In addition to exploring writing daily, students will engage in self-critique, peer-editing, and publishing.

Public Speaking – Fearless Presentations

.5 Credit Semester

Open to grades 11-12

Public Speaking is designed to help students lose the public speaking jitters to prepare them to confidently deliver a college presentation, introduce themselves for an interview, or speak at their best friend's wedding. Students will learn to defend a position, explain a process, persuade, demonstrate, and entertain.

Media Hype

.5 Credit Semester

Open to grades 11-12

Print and digital media reflects and influences our culture. In Media Hype, students will explore a variety of texts, including TikTok videos, memes, films, posters, music, and advertisements. Through class discussion and writing, students will examine how these media sources both entertain and inform so they can be good consumers and creators of digital media.

Fine Arts Courses

Visual Arts

Introduction to Studio Art

.5 Credit Semester

This course is an introduction to the fundamentals of art, including elements of art and principles of design, the building blocks of all art classes. Students will explore various media through assignments that include everything from photography and printmaking to still life studies. In addition, students will learn to reflect on their own work and the work of other artists.

Fiber Arts

.5 Credit Semester Prerequisite: Introduction to Studio Art Open to grades 10-12

This course will give students an overview introduction of fiber work using natural and manmade materials. Students learn the basics of fiber processes, including weaving, felting, tiedye, knitting, crochet, embroidery, screen-printing, sewing, surface manipulation and embellishment. Upon successful completion of this course, participants will be able to experiment with two and three-dimensional fiber arts techniques to create a body of original work. Emphasis will be placed on creative design concepts, craftsmanship, and skillful and imaginative use of materials.

Sculpture

.5 Credit Semester Prerequisite: Introduction to Studio Art Open to grades 10-12

This course is designed to strengthen students' imagination and push them to be creative thinkers and problem solvers through learning the process, ideas, and functions of sculpture as fine art. Students will apply skills that were learned in Introduction to Art to three-dimensional works, exploring various media, including paper, cardboard, wood, 3D pens, and plaster. Throughout the course, students will brainstorm and sketch ideas, reflect on their own work and the work of other artists, research artists, and experiment with new ideas and experiences.

Ceramics

.5 credit Semester Prerequisite: Introduction to Studio Art Open to grades 10-12

This course is designed to strengthen students' imagination and push them to be creative thinkers and problem solvers through learning the process, ideas, and functions of ceramics as fine art. Students will apply skills that were learned in Introduction to Art to three-dimensional clay works, including hand building, wheel throwing, pinching and coiling, and glazing techniques and processes. Students will also be able to identify the five stages of clay and understand how each stage affects the development of their own works of art. Throughout the course, students will brainstorm and sketch ideas, reflect on their own work and the work of other artists, research artists, and experiment with new ideas and experiences.

3-D Art II

.5 Credit Semester Prerequisites: Introduction to Studio Art and 3-D Art I Open to grades 10-12

3-D Art II is a challenging class for students truly interested in fine arts. Building on skills learned in Introduction to Studio Art and 3-D Art I, students will explore higher level constructing and modeling techniques and skills. Implementing the knowledge and experience from the previous courses, students will be working on creating truly original works of art that will prepare them for the Studio Art Portfolio course if they choose to continue. Students will learn to make decisions about processes, media, and aesthetics based on their personal expression and artistic style.

Drawing and Painting I

.5 Credit Semester Prerequisite: Introduction to Studio Art Open to grades 10-12

Students will build on what was learned in Introduction to Studio Art to hone their skills and explore the techniques associated with drawing and painting. Students will learn to incorporate what they see and interpret that into visual design. They will further explore the critique process as well as study famous artworks to be able to learn how to pull the unspoken meaning from visual art.

He who works with his hands is a laborer.

He who works with his hands and his head is a craftsman.

He who works with his hands and his head and his heart is an artist.

- St. Francis of Assisi

Drawing and Painting II

.5 Credit Semester

Prerequisites: Introduction to Studio Art and Drawing and Painting I

Open to grades 10-12

Drawing and Painting II is a challenging class for students truly interested in fine arts. Students will explore higher level drawing techniques that will transition into painting techniques and skills. Implementing the knowledge and experience from the previous courses, students work on creating truly original works of art that will prepare them for the Studio Art Portfolio course if they choose to continue. Students will learn to make choices about processes, media, and aesthetics based on their personal expression and artistic style.

Digital Art

.5 Credit Semester Prerequisite: Introduction to Studio Art Open to grades 10-12

Digital Art introduces students to art creation in the digital realm by applying the foundations and principals learned in Introduction to Studio Art. Projects involve manipulating, altering, and layering visual images within apps and programs. Students will explore the Adobe Creative Suite including Photoshop as they learn to organize digital imagery and apply effects and masks. Students will reflect on their work and the work of other artists so they may learn to edit and revise their own digital works and culminates in a project that is a crowd-sourced solution to a complex design problem.

Photography I

.5 Credit Semester Prerequisite: Introduction to Studio Art Open to grades 10-12

Photography I applies the foundations of art learned in Introduction to Studio Art to the process, ideas, and function of photography as fine art. This course will utilize the traditions of photography and the technologies of today as students explore composition using their iPads or digital cameras. Students will reflect on their work and the work of other artists so they may learn to edit and revise their own art.

Photography II

.5 Credit Semester Prerequisites: Introduction to Studio Art and Photography I Open to grades 10-12

This is a challenging class for students truly interested in photography as a fine art. Implementing the knowledge and experience from the previous courses, students will work on creating truly original works of art that will prepare them for the Studio Art Portfolio course if they choose to continue. Students will learn to make decisions about processes, media and aesthetics based on their personal expression and artistic style.

Introduction to Film Making

.5 Credit Semester Prerequisites: Introduction to Studio Art and Photography I Open to grades 11-12

This next level class introduces students into the world of filmmaking, pulling upon the foundation skills learned from Introduction to Studio Art and Photography. In this hands-on beginning to the art of narrative filmmaking, students will become familiar with the ideas, materials, and techniques needed for creative expression in this medium. They will learn how to use images in conjunction with sound, text, and narrative structure as a basis for communication and storytelling. Students will address a subject, define goals and audience, explore new tools and resources available, and craft ideas through experimentation to create short films using their iPads.

Graphic Design

.5 Credit Semester Prerequisites: Introduction to Studio Art, Drawing and Painting I, Photography I, and TR

Open to grades 11-12

This upper level class introduces students into the world of graphic design. Pulling upon the foundation skills learned from Introduction to Studio Art, Photography I, and Drawing and Painting I, students will be introduced to designing on sophisticated software as they explore higher level design principles, software techniques, and text. Students will learn to design digitally with an introduction to typefaces, font exposure, layout, and production skills. This course is designed to expose students to the professional world of graphic design if they were to choose this as a college major.

Studio Art Portfolio

1 Credit Year Prerequisites: Introduction to Studio Art, Drawing and Painting I and II, Photography I, and TR

Open to grades 11-12

Studio Art Portfolio is an advanced level course for students who are self-motivated and seriously interested in a creative career. The course allows students to take an indepth, mature approach to developing skills, techniques, and personal style. Students will be motivated to make their own choices about processes, media, and aesthetics based on their own expression and voice. Emphasis will be placed on creativity, originality, and authentic work. Students will critically reflect on their work and the work of other artists. Students at this point should be able to read the language of visual art and be developing their own personal vocabulary for creating art. Work created in this course must show thoughtful decision making that culminates in communicating personal expression.

AP® Art and Design

1 Credit Year Prerequisites: Introduction to Studio Art, Drawing and Painting I and II, and/or Photography I and II, and TR

Open to grade 12

AP® Art and Design is designed for students who are seriously interested in a rigorous study in art. AP® Art and Design is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The program consists of a choice among one of three portfolios: 2-D Design, 3-D Design, and Drawing. Students create a body of work that demonstrates quality, concentration, and breadth. As in any college level course, students will be expected to spend a considerable amount of time outside of class in order to complete assignments.

Performing Arts

Concert Band

1 Credit Year

The Concert Band is a performance ensemble that meets during the school day. <u>No previous instrument experience is necessary to join</u>. This class is for those who want to learn a wind instrument or continue study on an instrument through the preparation of concert music. The class includes many performances throughout the school year and covers several different styles of classical music.

Concert Choir

1 Credit Year

The Concert Choir is a full singing choral group that meets during the school day. *Anyone interested, advanced singer or beginner, is welcome to join*. Their repertoire includes both sacred and secular music of all periods and styles. An emphasis is placed on the performance of choral ensemble, multi-part songs. The basic skills for proper singing - posture, breath support, and tone production – are taught through individual and group work. The Concert Choir will rehearse sacred music for each month's all-school Mass, as well as other traditional and contemporary songs to perform at several concerts throughout the year at Roger Bacon, community events, and other local schools.

Francis loved to sing. It freed his spirit and turned the human voice . . . into an instrument of celebration. He was simply giving voice to the joy within him and to the beauty he saw all around him.

Murray Bodo, OFM

from Francis: The Journey and the Dream

Piano I

.5 credit Semester

Piano I is for the beginner or inexperienced piano player. Students will learn the basics of music and piano performance, from simple note reading and hand placement to full accompaniment. The class will focus on the primary techniques particular to good, basic keyboard performance and piano playing.

Guitar I

.5 Credit Semester

Guitar I is for the beginner or inexperienced guitar player. Students will learn the basics of music and guitar performance, from simple chords to full accompaniment, and learn a variety of techniques and styles particular to guitar playing.

Guitar II

.5 Credit Semester Prerequisite: Guitar I Open to grades 10-12

Guitar II is for the experienced guitar player. Students learn advanced techniques of chord positions and scales to further their understanding of the multiple styles of the guitar. Built upon the basics learned in Guitar I, students will be able to extended their guitar playing and music understanding, from simple accompaniment to lead lines and alternate tunings.

History of Broadway

.5 Credit Semester

This course explores the creation of the Broadway musical through the history of American stage styles. We will discuss the basics of this genre and understand the many elements that go into creating a musical. This class will focus on the history, key performers, and important shows of Broadway through listening examples, performance videos, presentations, and other activities.

History of Rock

.5 Credit Semester

This course explores the creation of "Rock 'n' Roll" music through the history of American jazz, folk, and blues popular styles. We will discuss the basics of this genre to understand how it grew to form such a large amount of our current popular music. This class will focus on the history, key artists, and important songs of rock music through listening examples, concert examples, presentations, and other activities.

Music in Film

.5 credit Semester

This course explores the creation of the movie soundtrack through a look at the history of cinema and how classical music has impacted the film score. We will study the basics of soundtracks and discuss how visual storytelling is enhanced by emotional music. Students will focus on the history, key composers, and important film scores through listening examples, interviews, concert examples, presentations, and other activities.

Introduction to Acting

.5 Credit Semester

This drama course is an introduction to the basics of acting. Students will be exposed to elements of public speaking, stage work, reciting lines, and the art of character study. Students will learn to reflect on their own work and the work of others, as well as begin to observe the art of professional theater acting. Students will have the opportunity to work in small group scenes and perform in the Fine Arts Center and will be encouraged to audition for Roger Bacon's drama productions.

Stage Acting

.5 credit Semester Prerequisite: Introduction to Acting or participation in a Roger Bacon Drama Guild production

Open to grades 10-12

This drama course builds upon the basics learned in the Introduction to Acting class. Students will be exposed to more specific techniques for stage acting, reciting monologues, and deeper character study. Students will begin to critique fellow actors and continue to observe professional theater acting in the local community. Students will work in small groups to perform dramatic one-acts in the Fine Arts Center and will be required to audition for Roger Bacon's drama productions.

Improvisation

.5 credit Semester Prerequisite: Introduction to Acting or participation in a

Roger Bacon Drama Guild production

Open to grades 10-12

This drama course builds upon the basics learned in the Introduction to Acting class. Students will be exposed to more specific techniques and methods of Viola Spolin with improvisational games, sketch building, and comic character study. This course relies heavily on the willingness of the students to let loose and explore. Students will work in small groups of fellow actors and build their own strategies, games, and performances. Improvisation focuses on how to interact as scene partners and part of an ensemble rather than an individual performer.

Stage Make-Up

.5 Credit Semester

Open to grades 10-12

This theatre course explores the technical art of make-up design and application as it relates to stage performance. Students will look at the history of the theatre and the use of make-up for specific periods and character design. Activities include research projects, drawings of personal designs, demonstrations, and applying make-up to themselves and fellow student actors. The projects explore the more detailed techniques of application and color choice for larger-than-life stage characters.

Theatre Production

.5 credit Semester Prerequisite: Introduction to Acting or participation in a

Roger Bacon Drama Guild production

Open to grades 10-12

Theatre Production explores the "behind-the-scenes" elements needed to create a dramatic staged show. Students will delve into stage management with a focus on the crew work of a show. Starting with a background and overview of the different roles within a theatre production team, students will explore the different types of backstage work. With a study of lighting plots and designs, sound designs, and digital backdrops and animations, students will begin their training on the tech equipment in RB's Fine Arts Center. The students will have hands-on experience in helping with each performance on stage.

Stage Directing

.5 credit Semester Prerequisites: Introduction to Acting, Theatre Production, and TR

Open to grades 11-12

Building upon the skills of Theatre Production, students will continue to master the techniques that go into stage management. Stage Directing explores combining the elements of working and managing multiple groups of student workers from cast to crew, light to sound, and stage hands to costumes. Students will have hands-on experience in helping with each drama production from the beginning of its creative design process to its show night execution, as well as directing their own small scale one-acts.

Music Production

.5 Credit Semester Prerequisites: Any two other music electives Open to grades 10-12

This course covers the basics of music recording and audio production technology. By using today's modern tools of home recording, students will complete projects and have hands-on experience in music making and recording. This class will also study the impact this technology has had on music as an industry and discuss the differences between digital streaming music and its hard copy analog counterpart. The course culminates with students producing, mixing, and editing their own songs with GarageBand on their iPads.

Music Theory

.5 Credit Semester Prerequisites: Any three other music electives and TR Open to grades 11-12

Music Theory focuses on the structure of music. Each of the elements of music is taught so that students not only become familiar with them but can work with these elements to create musical examples. From voice leading and chord progressions to complete compositions, students learn the significance of music structure as a result of the creative innovations of the composer. Students will master the skills of reading, writing, playing and singing music at its foundations.

Health & Physical Education Courses

Health

.5 Credits Semester

This course covers many topics including making healthy choices, managing stress, pregnancy and birth, food and nutrition, movement and coordination, personal care, prevention of drug, alcohol, and tobacco abuse, and first aid and C.P.R.

Physical Education

.25 Credits Semester

This course is designed to promote a sense of health, fitness, recreation, and a personal responsibility in being fit. Students are exposed to a variety of lifetime activities aimed at achieving a basic level of fitness including general physical conditioning, weight training, physical fitness testing, and various individual and team activities. The course involves activity and lecture.

* This course will meet physical education graduation requirements. However, a waiver of the requirement for Physical Education can be granted if a student completes two full seasons as a participant on an OHSAA approved inter-scholastic sports team.

Strength and Conditioning

.25 Credits Semester

Open to grades 11 and 12

This course is designed for students who have met their physical education graduation requirement through participation in two seasons of an OHSAA inter-scholastic sports team or the Physical Education course. Students will engage in exercises using a variety of strength and conditioning equipment that help improve their body strength and performance as an athlete. Students will apply principles of strength, conditioning and fitness to develop their own individualized exercise plans.



Mathematics Courses

Algebra I, Part I

1 Credit Year

This is the first part of a two-year fundamental algebra course designed for incoming freshman who benefit from small class sizes offering individualized instruction. This class works to develop a strong foundation of mathematical skills by reviewing many of the concepts of 8th grade math. The course will cover basic computational skills, fundamental mathematical skills, rational numbers, the solving and graphing of linear equations, proportional reasoning and applying algebraic properties. The class is designed to challenge students with a modified course while providing individual and collaborative support to allow students to be successful. Students will be given extensive support as they work to write equations and solve basic real-world problems.

Algebra I, Part II

1 Credit Year

This course completes the objectives of basic algebraic principles for sophomore students. This class will continue to provide individualized support while challenging students to make connections from previous concepts to the new topics of operations of polynomials, factoring, solving and graphing quadratic equations, and radical expressions. After completion the students will have a comprehensive background of Algebra I.

CP Algebra I

1 Credit Year

This is a college preparatory course for freshmen with the aim of developing well prepared, confident problem solvers. Starting with the basic algebraic premise of solving for "unknowns," students will also explore rational and irrational numbers, functions and linear equations, as well as patterns and sequences. All Algebra I students will be introduced to and required to manipulate monomial and polynomial expressions, including quadratic equations and functions. Students will engage in indepth problem-solving, aimed at developing critical thinking skills needed to succeed in the 21st century. Students will explore algebraic functions and concepts through the use of graphing calculators and other graphing software.

Honors Algebra 1

1 Credit Year

This rigorous course explores four main topics in Algebra: solving one and two variable equations, using and interpreting linear functions, factoring and quadratics, and exponentials and polynomials. Specifically, this course investigates the topics of linear and quadratic functions and their graphs, factoring and solving polynomial equations, solving systems of equations, as well as inductive and deductive reasoning. Real-world applications that can be modeled by linear and quadratic functions will be covered. In depth word problems will be addressed that require students to demonstrate an understanding of the concepts covered. Students will explore algebraic functions and concepts through the use of graphing calculators and other graphing software.

Geometry

1 Credit Year Prerequisite: Algebra I, Part II or Algebra I

Students will use geometry with algebra to find distances, angle measures, areas, and volumes. They will use theorems and postulates for parallel and perpendicular lines as they apply to polygons and circles. Students will also problem solve using the Pythagorean Theorem and basic right triangle trigonometry.

CP Geometry

1 Credit Year Prerequisite: Algebra I, Part II or Algebra I

Students will study geometry as a mathematical system through the deductive development of relationships in the plane and in space. Topics covered in this course include congruence and similarity of polygons, properties of parallel and perpendicular lines, angle measures, transformations, geometric constructions, circles, volume, and area. Logic is a driving force behind all that is studied in this course as students learn to explore various concepts through geometric proof.

Honors Geometry

1 Credit Year Prerequisite: Algebra I and TR <u>OR</u> a score of 4 or higher on the Algebra I End of Course Ohio State Test

Students will study geometry as a mathematical system through the deductive development of relationships in the plane and in space. Topics covered in this course include congruence and similarity of polygons, properties of parallel and perpendicular lines, angle measures, transformations, geometric constructions, circles, volume, and area. Logic is a driving force behind all that is studied in this course as students learn to explore various concepts through geometric proof. The resources used to accomplish the objectives of the course include protractor, compass, graphing calculator, and other computer programs that demonstrate the components of geometry.

Algebra II

1 Credit Year Prerequisite: Algebra I, Part II or Algebra I

Algebra II continues and broadens the exploration of Algebra I. Incorporating the latest in graphic calculator technology and using problem-solving techniques, students will explore rational, irrational, and complex numbers. Specifically, this course will develop an understanding of functions as they relate to linear relations, and both quadratic and exponential equations.

CP Algebra II

1 Credit Year Prerequisite: Algebra I, Part II or Algebra I

CP Algebra II continues and broadens the exploration of Algebra I. Incorporating the latest in graphic calculator technology and using problem-solving techniques, students will explore rational, irrational, and complex numbers. Specifically, this course will develop an understanding of functions as they relate to linear relations, quadratics, and polynomials. Exponentials, logarithms, sequences, and matrices will also be covered.

Honors Algebra II

1 Credit Year Prerequisites: Algebra I and TR

Honors Algebra II continues and broadens the exploration of Algebra I. Incorporating the latest in graphic calculator technology and using high-level problem-solving techniques, students will explore rational, irrational and complex numbers. Specifically, this course will develop an understanding of functions as they relate to linear relations, quadratics, polynomials, and radicals. Exponentials, logarithms, sequences, and matrices will also be covered.

CP Precalculus

1 Credit Year Prerequisites: Geometry and Algebra II

CP Precalculus examines advanced mathematical concepts graphically, numerically, algebraically, and geometrically. Topics covered include early and transcendental functions, analytic geometry and plane figures, alternate coordinate systems, probability and counting, statistical reasoning, and an introduction to limits, continuity and beginning calculus concepts.

For the things of this world cannot be known without a knowledge of mathematics.

- Friar Roger Bacon

Honors Precalculus

1 Credit Year Prerequisites: Geometry, Algebra II, and TR

Honors Precalculus is designed to prepare students for AP® Calculus AB, AP® Statistics, or college level math courses. The course examines advanced mathematical concepts graphically, numerically, algebraically, and geometrically. Topics covered in detail include early and transcendental functions, analytic geometry and plane figures, alternate coordinate systems, probability and counting, statistical reasoning, and an introduction to limits, continuity and beginning calculus concepts.

CP Probability and Statistics

1 Credit Year Prerequisites: Geometry and Algebra II

CP Probability and Statistics is aimed at those students interested in pursuing a career in business. Beginning with an introduction of simple and compound probability, this course will explore and expand the students' understanding of statistical data and analysis. Students will analyze strategies and, using probability concepts, will interpret, manipulate, and create relevant statistical data in the exploration of means and standard deviations. Students will use calculators, spreadsheets, and tables to estimate areas under the normal distribution curve and apply these techniques within a business model.

AP® Statistics

1 Credit Year Prerequisites: CP Algebra II or Pre-Calculus and TR

The AP® Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP® Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem-solving, and writing as they build conceptual understanding.

AP® Calculus AB

1 Credit Year Prerequisite: Honors Pre-Calculus, Physics, and TR

This course investigates topics in differential and integral calculus, including limits and continuity, differential calculus, and definite and indefinite integration. Emphasis will be placed on transcendental functions and techniques of integration. Students will also study the concepts of calculus analytically, numerically, graphically, and conceptually. Technology will be integrated into the course through the use of graphing calculators and dynamic graphing programs. Connections and applications to various disciplines, especially physics and economics, are investigated at length.

Science and Technology Courses

Integrated Science

1 Credit Year

This introductory course explores the fundamental concepts of science skills, chemistry, and biology, including scientific notation, metric conversion, scientific method, graphing, and lab techniques. Students will explore the relationships between science and everyday life. Inquiry labs, hands-on activities, and dissection will be a part of the curriculum. Emphasis will be placed upon the Ohio Learning Standards, Science/Grade Level Expectations, and 21st Century learning skills.

Biology

1 Credit Year

Biology investigates the composition, diversity, complexity, and interconnectedness of life on Earth. Fundamental concepts of heredity and evolution provide a framework through inquiry-based instruction to explore the living world, the physical environment, and the interactions within and between them.

CP Biology

1 Credit Year

CP Biology investigates the composition, diversity, complexity, and interconnectedness of life on Earth. Fundamental concepts of heredity and evolution provide a framework through inquiry-based instruction to explore the living world, the physical environment, and the interactions within and between them.

Honors Biology

1 Credit Year

Honors Biology investigates the composition, diversity, complexity, and interconnectedness of life on Earth. Fundamental concepts of heredity and evolution provide a framework through inquiry-based instruction to explore the living world, the physical environment, and the interactions within and between them. As part of this course, students are required to participate in the Science Fair.

The strongest arguments prove nothing so long as the conclusions are not verified by experience.

Experimental science is the queen of sciences and the goal of all speculation.

- Friar Roger Bacon



Materials Science

1 Credit Year Prerequisite: Biology

Materials science is a discipline that links applied chemistry directly to useful products. The content of the course introduces basic chemistry concepts and focuses on content in the areas of solids, metals, polymers, ceramics, glasses, composites, electronic materials, and nanotechnology. The content of the course has been developed with materials and support from ASM International, one of the largest technological and scientific communities focusing on metals, polymers, and ceramics. Lab work and demonstrations are included.

CP Chemistry

1 Credit Year Prerequisite: Algebra I

CP Chemistry includes atomic theory and history, atomic bonding, the periodic table, chemical nomenclature, ionic charge and oxidation numbers, chemical/physical changes, chemical equations, molar conversions, stoichiometry, phases of matter, gas laws, solubility, acids and bases, and nuclear chemistry. Lab work and demonstrations give students hands-on experience.

Honors Chemistry

1 Credit Year Prerequisites: CP/Honors Biology and TR

Honors Chemistry includes atomic theory and history, atomic bonding, the periodic table, chemical nomenclature, ionic charge and oxidation numbers, chemical/physical changes, chemical equations, molar conversions, stoichiometry, phases of matter, gas laws, solubility, acids and bases, and nuclear chemistry. There is extensive lab work to support and illustrate information presented in lecture. As part of this course, students are required to participate in the Science Fair.

CP Physics

1 Credit Year Prerequisite: CP Chemistry and Geometry

CP Physics investigates physical laws and theories, relationships of physical phenomena, and the connections between physics and other fields. It will familiarize students with the principles of mechanics, electricity and magnetism, waves, and optics. Demonstrations and labs will be incorporated to reinforce understanding. The class will focus on the conceptual understanding of physics with mathematical applications.

AP® Physics I

1 Credit Year Prerequisites: Honors/CP Chemistry and TR

AP® Physics I is designed for students who wish to investigate physical laws and theories, relationships of physical phenomena, and the interrelationships of physics to other fields. AP® Physics I will familiarize students with the principles of mechanics, electricity and magnetism, waves, and optics. It will show the value of experimentation and mathematics in the development of laws and theories in physics and teach the basic skills of problem-solving and scientific thinking in the area of physics. The mathematical emphasis of this course prepares students for college level physics.

AP® Biology

1 Credit Year Prerequisites: Honors/CP Chemistry and TR

AP® Biology is a second-year course in biology and covers molecules and cells, heredity and evolution, and organisms and populations. Laboratory experience is an essential part of the curriculum. Early College Credit is available through Mount St. Joseph University.

AP® Chemistry

1 Credit Year Prerequisites: Honors/CP Chemistry and TR

AP® Chemistry reviews all basic concepts in chemistry, focusing on more in-depth investigation of atomic theory, atomic structure, chemical bonding, chemical equilibria, stoichiometry, electrochemistry, acid/base chemistry, redox reactions, solubility, gas laws, chemical thermodynamics, organic chemistry, nuclear chemistry, reaction prediction, chemical nomenclature, and VSEPR theory. Extensive lab work supports and illustrates information presented in class.

CP Anatomy & Physiology

1 Credit Year Prerequisite: "B" or better in Biology and Chemistry Open to grades 11-12

Anatomy & Physiology is designed for students who are considering a career in the health fields or are curious about how the body works. Anatomy covers the structures within the body, while physiology covers the functions of those structures. The class includes dissections, group activities, lab activities, lecture, and class discussion.

Environmental Science

1 Credit Year

Open to grade 12

Environmental science incorporates biology, chemistry, physics and physical geology and introduces students to key concepts, principles and theories within environmental science. Investigations are used to understand and explain the behavior of nature in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills, and real-world applications.

Vertebrate Zoology

.5 Credit Semester

Open to grades 11-12

Vertebrate Zoology is a semester-long survey course of the vertebrates in the animal kingdom. Animal characteristics, classification, anatomy, behavior, and development are the major topics that will be discussed. The topics covered include the vertebrate chordates: Osteichthyes, Chondrichthyes, Agnatha, Amphibia, Reptilia, Aves, and Mammalia. The class will include labs, hands-on activities, dissections, class discussion, projects, and lecture.

Astronomy

.5 Credit Semester

Open to grades 11-12

This course is a scientific exploration of the human place in the universe. Astronomy covers the origin and history of the Universe and the formation of the Earth and the solar system. It also compares the Earth's properties with those of the other planets and explores how the heavens have influenced human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe, and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of basic mathematics.

Ethics in Science

.5 Credit Semester

Open to grades 11-12

The purpose of this course is to engage students in reading about, considering, and discussing the responsible conduct of science. Student objectives will include learning the purpose and value of ethical decision-making, having a positive disposition toward continued learning about research ethics, and investigating current science situations.

3-D Design

.5 Credit Semester

Open to grades 11-12

In this guided, project-based class, students will learn to design objects in 3-D design software and have the opportunity to print them with a 3-D printer. Designs will start at a basic level and will progress to more detail-oriented projects. Students will be expected to create at least four designs each quarter.

Introduction to Computer Programming

.5 Credit Semester

This course is an introduction to basic concepts of structured programming. The programming language used in this course is C++.

Website Design I

.5 Credit Semester

Website Design I focuses on how to develop websites using HTML5 and CSS styling. Students will develop webpages with elements such as images, audio, and video. This course does not include programming.

Website Design II

.5 Credit Semester Prerequisite: Website Design I

Website Design II focuses on programming languages that support and build upon the knowledge acquired in Website Design I. Students will use "client side" Javascript to create website animation and response to user input and "server side" PHP for form processing, web security, and database access.

Robotics

.5 Credit Semester Prerequisite: Algebra I

Open to grades 11-12

This hands-on, interactive semester course is for students interested in building and programming robots. Students will learn about programming, motors, servos, and sensors, ultimately creating both user-controlled and autonomous robots.

Engineering I

.5 Credit Semester Prerequisite: Algebra I

Open to grades 11-12

Engineering I describes the field of engineering and engineering technology, allowing students to explore technology systems and design processes. Through the course students will use math, science, technology, and writing to solve engineering problems. The course is primarily project-based also emphasizes teamwork, oral and written communication, and the impact technology has on society.

Engineering II

.5 Credit Semester Prerequisite: Geometry and Engineering I Open to grades 11-12

Engineering II builds upon the understanding of engineering technology introduced in Engineering I, allowing students to explore in more depth technology systems and design processes. Through the course students will use math, science, technology, and writing to solve complex engineering problems. The course is primarily project-based emphasizes teamwork, oral and written communication, and the impact technology has on society.

AP® Computer Science A

1 Credit Year Prerequisites: Algebra II and TR

Open to grades 11-12

AP® Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. The host language for the class is Java. Strong math and writing skills are required for this course.

Social Studies Courses

World History

.5 Credit Semester

This course traces the development of humanity from the Enlightenment to the present day. Emphasis is placed upon the political, economic, and social development of the various civilizations, especially those comprising our Western heritage. This course will emphasize writing while also emphasizing foundational social studies skills.

CP World History

.5 Credit Semester

This course traces the development of humanity from the Enlightenment to the present day. Emphasis is placed upon the political, economic, and social development of the various civilizations, especially those comprising our Western heritage. The course will include a strong emphasis on writing.

Honors World History

.5 Credit Semester

This course traces the development of humanity from the Enlightenment to the present day. Emphasis is placed upon the political, economic, and social development of the various civilizations, especially those comprising our Western heritage. The course introduces students to the type of writing tasks required for AP® United States Government and Politics.

United States Government and Politics

1 Credit Year

This course is an examination of the structure and workings of the government of the United States. It is designed to educate students about the history of the American government, federalism, the Bill of Rights, the three branches of government, and important documents such as the Declaration of Independence and the Constitution. Students will examine state and local government as well as basic concepts of personal financial literacy.

CP United States Government and Politics

1 Credit Year

This course is an examination of the structure and workings of the government of the United States. It is designed to educate students about the history of the American government, federalism, the Bill of Rights, the three branches of government, and important documents such as the Declaration of Independence and the Constitution. Students will also examine rulings of the U.S. Supreme Court, analyze political cartoons, and explicate articles concerning government issues. Students will examine state and local government as well as basic concepts of personal financial literacy. This class will include a strong emphasis on writing.

AP® United States Government and Politics

1 Credit Year Prerequisite: TR

This course will challenge students to take an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes, as well as basic concepts of personal financial literacy. The course will also prepare students to take the AP® United States Government and Politics exam.

United States History

1 Credit Year Prerequisite: United States Government and Politics
United States History is an introduction to American civilization from the age of
exploration and colonization through late twentieth century American history. The
course focuses on central themes and issues in the development of American growth,
institutional change, cultural development, and political democracy as Americans faced
them in the past.

CP United States History

1 Credit Year Prerequisite: United States Government and Politics
CP United States History is an introduction to American civilization from the age of exploration and colonization through late twentieth century American history. The course focuses on central themes and issues in the development of American growth, institutional change, cultural development, and political democracy as Americans faced them in the past. The class will include a strong emphasis on writing.

AP® United States History

1 Credit Year

Prerequisites: AP® United States Government and Politics and TR

AP® United States History is a challenging course designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. It is a year-long survey course of American history, from the Pre-Columbian era to the present. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, essay writing, interpretation of original documents, and historiography. Early College Credit is available through Mount St. Joseph University.

Economics

.5 Credit Semester Open to grades 11-12

Economics explains microeconomics and supply and demand in terms of the choices made by individual consumers and producers in the marketplace, as well as microeconomics in terms of the choices made by the whole economy, as reflected in aggregate demand and supply. Topics explored include GDP, unemployment, inflation, the money supply, the banking system, and monetary, tax and fiscal policy.

CP Economics

.5 Credit Semester Open to grades 11-12

CP Economics explains microeconomics and supply and demand in terms of the choices made by individual consumers and producers in the marketplace, as well as macroeconomics in terms of the choices made by the whole economy, as reflected in aggregate demand and supply. Topics explored include GDP, unemployment, inflation, the money supply, the banking system, and monetary, tax and fiscal policy.

Contemporary World Issues

.5 credit Semester Open to Grades 11-12

This project-based course will help students explore world issues of political, environmental, and economic importance. Students will develop an understanding of how the world is organized and interconnected and the possibilities and constraints facing its peoples. As a result, students will explore the relationship between a Catholic understanding and core Franciscan values and their responsibilities as citizens of the world. Students will help choose and evaluate each issue and propose personal questions and solutions.

Psychology I

.5 Credit Semester

Open to grades 11-12

Psychology I is a survey course that provides an overview of the scientific study of the human mind, its functions, and resulting human behavior. Central themes of the course include the history of psychology, methodology, motivation, emotion, the life span, theories of personality, the cognitive process, sensation, body, and behavior.

CP Psychology II

.5 Credit Semester Prerequisites: Psychology I

Open to grades 11-12

CP Psychology II is a course for students who desire more insight into the field of psychology. Central themes of the course include the principles of learning, abnormal behavior, personality, states of consciousness, therapies, group and social forces on behavior, and careers in psychology.

AP® Psychology

1 Credit Year Prerequisite: TR

Open to grades 11-12

The AP® Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

Early Cincinnati History

.5 Credit Semester

Open to grades 11-12

Early Cincinnati History will take students on a journey through time as Cincinnati evolved from frontier town to "Porkopolis" and an industrial city. From the Civil War to the founding of the Cincinnati Reds to WWI, students will learn about the people, places, and events associated with the founding and the early years of the Queen City.

Modern Cincinnati History

.5 Credit Semester

Open to grades 11-12

Modern Cincinnati History will take students on a journey through 20th and 21st century Cincinnati from Prohibition and WWII to the Civil Rights Movement and beyond. Students will learn about the early years of the Bengals, the Big Red Machine, and how neighborhoods formed and shifted, gaining a better understanding of the city they call home.

The Vietnam War: American History and Literature

.5 Credit Semester

Open to grades 11-12

This course is an analytical examination of the American involvement in the Vietnam War and the war's effect on American literature and society.

Civil War

.5 Credit Semester

Open to grades 11-12

This course analytically examines the causes of the Civil War, the events of the war, and the aftermath of the war. Particular attention is paid to the issues of sectionalism and slavery, the strategies and tactics of the war itself, and the difficult period of Reconstruction which followed.

AP® World History: Modern

1 Credit Year Prerequisite: TR

Open to grades 11-12

AP® World History: Modern is an introductory college-level modern world history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. Early College Credit is available through Mount St. Joseph University.

Theology Courses

Theology 9

1 Credit Year

Theology 9 introduces students to our Franciscan heritage and the development of faith according to the Christian tradition from a Roman Catholic perspective. The course also provides a survey of the Old Testament, with a special emphasis placed on the Torah. Students learn how to read, understand and apply a Biblical text.

Theology 10

1 Credit Year

Theology 10 is a study of Christology, which explores the person and the message of Jesus as found in the Catechism of the Catholic Church, and Ecclesiology, which explores the nature and role of the Church with a particular emphasis on the four marks: one, holy, catholic, and apostolic. The focus throughout this dogmatic study is understanding the involvement of humanity in God's plan of salvation. This course will also outline the development of Christianity, and particularly Roman Catholicism, from its Judaic origins through the major historical periods of the Church.

Theology 11

1 Credit Year

Theology 11 is based around the framework of Catholic Social Teachings. Students examine various methods of making moral decisions and the core concepts of conscience, sin, freedom, law, and dignity.

Theology 12

1 Credit Year

In the first half of this course, a study of world religions introduces the concept of cultural/religious pluralism in order to encourage appreciation, cooperation and peace among all of the world's cultures, nations, and religions. The second half of this class challenges each person to understand the universal call to holiness through a vocation to single, married, religious, or ordained life. It focuses on sexuality, love, and interpersonal relationships in light of the Gospels. A culminating portion of this course is an essay demonstrating how students have grown both spiritually and academically at Roger Bacon High School.

Let's Change the World: Service-Learning in Your Community

.5 credit Semester

Open to grades 11-12

This course will engage students to explore how service can change the world on both the local and the global levels. A focus of academic study centers around bi-weekly service engagements at Cincinnati non-profit agencies at large with reflection on personal and community impact. Students will examine the root causes of social needs and understand a faith-based motivation on how to serve those in need. Students will also explore post high school opportunities to continue to serve those in need as well as participate in Magnified Giving, a student philanthropy program.

Grief and Hope

.5 credit Semester

Open to grades 10-12

This course explores the complexity of death through the lens of the Catholic faith, emphasizing the importance of the Paschal Mystery for the journey of grief toward hope. Emphasis is placed on the importance of finding hope through experiences of suffering and death. The course includes a study of some of the physical, philosophical, personal, psychological, cultural, historical and religious aspects of "suffering and death" (causes of grief). This course will also provide students with prayer experiences that help to foster a dialogue with God in the midst of grief, in an effort to embrace and live a life of hope.

Prayer and Spirituality

.5 credit Semester

Open to grades 10-12

Rooted in Scripture, this course explores the sacred in everyday life and will assist the students in discovering that faith helps them become aware of God's divine, loving presence in their everyday lives. Students will explore the wonderful legacy of prayer from the Catholic tradition, learning the significance of prayers of petition, praise, thanksgiving, and liturgical feast days.

If you learn everything except Christ, you learn nothing. If you learn nothing except Christ, you learn everything. ~ St. Bonaventure

World Language Courses

Scope and Sequence of Courses

Our world language program is structured around the five goal areas highlighted by the American Council on the Teaching of Foreign Languages (ACTFL): communication, cultures, connections, comparisons, and communities. World language courses place special emphasis on giving students the tools they need to use the language in real world situations. All teachers use the Comprehensible Input Method in their teaching. Focus in the classroom is on high-frequency words and grammatical structures that make-up approximately 65% of native conversations. Students will acquire the structures they need to use the language in a natural way.

The following yearly structure applies to Spanish and French.

- Year 1 Introduces students to the basic vocabulary and grammatical structures of the target language. Students will also receive a basic introduction to the culture of countries where the target language is spoken. (Proficiency target: Novice-Mid)
- Year 2 Develops more complex structures of the language and expands the cultural themes. (Proficiency target: Novice-High)
- Year 3 Completes the basic grammatical structures and places additional emphasis on higher-level communication including interpreting the literature of the target language. (Proficiency target: Intermediate-Low)
- **Year 4** Provides in-depth study of literature and civilization with a review of structures. (Proficiency target: Intermediate-Mid)

Knowledge of languages is the doorway to wisdom.
- Friar Roger Bacon

French I

1 Credit Year

French I is an introduction to contemporary French through the Comprehensible Input Method, aimed at providing the student with an ability to comprehend the basics of the language. In addition to reading and writing, there is a focus on speaking and pronunciation in a manner that is acceptable to native speakers. Students are introduced to France and French-speaking countries around the world through stories, videos, cultural lessons, current events, and authentic resources. Instruction is provided in French at least 50% of the time.

French II

1 Credit Year Prerequisite: French I and TR

French II is a continuation and deepening of the four basic skills of the French language: through the Comprehensible Input Method: listening comprehension, speaking, reading, and writing. Student activities in French II emphasize more advanced communication skills and language structures and a continuation of vocabulary acquisition and cultural analysis. Students develop their cultural understanding of France and francophone cultures. Instruction is provided in French at least 75% of the time.

CP French III

1 Credit Year Prerequisite: French II and TR

Student activities in French III emphasize advanced communication and conversation skills and language structures. Vocabulary acquisition as well as cultural analysis are continued. Students further develop the four skills of communication with guided practice in conversation, listening comprehension, advanced reading, and writing drills. Instruction is provided in French at least 75% of the time.

CP French IV

1 Credit Year Prerequisite: CP French III and TR

This course delves more deeply into French culture and language usage. Students continue to develop the four skills of communication, with an emphasis on writing and speaking while we study the history and culture of France. Literature, art, and an indepth review of grammar structures are fully integrated into this curriculum, with the goal of preparing the students for university language placement exams. Instruction is provided in French 100% of the time.

Spanish I

1 Credit Year

Spanish I is an introduction to contemporary Spanish through the Comprehensible Input Method, aimed at providing the student with an ability to comprehend the basics of the language. In addition to reading and writing, there is a focus on speaking and pronunciation in a manner that is acceptable to native speakers. Students are introduced to Spanish-speaking countries around the world through stories, videos, cultural lessons, current events, and authentic resources. Instruction is provided in Spanish at least 50% of the time.

Spanish II

1 Credit Year Prerequisite: Spanish I and TR

Spanish II is a continuation and deepening of the four basic skills of the French language: through the Comprehensible Input Method: listening comprehension, speaking, reading, and writing. Students continue to build vocabulary as well as add tenses to their skill set. In addition, students will expand their cultural understanding of Spanish and Latin American countries. Instruction is provided in Spanish at least 75% of the time.

CP Spanish III

1 Credit Year Prerequisite: Spanish II and TR

Student activities in Spanish III emphasize advanced communication and conversation skills and language structures. Vocabulary acquisition is continued, and students are exposed to Spanish civilization and culture by way of writers, poets, artists, musicians, composers, singers, and the saints. Students further develop the four skills of communication with guided practice in conversation, listening comprehension, advanced reading and writing drills. Instruction is provided in Spanish at least 75% of the time.

CP Spanish IV

1 Credit Year Prerequisite: CP Spanish III and TR

Student activities in Spanish IV emphasize much more advanced communication and conversation skills and language structures. Vocabulary acquisition is continued. Students are required to develop the four skills of communication with guided practice in conversation, listening comprehension, advanced reading, and writing drills. The class will focus on the historical cultures of Latin America and Spain through literature. Instruction is provided in Spanish 100% of the time.