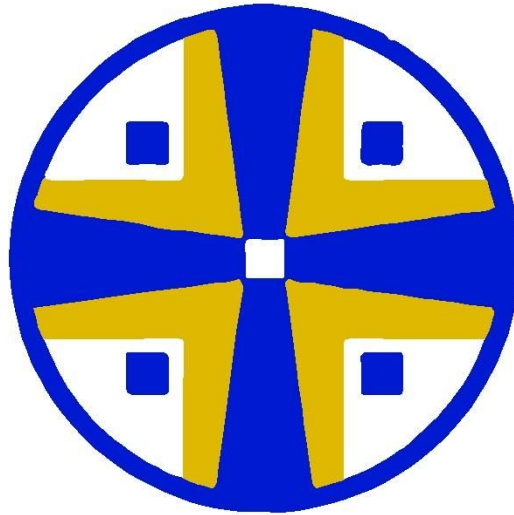


Loyola Catholic School

Mankato, Minnesota



2018-2019

High School Course Catalog

“We must be dedicated so that like good trees,
Through education and instruction,
We produce good fruit...”

Blessed Theresa of Jesus Gerhardinger,
Foundress of SSND

Guiding Students to their full potential
Walking with them in faith
Equipping them to lead and serve



RIGHT TO AMEND

The administration reserves the right to amend this handbook for just cause.

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GENERAL INFORMATION

SEMESTER AND YEAR LONG COURSES

Within this guide, 1 credit is earned for each year long course and .5 credit is earned for each semester course (unless otherwise noted). Please review the course title and the description of each semester course to be aware of course content before registering. Students will register for both first and second semesters at the same time. (Keep in mind that the semester in which a course is to be taught is not always determined until the school builds the Master Schedule). In most cases, students will be scheduled into courses they select, but the courses may not be in the sequence the student desires. Note: Certain courses will be offered on alternating years.

SCHEDULE CHANGES

All schedule changes require the completion of a course change request form available in the counseling office. After the first week of the semester, a teacher or counselor recommendation is required to drop or add a course. In certain circumstances, a student and parent meeting may be required with the principal, department and counselor to drop or add a course.

Courses are offered based on the number of students selecting each course. Students should give serious thought to selection of courses for next year. The school reserves the right to drop a course due to insufficient enrollment.

If a student wishes to request a schedule change, they should be aware of the following:

- A. The student must carry a minimum of seven classes each semester.
- B. The student may not add classes after the first week of the semester.
- C. The student must fill out a schedule change form and obtain all the required signatures.
- D. A completed request change does not guarantee change.

If a student wishes to drop a class after the first week of school the grade for the dropped class will be WP (withdrawal passing – no credit – not included in GPA – appears on the transcript) if withdrawal is during the first half of the grading period of record. If class is dropped after the first mid-quarter of the course a WF (withdrawal failing – no credit – F included in GPA) appears on transcript.

ADVANCED PLACEMENT (AP) COURSES and POST-SECONDARY ENROLLMENT OPTION (PSEO)

The Advanced Placement (AP) Program is a nationally recognized cooperative educational endeavor between high schools and colleges and universities. AP courses offer students an opportunity to earn college credit upon completion of college level curriculum and an acceptable score on the national AP exam given annually in May. Loyola offers the following AP courses: Biology, Calculus, Chemistry, Computer Science, English Language, English Literature, Statistics, and United States History. If a student signs up for an AP course, there is an additional fee for an AP exam. AP exam fees are non-refundable.

PSEO allows high school juniors and seniors to take courses at various colleges and universities which are not available at LCS, earning both high school and college credit. Students must meet the enrolling colleges' requirements and application process to participate. Any student who wishes to take a PSEO course must share their intent to do so by **April 1st. All PSEO applications and paperwork must be**

completed and turned into the counselor by May 15th. For further information please refer to this link. [LCS PSEO Information](#)

GRADING

The grading procedure used at Loyola High School is the traditional four point system. Grades are earned quarterly and the final semester grade is computed using the quarter and the final test grades. All course work must be completed before a final grade will be given. Cumulative grade point average (GPA) will be calculated using final semester grades for all 9-12 courses.

Advanced Placement (AP) courses are awarded a weighted grade because of the academic rigor expected in these courses. Weighted values for AP courses are A = 5.0, A- = 4.67, B+ = 4.33, B = 4.0, B- = 3.67, C+ = 3.33, C = 3.0, C- = 2.67. If the student does not take the AP exam, the grade for the class will not be weighted.

Grades are reported at each quarter and semester. Academic deficiency reports are provided at mid-quarter and/or other times as needed. Teacher/Parent/Student conferences are conducted at least twice a year. Conferences with teachers may also be requested at any time.

<u>Standard Courses</u>	<u>Grade</u>	<u>AP Courses</u>
100-94% = 4.0	A	100-91% = 5.0
93-90% = 3.67	A-	90% = 4.67
89, 88% = 3.33	B+	89-88% = 4.33
87 - 82% = 3.0	B	87-81% = 4.0
81, 80% = 2.67	B-	80% = 3.67
79, 78% = 2.33	C+	79-78% = 3.33
77 - 72% = 2.0	C	77-71% = 3.0
71, 70% = 1.67	C-	70% = 2.67
69, 68% = 1.33	D+	69-68% = 2.33
67 - 62% = 1.0	D	61-67% = 2.0
61, 60% = .67	D-	60% = 1.67
<60% = 0	F (No Credit)	<60% = 0

Grade point averages (GPA's) are determined by calculating the total grade points divided by the number of courses taken. Under certain circumstances, teachers with the approval of administration and counseling may assign grades of:

P = Pass – Course credit is given, not included in GPA.

I = Incomplete – no credit; grade becomes an F if not completed by assigned due date.

NC = No Credit - if student has exceeded 10 absences in a semester.

HONOR ROLL

GPA is calculated and announced officially at the end of each semester.

COLLEGE & VOCATIONAL SCHOOL PLANNING

Admission requirements to schools vary; therefore, it is highly desirable that students plan early and thoroughly for their post-graduation goals. Academic records will be the most important single factor in determining whether or not a student is accepted in the school or program of their choice. The second most important factor is the student's attendance record. Employers prefer people with a good attendance record.

4-YEAR COLLEGE ADMISSION REQUIREMENTS

INCLUDE A MINIMUM OF:

4 Years	English
3 Years	Math (Algebra I and above)
3 Years	Science (lab)
3 Years	Social Studies
2 Years	World Language (single world language)
1 Year	Fine Arts (Visual/Performing)

LOYOLA GRADUATION REQUIREMENTS

INCLUDE A MINIMUM OF:

4 Credits	English
4 Credits	Math (Intermediate Algebra and above)
4 Credits	Theology
3 Credits	Science (lab)
3.5 Credits	Social Studies
1 Credit	Physical Ed/Health
1 Credit	Fine Arts (Performing/Visual)
.25 Credit	Career/College Prep

LOYOLA HIGH SCHOOL GRADUATION COURSE REQUIREMENTS

REQUIRED FRESHMAN COURSES

Theology	1 Credit
English	1 Credit
Math	1 Credit
Civics/Geography	1 Credit
Intro Physical Science	1 Credit
Physical Ed/Health	1 Credit
Elective (Language, Art, Music)	1-2 Credits
Total	7-8 Credits

REQUIRED SOPHOMORE COURSES

Theology	1 Credit
English	1 Credit
Math	1 Credit
World History	1 Credit
Biology	1 Credit
Career/College Prep	0.25 Credit
Electives	2-3 Credits
Total	7.25-8.25

REQUIRED JUNIOR COURSES

Theology	1 Credit
English	1 Credit
Math	1 Credit
American History	1 Credit

REQUIRED SENIOR COURSES

Theology	1 Credit
English	1 Credit
Math	1 Credit
Economics	.5 Credit

Science
Electives
Total

1 Credit
2-3 Credits
7-8 Credits

Electives
Total

3.5-4.5 Credits
7-8 Credits

LOYOLA HIGH SCHOOL COURSES 2018-2019

ENGLISH REQUIRED COURSES

ENGLISH I

(1 credit)

Grade 9

Designed to develop the student's skill in capitalization, punctuation, vocabulary, and spelling, this course will develop the student's skill in written exposition. The essay structure is introduced. The student will learn journalism techniques necessary to write quality paragraphs and essays and develop an effective style. Reading, writing, speaking, listening and critical thinking skills will be developed as students will read and report on novels and plays.

ENGLISH II

(1 credit)

Grade 10

This course introduces students to the types of writing they will be expected to execute in both upper-level high school courses and introductory college courses. Students will compose varying modes of writing, including narrative essays, descriptive essays, expository essays, persuasive essays, synthesis essays, and process essays. Students will internalize the importance of following the process of writing, and will prepare a portfolio of their best work.

AMERICAN LITERATURE

(1 credit)

Grade 11/12 Alternates yearly with World Literature: Offered 2019-2020

This course concentrates primarily on discussion and analysis of American literature from Colonial times to the present, including works by Native American authors, coupled with close readings of historical American documents and speeches. The student will continue to hone grammar and writing skills, and will complete work using the foundations of literacy, which include reading, writing, listening, and speaking. Students will continue to develop research and documentation techniques and will write at least one multi-source research paper.

WORLD LITERATURE

(1 credit)

Grade 11/12 Alternates yearly with American Literature: Offered 2018-2019

This course concentrates primarily on discussion and analysis of works by non-American authors, both classical and contemporary, with an emphasis on cultural literacy. The student will continue to hone grammar and writing skills, and will complete work using the foundations of literacy, which include reading, writing, listening, and speaking. The student will also explore non-American art and philosophies.

ENGLISH ELECTIVES

AP ENGLISH LANGUAGE AND COMPOSITION

(1 credit) Alternates yearly with AP English Literature: Offered 2019-2020

Grade 11-12, GPA of >3.33 or Instructor Approval (May be taken in lieu of American and/or World Literature)

PREREQUISITES: Average of a “B” grade in all high school English classes and teacher approval.

This course is designed to prepare students to successfully complete the AP English Language and Composition Exam with a score of 3 or above. With a primary focus on nonfiction and rhetoric, students will explore author’s purpose and will, in concert with the College Board’s AP English Course Description, learn to “read primary and secondary sources carefully, to synthesize material from these texts in their own compositions, and to cite sources using conventions recommended by professional organizations such as the Modern Language Association (MLA).” This is a reading- and writing-intensive course in which students will be expected to write an average of one 2-3 page essay per week.

AP ENGLISH LITERATURE AND COMPOSITION

(1 credit) Alternates yearly with AP English Language: Offered 2018-2019

Grade 11-12, GPA of >3.33 or Instructor Approval (May be taken in lieu of American and/or World Literature)

PREREQUISITES: Average of a “B” grade in all high school English classes and teacher approval.

AP English Literature and Composition is designed to prepare students to successfully complete the AP English Literature and Composition Exam with a score of 3 or above. This course provides the intellectual challenges and workload consistent with a typical college undergraduate English literature or humanities course. Students will study representative works, including poetry, from various genres and periods from the 16th to the 21st century. Students will learn to carefully read and critically analyze literature; understand a work’s structure, style, and themes as well as smaller scale elements such as the use of figurative language, imagery, symbolism, and tone; and to consider the social and historical values a work reflects and embodies. This course is writing-intensive, focusing on critical analysis of literature including expository, analytical, and argumentative essays.

THE BOOK vs. THE MOVIE

(.5 credit)

Grades 10-12

Books will be read and then the movie will be watched! Is the book always better than the movie? The purpose of the class is to examine both treatments of a story for comparison. Can both be valid? Can both be considered works of art? What are strengths and weaknesses of each? Students are expected to analyze selected books and the movies made for them.

COMMUNICATIONS

(.5 credit)

Grades 10-12

This course examines how verbal and nonverbal communication impact people's perceptions of themselves and the world around them. As students critically analyze how communication both shapes and reflects culture, students will examine, develop and refine intrapersonal, interpersonal, small group, public speaking, and media literacy communication skills.

REGIONAL AUTHORS

(.5 credit)

Grades 10-12

In this class, students will be reading novels written by Minnesota authors and, time permitting, other midwest authors. These works will be read and critiqued as to subject matter, theme, style and local color.

SHORT STORIES

(.5 credit)

Grades 10-12

Students will read and discuss a variety of texts including science fiction, fantasy, horror, adolescent, humorous and war short stories. Some of the topics explored are heroism, other realms, technology and its impact on humanity, alternate realities, irony, hubris, and the human conscience. Besides "dramatic" class readings, there are many group and creative activities conducted throughout the course.

GRAPHIC NOVELS

(0.5 or 1 credit)

Grades 10-12

This course combines literary and historical approaches to investigate one of the most rapidly growing and increasingly influential forms of literature: the graphic novel. Popular yet understudied for over a century, comics are now critically recognized as a major form of communication and contemporary creative arts. The course represents an interdisciplinary approach to knowledge mirrored by the graphic novel's joint ancestry in fine arts and literature. It will include a historical overview of the form's development across the twentieth century, complete with analysis of relevant broader institutional and cultural factors illuminating the growth of American media culture more generally. Providing students with the critical skills necessary to read and understand this deceptively complex medium—and visual storytelling in general—the course exposes students to a series of works that define and redefine the genre while illustrating a variety of artistic & storytelling approaches to central themes of the American experience: politics, class, censorship, violence, cultural and ethnic diversity. Readings will include classic and contemporary works. In addition, we will read selections from graphic narrative theory and comics history, beginning with Scott McCloud's *Understanding Comics*.

FINE ARTS ELECTIVES

CHORAL MUSIC

(1 credit)

Grades 9-12

The Loyola Concert Choir is open to any student who would like the experience of singing in a mixed-voice choir. During the course of the year we will perform music that is emotionally charged and historically accurate. The student will have the opportunity to study vocal performance in private or group lessons. Students are required to perform with the choir in all Loyola performances including the Christmas, Winter and Spring Concerts. Students will also have the opportunity to compete at the MSHSL music competitions. The choir will be travelling to New York City in the Spring of 2019!

BAND

(1 credit)

Grades 9-12

Participation in this course includes private and/or group lessons and performing a variety of music ranging from traditional to popular styles. The student will hone both their individual and ensemble playing skills, while reviewing and strengthening the basics of general music theory and appreciation. Private and group lessons are offered for students and are arranged in cooperation with other subject areas and the student schedule at 20-minute intervals. All Band members are required to participate in all pep band events that do not conflict with the students other co-curricular activities. The student is encouraged to prepare solo and ensemble music throughout the school year and will have the opportunity to participate in All State Band and Honor Band Clinics.

ART HISTORY

(.5 credit)

Grades 9-12

Students will learn about the history of art from the Renaissance through the 20th Century. Each time period will be discussed in depth with a look at the artists and their work that impacted our visual world. Each class period is a virtual trip into the greatest museums of the world and a look at the fascinating lives of the greatest artists that ever lived.

CERAMICS I

(.5 credit)

Grades 9-12

The use of clay for self-expression is one of the oldest methods known. In this introductory course students will use the basic methods for creating ceramic art including pinch, coil, and slab types of construction. Students will create both functional and non-functional pottery. Students will also learn glazing techniques.

CERAMICS II

(.5 credit)

Grades 9-12, Prerequisite: Ceramics I

Ceramics II consists of more advanced methods of creating ceramic art. Students will challenge their skill level to create functional wares through pinch, coil, and slab methods to build and create larger pieces incorporating multiple construction techniques.

DRAWING I

(.5 credit)

Grades 9-12

This course will introduce a student to the elements and principles of design, which are necessary for other art courses and also needed for aesthetic evaluation as a conscientious consumer. The class provides a variety of drawing exercises using different media, providing a student with a well-rounded approach to the art of drawing. The class will have a weekly routine based on assignments, in-class studio work, critique and evaluation of student work, and observation of environmental influences.

DRAWING II

(.5 credit) Offered Alternating Years: 2019-20

Grades 9-12, Prerequisite: Drawing I

This class is for a student who has taken Drawing I and wants to expand their talents and interest in the drawing experience. This course will place an emphasis on drawing from life, still life, and location drawing.

PAINTING I

(.5 credit) Offered Alternating Years: 2018-19

Grades 9-12

This is a studio class in which a student learns the history of painting and techniques used in painting. The medium chosen is acrylic paints. The student will paint on paper, wood, and canvas.

PHOTOGRAPHY I

(.5 credit)

Grades 11-12

Discover the difference between an ordinary snapshot and an image created for artistic purposes using digital photography as the medium. This course will focus on introducing students to skills that will allow them to compose a photograph properly as well as how to function within a digital darkroom using Photoshop creatively to edit and manipulate images that tell a story. Students will also learn how to use a digital camera including manual and automatic settings. Students must provide their own digital camera and memory cards. NOTE: A cell phone camera is not adequate or appropriate for this course.

PHOTOGRAPHY II

(.5 credit)

Grades 11-12, Prerequisite: Photography I

This course is an extension of Photography I and is designed for the student who is interested in continuing to create quality photographs. The course will increase the student's knowledge in the

digital darkroom through the study of advanced photographic techniques, a variety of photographic media, and the history of photography, including the basic techniques necessary to produce black and white photographs through the traditional darkroom process. Emphasis will be placed on developing skills and standards necessary to create quality photographic art that could be presented in a portfolio for college entrance or an art gallery setting. Students must provide their own digital camera and memory cards. NOTE: A cell phone camera is not adequate or appropriate for this course.

POTTERY I

(.5 credit)

Grades 10-12, Prerequisite: Ceramics II

Through this course students will learn the art of using a potter's wheel. The student will learn throwing techniques including kneading, centering, pulling, footing, and trimming. Projects will include making cylinders, matching set of four thrown objects, and bowls. The students will also glaze projects.

POTTERY II

(.5 credit)

Grades 10-12, Prerequisite: Pottery I

This class is an extension of Pottery I. The student will use the wheel to work on advanced projects. Projects will be larger and more detailed than the projects completed in Pottery I. Projects will include large bowls, plates (with underglaze and overglaze designs), and vases with lids.

INDEPENDENT ART

(.5 credit)

Grades 12, Requires instructor approval

In this independent course the student will work with the instructor to design an in depth focus of study using skills learned in prior art classes, to develop a semester-long project or goal. See art teacher for course details and arrangements.

MATHEMATICS REQUIRED COURSES

Grade 8	Algebra I	Algebra I
	↓	↓
Grade 9	Intermediate Algebra	Geometry
	↓	↓
Grade 10	Geometry	Advanced Algebra
	↓	↓
Grade 11	Advanced Algebra	Pre-Calculus
	↓	↓
Grade 12	Pre-Calculus	AP Calculus

ALGEBRA I

8th Grade

Prerequisite: 7th grade math

Mastery of complex equations, polynomials, and quadratic functions. Students in this course will learn to evaluate, simplify, solve, and graph linear equations and equations with absolute values, exponents, and radicals. Students will also learn to use basic statistics, probability, and matrices.

INTERMEDIATE ALGEBRA

(1 credit)

Prerequisite: Algebra I

This course is the first of a three-year program to ready the student for postsecondary success. Topics include linear, quadratic, radical, and rational equations. For these types of equations students will learn to simplify, solve, and graph. Students will also learn about probability and statistics using survey and samples. Students will learn how to perform operations with matrices. Then students will learn an introduction to logic and proofs with algebraic proofs.

GEOMETRY

(1 credit)

Prerequisite: Algebra I or Math Department Approval

This course is the second of a three-year program to ready the student for postsecondary success. Students will learn to identify, name, and calculate properties of polygons and circles, with an emphasis on triangles and quadrilaterals. Students will learn how to use logic, mathematical properties, and geometric theorems to write proofs. Students will learn how to use a compass and

protractor to construct mathematically accurate drawings. Students will learn how to identify, set up, and calculate trigonometric ratios of sine, cosine, and tangent. Students will be able to use all this information to solve for missing information in real world problems.

ADVANCED ALGEBRA

(1 credit)

Prerequisite: Geometry

This course is the third of a three-year program to ready the student for postsecondary success. Students will spend much of the year analyzing different kinds of graphs and functions including linear, absolute value, quadratic, polynomial, exponential, logarithmic, rational, and radical. Students will also keep building their algebraic skills by simplifying many different types of expressions and solving many varied equations and inequalities. Practical applications will be explored throughout the course.

PRE-CALCULUS

(1 credit)

Prerequisite: Advanced Algebra and Mathematics Department Approval

This course is designed to introduce students to the standard concepts and language needed for a first course in calculus. Students will develop a detailed understanding of various types of functions including polynomial, exponential, and logarithmic with connections to calculus. Students will explore the connections between right triangle trigonometry and trigonometric functions and will master the six basic trigonometric functions, identities, half-angle and double angle formulas, sum and difference formulas, sum-to-product and product-to-sum formulas, and the laws of sines and cosines. As time permits, studies will also include complex numbers and sequences, series, probability, and statistics, and polar coordinates. The course serves as a bridge to calculus and college-level mathematics.

AP CALCULUS

(1 credit)

Prerequisite: Pre-Calculus and Mathematics Department Approval

This is a rigorous, college-level course. Topics include limits and continuity, derivatives, definite and indefinite integrals, an introduction to differential equations, and numerous applications. Ultimately, students will be prepared and expected to take the AP Calculus Exam (AB) at the end of the year.

MATHEMATICS ELECTIVES

AP STATISTICS - (Part of the DOW Collaborative through Loyola Catholic School)

(1 credit)

Prerequisite: Algebra II, GPA >3.33 or Mathematics Department Approval

This college level course introduces the student to four broad conceptual themes: Exploring Data (describing patterns and departures from patterns), Sampling and Experimentation (planning and conducting a study), Anticipating Patterns (exploring random phenomena using probability and simulation), Statistical Inference (estimating population parameters and testing hypotheses). Ultimately, students will be prepared and expected to take the AP Statistics Exam at the end of the year.

PHYSICAL EDUCATION AND HEALTH REQUIRED COURSES

PHYSICAL EDUCATION AND HEALTH

(1 credit)

Grades 9

This course includes introductions and instruction in various “lifetime” activities. Team game strategies, rules, and equipment use will be reinforced. The student will be required to dress in school-approved clothing for PE class. Health units will include wellness & decision making, physical health and fitness, mental & emotional health, stress management, drugs, alcohol, tobacco, and growth and development.

PHYSICAL EDUCATION AND HEALTH ELECTIVES

STRENGTH AND CONDITIONING

(.5 credit)

Grades 10-12

This course is designed for competitive athletes to increase fitness levels and athleticism through a variety of strength and conditioning activities. Free weights, exercise machines and conditioning activities will be incorporated to promote improvement in muscular strength, muscular endurance, power, agility, and speed. Proper technique, safety precautions and the application of the Principles of Training will be emphasized. Students should expect to be challenged on a daily basis to reach their personal strength and fitness goals.

SCIENCE REQUIRED COURSES

INTRODUCTION TO PHYSICAL SCIENCE

(1 credit)

Grade 9

This one year introductory course is designed to give the student a practical foundation in chemistry and physics. During the chemistry semester, the composition and properties of matter are investigated by modeling particle structure and lab experiments. The student is also introduced to types of chemical bonds and the transfer of energy during chemical reactions. During the physics semester, students will practice using the scientific method and modeling to gain a fundamental understanding of motion, forces, and energy.

BIOLOGY

(1 credit)

Grade 10, Prerequisite: Introduction to Physical Science or teacher approval

This course is designed to help students develop an understanding of cell structure and function, DNA structure and protein synthesis, the genetic basis of heredity, the process of evolution through natural selection, the transfer of matter and energy in living systems, and the interdependence and behavior of organisms. Historical contexts in biology, the scientific method and procedures, and current event are

also included. Biology is an activity-based class where students are expected to participate in labs, classroom discussions, classroom projects, readings, and use problem solving techniques and critical thinking skills.

A student must complete at least one of the following science courses to graduate in the State of Minnesota.

CHEMISTRY

(1 credit)

Grades 11-12, Prerequisite: Introduction to Physical Science and Intermediate Algebra

This is a laboratory component class designed to provide students with a basic knowledge of Chemistry. Students develop their critical thinking and qualitative problem-solving skills in a collaborative environment including modeling, graphing, and experimental investigations. Concepts covered include measurements in chemistry, atomic structure, states of matter, the periodic table as a model of element structure, chemical bonding and equations, compounds and reactions and acid-base reactions. . Problem solving integral to the performance of chemistry is strongly covered.

And/Or

PHYSICS

(1 credit)

Grades 12, Prerequisite: Introduction to Physical Science & Advanced Algebra

This course is a study of the physical world around us, and the fundamental laws that govern the behavior of all matter and energy. The course is necessary for those who will be majoring in a technical discipline: mathematics, science or engineering. Physics is a heavily math-dependent subject. Major topics covered include: motion in one and two dimensions, velocity, acceleration, forces, friction, gravitation, work, power, energy, heat, vibrations and waves, light, sound and electricity. Lab activities will be provided to reinforce concepts discussed. Throughout the course, students will develop measuring and analytical modeling skills. A different engineering project related to the curriculum will be carried out each quarter.

SCIENCE ELECTIVES

AP BIOLOGY

(1 credit)

Grades 11-12, Prerequisite: Biology and GPA > 3.33 or Instructor Approval

This course is a challenging, introductory college level course. It is designed for the college bound student who is considering a major in science or medicine and who has a profound interest in the Biological Sciences. AP Biology is a laboratory component class, which covers all aspects of biology in great detail with a strong emphasis on problem solving, laboratory investigation and writing. Concepts to be explored include: Chemistry of Life; Cells; Heredity; Molecular Genetics; Diversity of Organisms; Structure and Function of Plants and Animals; and Ecology. This course offers an opportunity to take the National AP Biology Exam in which the student may earn college credit. Grades 11 or 12, prerequisite: Biology

AP CHEMISTRY

(1 credit) Offered Alternating Years: 2018-2019

Grades 12, Prerequisite: Chemistry and GPA >3.33 or Instructor Approval

This AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. For most students, the course enables them to undertake, as a freshman, second year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. This course is structured around the six big ideas articulated in the AP Chemistry curriculum framework provided by the College Board. [CR2] A special emphasis will be placed on the seven science practices, which capture important aspects of the work that scientists engage in, with learning objectives that combine content with inquiry and reasoning skills. AP Chemistry is open to all students that have completed a year of chemistry who wish to take part in a rigorous and academically challenging course. Big Idea 1: Structure of matter Big Idea 2: Properties of matter-characteristics, states, and forces of attraction Big Idea 3: Chemical reactions Big Idea 4: Rates of chemical reactions Big Idea 5: Thermodynamics Big Idea 6: Equilibrium

ANATOMY

(1 credit)

Grades 11-12, Prerequisite: Biology

This year long course is designed to explore the principles of human anatomy and physiology including anatomical terminology, basic biochemistry, cells while approaching a system-by-system study of the function of the normal human body. Each system will include various pathologies being investigated. Laboratory experiments and dissections, media and technology will reinforce the concepts discussed. This course is highly recommended for students who wish to pursue a possible career in any health-science related field. Prerequisite: Biology

INTRODUCTION TO ENGINEERING

(.5 credit)

Grades 10-12

In this course the student will apply engineering, science, math, and technology to solve complex, open-ended problems in a real-world context. The student will focus on the process of defining and problem solving. Students will participate in the VEX Robotics program, and will design and program a robot for competition.

ENVIRONMENTAL SCIENCE

(.5 credit)

Grades 10-12

This course surveys key topics including the application of the scientific process, ecology, populations, energy flow, ecosystems and earth systems. It is designed to show thematic connections between a variety of science disciplines including biology, chemistry and physics. The student will learn about the management of natural resources and analysis of private and governmental decisions involving the environment. The student will explore case studies and conduct hands-on research activities learning that both political and private decisions about the environment and the use of resources

require application of the scientific process, including accurate data collection and responsible conclusions.

INDEPENDENT SCIENCE RESEARCH

(.5 or 1 credit)

Grades 11-12, Prerequisite Biology and Chemistry and approval from Science Department

In this independent course, the student along with the instructor will develop a research project, design a focus of study, and use skills learned in prior Science courses to develop a semester or year-long project. See Science teacher for course details and arrangements.

SCIENCE LAB ASSISTANT

(.5 or 1 credit)

Grade 12, Prerequisite: approval from Science Department

In this independent course, the student will use study halls or before/after school time to work collaboratively with one or more of the science teachers. See a science teacher for course details and arrangements.

SOCIAL STUDIES REQUIRED COURSES

HUMAN GEOGRAPHY

(.5 credit)

Grade 9

Human Geography is a semester-long class that studies processes and patterns that exist in our world due to human development and activity. Human Geography studies how humans affect and have been affected by the environment, population, cultural patterns and processes, political organization of space, land use, and economic development.

CIVICS

(.5 credit)

Grade 9

In this class the student will learn about the basic principles of government intended to protect each individual's rights and will gain an appreciation of what it means to be a citizen of the United States.

WORLD HISTORY

(1 credit)

Grade 10, Prerequisite: Geography and Civics

This course is the study of the political, social and economic movements and events that have shaped western civilization from the Renaissance to the present day. The student will discover influences of the other cultures on western civilization. Map study and the influence of geography on those movements and events is included.

AMERICAN HISTORY

(1 credit)

Grade 11, Prerequisite: World History

This course investigates the political, diplomatic, economic, and social movements that have shaped the United States since 1900.

ECONOMICS

(0.5 credit)

Grade 11-12

This course gives the student the opportunity to study economic theory and analyze present day economic problems. Topics include personal finance, production, economic growth, automation, trade, poverty, urbanization, and practical concerns.

SOCIAL STUDIES ELECTIVES

AP UNITED STATES HISTORY

(1 credit)

Grades 11-12, Prerequisite: GPA >3.33 or Instructor Approval (May be taken in lieu of Am. History)

AP U.S. History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society.

AP HUMAN GEOGRAPHY - (Part of the DOW Collaborative through Rochester Lourdes)

(1 credit)

Grades 10-12, Prerequisite: GPA >3.33 or Instructor Approval

The AP Human Geography course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in the research and applications.

INTRO TO BUSINESS ENTREPRENEURSHIP

(0.5 credit)

Grades 11-12

Intro to Business Entrepreneurship is a semester-long class that allows students to create, run, and liquidate a business. We will be working with Junior Achievement and students will be introduced to key elements involved in organizing and operating a business. This class will address key economic concepts as well as provide students with a real-world experience. You will be learning appropriate business etiquette and communication skills as you contact potential vendors, investors, and stakeholders.

PSYCHOLOGY

(1 credit)

Grades 11-12; Grade 10 with Instructor Approval

This course is an introduction to the research questions, concepts, theories, methods, and findings of psychological science. Topics include brain function, psychological testing, sensation and perception, cognition (learning, memory, language), states of consciousness, motivation, human development, personality, origin and treatment of disorders, social behavior, stress and health, and applied psychology (workplace, community, and environment).

THEOLOGY REQUIRED COURSES

NOTE: In addition to Theology I-IV, the student is required to live out the spiritual and corporal works of mercy by giving service in our school and local community. Service is essential in building relationships, community involvement, and developing professionalism. The student will be provided a list of options or may seek out opportunities on their own.

The student is required to participate in a class retreat during Junior and Senior year.

THEOLOGY I

(1 credit)

Grade 9/10, Offered Alternating Years: 2018-2019

Theology Ia: Encountering Jesus Christ in Scripture

Theology Ib: Who is Jesus Christ

When Jesus was walking along with his disciples, he asked them an interesting and perplexing question, "Who do people say that I am?" Peter responded with what others were saying about him. Jesus went deeper and asked, "Who do you say that I am?" Peter confessed that Jesus was the Messiah. This course strives to show students who the real Jesus is, not what others have said he is. Students will be invited to look at the historical and textual evidence of Jesus Christ's life to identify why he is called the Son of God and the Word of God.

THEOLOGY II

(1 credit)

Grade 9/10, Offered Alternating Years: 2019-2020

Theology IIa: The Mission of Jesus Christ

Jesus Christ came so that all people on earth could have eternal life (cf. John 3:16). To do this, Jesus entered into human history and offered himself for the sake of our salvation. Students in this class will focus on how Jesus' life, death, and resurrection are paths that all are called to follow.

Theology IIb: Jesus Christ's Mission Continues in the Church

Jesus Christ's public ministry brought many people together. For example, the apostles weren't just a group of fisherman, but also included a tax collector -- a group despised by the Jews. Through this course, students will discover how the Church that Christ established still calls humanity to conversion. He established this living body to welcome sinners and heal them of their sins. It is in this living body that Christ has changed the course of history and continues to redirect humanity to God.

THEOLOGY III

(1 credit)

Grade 11/12, Offered Alternating Years: 2018-2019

Theology IIIa: Sacraments as Privileged Encounters with Jesus Christ

Jesus Christ established the sacramental life of the Church so that believers could be sustained in their journey and led to God the Father in heaven. Students in this class will discover how the 7 sacraments of the Catholic Church mirror 7 of the essential needs of the human person. Through this lens of discovery, students will come to recognize the genius of the Catholic sacraments and why they are so necessary as we seek heaven.

Theology IIIb: Life in Christ (Morality)

Morality and ethics continue to be a great topic of discussion. From the beginning to the present day, humankind has sought a way to live correctly. Students will be taught that human flourishing comes about through right-living, friendship, virtue, and self-sacrifice. Upon learning the basic of forming human desire to the good, students will come to learn how the Catholic Church seeks to heighten what is good, true, and beautiful in its members.

Participation in the junior class retreat is required.

THEOLOGY IV

(1 credit)

Grade 11/12, Offered Alternating Years: 2019-2020

Sacred Scripture

The Bible is held as the sacred word of God. It is the revelation that God has given to us so that we may better understand Him as the Father who has created us. Scripture tells us of the many ways that God has sought our flourishing. This class will teach students how to navigate their way through the scriptures and how the Bible has come to be.

History of the Catholic Church

The Catholic Church makes the bold claim that it is the Church that Christ has established and continues to sustain through the Holy Spirit. Students will discover how this claim can be traced back to the apostles and how it holds true today. Students will also recognize that the Catholic Church's influence can still be seen today, even in a time of separation of Church and state.

Living as a Disciple of Jesus Christ

The purpose of this course is to introduce students to the Church's social teaching. In this course, students are to learn how Christ's concern for others, especially the poor and needy, is present today in the Church's social teaching and mission.

Responding to the Call of Jesus Christ

The purpose of this course is to help students to understand the vocations of life: how Christ calls us to live. In this course, students should learn how all vocations are similar and how they differ. The course should be structured around married life, single life, priestly life, and consecrated life. Students should learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community.

Ecumenical and Interreligious Issues

The purpose of this course is to help the students understand the manner in which the Catholic Church relates to non-Catholic Christians as well as to other religions of the world. Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the course is intended to help students to recognize the ways in which important spiritual truths can also be found in non-Catholic Christian churches and ecclesial communities as well as in non-Christian religions. It is also intended to help them to recognize the ways in which other systems of belief and practice differ from the Catholic faith.

Participation in the senior class retreat is required.

THEOLOGY ELECTIVES

PACC THEOLOGY COURSE TBD - (Part of the DOW Collaborative through Austin Pacelli)

(1 credit)

Grades 11-12

Course description to follow. Student may be eligible to earn college credit through St. Mary's University.

WORLD LANGUAGES AND CULTURES

SPANISH I

(1 credit)

Grades 9-12

In the first year of high school Spanish, the student is reintroduced to the fundamental grammar structure built around a basic working vocabulary. The emphasis of this course is building oral proficiency skills and the development of reading and writing skills. Enrichment activities include songs, videos, prayers, games, Spanish foods, and guest speakers.

SPANISH II

(1 credit)

Grades 10-12, Prerequisite: Spanish I or Instructor Approval

Spanish II continues to develop oral proficiency skills of listening and speaking and provides a continuation of reading and writing skills of Spanish I. The class studies the culture, customs and civilizations of the Spanish speaking world. Enrichment activities include videos, prayers, games, food, guest speakers and field trips. Spanish II is a preparation for travel and continued study.

SPANISH III

(1 credit)

Grades 11-12, Prerequisite: 'B' average in Spanish II or Instructor Approval

The course will advance proficiency skills in speaking, listening, reading and writing developed during the first two years of Spanish study. The student will be exposed to music, geography, history, art, and advanced reading selections in order to meet national standards for foreign language learning. This course will explore the history of the Catholic church in Spain.

SPANISH IV

(1 credit)

Grade 12, Prerequisite: 'B' average in Spanish III or Instructor Approval

In this course the student will work towards mastery of speaking, listening, reading and writing through an intensive study of grammar and a variety of Spanish literature. The student will study the history of Latin America and Spain. It will delve into the history of the Catholic church in Spain and its spread across the Spanish-speaking world.

ADDITIONAL COURSES

AP COMPUTER SCIENCE A - (Part of the DOW Collaborative through Rochester Lourdes)

(1 credit)

Grade 11-12, Prerequisite: GPA >3.33 or Instructor Approval

The AP Computer Science A course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical

and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems.

CAREER/COLLEGE PREPARATION

(.25 credit)

Grade 10, REQUIRED

In this independent course the student will complete a series of career inventories which will assess interests, abilities, and values. The course will prepare the student for the ACT exam and provide an opportunity to visit local college campuses and research careers. The student will become familiar with materials to make informed career and college decisions.

TEACHING ASSISTANT

(1 credit)

Grade 12

In this independent course, the student will work collaboratively with an elementary teacher in their classroom. See the counselor for course details, course registration and room assignments. The student will be admitted to this program with the approval of counselor and/or principal. There is a very limited number of openings for TA positions and not all students who request a TA will receive a placement.

POST SECONDARY ENROLLMENT OPTION (PSEO)

Grade 11-12

PSEO allows high school juniors and seniors to take courses at various colleges and universities which are not available at LCS, earning both high school and college credit. Students must meet the enrolling colleges' requirements and application process to participate. Any student who wishes to take a PSEO course must share their intent to do so by **April 1st. All PSEO applications and paperwork must be completed and turned into the counselor by May 14th, 2018.** For further information please refer to this link. [LCS PSEO Information](#)

ONLINE COURSE

(.5 or 1 credit)

Grade 11 and 12 (Students in grade 10 may apply, parent meeting is required to provide overview of expectations)
Students may take an online course, providing it is not offered at Loyola Catholic School or cannot fit in their schedule. A list of online courses may be reviewed by appointment with the school counselor. Enrollment in online coursework will require meetings with the counselor every 3 weeks. **Such courses must be approved by a counselor prior to enrolling. Additional costs may be associated with online courses above and beyond Loyola tuition and are the responsibility of the family.**