

# Catholic Central

HIGH SCHOOL

## STUDENT COURSE GUIDE



Dear Catholic Central High School students and families:

Catholic Central High School (originally named St. Mary's) was founded in 1920 by Fr. Van Treeck of St. Mary Immaculate Conception Parish in Burlington, and by Sister Mary Michael of the School Sisters of Notre Dame. With nothing more than unshakeable faith and missionary enthusiasm, the little school grew from a two-year business program into a prestigious, college preparatory high school serving seventeen area parishes and additional communities by forming students in the Catholic Faith, arming them with rigorous, academic Knowledge and steeping them in the excellence of our now 100 year Tradition.

The Catholic Central Course Catalog offers a summative look at the curricular offerings of our school. CCHS students have the ability to participate in advanced coursework in all of the core subject areas in the form of weighted, honors courses or Advanced Placement (AP) courses. Thanks to a partnership with Cardinal Stritch University, we now offer Concurrent Enrollment classes, where students can earn high school and college credit for courses at the same time. Currently, we offer five such classes, and approximately 16% of our student body is taking advantage of this program. In the 2020-21 school year, we entered into an articulation agreement with Gateway Technical College. We now offer Marketing, which is a transcribed course through Catholic Central that receives dual credit for Gateway. We hope to expand these kinds of offerings for the future, to expand our curriculum for students who have an interest in the trades.

Catholic Central's curriculum is specifically designed to utilize technology to enhance education. We are a one-to-one iPad school with Apple TV technology in every classroom. Our courses help students learn about technology with technology, positioning CCHS as a model for schools who are preparing students for the future.

At CCHS, we not only teach our students how to learn, we teach them how to live. In a study conducted by the United States College of Catholic Bishops (USCCB), it was found that Catholic school graduates are more civically engaged, more tolerant of diverse views, more likely to vote, more committed to service as adults and are more likely pray daily, attend church more often, retain a Catholic identify as an adult, and donate more to the Church. We are committed to nurturing all of the gifts and talents of each of our students that have been endowed by the Creator. We offer a wide variety of experiences in the arts, athletics, clubs, field trips, retreats and service opportunities that contribute to forming courageous and confident individuals who are prepared to serve the whole of society.

Your future awaits you in the pages of this Course Catalog. I invite you to explore a wide variety of academic pursuits. I encourage you to find your passion by daring to try different experiences, and I challenge you to take charge of your future, and by so doing, achieve great things.

Sincerely,

Brian Shimon

Principal

Catholic Central High School

# Table of Contents

## TABLE OF CONTENTS

CATHOLIC CENTRAL MISSION STATEMENT .....	5
CHARISM .....	5
Grading & Grade Point Average .....	5
CATHOLIC CENTRAL GRADUATION REQUIREMENTS.....	5
Sample Catholic Central High School Four Year Plan .....	7
CCHS 4-YEAR COURSE PLANNING WORKSHEET .....	9
BEYOND HIGH SCHOOL .....	10
TECHNICAL COLLEGES .....	10
PRIVATE CAREER AND TECHNICAL EDUCATION PROGRAMS.....	11
ADULT APPRENTICESHIPS .....	11
MILITARY .....	11
College Admission Requirements .....	11
College Courses .....	12
ADVANCED PLACEMENT .....	12
AP Program.....	12
COST OF AP EXAMS .....	12
AP Courses Catholic Central Offers.....	12
Concurrent Enrollment Program .....	12
COLLEGIATE ATHLETICS NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA).....	13
WISCONSIN VIRTUAL SCHOOL .....	13
ADD/DROP COURSE .....	13
Scope and Sequence.....	14
CAREER CLUSTER MODEL.....	16
Art & Design .....	17
Business & Information Technology.....	18

English .....	19
Fitness & Wellness .....	21
Math .....	22
Performing Arts .....	23
Science .....	25
Social Studies .....	27
Special Courses .....	29
Theology .....	30
World Languages.....	31

## CATHOLIC CENTRAL MISSION STATEMENT

Catholic Central High School is dedicated to providing a Catholic education through the teachings of Jesus Christ, while offering respect to all faiths. With a student-centered approach to learning, we develop students' abilities and creative talents. We are a passionately committed college preparatory institution, implementing a rigorous holistic, academic curriculum, while instilling life-long Catholic values. Catholic Central is a diverse, family-like community built upon Faith, Knowledge, and Tradition.

### **CHARISM**

Dedicated to the charisms of our founding patronesses, the School Sisters of Notre Dame, we strive to uphold their mission to aspire to embody 1) Blessed Mary Theresa Gerhardinger's longing for oneness of all in God through the Eucharist, 2) St. Augustine's desire to form a community of one heart and soul grounded in the Trinity, and 3) Mother Caroline Freiss's courageous leadership in offering an innovative response to the needs of a new world.

### **Grading & Grade Point Average**

Grades are computed on a 4.1 scale unless the class is specified as Honors, Advanced Placement, or Concurrent Enrollment. These courses will be computed on a 5.0 weighted grading scale. All courses in the curriculum guide will be weighted for determining a student's grade point average, according to the following system.

METHOD OF COMPUTING GRADE POINT AVERAGE					
STANDARD			AP/HONORS/CONCURRENT		
A+	100-98	4.1	A+	100-98	5.0
A	97-94	4.0	A	97-94	5.0
A-	93-90	3.67	A-	93-90	4.67
B+	89-87	3.33	B+	89-87	4.33
B	86-83	3.0	B	86-83	4.0
B-	82-80	2.67	B-	82-80	3.67
C+	79-77	2.33	C+	79-77	3.33
C	76-73	2.0	C	76-73	3.0
C-	72-70	1.67	C-	72-70	2.67
D+	69-67	1.33	D+	69-67	2.33
D	66-63	1.0	D	66-63	2.0
D-	62-60	0.67	D-	62-60	1.67
F	59 and below	0	F	59 and below	0

## CATHOLIC CENTRAL GRADUATION REQUIREMENTS

**GRADUATION CRITERIA:** To remain eligible for graduation and earn a Catholic Central High School Diploma, a student should maintain a 2.00 GPA and have no major disciplinary incidents. A student must have a minimum of **26 credits to graduate**.

Graduation will be based on the pupil's academic performance, teacher recommendations, passing of the civics test and the successful completion of the following mandatory credit requirements: 4.0 Cr. English, 4.0 Cr. Theology (pro-rated for transfers), 3.0 Cr. Math, 3.0 Cr. Science, 3.0 Cr. Social Studies, 1.0 Cr. Fitness & Wellness, .5 Cr. Health, .5 Cr. Personal Finance, 1.0 Cr. Fine Arts.

Subject	Credits	Courses
<b>Business and Technology</b>	0.5	Personal Finance
<b>English</b>	4.0	English 1 English 2 American Literature & Composition or AP Language & Composition World Literature & Composition or AP Literature & Composition
<b>Fine Arts</b>	1.0	Art, Music, Theatre
<b>Fitness &amp; Wellness</b>	1.0	Physical Education (over 4 years)
<b>Health</b>	.5	Health
<b>Math</b>	3.0	Algebra I, Geometry, Algebra II/Trigonometry or Honors Algebra II/Trigonometry
<b>Science</b>	3.0	Conceptual Physics Biology One Science Elective
<b>Social Studies</b>	3.0	World History US Government (.5) or AP US Government & Politics or Political Sci. 102 Intro to American Government (1.0) US History .5 Elective (if took US Government)
<b>Theology</b>	4.0	Catholic Christianity I & II ( Old and New Testament Social Justice Church History (11 or 12 <sup>th</sup> ) 1 Elective
<b>Electives</b>	6.0	Elective courses are an opportunity for students to pursue personal interests. Credits will increase if theology courses are pro-rated

+ Highly recommended: Two years of a consecutive World Language

++ 25 hours of documented community service per year is required

## Sample Catholic Central High School Four Year Plan

Grade 9							
Semester 1				Semester 2			
1	English	English 1	.5	1	English	English 1	.5
2	Math	Alg. or Geom.	.5	2	Math	Alg. or Geom.	.5
3	Fitness & Wellness	Either semester		3	Fitness & Wellness	Either semester	
4	Science	Conceptual Physics	.5	4	Science	Conceptual Physics	.5
5	Social Studies	World History	.5	5	Social Studies	World History	.5
6	Theology	Cath. Christianity 1	.5	6	Theology	Cath. Christianity 2	.5
7	Elective			7	Elective		
8	Elective			8	Elective		
Grade 10							
1	English	English 2	.5	1	English	English 2	.5
2	Math	Geom. or Alg. 2	.5	2	Math	Geom. or Alg. 2	.5
3	Fitness & Wellness	Either semester	.5	3	Fitness & Wellness	Either semester	
4	Science	Biology	.5	4	Science	Biology	.5
5	Social Studies (either semester)	U.S Government	.5	5	Social Studies	Elective	.5
6	Theology	Old Testament	.5	6	Theology	New Testament	.5
7	Elective			7	Elective		
8	Fine Arts			8	Fine Arts		

Grade 11							
1	English	Am. Lit or AP Lang	.5	1	English	Am. Lit or AP Lang	.5
2	Math	Alg. 2 Trig/P Calc	.5	2	Math	Alg. 2 Trig/P Calc	.5
3	Fitness & Wellness	11 or 12 grade	.5	3	Fitness & Wellness	11 or 12 grade	
4	Science	Many courses	.5	4	Science	Many courses	.5
5	Social Studies	US History	.5	5	Social Studies	US History	.5
6	Theology	Social Justice	.5	6	Theology	One of three courses	.5
7	Business/Tech	Personal Finance	.5	7	Elective		
8	Elective			8	Elective		
Grade 12							
1	English	World Lit or AP Lit	.5	1	English	World Lit or AP Lit	.5
2	Theology	One of 3 Courses	.5	2	Theology	One of 3 courses	.5
3	Elective			3	Elective		
4	Elective			4	Elective		
5	Elective			5	Elective		
6	Elective			6	Elective		
7	Elective			7	Elective		
8	Elective			8	Elective		



## CCHS 4-YEAR COURSE PLANNING WORKSHEET

<i>26.0 Credits required for Graduation</i>					
FRESHMAN			SOPHOMORE		
Subject Area	Course Name	Credit	Subject Area	Course Name	Credit
English		1.0	English		1.0
Math		1.0	Math		1.0
Science		1.0	Science		1.0
Soc.Studies		1.0	Soc.Studies		1.0
Phy Ed		.5	Phy Ed		.5
Health		.5	Theology		1.0
Theology		1.0	Fine Arts		
Fine Arts			Elective		
Elective			Elective		
Elective			Elective		
<b>TOTAL</b>	Up to 8 credits can be taken each year.		<b>TOTAL</b>	Up to 8 credits can be taken each year.	

JUNIOR		
Subject Area	Course Name	Credit
English		1.0
Math		1.0
Science		1.0/.5
Soc. Studies		1.0
Theology		1.0
Personal Fin.		
Elective		
Elective		
Elective		
Elective		
<b>TOTAL</b>	Up to 8 credits can be taken each year.	

SENIOR		
Subject Area	Course Name	Credit
English		1.0
Theology		1.0
Elective		
Elective		
Elective		
Elective		
Elective		
Elective		
Elective		
<b>TOTAL</b>	Up to 8 credits can be taken each year.	

## BEYOND HIGH SCHOOL

Planning for life after high school allows students to take courses that help them decide what kind of a job they may be successful with. Selecting courses with a focus on what may come after graduation allows students to take advantage of opportunities in high school to be prepared for college or university studies. Information is provided so that intentional decisions can be made to meet admission requirements. Our concurrent enrollment, TC courses and AP courses are all programs that allow students the opportunity to earn college/university credit in high school at no or low cost.

## TECHNICAL COLLEGES

- Diploma or Associate Degree certificate and apprenticeship, in addition to certificate programs.
- Take as many courses as possible that are related to your career choice.
- Apply to a technical college as soon as possible after July 1, of the summer preceding grade 12. Some programs will have specific windows of application, check with your school counselor regarding your particular program. Some with a waitlist can apply during junior year.
- Follow the registration requirements given to you by the technical college upon receipt of your application.

## PRIVATE CAREER AND TECHNICAL EDUCATION PROGRAMS

- Be sure to check placement records and accreditation of private vocational programs (i.e., where are graduates hired, what is the salary range, how many graduates secure employment in the area of their training, etc.).
- Ask to have the names and addresses of graduates with whom you can discuss the benefits of attending a particular school versus the other educational and training options open to you after the completion of high school.

## ADULT APPRENTICESHIPS

- Meet with your counselor regarding specific adult apprenticeships.
- Talk with teachers in elective areas related to your adult apprenticeship interests to obtain their advice on how to prepare yourself for apprenticeship competition.

## MILITARY

- Meet with your counselor regarding the military.
- Meet with the military representatives when they come on campus visits.
- Take the ASVAB test.

## College Admission Requirements

Subjects	Minimum Requirements for University of Wisconsin System	Recommendations for Highly Selective Colleges
<b>English</b>	4 college bound credits	4-5 credits including AP level
<b>Math</b>	3 credits to include Alg.,Geom.,Alg. 2	4 credits including AP level
<b>Science</b>	3 credits	4+ credits to include Biology, Chemistry, Physics including AP level
<b>Social Studies</b>	3 credits	4 credits including AP level
<b>Physical Education/Health</b>	-	-
<b>Financial Literacy</b>	-	-
<b>Electives</b>	4 Academic Electives	Academic Electives recommended
<b>Fine Arts</b>	May count as Academic Electives	1 or more recommended
<b>World Language</b>	2+ credits depending on campus	4-5 credits of the same language
<b>Total</b>	<b>17+ Academic Credits</b>	<b>22+ Academic Credits</b>

+ Requirements may vary; please check college admission websites. Students are urged to take more than the minimum credits, including AP and other rigorous courses especially for the highly competitive universities.

## College Courses

### **ADVANCED PLACEMENT**

#### **WHAT IS ADVANCED PLACEMENT?**

The Advanced Placement program (AP) is a cooperative educational endeavor between high schools and colleges or universities. It allows students to enroll in college-level courses while in high school and gives them the opportunity to show mastery by taking an AP exam.

#### **AP Program**



With AP®, students can take college-level course work in high school. When students take AP courses, they demonstrate to college admission officers that they've sought out an educational experience that will prepare them for success in college and beyond. Resourceful and dedicated AP teachers work with their students to develop and apply the skills, abilities, and content knowledge they'll need later in college. Each of AP's 38 courses is modeled upon a comparable college course. College and university faculty play a vital role in ensuring that AP courses align with college-level standards. Each AP course concludes with a college-level exam developed and scored by college and university faculty members as well as experienced AP teachers. AP Exams are an essential part of the AP experience, enabling students to apply the new critical thinking skills they have learned in a comprehensive exam. Performing well on an AP Exam means more than just the successful completion of a course. Most two- and four-year colleges and universities worldwide recognize AP in the admission process and accept successful exam scores for credit, advanced placement, or both. Research consistently shows that students who score a 3 or higher typically earn higher GPAs in college and have higher graduation rates. Visit the College Board's website for more information: <https://ap.collegeboard.org/>

#### **COST OF AP EXAMS**

Students do have to register and pay for each exam taken in October of the year they wish to take the exam. Students who are enrolled or eligible to participate in the federal free and reduced lunch program qualify for a \$32 fee reduction on all exams taken in a given year.

#### **AP Courses Catholic Central Offers:**

AP Language and Composition, AP Calculus AB, AP Biology, AP Psychology, AP Literature and Composition, AP Calculus BC, and AP Chemistry. For further information, contact any teacher of the courses listed on this page, as well as the school counselor.

#### **Concurrent Enrollment Program**



Catholic Central High School and Cardinal Stritch University have partnered to create a Concurrent Enrollment Program (CEP). This program allows qualified high school students to learn Stritch's college curriculum and qualified high school instructors to teach Stritch's curriculum at the high school's campus during the high school's regular hours while concurrently earning high school and college credit. Qualified CCHS students who choose to enroll in CEP from Cardinal Stritch University and pay the substantially reduced tuition rate for the college credit are admitted to the University as "non-degree seeking students." Upon successful completion of the course, these students will receive high school credits as well as college credits and an official Cardinal Stritch University transcript. The official University transcript verifies to other colleges/universities that the student has earned college/university credits.

## **COLLEGIATE ATHLETICS NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA)**

If a student is planning to participate in intercollegiate athletics at a Division I or II college, it is the student's responsibility to be aware of and follow the guidelines for eligibility spelled out by the National Collegiate Athletic Association (NCAA). Refer to [www.ncaa.org](http://www.ncaa.org) for more information. Details of these guidelines can be found in the high school counseling office and the athletic office.

## **WISCONSIN VIRTUAL SCHOOL**

The District understands that learning takes place in a variety of situations, environments and locations. Through Wisconsin Virtual School we are able to offer an alternative way to meet the educational needs of the student population. Families are required to pay for the cost of the class that they choose to participate in. Classes done through WVS are not the norm and are given much consideration before the request is granted.

## **ADD/DROP COURSE**

Each student has the ultimate responsibility for his/her schedule. He/she will be assisted in this effort by the Counseling Department and the faculty. Graduation requirements, teacher recommendation, the talents, and the needs of the student will be considered before a final approval of the schedule change is given. A student may request a schedule change before the fifth day of classes; students must submit a parent approved **"Schedule Request Form"** before any requests will be granted. No student will be allowed to drop a class after the 5th day unless recommended by the teacher and counselor. Please note that class changes will only be made for graduation purposes. For year-long classes, the 5<sup>th</sup> day rule **only applies to the first semester**. Once enrolled in a year-long class, students cannot drop.

## Scope and Sequence

Department	Grade 9	Grade 10	Grade 11	Grade 12
Art & Design	Art Foundations	Architectural Design Ceramics Design Studio Drawing and Painting Digital Photography Stained Glass Printmaking Sculpture <i>Any previous course</i>	<i>Any previous course</i>	Advanced Art and Design 2D3D  <i>Any previous course</i>
Business & Information Technology	Web Design Computer Applications Graphic Design	Accounting Business management & Entrepreneurship Marketing Personal Finance <i>Any previous course</i>	<i>Any previous course</i>	<i>Any previous course</i>
English	English 1	Creative Writing English 2 Speech <i>Any previous course</i>	American Lit and Comp AP Lang and Comp  <i>Any previous course</i>	AP Lit and Comp World Lit and Comp  <i>Any previous course</i>
Fitness & Wellness	Health Physical Education Foundations	Health Physical Education Foundations Team Sports & Activities Strength & Conditioning Fitness for Life <i>Any previous course</i>	<i>Any previous course</i>	<i>Any previous course</i>
Math	Algebra Analytical Geometry	Algebra 2 /Trigonometry Honors Algebra Trigonometry <i>Any previous course</i>	Pre-Calculus Honors Pre-Calculus Probability & Statistics <i>Any previous course</i>	AP Calculus AB AP Calculus BC Calculus Preparation for College Math <i>Any previous course</i>
Performing Arts	Band Beginning Instrument Ensemble Choir Theater	Piano/Guitar Production Performance  <i>Any previous course</i>	<i>Any previous course</i>	<i>Any previous course</i>

Department	Grade 9	Grade 10	Grade 11	Grade 12
Science	Conceptual Physics	Biotechnology- Even years Biology STEM 1, STEM 2 Earth & Space Environmental Honors Anatomy & Physiology <i>Any previous course</i>	AP Biology – Odd years H. Physics II AP Chemistry – Even years BIO 302 Bioinformatics – Even years <i>Any previous course</i>	<i>Any previous course</i>
Social Studies	World History	AP US Gov. & Politics United States Government PolySci 102 Intro. To Amer. Government <i>Any previous course</i>	AP Psychology International Relations United States History  <i>Any previous course</i>	20 <sup>th</sup> Century  <i>Any previous course</i>
Special Courses		Yearbook	EDU 101 Intro. To EDU/Seminar EDU 205 EDU for Diversity: Historical Foundations Teacher Assistant Program (T.A.P) <i>Any previous course</i>	<i>Any previous course</i>
Theology	Catholic Christianity 1 Catholic Christianity 2	Old Testament New Testament  <i>Any previous course</i>	Social Justice (req. 11 <sup>th</sup> grade) Morality Discipleship REL 104 World Religions Church History <i>Any previous course</i>	<i>Any previous course</i>
World Languages	French Language 1 Spanish Language 1	French Language 2 Spanish Language 2 <i>Any previous course</i>	French language 3 Spanish Language 3 <i>Any previous course</i>	French Language 4 Spanish Language 4 <i>Any previous course</i>

The 2023-2024 school year is an “ODD” year for courses offered every other year.

# CAREER CLUSTER MODEL

Learn more about the career clusters: <https://careertech.org/career-cluster>



## **Agriculture, Food & Natural Resources**

- Agribusiness Systems
- Animal Systems
- Environmental Service Systems
- Food Products & Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural & Technical Systems
- Architecture & Construction

## **Architecture & Construction**

- Construction
- Design/Pre-Construction
- Maintenance/Operations

## **Arts, A/V Technology & Communications**

- A/V Technology & Film
- Journalism & Broadcasting
- Performing Arts
- Printing Technology
- Telecommunications
- Visual Arts

## **Business Management & Administration**

- Administrative Support
- Business Information Management
- General Management
- Human Resources Management
- Operations Management

## **Education & Training**

- Administration & Administrative Support
- Professional Support Services
- Teaching/Training

## **Finance**

- Accounting
- Banking Services
- Business Finance
- Insurance
- Securities & Investments

## **Government & Public Administration**

- Foreign Service
- Governance
- National Security

- Planning
- Public Management & Administration
- Regulation
- Revenue & Taxation

## **Health Sciences**

- Biotechnology Research & Development
- Diagnostic Services
- Health Informatics
- Support Services
- Therapeutic Services

## **Hospitality & Tourism**

- Lodging
- Recreation, Amusements & Attractions
- Restaurants & Food/Beverage Services
- Travel & Tourism

## **Human Services**

- Consumer Services
- Counseling & Mental Health Services
- Early Childhood Development & Services
- Family & Community Services
- Personal Care Services

## **Information Technology**

- Information Support & Services
- Network Systems
- Programming & Software Development
- Web & Digital Communications

## **Law, Public Safety, Corrections & Security**

- Correction Services
- Emergency & Fire Management Services
- Law Enforcement Services
- Legal Services
- Security & Protective Services

## **Manufacturing**

- Health, Safety & Environmental Assurance
- Logistics & Inventory Control
- Maintenance, Installation & Repair
- Manufacturing Production Process Dev.
- Production
- Quality Assurance



## Art & Design

### **Fine Arts – 1.0 Credits Required**

#### **Foundations of Art (607) 1 semester, 0.5 credit: grades 9-12: prerequisite: None**

Foundations of Art is designed to provide a skill and vocabulary foundation for advanced courses and satisfies the basic requirements of the WISCONSIN STATE STANDARDS. Emphasis is placed on understanding the Elements and Principles of Art as a basis for composition. Students will explore a variety of artists, art processes and materials such as drawing, painting, textiles, ceramics, two & three-dimensional design, and digital art. Student artwork will reflect aesthetics & cultural and historical contexts. An interest in the creative process is the only requirement for this course.

#### **Architectural Design (609) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

Architectural Design is a course in which the student will express themselves visually and be able to showcase their creativity. Instruction will be given in the following areas: elements of design, architectural history, technical drafting, sketching, and computer design. Students will then work with building materials to create their own piece in the Design to Build Architectural Style.

#### **Ceramics (632) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

This course will introduce students to building with clay. Emphasis will be placed on the design elements; line, shape, texture, and color. Focus will be on the hand building techniques; pinch/coil/slab, Carving/Piercing, and ending with the Wheel. Functional as well as sculptural applications will be explored.

#### **Design Studio (645) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

This course is for students who wish to develop their skills and understanding of different design careers, including some of the following: Marketing and Advertisement Design/ Logo Design/ Product Design/ Packaging Design/ Auto Design/ Fashion Design/ Industrial Design/ Interior Design/ Urban Design/ Etc.

#### **Drawing and Painting (2D Art) (625) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

This is a second level art course focusing on 2 dimensional media. Students will continue to explore the elements and principles of art, current and past practicing artists, technique, and concept as it pertains to art making. A variety of 2 dimensional media will be explored including but not limited to, pencil, charcoal, pastels, acrylics, watercolors, etc.

#### **Digital Photography (626) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

In this course, students will learn how to use a Canon EOS Rebel XT digital camera in full manual settings, as well as the basics of Adobe Photoshop. Students have the opportunity to understand how a camera works and how Shutter Speed, Aperture, and ISO work together to take quality photos. Topics include: Manual Settings, Photography Techniques, Digital Manipulation and Concept Series. Students will also study significant photographers in history. All of the camera techniques learned in this course can be applied to the most advanced digital cameras. Cameras are available for student use.

#### **Stained Glass (631) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

This course will instruct students in the basics of glass cutting, creating a pattern, working with solder, and putting a piece together. We will cover simple 2D panels along with the "History of Stained Glass and the Church". The second half of the semester will be slice forms and 3D stained glass sculpture.

### **Printmaking (630) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

Working with the prompt: "What positive message do you want to tell your community?" We will examine the relationship between words and image to design and screen-print one- and two-color posters and shirts. Using a direct method of image making, we will cut stencil designs from mylar for screen printing. Each participant will come away with a collection of posters from each participant in the class, a collaboratively designed and printed shirt."

### **Sculpture (634) 1 semester, 0.5 credit: grades 10-12: prerequisite: Foundations of Art**

This course offers an opportunity for students who wish to create three-dimensional art. Students will explore the element of form using a variety of materials such as clay, plaster, wood, and metals. Students are encouraged to explore individual styles while producing a diverse body of three-dimensional work.

### **Advanced Art and Design 2D/3D (647) 1 semester, 0.5 credit: grade 12: prerequisite: Instructor Consent**

This course is designed to meet the needs of students who wish to learn advanced techniques in 2D/3D Art. Students will build upon skills learned in the introductory art courses. Students have input about mediums and projects they will work on during the course. A wide range of materials and processes will be further explored and topics may include: Cultural Commentary, Careers, Miniatures, Genre Focus, etc. Students are encouraged to develop their own personal vision and style. Students will also focus on the creation of a summative portfolio as they continue to develop skills in producing a variety of high quality works of art. Students will have the opportunity to submit pieces from their portfolio to several local and regional art competitions throughout the year.

## **Business & Information Technology**

### **0.5 Credits – Personal Finance required**

#### **Accounting (532) 1 semester, 0.5 credit: grades 10-12: prerequisite: None**

Principles of Accounting is a course which gives the student a foundation in accounting theory and practice. Students will gain knowledge relating to service and merchandising businesses using sole proprietor, partnerships and corporate accounting principles. There is a required workbook for this class.

#### **Business Management & Entrepreneurship (534) 1 semester, 0.5 credit: grades 10-12: prerequisite: None**

This course provides students the opportunity to learn basic concepts of management and the operations of business as a major sector of the economy. Topics include business procedures, ethics, business ownership, management philosophies, diversity, motivation, harassment, human resources, financial management and marketing management. In addition, students will have the opportunity to develop a professional business plan for a business for which they create.

#### **Computer Applications (504) 1 semester, 0.5 credit: grades 9-12: prerequisite: None**

Computer Applications provide a comprehensive introduction to Microsoft Word, PowerPoint, Publisher, Excel & Access. Google Applications such as E-mail, Docs & Calendars will also be covered. Students learn basic to advanced level skills in daily lessons that provide many business-based profiles, real-life problems, exercises, and projects. By the end of the course students will be very familiar with the computer and its basic functions.

### **Graphic Design (601) 1 semester, 0.5 credit: grades 9-12: prerequisite: None**

Students in this course experience the challenge of creating exciting publications related to a business environment using Adobe InDesign, Adobe Photoshop, and Adobe Illustrator software. This course is an excellent opportunity to put creative energies toward completing real-world design projects.



### **Marketing (537) 1 semester, 0.5 credit: grades 10-12: prerequisite: None**

This semester-long course introduces students to the world of marketing products and services. Emphasis is placed on advertising, promotion, pricing, selling, market research, and product development. This course is offered with transcripted credit opportunity at Gateway Technical College.

### **Personal Finance (531) 1 semester, 0.5 credit: grades 11-12 required. prerequisite: 10th grade teacher signature required**

Personal Finance is a course that provides students with the knowledge and skills they need now and in their future to explore their personal financial values while making life-long decisions. Students will recognize economic alternatives in purchasing goods and services, cope with the pressures to which they are exposed to as members of the buying public, prepare for and adjust to rapidly changing economic conditions, make educated choices in personal values and responsibilities, and participate effectively as consumers in the economic and government systems. This course is designed to teach students personal financial aspects so they can have the lifelong skills needed to live on their own.

### **Web Design (521) 1 semester, 0.5 credit: grades 9-12: prerequisite: None**

This course is designed to teach beginning web designers how to get started creating websites. The class begins with an introduction to the World Wide Web and web design basics. Students will develop beginning web pages in Hypertext Markup Language (HTML) and advance to more sophisticated web pages using Adobe's Dreamweaver, Photoshop, Fireworks & Flash. Students will be given the opportunity to design and maintain a web page using various tools and various software programs. Students in Beginning or Advanced Web Page Design will benefit and understand why businesses today are using sophisticated web pages to market businesses.

## **English**

### **English - 4.0 Credits Required**

#### **English 1 (110,112) 1 year, 1.0 credit: grade 9 required: prerequisite: None**

In a student-centered workshop approach, this course will cover a variety of genres of literature and non-fiction, which may include short stories, essays, novels, Shakespearean Drama, poetry, epic poetry, newspaper articles, essays, and other forms of non-fiction writing. Reading, writing, listening, speaking, and thinking skills are developed and expressed by analyzing these genres. A strong emphasis will be placed on how to read different texts closely using a variety of reading strategies, as well as writing strategies for different writing genres such as creative fiction, poetry, memoir, informational and argument writing. Much attention will be spent on cross-curricular writing skills such as supporting arguments and statements with evidence and explanation. Vocabulary, grammar, and proper usage will also be covered.

#### **English 2 (120,122) 1 year, 1.0 credit: grade 10 required: prerequisite: English 1**

This course will help students to learn to think clearly, quickly and critically, listen well, and express themselves effectively before various audiences with a variety of in-class speaking and role-playing activities. Students will read, view and analyze a variety of public speakers, as well as have opportunities to increase their fluency as a speaker, and develop their self-confidence with practical experiences of writing and delivering a minimum of seven major speeches. The course introduces the beginning speech student to a study of poise, use of body and voice, public speaking, oral interpretation of literature, role playing and beginning argumentation.

### **American Literature and Composition (127,128) 1 year, 1.0 credit: grade 11 required: prerequisite: None**

This year-long course focuses on works from American authors and their historical time periods with much emphasis on nonfiction writing. Students will be required to read and analyze a minimum of four to six major works throughout the year that may consist of short stories, novels, poems, drama, essays, speeches and other non-fiction pieces. Figures of speech, vocabulary and author's style with tone, diction, and structure will be a major emphasis. This course will also provide students the practice and ability necessary to become flexible writers who can compose in a variety of modes and or a variety of purposes while utilizing many rhetorical devices appropriate for different audiences. There will be a strong emphasis placed on the composition of a major researched argument paper in the MLA (Modern Language Association) format. In addition, other formal essays, oral presentations, and projects are essential components of the class. A cross curriculum approach helps the students to connect literature to other subjects including Social Studies and Theology. AP Language can replace this class as the grade 11 required course.

### **World Literature and Composition (142, 143) 1 year, 1.0 credit: grade 12 required: prerequisite: None**

This year-long, senior level course focuses on selected works of literature from around the world, with an emphasis on Shakespeare and various multicultural authors. Literature choices may be thematic, by region, or chronological to one or more regions. Students will be required to read a minimum of four to six major works throughout the year and to analyze short stories, novels, poems, drama, literary criticism, and other nonfiction pieces. Students will continue to improve and expand their reading, writing, speaking, and listening skills with an emphasis on responding to and analyzing how literary authors use figurative language and literary/poetic devices. Formal written essays that use literary analysis and research on literary criticism, group projects, and oral presentations continue to be essential elements of this course. A cross curriculum approach helps the students to connect literature to other subjects including Social Studies and Theology. AP Literature can replace this class as the grade 12 required course

### **AP Language and Composition (153,155) 1 year, 1.0 credit: grade 11: prerequisite: English 2**

This course focuses on both effective writing and critical reading at the level of an introductory college English course. Students will become critical thinkers and careful readers through attentive and regular analysis of a variety of prose texts, such as essays, speeches, fiction and non-fiction books. The major focus will be on American Authors, which will coincide with some of the content of the junior level American Literature and US History courses. The course will also give students the practice and ability necessary to become flexible writers who can compose in a variety of modes and for a variety of purposes. It is expected that students in the course will take the AP Language Exam. Summer reading and assignments may be required. This course may replace American Literature as the grade 11 requirement.

### **AP Literature and Composition (156,160) 1 year, 1.0 credit: grade 12: prerequisite: AP Language and Composition OR American Literature and Composition**

This course will prepare every student for success as an independent analytic reader, thinker, and writer. The course will involve learning how to read and respond to literature and to develop analytical skills. The course will be fast-paced and will require extensive reading and writing. All writing assignments will involve analytical exposition, based on the essay topics created by the College Board for the AP English Literature and Composition Exam. Students will be required to read numerous works throughout the year and to analyze novels, short stories, drama and poetry. Students should also expect to write extensively to prepare them for the writing expectations on the AP Literature and Composition Exam. It is expected that students in the course will take the AP Literature Exam. Summer reading and assignments may be required. **This course may replace World Literature as the grade 12 requirement.**

### **Creative Writing (152) 1 semester, 0.5 credit: grades 10-12: prerequisite: English 1**

In this writing focused elective, students will read, analyze, and reflect on model texts in poetry, drama, and/or other fiction in order to help themselves become better creative writers in a variety of genres. In addition to creating their own work, Students may be asked to model published authors to help develop their writing voice and style. Students should expect to read articles and/or a book about the

craft of writing. Writing Workshops are a huge component of this class where students will share their work, read other student work, and complete writing and revision activities. A major assessment will be a semester writing portfolio that showcases the student's polished writing.

### **Speech (131) 1 semester, 0.5 credit: grades 11-12: prerequisite: None**

This course will help students to learn to think clearly, quickly and critically, listen well, and express themselves effectively before various audiences with a variety of in-class speaking and role-playing activities. Students will read, view and analyze a variety of public speakers, as well as have opportunities to increase their fluency as a speaker, and develop their self-confidence with practical experiences of writing and delivering a minimum of seven major speeches. The course introduces the beginning speech student to a study of poise, use of body and voice, public speaking, oral interpretation of literature, role playing and beginning argumentation.

## **Fitness & Wellness**

### **Fitness & Wellness – 1.5 Credits required (including Health)**

#### **Health (911) 1 semester, 0.5 credit: grades 9-10 required: prerequisite: None**

Health education is vital for preparing students for their future roles as responsible and productive citizens. Students will learn about all aspects of health and the many dimensions of wellness. Students will develop skills needed in confronting difficult situations, understand health prevention and promote techniques that will establish a solid personal health education, and become health literate in making positive and healthy decisions. Topics will include: Mental & Emotional Health, Nutrition & Fitness, Alcohol, Tobacco & Other Drugs, CPR AED & First Aid, and Sexuality & Relationships.

#### **Physical Education Foundations (908) 1 semester, 0.5 credit: grades 9-10 required: prerequisite: None**

Developing and maintaining personal fitness throughout one's life begins with knowledge. Major concepts related to physical activity and fitness are presented in a format that equips the student with useful strategies to improve individual fitness. Specific activities are geared to assess and/or grasp major concepts crucial to establishing and maintaining lifelong fitness. Major concepts will be reinforced by the student actively participating in the Fitness Center which will include aerobic and anaerobic activities. Several sport and recreational activities will be incorporated into this required course: volleyball, STXball, basketball, flag football, softball, table tennis, baggo, badminton, pickleball, and soccer. Fitness units will include power walking, aerobics, weight lifting and yoga.

#### **Fitness for Life (915) 1 semester, 0.5 credit: grades 10-12: prerequisite: Physical Education Foundations**

This course is designed to provide students an opportunity to work towards one's **own** personal fitness and nutrition goal. Students will learn basic fitness & nutrition concepts, develop weekly personal goals for self-improvement, track and monitor their own weekly progress throughout the semester. At the end of the semester students will reflect on their process of towards the goal and the journey to developing a better habit. This course provides students an opportunity to work towards one's **own** personal fitness and nutrition goal.

#### **Team Sports & Activities (913) 1 semester, 0.5 credit: grades 10-12: prerequisite: Physical Education Foundations**

In this class, the major attention is based on fitness and team activities. The purpose of these activities is to help foster desirable character and personality traits to improve interpersonal relationships and to improve spectator understanding of these games. This course will offer several of the major team sports: Basketball, Flag Football, Volleyball, Soccer, Softball, and Ultimate Frisbee. The Team Sports course will incorporate all areas of the sport from participation, officiating, scorebook keeping, to coaching. Out of the class reading of the rules and regulations of each sport should be expected.

### **Strength & Conditioning (914) 1 semester, 0.5 credit: grades 10-12: prerequisite: Physical Education Foundations**

This course is designed to offer the student a wide variety of health enhancing physical fitness activities. Activities will include both anaerobic and aerobic workouts. Such activities will include lifting weights, performing bodyweight exercises, cardiovascular workouts, and high intensity crossfit circuit workouts. An individual who elects to take this course must be highly motivated and ready to work hard day in and day out.

## **Math**

### **Math 3.0 – Credits Required**

#### **Algebra 1 (212,213) 1 year, 1.0 credit: grade 9 required: prerequisite: None**

The goal of this course is to introduce students to the study of mathematics on a more advanced level than arithmetic and to equip them to deal with mathematical concepts that they will encounter in science and other areas of life. The course covers: signed numbers, linear graphing, radical expressions, quadratic formula, and solving systems of equations. Students apply the concepts they learn in problem solving situations.

#### **Algebra 2/Trigonometry (235,236) 1 year, 1.0 credit: grades 9-12 required: prerequisite: Geometry.**

Algebra 2/Trigonometry is an extension of the work begun in Algebra I. Topics from Algebra that are further developed include: number systems and field properties, linear and quadratic functions, systems of equations, factoring, graphing, and working with exponents, logarithmic functions, and radical expressions. Trigonometry will be included in this course. Scientific Calculator is required for this course.

#### **Analytical Geometry (224,235) 1 year, 1.0 credit: grades 9-12 required: prerequisite: Algebra I.**

Analytical Geometry with proofs teaches a student to think logically, to solve problems, and to analyze real world situations. Through systemic reasoning, the student will learn to apply properties of geometric figures and set up proofs to complete problems successfully. Course topics include deductive reasoning, parallel lines, congruent triangles, quadrilaterals, similarity, right triangles, areas and volumes, analytic geometry, trigonometry and geometric proofs. Algebra skills are also maintained and enhanced. Students will learn to read and write mathematics on a daily basis.

#### **Honors Algebra 2/Trigonometry (238,239) 1 year, 1.0 credit: grades 9-12: prerequisite: B or better in Algebra 1**

This course will cover all of the topics in Algebra 2/Trigonometry in more depth with more challenging problems, a deeper focus on trigonometry, and special attention to algebraic concepts that are used regularly in Calculus.

#### **AP Calculus AB (253,254) 1 year, 1.0 credit: grades 11-12: prerequisite: “B” in Pre-Calculus or Consent of Instructor**

AP Calculus includes both the study of differential calculus and integral calculus with special stress placed on methods of differentiating and integrating, plus practical applications. After completion of the course, the students may participate in the National AP Testing Program in May. This test enables the student to receive possible college credits and/or Advanced Placement. This is a very demanding course that will cover about 1.5 semesters of college calculus. It is expected that students in this course will take the AP exam. TI-83 or Graphing Calculator is required. Summer work is required.

#### **AP Calculus BC (257,258) 1 year, 1.0 credit: grade 12: prerequisite: “B” in Calculus or Consent of Instructor**

AP Calculus is an extension of AP Calculus AB: the **difference** between them is scope, not level of difficulty. AP Calculus BC includes all topics in AP Calculus AB, plus others such as parametric, polar, and vector functions, and series. Summer work is required



**Calculus (251,252) 1 year, 1.0 credit: grade 12: prerequisite: “B” in Pre-Calculus or Consent of Instructor \**

Calculus will include the study of differential calculus and integrated calculus with practical applications. This course is designed for students who are not preparing for the AP Calculus exam

**Honors Pre-Calculus (242,243) 1 year, 1.0 credit: grades 10-12: prerequisite: “B” in Honors Alg. 2/Trigonometry or Consent of Instructor**

Honors Pre-Calculus is designed for students who plan to continue their study of mathematics after high school. Graphical approaches to problem solving will be emphasized along with traditional analytical methods. In addition to the further treatment of linear, quadratic, exponential and logarithmic functions, this course includes topics in trigonometry, analytical trigonometry, discrete mathematics and applications involving these topics. TI-83 or Graphing Calculator is required.

**Pre-Calculus (240,241) 1 year, 1.0 credit: grades 11- 12: prerequisite: “C” in Alg. 2 or Consent of Instructor**

This course is designed for students who want to take a class that is an extension of Algebra II/Trigonometry but are not looking to go on to AP Calculus. This class aims to prepare students for algebra at the college level. This class will cover many of the same topics as Honors Pre-Calculus in addition to a rigorous review of concepts from Algebra II/Trigonometry. TI 83 or Graphing Calculator is required.

**Probability & Statistics (233) 1 semester, 0.5 credit: grades 11-12: prerequisite: Algebra 2/Trigonometry**

This course is designed for students planning on entering fields such as business, education, psychology, biology, etc., which require statistics for their effective study. The course teaches students how to gather, organize, interpret, and model data; Students will study measures of central tendency, basic probability and its relation to statistics. Hypothesis testing, scatter plots and regression analysis of paired data are some of the topics that will be covered. TI-83 or Graphing Calculator is required.

**Preparation for College Math (247) 1 semester, 0.5 credit: grade 12: prerequisite: Algebra 2/Trigonometry**

Preparation for College Mathematics is designed for students who plan to attend college, but are not prepared for or interested in the calculus courses. This course will allow students to analyze functions and their graphs. Students will study polynomial, rational, exponential and logarithmic functions. The course will also cover sequences, series, and probability. Some colleges may not accept this course as the third mathematics credit or a part of the three extra credits required from the core area. TI 83 or Graphing Calculator is required.

## Performing Arts

**Fine Arts 1.0 Credits Required****Band (720,735) 1 year, 1.0 credit: grades 9-12: prerequisite: 1 year of Band or Percussion experience**

Band is a performance-based class, which offers students a variety of diverse musical experiences. During the first semester, students will continue working on skills and techniques needed to advance on their instrument, participate in a Christmas concert, and play at Pep Band performances, which occur at various fall and winter athletic events. Throughout the year, the band plays at pep rallies, assemblies and other school events such as formal concerts. During the second semester, students will continue working on instrument specific skills, and study both traditional and contemporary solo and band literature. The second semester includes Solo and Ensemble Festival performances and culminates with a Spring Concert. Attendance at all performances is mandatory. A calendar of events will be provided at the beginning of the school year.

**Beginning Instrument Ensemble (740) 1 semester, 1.0 credit: grades 9-12: prerequisite: Basic music reading**

Have you ever wanted to learn to play a band instrument? This is your chance. Students will choose a band instrument they will learn for a full semester. Students will learn the basic skills of playing an instrument along with music literacy and music theory. Students are encouraged to rent or own an instrument if possible. Some instruments are available from the school to use but selections are limited to the current inventory.

**Choir (708,710) 1 year, 1.0 credit: grades 9-12: prerequisite: None**

Concert choir is a performance-based class for all grade levels. In this class, we perform songs from Broadway, to pop, to classical/sacred. There are two formal concerts during the year, a winter concert and a Spring Concert. Students will also perform with the Praise Band during every CCHS Mass. Attendance and participation at all concerts is a requirement for this class. Emphasis is placed on effort, attitude, and making daily musical contributions. You do not have to be a great singer to be in this class – just love to be creative and participate.

**Piano/Guitar (735) 1 semester, 0.5 credit: grade 10-12: prerequisite: None**

Piano/Guitar is an introductory course for those interested in basic music, keyboard, and/or guitar skills. Students will spend a full semester on one instrument. Students will learn the basics of music theory and literacy, explore the history of their instrument of choice, and learn the basic skills needed to learn and perform music on their instrument of choice. The semester culminates with an in class performance on the student's chosen instrument. Students will need to provide their own guitars but will be able to utilize Catholic Central's pianos.

**Production Performance (151) 1 semester, 0.5 credit: grades 10-12: prerequisite: Theater or consent of instructor**

This production performance course is an advanced theater class that is student driven. Students will choose a script for a short play or a children's show. Students will design and build all aspects of the production: costumes, lights, sets, and sound. Students will also act in the show which will culminate in a traveling show to the area grade schools. This exciting class is hands-on and encompasses all aspects of theater.

**Theater (150) 1 semester, 0.5 credit: grades 9-12: prerequisite: None**

Theater will focus on: enhancing perception, interpretation, and performance, understanding heritage and tradition, understanding influences of theater, film, television, and technology, as well as reflecting and evaluating personal work and the work of others. As an introductory survey course, Introduction to Theater would encompass: theatrical vocabulary, elements, conventions, and basic concepts, historical and cultural backgrounds, experiences that develop a broad-based body of knowledge and technical skills, and strategies for evaluating theater experiences.



## Science

### Science 3.0 – Credits Required

#### **Anatomy & Physiology (341,343) 1 year, 1.0 credit: grades 10-12: prerequisite: “C” or better in Biology & Chemistry (may be concurrently enrolled in chem.)**

Anatomy and physiology is a course that will enable students to develop an understanding of the relationships between the structures and functions of the human body. Students will also learn the mechanisms for maintaining homeostasis within the human body. This course will involve laboratory activities, projects, dissections, textbook material, models, diagrams and clinical case studies. It is open to any student who wants to have a more comprehensive understanding of the human body. It must be emphasized that while this course will prove useful to those students interested in the medical field, it is not a requirement.

#### **AP Biology (323,324) 1 year, 1.0 credit: grades 11-12: prerequisite: “C” or better in Biology & Chemistry (may be concurrently enrolled in chem.) and Consent of Instructor. Offered Odd years**

The AP Biology course is designed to be the equivalent of a two-semester college-level introductory biology course. The intent of the course is to expose students to higher-level biological principles, concepts, and skills and allow them the opportunity to apply their knowledge to real-life applications. Students are expected to learn not by memorization of facts, but through content and concept application via the AP Biology science practices. Students who take an AP Biology course will also develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts. The result will be readiness for the study of advanced topics in subsequent college courses. AP Biology students are encouraged to take the AP exam given in May and may have a required summer assignment.

#### **AP Chemistry (348,349) 1 year, 1.0 credit: grades 11-12: prerequisite: “C” or better in Chemistry and Consent of Instructor. Offered Even years.**

From College Board, “*AP Chemistry is an introductory college-level chemistry course. Students cultivate their understanding of chemistry through inquiry-based lab investigations as they explore the four Big Ideas: scale, proportion, and quantity; structure and properties of substances; transformations; and energy.*” This second year of chemistry will dive deeper into atomic structure and also explore kinetics, thermodynamics, acids and bases, and intermolecular forces.

#### **Biology (320,321) 1 year, 1.0 credit: grade 10 required: prerequisite: None**

Biology is an introductory course designed to explore the nature of the physical world as it relates to the living. Students will investigate biological systems at the molecular, cellular, and ecological level. In this class there will be an emphasis on activities and laboratory exercises that will promote problem solving, refine laboratory procedure, and strengthen reading, writing and math skills. Hands-on laboratory exercises incorporating cellular biology, genetics, DNA technology, evolution, and ecology will be provided to assist students in their understanding of biological themes.

#### **Biology 302 Bioinformatics (318) 1 semester, 0.5 credit & 2.0 credits from Stritch: grades 11-12: prerequisite: Biotechnology or AP Biology. Offered Even years.**

Bioinformatics is a rapidly developing branch of biology and is highly interdisciplinary, using techniques and concepts from informatics, statistics, mathematics, chemistry, biochemistry, physics, and linguistics. This highly interactive course will allow students to develop a basic competency in the use of bioinformatics tools for research and analysis of DNA, RNA and proteins. During the course of the semester, students will investigate genes and genetic diseases using various available online databases and learn to recognize key similarities and differences in the organization of prokaryotic and eukaryotic genomes. Students will work through practical examples involving the analysis of a protein or nucleic acid sequence using suitable programs and develop an understanding of the scientific method in conducting bioinformatics related experiments in silico.

**Chemistry (330,333) 1 year, 1.0 credit: grades 10-12: prerequisite: Biology, Algebra 2 (may be concurrently enrolled in alg. 2)**

Chemistry covers matter and its changes. Topics discussed include: the scientific method, energy and matter, atomic structure, the Periodic Table and its implications, elements, compounds, chemical formulas and bonding, chemical reactions and equations. The mole, stoichiometry, and behaviors of gasses and solutions are studied.

**Conceptual Physics (312, 313) 1 year, 1.0 credit: grade 9: prerequisite: None**

The freshmen science course focused on algebra-based physics content including one-dimensional motion, energy, electricity and magnetism, and electromagnetic waves, while learning essential science skills like measuring, graphing and writing scientifically through hands-on activities and experiments.

**Environmental Science (237) 1 semester, 0.5 credit: grades 10-12: prerequisite: None**

This course will provide students with the scientific principles required to understand the interrelationships of the natural world, to identify environmental problems both natural and human-made and to examine solutions for resolving and/or preventing them. Environmental science is interdisciplinary; it focuses on topics from different areas of science.

**Earth and Space Science (314) 1 semester, 0.5 credit: grades 10-12: prerequisite: None**

Earth and space science is a physical science that studies the dynamic processes that shape our planet earth as well as investigates our place in our galaxy and our universe. Earth and space science is a discipline of science that interacts with other sciences to understand our planet by investigating astronomy, geology, and oceanography. Earth and space science is a laboratory science and will involve various projects examining the interaction of human activity and Earth's systems.

**Honors Biotechnology (322) 1 semester, 0.5 credit: grades 10-12: prerequisite: "C" or better in Biology & Chemistry (may be concurrently enrolled in chem.) and Consent of Instructor. Offered Even years. 18 Students maximum.**

Biotechnology is the science for this century giving students a first glimpse at the tools used in modern biotechnology and will be taught through hands-on instruction. The course focuses on biotechnology lab techniques examining DNA and proteins, and the practical application of biotechnology for such things as crime scene investigation and social ethics. After completion of this class, students will understand and appreciate the opportunities available for a career in biotechnology.

**Honors Physics II (331,334) 1 year, 1.0 credit: grades 11-12: prerequisite: "C" or better in Algebra 2**

A course designed to provide a more in depth study of physics. Topics covered include kinematics, forces and motion, circular motion, fluid dynamics and optics. Students will gain conceptual understanding of the topics covered and ability to use quantitative methods to model physical phenomena. This course includes laboratory work and STEM projects.

**Stem 1: Technology (298) 1 semester, 0.5 credit: grades 10-12. Prerequisite: None. Offered Odd years. 18 students maximum.**

This course is designed to introduce students to the practice of engineering as a career. The course will be a survey of topics in materials science, mechanical engineering, electrical engineering, manufacturing, software coding, and engineering design. Through hands-on labs and engineering projects the students will develop an engineering mindset to the practice of applying science and math to solving real-world problems. Limited class size of 16 students due to lab constraints.

**Stem 2: Engineering Design (299) 1 semester, 0.5 credit: grades 10-12. Prerequisite: None. Offered odd years. 18 students maximum.**

Focusing on the engineering design process, students will embark on a series of projects building windmills, bridges, cars, boats, catapults and more. We will also explore current engineering opportunities including bioengineering and nanotechnology. This course requires students to work with their hands and be creative.

## **Social Studies**

### **Social Studies – 3.0 Credits Required**

**World History (410, 412) 1 year, 1.0 credit: grade 9 required: prerequisite: None**

This course is intended to explore and investigate the history of the world. We will use a variety of critical thinking skills to obtain a better understanding of the history of our world, including Classical Greece and Rome, the Middle Ages, the Renaissance, and the emergence of contemporary Europe. We will compare and contrast how human advancement through time is connected to the present, and ultimately, the future.

**United States Government (420) 1 semester, 0.5 credit: grade 10 required: prerequisite: None**

This course is intended to help students better understand the processes of government. Included in the concepts explored in this class are Parliamentary Procedure, the Social Contract, Constitutionalism, Citizenship, Politics and Ideology, Legislation, Law and Courts, and International Relations. Emphasis will be placed on an experiential understanding of these concepts through simulations, case studies, and role-plays. The course will conclude with a series of debates regarding contemporary political controversies. The state-mandated **Civics exam** will be administered during this class. This course may be replaced with AP US Government or PoliSci 102 as the grade 10 required course.

**United States History (429,430) 1 year, 1.0 credit: grade 11 required: prerequisite: None**

This year-long course takes us on a trip in American History through 1920. This course will take a look at the social, political, religious, and cultural history of America. This course is intended to be able to re-live an experience of the past, not just transfer the information. The course is extremely active, as students will be encouraged to debate, discuss, analyze, role play, and re-live the past. The goal of the course is not to just understand what happened, but also why it happened.

**\*\*AP US Government & Politics (406,407) 1 year, 1.0 credit: grade 10-12: prerequisite: None**

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. The state-mandated **Civics exam** will be administered during this class, as needed. If completed, this course can replace the US Government requirement. AP US Government students are expected to take the AP exam in May. This course may replace the US Government as the grade 10 required course.

**\*\*Political Science 102 Intro to American Government (408,409) 1 year, 1.0 credit & 3.0 credits from Stritch: grades 10-12; prerequisite: None**

The goal of this course is to help students gain a better understanding of the reasons for government and its place in students' lives to enable students to become active citizens in the democratic process. We will focus on the roles of government in history as well as the current organization and operation of local, state, and national government. This is a rigorous and active course, and will be much more than just a transfer of knowledge. Students will be engaged and placed in projects, simulations, role-play, Socratic seminars, and debates that will emulate how government works. Due to this, class participation is crucial. Students are expected to be in class, participate in discussions/projects and be involved in the topics we are covering. In this course students will earn college credit for an intro-level Political Science course. The state-mandated **Civics exam** will be administered during this class. This course may replace the US Government as the grade 10 required course.

\*\* These two classes will be taught concurrently throughout the year. You have the option of choosing to pay to take the Concurrent Enrollment course through Cardinal Stritch or paying to take the Advanced Placement test to earn college credit.

**AP Psychology (399, 401) 1 year, 1.0 credit: grade 11-12; prerequisite: None**

The purpose of Advanced Placement Psychology is to prepare students to pass the AP Examination. Students will be introduced to the systematic and scientific study of the behavioral and mental process of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Specifically, students will engage in an in-depth study of the physiological basis of behavior, sensation and perception, motivation, learning, stress, human development, abnormal behavior, and social psychology. They also learn about the methods psychologists use to explore the process involved in normal and abnormal perceptions, thoughts, feelings and actions. It is expected that students in this course will take the AP exam. AP Psychology includes a summer assignment that will be due the first day of class.

**International Relations (419) 1 semester, 0.5 credit: grades 11-12; prerequisite: None**

International Relations is an active hands-on course designed to introduce students to the 21st Century Global Community. The first portion of the semester shall be spent on two basic topics. First, we will discover the role that international relationships play in both governmental interaction and economic development. Secondly, we will briefly tour the continents of the world, discussing relevant social, economic, and political issues. The second portion of the semester shall be spent in a Model United Nations Simulation. This simulation will require students to actively take on the role of representing a foreign nation in discussing and solving the issues facing the contemporary world. This course will prepare any student looking to attend the Model UN Conference in January.

**20<sup>th</sup> Century US History (440) 1 semester, 0.5 credit: grade 12; prerequisite: United States History**

20th Century American History focuses on the study of American growth and change from the end of World War I to the present. Emphasis of the study includes the Great Depression, World War II from an American and German perspective, the Nuclear Age, the Korean and Vietnam Wars, and the fall of Communism. A special portion of this course requires the student to create a final thesis paper on a 20th century American topic of their choice. Students are encouraged to look at decisions of the past for their effect on today's America. This course is intended to help students better understand the processes of government. Included in the concepts explored in this class are Parliamentary Procedure, the Social Contract, Constitutionalism, Citizenship, Politics and Ideology, Legislation, Law and Courts, and International Relations. Emphasis will be placed on an *experiential* understanding of these concepts through simulations, case studies, and role-plays. This course is a project-based class, so participation is essential. The course will conclude with a series of debates regarding contemporary political controversies.

## **Special Courses**

### **ED 101: Introduction to Education (950) 1 semester, 0.5 CCHS credits & 3.0 credits from Cardinal Stritch University; grades 11-12; prerequisite: Instructor Consent**

This concurrent credit course is for students who are considering a career in Education and may enroll as an Elementary or Secondary Education major in college. Introduction to Education will acquaint the students with the profession of education, the regular education program and the faculty within the College of Undergraduate Studies. Students will investigate what it means to be a teacher and learner through an arts integration framework. This will be accomplished through reflection, exploring the InTASC Model Core Teaching Standards and Danielson Domains, and potentially school site visits. There will be an introduction and exploration of the Wisconsin Environmental Literacy and Sustainability Standards as well as assessments of oral and written communication skills. There will also be an introduction to the Franciscan Tradition as the basis for the framework of the educational philosophy of the department.

### **ED 205: Education for Diversity: Historical Foundations (951) 1 semester; 0.5 CCHS credits & 3.0 credits from Cardinal Stritch University; grades 11-12; prerequisite: ED 101**

This concurrent credit course is for students who are considering a career in Education and may enroll as an Elementary or Secondary Education major in college. In this course, students will study and discuss the philosophy of education in historical context as it reflects societal norms and values. Of particular emphasis will be the examination of the experience of various groups whose culture, religion, race or ethnicity placed them outside of the “mainstream” American Culture. In addition to this, students will also study the characteristics of the Franciscan Tradition with particular emphasis on peacemaking and reconciliation among various groups as a way of becoming more culturally proficient.

### **Prep for College (007) 1 quarter, 0.25 credit: grades 11-12; prerequisite: Instructor consent**

This seminar style course is designed to help students identify some long-term career and life goals and to help accomplish them. Students will identify their gifts and talents and begin to consider careers in which they could be happy and successful. Using these new understandings, the students will seek out a college or university that best fits their academic, social, and spiritual requirements. Students will learn the process of applying to colleges by preparing applications, resumes, exams, interviews, essays etc. Students will discover many parts of the college experience from current college students, former students, and from visiting college campuses. This course is coupled with a study hall.

### **Teacher Assistant Program (524) 1 semester, 0.25 credit: grades 11-12; prerequisite: Instructor consent**

T.A.P. is a program designed for the teachers and administration at CCHS. Students who are chosen for this program will aid an assigned CCHS staff member for an entire semester. They will be under supervision of the assigned staff member and will be expected to perform assigned duties. This course is designated as Pass/Fail. Students who are interested in this program should be self-motivated, mature, and have a good work ethic. Please see counselor for an aide form.

### **Yearbook (901) 1 semester, 0.5 credit: grades 10-12; prerequisite: None**

Yearbook is a semester course in the writing, layout, and financing of the school's publication, The Marian. Students must have an interest in school activities and be comfortable working with the publishing program, along with digital photographic equipment. Course work will consist of photographing school events and activities, preparation, layout, graphics, and other production procedures in completing the yearbook.

## Theology

### **Theology – 4.0 Credits Required**

#### **Catholic Christianity 1 (811) 1 semester, 0.5 credit: grade 9 required: prerequisite: None**

This course prepares the student to come to a basic understanding of the call to holiness of all people. Students will study and practice different methods and forms of prayer, study the dogma of the Trinity and the practices of the apostolic, hierarchical church. The students will study the dogmas of our Blessed Mother. Students will be exposed to scripture through readings and practicing interpretation. All class work and study materials will introduce them to the role of the church and the basic teachings of the Catholic Church as presented in the Catechism of the Catholic Church.

#### **Catholic Christianity 2 (812) 1 semester, 0.5 credit: grade 9 required: prerequisite: None**

The second semester will focus on the sacramental life of the church and how these sacraments apply to the practice of the Catholic Faith. In addition, the sacraments as a sign of Christ living and loving within the Christian community will be studied. Emphasis will be placed on the institution of, the form, the matter, and effects of each sacrament.

#### **Church History (815) 1 semester, 0.5 credit: grades 11-12: prerequisite: None**

This class works to acknowledge that the Catholic Church is composed of saints and sinners and that the Church is in constant need of reform while being faithful to the deposit of faith. It will survey the history of the Church and highlight major events and individuals that have influenced the development of the Church.

#### **Discipleship (822) 1 semester, 0.5 credit: grades 11-12: prerequisite: None**

The dictionary definition of the word “disciple” is someone who adheres to the teachings of another. A disciple is a follower or a learner. Applied to Jesus, a disciple is someone who learns from Him to live like Him- someone who, because of God’s awakening grace, conforms his or her words and ways to the words and ways of Jesus. The goal of this class is for students to explore their personal relationship with Christ with the hope of them becoming better disciples.

#### **New Testament Scripture (814) 1 semester, 0.5 credit: grade 10 required: prerequisite: None**

This course will examine the life, ministry, and teachings of our Savior Jesus Christ, prophesied about in the Old Testament, using the Bible as the primary source. Students will recognize the establishment of the Catholic Church in the New Testament, as well as analyze the institution of Catholic Christian teachings practiced and valued today.

#### **Old Testament Scripture (815) 1 semester, 0.5 credit: grade 10 required: prerequisite: None**

This course is an introduction to the word of God communicated to the Church through the Holy Scriptures. It examines key themes of our faith tradition to inspire academic and personal growth, using the Bible as a primary source. Students will gain critical tools needed to learn the value of interpreting the Bible in a Catholic context. They will also learn the value of the Jewish roots in Scripture and how they are fulfilled by the New Testament, and enrich our Catholic faith tradition. The course will provide the foundation and security necessary for students to be grounded in the Catholic tradition.

#### **Social Justice (830) 1 semester, 0.5 credit: grade 11 required: prerequisite: None**

Students in this course will study current-day moral issues in light of Catholic Social Teaching. These CST principles are (1) The Right to Life and Human Dignity (2) Rights and Responsibilities (3) Call to Family, Community and Participation (4) Option for the Poor and Vulnerable (5) Solidarity (6) Dignity of Work/Rights of Workers and (7) Stewardship of God’s Creation. The first principle is the most important and the basis for every other principle. It is the first discussed, and will be studied in great detail. Afterwards, the other principles will be covered. Within each principle, students will learn about modern-day abuses and violations of our God-given rights.



### **Philosophy for Theology (225) 1 semester, 0.5 credit: grade 11: prerequisite: None**

This course is a historical and practical overview of philosophical themes throughout the past three thousand years and how these philosopher's concepts were importantly adapted by Church Fathers and Theologians of the Christian Community in the study of religion and Christian theology, with emphasis on the modern and contemporary theological beliefs. The main objectives of the course are to become familiar with important philosophical figures, issues, and methods, and to gain an appreciation of the relation of these to a variety of contemporary approaches in theological study, doctrine and present Catholic Church teaching. At Cardinal Stritch University this course is both a Theology and Philosophy course.

### **Religion, Theology, Science and Technology (835) 1 semester, 0.5 credit: grade 11- 12 required: prerequisite: None**

In this class we offer for those who are interested in learning how the Catholic Church, Science and Technology from Chemistry to Apple, from Physics to App technology, from Psychology to dating apps are all connected and intertwined in our two-thousand-year history. From Pythagoras with theorems in algebra, St. Anselm introduction of the Scientific Method, Copernicus an avid Catholic presenting a Solar Centric Planetary system, why it is called the Solar System, Fr. Mendel with his groundbreaking work in Genetics, all the way to people like Bill Gates, creator of Microsoft with a strong Christian belief in service to the poor. Even though many believe that these three areas are not compatible, our greatest Theologian St. Thomas Aquinas, believed that these three human concerns in actual fact could not exist without the other. Learn how this apparent opposition between these three areas, is not Catholic, but from extreme forms of Christianity.

## **World Languages**

### **French 1 (010, 011) 1 year, 1.0 credit: grades 9-12: prerequisite: None**

This class is an introduction to basic concepts in the French language and culture. Everyday conversation and activities of young people are emphasized. Oral proficiency, reading comprehension and writing are stressed.

### **French 2 (020, 021) 1 year, 1.0 credit: grades 10-12: prerequisite: "C" or better in French 1 or Instructor Consent**

This class is a continuation of French I with a more in-depth study of French grammar, vocabulary, and culture. Greater emphasis is placed on oral proficiency as well as reading and writing skills.

### **French 3 (030, 034) 1 year, 1.0 credit: grades 11-12: prerequisite: "C" or better in French 2 or Instructor Consent I**

This class is a continuation of French II Language and culture study with stress on the details of grammar, development of vocabulary and increased fluency in reading and writing French.

### **French 4 (042, 044) 1 year, 1.0 credit: grade 12: prerequisite: "C" or better in French 3 or Instructor Consent**

French IV is a survey of French history and literature from the middle ages to the present, with a review and continuation of grammar. The class is designed to prepare students for college level French classes.

### **Spanish 1 (012,013) 1 year, 1.0 credit: grades 9-12: prerequisite: None**

Spanish I is an introduction to the Spanish language. Students will learn basic vocabulary and basic grammar structures. Speaking, listening, writing, and reading will be emphasized. Students will learn to ask questions, and describe people, places, and things in the target language. Students will leave Spanish I with an understanding of the geographical and cultural variety of the Spanish-speaking world.

**Spanish 2 (022,023) 1 year, 1.0 credit: grades 10-12: prerequisite: Successful completion of Spanish 1**

Spanish II is an expansion of material learned during the student's first year of study, and will continue to build the vocabulary and grammar structures of the language. Students continue to explore as they study the themes of Home Life, Student, Life, Leisure Time, and Vacation and Travel.

**Spanish 3 (032,036) 1 year, 1.0 credit: grades 11-12: prerequisite: "C" or better in Spanish 2 or Instructor Consent**

Spanish III is a continuation of Spanish II where students continue to develop and refine their proficiency in all four-language skills- listening, speaking, reading, and writing- with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. Students apply critical thinking skills as they study and/or present current events, art forms, and media forms in the target language. Students use technology sources to research topics of personal interest.

**Spanish 4 (042,046) 1 year, 1.0 credit: grade 12: prerequisite: "C" or better in Spanish 3 or Instructor Consent**

Students develop more sophisticated communication skills in all four areas – listening, speaking, reading, and writing – with special emphasis on the ability to interact orally and in writing. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. Reading supplements such as short stories and essays, monthly newspaper/magazines and current articles in the Spanish language are studied to build cultural awareness and improve reading comprehension. Students are expected to ask questions, give comments and converse with others in the target language.