

# **COURSE DESCRIPTIONS**

**2011-2012**



## **COLUMBUS CATHOLIC HIGH SCHOOL**

710 S Columbus Avenue  
Marshfield, WI 54449  
Central Office – 715-387-1177  
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# *Mission Statement*

*The Columbus Catholic Schools, guided by our parishes, are dedicated to providing a high-quality Catholic education, permeated with Gospel values, and designed to nurture each child spiritually, academically, socially, emotionally, and physically.*

## *Philosophy*

*Columbus Catholic Schools are committed to the education, development, and spiritual formation of our students. Within the context of the Gospels and the teachings of the Catholic Church, we believe we are called to....*

- 1. Faithfully teach Catholic doctrine and nurture in our students an abiding love of the Catholic faith through participation in religious instruction, prayer, devotions, and the Sacraments, particularly the celebration of the Liturgy, preparing each to take his/her place as the Church leaders of tomorrow.*
- 2. Carry out the educational ministry of the Catholic Church by providing a quality, affordable Catholic education to all those children entrusted to our care, regardless of race, creed, or socio-economic status.*
- 3. Fulfill the academic needs of each individual student through a curriculum and through teaching methods that encourage and enable each student to reach his or her maximum potential in all areas, placing an emphasis on nurturing a sense of responsibility to develop God-given gifts to their fullest.*
- 4. Prepare our students to meet the academic, spiritual, and moral challenges of the future by providing opportunities to develop Christian values and the skills of critical thinking that will be the basis for future decision-making, growth, and development.*
- 5. Provide an atmosphere of love and compassion for each individual student, offering them a sense of belonging and respect in order to foster their growth as caring, responsible, and confident Christians inspired to loving service of God and neighbor.*
- 6. Help each student learn to appreciate and respect the rights and differences of others so that at school, at home, and in the community, they might act as true Christians who nobly grace our society with peace.*
- 7. Provide a safe, nurturing environment with clear expectations for behavior and decorum, based on the Christian model of peace and respect, and compassionate to the developmental, social, and emotional needs of each student.*
- 8. Provide a variety of opportunities in athletics and other extra-curricular and co-curricular activities in order to allow our students to explore diverse areas of personal interest and fulfillment.*

# RECOMMENDED CLASSES

## by Grade Level

### GRADE 9

<b>Theology:</b> (1 credit)	Old Testament (.5 cr.) and New Testament (.5 cr.)
<b>English:</b> (1 credit)	Literature/Composition I Literature/Composition I Honors
<b>Social Studies:</b> (.5 credit)	Civics
<b>Mathematics:</b> (1 credit)	Pre-Algebra I* Algebra I Algebra I Honors Geometry Geometry Honors
<b>Science:</b> (1 credit)	Biology I Biology I Honors
<b>Physical Education:</b> (.5 credit)	Physical Education I
<b>Computer Education</b> (.5 credit)	Computer Applications
<b>World Language:</b> (1 credit)	Spanish I or II French I or II

### GRADE 10

<b>Theology:</b> (1 credit)	Fundamental Theology (.5 cr.) and Sacramental Theology (.5 cr.)
<b>English:</b> (1 credit)	Literature/Composition II Literature/Composition II Honors
<b>Social Studies:</b> (1 credit)	World History World History Honors
<b>Mathematics:</b> (1 credit)	Algebra I Basic Geometry* Geometry Geometry Honors Algebra II Algebra II Honors
<b>Science:</b> (1 credit)	Chemistry I Chemistry I Honors
<b>Health:</b> (.5 credit)	Health
<b>World Language:</b> (1 credit)	Spanish II or III French II

\* This Math course does not count towards admission requirements of four-year colleges.

The Advanced Placement (AP) examinations are administered every year in early May by *The College Board*, the same company that brings us the PSAT/NMSQT and SAT. Doing well on an AP Exam may qualify the student for placement in an advanced course in college, which may result in lower tuition costs and earlier college graduation. See the website <http://www.collegeboard.com/student/testing/ap.about/html> for more information.

# RECOMMENDED CLASSES

## by Grade Level

### GRADE 11

<b>Theology:</b> (1 credit)	Moral Theology I (.5 cr.) <b>and</b> Moral Theology II (.5 cr.)
<b>English:</b> (1 credit)	Literature/Composition III Literature/Composition III Honors
<b>Social Studies:</b> (1 credit)	U.S. History AP U.S. History I
<b>Mathematics:</b> (1 credit)	Basic Geometry* Geometry Algebra II Algebra II Honors Consumer Mathematics* Pre-Calculus Honors Trigonometry (.5 cr.) Advanced Functions & Stats (.5 cr.)
<b>Science:</b> (1 credit)	Anatomy & Physiology Chemistry II Honors Introduction to Physics (.5 cr.) Physics Honors
<b>Physical Education:</b> (.5 credit)	Physical Education II (.5 cr.) Lifetime Sports (.5 cr.) Team Sports (.5 cr.)

### GRADE 12

<b>Theology:</b> (1 credit)	Spiritual Theology (.5 cr.) <b>or</b> Adv. Spiritual Theology (.5 cr.) <b>and</b> Christian Stewardship (.5 cr.)
<b>English:</b> (1 credit)	Literature/Composition IV AP Literature & Composition
<b>Social Studies:</b> (1 credit)	Government (.5 cr.) <b>and</b> Recent United States History (.5 cr.) AP United States History I AP United States History II
<b>Mathematics:</b> (1 credit)	Algebra II Consumer Mathematics* Pre-Calculus Honors AP College Calculus Trigonometry (.5 cr.) Advanced Functions & Stats (.5 cr.)
<b>Science:</b> (1 credit)	Anatomy & Physiology Chemistry II Honors Introduction to Physics (.5 cr.) Physics Honors PACC Introduction to Molecular Biology
<b>Physical Education:</b> (.5 credit)	Physical Education II (.5 cr.) Lifetime Sports (.5 cr.) Team Sports (.5 cr.)

\* This Math course does not count towards admission requirements of four-year colleges.

The Advanced Placement (AP) examinations are administered every year in early May by *The College Board*, the same company that brings us the PSAT/NMSQT and SAT. Doing well on an AP exam may qualify the student for placement in an advanced course in college, which may result in lower tuition costs and earlier college graduation. See the website <http://www.collegeboard.com/student/testing/ap.about/html> for more information.

## GRADUATION REQUIREMENTS

The requirements listed below either meet or exceed the standards set by the North Central Association of Secondary School and Colleges (NCA) and the Wisconsin Department of Public Instruction.

### DEPARTMENT

THEOLOGY	4.0
ENGLISH	4.0
SOCIAL STUDIES	3.5
MATHEMATICS	3.0
SCIENCE	3.0
PHYSICAL EDUCATION	1.5
HEALTH	0.5
COMPUTER APPLICATIONS	0.5
FINE ARTS (Music/Art/Culinary)	0.5
WORLD LANGUAGE	2.0
ELECTIVES	5.5
TOTAL	<hr/> 28.0

A minimum of 7.0 credits are required per student per year.

The administration reserves the right to cancel a course due to insufficient enrollment in that course.

### Classroom Fees

If there is an additional fee for a class, it is shown in **bold** to the right in the course description below the credit for the class.

Fees for the following classes will be added to your tuition statement once your child's class schedule is completed:

- \$75 Band
- \$40 Choir
- \$40 Beginning Foods
- \$70 Other Foods classes
- \$30/\$40 Art
- \$50 Automotive
- \$25 Biology and Chemistry
- \$30 AP Biology

The other fees are collected by individual teachers throughout the school year. The English fees listed are for books that are read during the year. The students must have the books and can order them through school or can get them at the library or other sources (used book stores, siblings, etc.).

These fees are based on the 2010-11 school year and may be subject to change

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## ART DEPARTMENT

**\*All art classes will use a sketch book for notes, images, brainstorming and reflective purposes. Students are required to complete a minimum of 4 projects, a final project, and a portfolio including work, artist statements and documentation of completed projects.**

**Daily Points:**

Ready, Listening, On-time & Working=3pts. Reminding needed or late=2 pts. Little work/not ready=1 pt.  
No work, disrespectful &/or Unexcused Absence=0 pt.

**Projects are graded using the following criteria:**

Creativity=5 pts. Composition=5 pts. Craftsmanship=5 pts. Sketches/Reflection=5 pts. Stretch/Process=5 pts.  
(Originality) (Design) (Techniques) (Brainstorming & Write Up) (Problem Solving)

**Final Project=50 pts., with Portfolio=10 pts.**

*(Artist statements & documentation)*

**Checklist=5 pts.**

*(Materials, Timeline & Assessment form)*

**Sketchbook=10 pts.**

*(Visuals, notes & sketches)*

**100 ART 1**

Grades 9, 10, 11, 12

0.5 Credit

**Fee - \$30**

Prerequisite for all Art courses unless waived by the Art Instructor *prior* to class registration.

This course incorporates varied experiences in two-dimensional media (drawing, painting, and printmaking) and three-dimensional media (ceramics, sculpture) for the beginning student. Concepts of art will be stressed as well as styles in art, history, aesthetics and evaluation in the visual arts.

**110 ART 2**

Grades 9, 10, 11, 12

0.5 Credit

**Fee - \$30**

Prerequisite: Art 1

This course expands on basic 2D and 3D skills from Art 1. This course is recommended for those who don't know what are they are personally interested yet. Projects and activities will challenge and build your working knowledge of various material and techniques.

**120 DRAWING and DESIGN**

Grades 9, 10, 11, 12

0.5 Credit

**Fee - \$30**

Prerequisite: Art 1

This course offers students a continuation of the study of elements and principles of design through a variety of drawing materials and papers. Focus is on developing realistic imagery, effective graphic design use and building your imagination.

**210 PAINTING**

Grades 9, 10, 11, 12

0.5 Credit

**Fee - \$30**

Prerequisite: Art 1

This course introduces the student to creative expression through pastel, watercolor, acrylic, and oil painting. Students will study what artists have done in the past and the work of contemporary painters to aid them in developing their own style.

**240 MULTI- MEDIA**

Grades 10, 11, 12

0.5 Credit  
Fee - \$30

Prerequisite: Art 1, Drawing and Design, unless waived by the Art Instructor

This course will focus on digital photography, software, contemporary art and short film editing. (Adobe Photoshop and Premier Pro will be used). Concepts will include how to improve your photographs, editing techniques, special effects, storyboards, digital camera and video camera use. Throughout the semester contemporary styles of art, history, aesthetics will be discussed and viewed to explore ones multi-media style.

**250 SCULPTURE and CERAMICS**

Grades 9, 10, 11, 12

0.5 Credit  
Fee - \$30

Prerequisite: Art 1

Students will be introduced to materials, techniques, and methods of constructing ceramic pottery and sculpture (both hand-built and wheel-thrown). They will also have an opportunity to experience other sculptural materials such as plaster, wood, paper, metal, and mixed media.

**420 ADVANCED 2D / 3D**

Grades 11, 12

0.5 Credit  
Fee - \$30

Prerequisite: Art 1, Painting, Drawing and Design, Sculpture and Ceramics

This is an advanced art course offered to students with a strong desire to improve material techniques, further develop their own style and build self identity in their work. This course offers the opportunity for students to further explore three-dimensional and/or two-dimensional approaches and processes. Students will dive into studio techniques and assist in daily art routines.

**430 ART-INDEPENDENT STUDY**

Grades 11, 12

0.5 Credit  
Fee - \$40

Prerequisite: Art 1, Painting, Drawing and Design, Sculpture and Ceramics, Advanced 2D / 3D

This is an advanced art course offered to students with a strong desire to develop their artistic knowledge and independence within their area of interest. This course offers the opportunity for students to further explore three-dimensional and/or two-dimensional techniques and media types. Students will learn studio techniques and assist in daily art routines and material prep work.

**495 HONORS ART**

Grades 11, 12

0.5 Credit  
Fee - \$40

**Honors credit is achieved in the below Honors courses by completing the 3-5 page research paper and the artwork “series” (minimum of 3 separate works of art focusing on one theme), in addition to the regular course load of 3 projects and a final with a portfolio.**

Prerequisite: Art 1, Painting, Drawing and Design, Sculpture and Ceramics,  
Advanced 2D / 3D, Independent Study... Instructor Permission and Signed Contract

This is an advanced art course offered to students with a strong desire to improve their artistic knowledge and ability and to further develop their own styles in one or more areas of study. This course offers the opportunity for students to further explore three-dimensional and/or two-dimensional techniques and media types. Students will learn studio techniques and assist in daily art routines and material prep work without complaint.

# MUSIC DEPARTMENT

## **500 CONCERT CHOIR**

Grades 9, 10, 11, 12

1.0 Credit  
**Fee - \$40**

Concert Choir is a performance class focused on developing “sound musicians” through quality vocal literature. Areas of study taking place during large and small group and individual instruction include but are not limited to sight reading, beginning and advanced music theory, vocal techniques, elements and styles of music and music history.

Outside commitments include concerts, contests, clinics, festivals, and guest performances.

Solo and Ensemble is encouraged but not required.

Students will need a 3-ring binder & pencil for class.

## **510 HONORS CHOIR**

Grades 11, 12

1.0 Credit  
**Fee - \$40**

In addition to the normal class load, the Honors student performs a Class A solo at Solo and Ensemble contest and performs various duties throughout the year at the discretion of the instructor to assist with building a stronger community of learners (choir).

Prerequisite: Approval of instructor

Final admittance to Honors Choir is dependent on previous grade averages, vocal readiness and commitment to Concert Choir.

## **550 LITURGY CHOIR**

Grades 9, 10, 11, 12

1.0 Credit  
**Fee - \$40**

Prerequisite: Approval of instructor

Meet: Tuesdays and Fridays at 7:00 a.m.

Liturgy Choir is a performance class focused on developing “sound musicians” through quality vocal literature. Areas of study taking place during group and individual instruction include but are not limited to sight reading, beginning and advanced liturgical music history, vocal techniques, elements and styles of music. This group is, like the Concert Choir, encouraged to participate in Solo and Ensemble.

Commitments include: Singing and leading weekly Masses both at Columbus Catholic and in the community. Any other community performances.

**560 LITURGY CHOIR HONORS**

Grades 9, 10, 11, 12

1.0 Credit  
**Fee - \$40**

Prerequisite: Approval of instructor

In addition to normal class load, Honors students must cantor at weekend Mass and participate in a historical project. Rules and format are decided between instructor and each individual student.

**700 CONCERT BAND**

Grades 9, 10, 11, 12

1.0 Credit  
**Fee - \$75**

The main focus of Concert Band is the study and performance of various styles of the music in the wind ensemble repertoire. This is accomplished by a historical study of each composition and its composer, a study of basic and advanced music theory, and proper playing technique on the student's chosen instrument. The student receives instruction in both full band rehearsals and in individual and/or group lessons. Out-of-school activities include concerts, contests, parades, half-time shows and pep band.

**710 HONORS BAND**

Grades 11, 12

1.0 Credit  
**Fee - \$75**

In addition to the normal course load, the Honors student performs a class A solo in Solo/Ensemble contest and must choose and complete one of the following:

- Perform a Class A solo during the current year's Solo/Ensemble Festival. Failure to perform a solo will result in a grade no higher than a "C" for the entire second semester.
- After meeting with the band director, pick from one of the following:
  - Write a 14-16 page research paper. The paper must be completed by the given due date or the band grade for the entire first semester will be no higher than a "C".
  - Assist the band director in a stewardship project. Projects will be assigned on a one-on-one basis.

**750 JAZZ BAND**

Grades 9, 10, 11, 12

1.0 Credit

Prerequisite: Approval of instructor and must be current member of concert band.

Jazz Band takes the student's acquired knowledge from concert band and applies it to the study and performance of jazz music. Correct performance of jazz styles is gained through listening and identification. An in-depth study of jazz theory, modal theory, and jazz as it applies to American culture and history is part of the course. Out-of-school events include concerts, contests, and jazz fests.

**760 JAZZ BAND - HONORS**

Grades 9, 10, 11, 12

1.0 Credit

Prerequisite: Jazz Band and approval of the present instructor.

In addition to the normal course load, there are two other requirements in which the student will demonstrate his/her knowledge and study of Jazz Theory and Jazz History. These requirements are to be done each semester.

1. Study the melody and chord structure of three jazz compositions. These compositions must be selected from three contrasting jazz styles. The student will also improvise as part of the memorization process.
2. Aural identification of jazz compositions as selected by the course instructor. These compositions all represent a minimum of four jazz styles and twelve jazz performers. Identification includes name of performer, instrument played, style of jazz, and approximate year of recording.

**800 MUSIC THEORY HONORS**

Grades 11, 12

1.0 Credit

The main focus of Music Theory Honors will be music composition. The compositions will be individualized per student based on the student's prior knowledge and familiarity with the fundamentals of music theory.

**850 JAZZ IMPROVISATION-HONORS**

Grades 9, 10, 11, 12

0.5Credit

Prerequisite: Approval of Instructor and must be current member of Concert Band and Jazz Band

Designed to develop the improvisational techniques of the student as a soloist and in a combo setting. Heavy emphasis placed on jazz theory, including modal, bebop and the blues. Chord structure and progressions, memorization of jazz tunes, and jazz history will also be studied. Focus will be on the lives and styles of jazz artists, including aural identification of these artists' recordings. Out-of-school activities include concerts, contests, and jazz festivals.

# WORLD LANGUAGES DEPARTMENT

## FRENCH

### 1120 FRENCH I

Grades 8, 9, 10, 11, 12

1.0 Credit  
Fee - \$16

This course is an introduction to the various aspects of the French language and culture in Europe and throughout the world. Instruction will focus on development of skills in reading, writing, listening and speaking, and student participation in all these areas is emphasized. An introduction to grammar forms is an intrinsic part of the course. An appreciation of French culture is developed through study and occasional sampling of French cuisine, music and art.

### 1220 FRENCH II

Grades 9, 10, 11, 12

1.0 Credit  
Fee - \$16

Prerequisite: French I with grade of “C” or higher and approval of instructor

With emphasis again placed on reading, writing, listening, and speaking, students will consolidate skills introduced in French I. Focus is placed on student participation. Continuing study of grammar will deepen French II students’ ability to grasp the “nuts and bolts” of the language. Ongoing cultural studies will extend students’ appreciation of the food, art and music of the French world.

## SPANISH

### 1180 SPANISH I

Grades 8, 9, 10, 11, 12

1.0 Credit  
Fee - \$13

This is an introduction class to Spanish and cultures of the Spanish speaking world. Strong emphasis is placed on class participation in the forms of reading, writing, listening and speaking. This is a great continuation of the Spanish studying at a younger level but no prior knowledge or exposure to Spanish is needed.

### 1280 SPANISH II

Grades 9, 10, 11, 12

1.0 Credit  
Fee - \$13

Prerequisite: Grade of “C” or better in Spanish I and approval of instructor.

This is a continuation of Spanish I. Students will be expected to continue speaking, listening, writing and reading in Spanish. Emphasis is still on participation. Grammatical skills and knowledge will be taught and mastered.

### 1380 SPANISH III HONORS

Grades 10, 11, 12

1.0 Credit  
Fee - \$13

Prerequisite: Grade of “C” or better in Spanish II and approval of instructor.

Requirement: Students will be expected to maintain a “C” or better in this course. The instructor reserves the right to dismiss students not meeting these requirements.

This class is a deeper journey into language and culture. Speaking, writing, listening and reading are strong elements in this class as well as emphasis on correct Spanish grammar. This is only offered in an Honor section as it is “extra” foreign language credit; extra work is expected of students in this class as well as an honors attitude, students are expected to be hard-working and self-motivated.

**1480 SPANISH IV HONORS**

Grades 11, 12

1.0 Credit

**Fee - \$20**

Prerequisite: Grade of “C” or better in Spanish III Honors and approval of instructor.

Requirement: To maintain a “C” or better in this course. Instructor reserves the right to dismiss students not meeting these requirements.

This is a cumulative course of the previous classes. Heavy emphasis is on speaking, writing, reading and listening. Students are prepared for college level courses or Spanish V. Because this is an honors course, honors work and attitude are expected. Students should be self-motivated and hard working. Textbook workbook combination will be used again in Spanish V.

**1580 SPANISH V HONORS**

Grade 12

1.0 Credit

**Fee- \$20 if a new book is needed**

Prerequisite: Grade of “B” or higher in Spanish IV Honors and approval of instructor.

Requirement: Maintain a “C” or better in this course. Instructor reserves the right to dismiss students not meeting these requirements.

This is the culmination of the Spanish program. You will be preparing for college level Spanish classes or entrance exams as well as the AP Spanish exam. You will use your verbal and writing, listening and reading skills every day in class or in homework. Much will be expected of students; they should be self-motivated and hard working.

# LIBERAL ARTS DEPARTMENT

## 2120 LITERATURE/COMPOSITION I

Grade 9

1.0 Credit

**Fee - \$25**

This course covers short stories, poems, myths, novels, and plays. Writing skills will be stressed and will tie in with the study of literature. Paragraph development will receive special attention. The course includes work on vocabulary, grammar usage, critical thinking, and instruction on formal speaking. Additional time outside of class may be scheduled for students who need extra help. Students will be required to demonstrate competency in paragraph and sentence writing as well as grammar. Students will participate in outdoor Phenology Journaling throughout the school year. Phenology is the study of climate (in Wisconsin, the study of the four seasons) and its effect on living things.

## 2180 LITERATURE/COMPOSITION I HONORS

Grade 9

1.0 Credit

**Fee - \$25**

Prerequisite: Columbus Catholic High School placement criteria.

This course is intended for students with high reading, writing and speaking ability. It aims to provide challenging growth in vocabulary, sentence structure, and formal speaking. Throughout the year, writing is integrated with the reading of short stories, novels, plays, poems, and myths. There will be opportunities for independent learning through creative projects. Students will be required to demonstrate competency in paragraph and sentence writing as well as grammar. Students will participate in outdoor Phenology Journaling throughout the school year. Phenology is the study of climate (in Wisconsin, the study of the four seasons) and its effect on living things.

## 2220 LITERATURE/COMPOSITION II

Grade 10

1.0 Credit

**Fee - \$20**

Prerequisite: Approval of current English instructor.

*For 2011-12, Literature/Composition II will be run as a pilot block scheduled course, meaning students will have the class for two consecutive periods per day, but only for one semester.*

This course covers short stories, poetry, novels, and plays. Literature/Composition II is a continuation of the freshman program, with further development of paragraph and essay writing. Additional formal speaking instruction is also a part of the curriculum. In addition, there is a unit of vocabulary building that stretches throughout one semester and is covered in conjunction with several other units. Students will be graded through a variety of assessments, including tests, quizzes, projects (both individual and group), essays, speeches, journaling, and daily homework. Additional time outside of class may be scheduled for students who need extra help.

## 2280 LITERATURE/COMPOSITION II HONORS

Grade 10

1.0 Credit

**Fee - \$20**

Prerequisite: Student must complete the honors class application. Student must have maintained an overall grade average of "B" or better in Literature/Composition I Honors or "A" in Literature/Composition I.

Approval of current English instructor.

*For 2011-12, Literature/Composition II will be run as a pilot block scheduled course, meaning students will have the class for two consecutive periods per day, but only for one semester.*

This course is comparable to the regular Literature/Composition II course (basic curriculum and assessments are the same), but the honors level moves at a faster pace, covers several different novels, and emphasizes a deeper study of thematic development, character analysis, plot, and stylistic devices in different genre. Students at the honors level are also assigned several more essays and individual projects. Students must demonstrate "advanced" reading and writing skills and expect to read and work in greater quantities than the Literature/Composition II student.

**2320 LITERATURE/COMPOSITION III**

Grade 11

1.0 Credit  
Fee - \$20

Prerequisite: Approval of current English instructor.

This is a comprehensive integration of literature, language, composition, and speech with emphasis on classical, traditional, and modern American authors. The course will include responses to the literature in oral and written forms. Additional time outside of class may be scheduled for students who need extra help. Students will participate in outdoor Phenology Journaling throughout the school year. Phenology is the study of climate (in Wisconsin, the study of the four seasons) and its effect on living things. All juniors will participate in a late winter all day fieldtrip devoted to this literary discipline.

**2380 LITERATURE/COMPOSITION III HONORS**

Grade 11

1.0 Credit  
Fee - \$22

Prerequisite: Student must complete the honors class application. Student must have maintained an overall grade average of “B” or better in Literature/Composition II Honors or “A” in Literature/Composition II. Approval of current English instructor.

This course is designed for the advanced student in language arts at the junior level. This course surveys classical, traditional, and modern American authors and requires students to respond through oral and written forms. Students in this course cover additional and more challenging materials than the Literature/Composition III course. Students must demonstrate “advanced” reading and writing skills and expect to read and work in greater quantities than the Literature/Composition III student. Students will participate in outdoor Phenology Journaling throughout the school year. Phenology is the study of climate (in Wisconsin, the study of the four seasons) and its effect on living things. All juniors will participate in a late winter all day fieldtrip devoted to this literary discipline.

**2420 LITERATURE/COMPOSITION IV**

Grade 12

1.0 Credit  
Fee - \$14

Prerequisite: Approval of current English instructor.

This course is a culmination of the skills that students have been developing in the previous three years of high school. During the first semester, we focus on the process of Shared Inquiry which requires students to read, analyze, discuss, and write about literature to find an interpretation supported by the text. During the second semester, we focus on a wider variety of literature, but with the same purpose. Overall, students will think critically and analytically while using both oral and written communication skills in order to clearly convey their thoughts on the literature. Individual help will be given to each student on writing and grammar in order to pinpoint specific strengths and weaknesses in their abilities. Students will be expected to be able to comprehend what they read and to find meaning in it. They should be able to dialogue with literature and share ideas on a mature, intellectual level. They should also be able to express these ideas clearly, concisely, accurately, deeply, logically, and in a way that is relevant to their lives.

**2490 CREATIVE WRITING HONORS**

Grades 11, 12

0.5 Credit

Prerequisite: Student must complete the honors class application. Student must be a junior or senior. Student must have maintained a “B” average in previous year’s English course(s). Approval of the Creative Writing Honors instructor(s).

In this course the student will write poetry, short fiction and nonfiction, dialogues/plays, and, if students are so inclined, novels. It will be a workshop-style class with peer critiquing. Grading is determined by deadlines, production, progression of writing skills, and effort.

**2500 AP LITERATURE/COMPOSITION**

Grade 12

1.0 Credit

Prerequisite: Student must complete the honors class application. Student must have maintained an overall grade average of “B+” or better in Literature/Composition III Honors or “A+” in Literature/Composition III. Approval of English department.

This class is a college literary analysis course that offers students the opportunity to meet the challenge of college-level reading, thinking, and writing with the support of a high school instructional environment. Thematic units cover important skills such as poetry explication, various modes of literary analysis, and interpretive reading and writing. A heavy emphasis will also be placed on creating reasonable arguments for the interpretation of a literary piece and presenting these arguments in a solid essay. For students seeking composition credit, the course aims to prepare students to take the Advanced Placement Literature and Composition Examination in May. The course demands serious students: individuals committed to spending time and effort in both reading and writing.

## SOCIAL STUDIES DEPARTMENT

### **3120 CIVICS**

Grades 9

0.5 Credit

This course offers an introduction to the responsibilities and right of American citizens. Included are a study of the three branches of government, the Constitution, American Society, basic economic concepts, and money and banking.

### **3220 U.S. HISTORY**

Grade 11

1.0 Credit

This is a survey course, covering American History from pre-Colonial times until World War II. Both a topical and thematic approach will be used, allowing for enhanced student understanding of the issues from America's past. Students will also learn of the connections of the past to today's world. Units of study will include the Revolutionary War, Birth of the Constitution, Reform movements of the 1800's, the Civil War, the Age of Imperialism and a decade by decade approach to the first half of the 20<sup>th</sup> Century.

### **3250 CURRENT ISSUES**

Grades 11, 12

0.5 Credit  
Fee - \$15

In this course students will examine many topics, which are important to the present and future of the world. Students are required to do a variety of tasks to demonstrate their understanding of current events, but the class is also designed to allow for many student-chosen ideas to be examined. There is no text for this course, but television news and numerous internet sources are consulted for topics in this class.

### **3320 WORLD HISTORY**

Grade 10

1.0 Credit

This is a survey course that uses a thematic approach to help students develop a broader scope of world events from the recent and far-reaching past. During the course of the year, students are introduced to many unique ideas and details by using a variety of themes, including the study of governments, wars, the question of fairness and the major religious beliefs of our world. Both Eastern and Western World History will be explored, including the role and influence of the Catholic Church in history.

### **3360 PSYCHOLOGY I**

Grades 11, 12

0.5 Credit

This is an introductory course to the field of psychology. The course includes a basic history of the field of psychology and introduces some fundamental concepts and theories of psychology and applies them to human development. Units covered will include history of psychology, basic psychological theories, learning principles, information acquisition and retention, theories of consciousness, sensation, perception, motivation, emotion, sleep, and dreaming.

**3370 PSYCHOLOGY II HONORS**

Grades 11, 12

0.5 Credit

Prerequisite: Psychology I, approval of current social studies instructor.

The units of this course take a deep look into specific areas of psychological studies with a more intense focus worthy of “honors” designation. The course begins with an intensive study of developmental psychology. The course will look at human development from the infancy stage through old age. As part of the developmental psychological study, we will look at personality development. A unit on abnormal psychology will explore what can go wrong with personality development. A unit on psychoactive drugs and behavior will show how substances can alter sensations, perceptions, consciousness, behavior, and development.

**3380 WORLD HISTORY HONORS**

Grade 10

1.0 Credit

Prerequisite is a grade of “A” in previous social studies courses, grade of “B+” or better in English and approval of your current social studies instructor as well as approval of the honors course instructor.

The World History course will give students an overview of the history of the people of our planet. This year-long course covers history from the earliest civilizations to the early 20<sup>th</sup> century. World History Honors will look at the people, places, and events that shaped our world. Students will focus on the development of Eastern and Western Civilizations. Since this course carries an honors designation students will be expected to give a college-preparatory effort in their studies. Since this is a college preparatory class it will be primarily lecture, similar to college history courses. Group work and guided reading activities will also be used from time to time.

**3420 AMERICAN GOVERNMENT**

Grade 12

0.5 Credit

This course will give students an overall view of the workings of the United States Government. Among the areas of focus will be government financing, the election process, the role of special interest groups and public opinion. Student decision-making skills will be sharpened to help them make wise political choices in the future.

**3450 RECENT US HISTORY (RUSH)**

Grade 12

0.5 Credit

This course concentrates on American History from 1950 to the present. Topics include the Cold War, Vietnam War, Civil Rights Movement, the Persian Gulf War, Terrorism, and other critical events of our recent past. The course will use historical fact to encourage students to make informed decisions

**3480 ECONOMICS**

Grades 11, 12

0.5 Credit

This course will introduce students to key economic concepts including supply and demand, scarcity, opportunity cost, risk and more. Students will also study the effects of government decisions on the economy and therefore everyday life. Students will also learn about different investment vehicles and participate in a Stock Market Simulation

**3500 ADV. PLACEMENT UNITED STATES HISTORY I  
(APUSH I)**

Grades 11, 12

1.0 Credit

Prerequisite: Junior or Senior standing, approval of current social studies instructor

This is a year-long college-level course in United States history. It covers the era from the first “Native American” settlers of the continent through the Civil War. The main purpose of this class is to teach students how to think like a historian, especially how to understand historical philosophy (the effect that *ideas* have on human life). This class will also prepare students for college by helping them to develop writing skills, study habits, and the skills of a good historian. Students may earn college credit by taking the Advanced Placement United States History exam and earning a grade accepted by the college of their choice. There is a fee for the exam. Students may choose to take Advanced Placement United States History II in order to learn more about the periods of history not covered in this course.

**3510 ADV. PLACEMENT UNITED STATES HISTORY II  
(APUSH II)**

Grade 12

1.0 Credit

Prerequisite: APUSH I

A continuation of Advanced Placement United States History I, this is a year-long college-level course in United States history. It covers the era from the Restoration Period after the Civil War forward. This class will prepare students for college by helping them to develop writing skills, study habits, and the skills of a good historian. Students may earn college credit by taking the Advanced Placement United States History exam and earning a grade accepted by the college of their choice. There is a fee for the exam. Students may take this course strictly as an honors level of Recent United States History (RUSH). They are still required to take United States Government, as the APUSH classes do not cover the material covered by the government class.

# THEOLOGY DEPARTMENT

## **4120 OLD TESTAMENT**

Grade 9

0.5 Credit

This course begins with an introduction of Sacred Scripture as the inspired Word of God. The course will consider the Old Testament as God's gradual revelation of Himself to man with a focus on the covenants God establishes with His people. Special emphasis will be placed on establishing a familiarity with important characters and key events in their chronological sequence, an emphasis which is of paramount importance for understanding the New Testament.

## **4130 NEW TESTAMENT**

Grade 9

0.5 Credit

This course will consider the New Testament as the written record of the fulfillment of Old Testament revelation: Jesus Christ. Focusing on the Gospels, the course will consider the events and meaning of the life, ministry, passion, death and resurrection of our Lord. Continuing with the Acts of the Apostles, the course will explore the life and growth of the early Church after our Lord's Ascension into heaven and the descent of the Holy Spirit upon the Apostles. The course will include a brief survey of St. Paul's letters and the Book of Revelation.

## **4220 FUNDAMENTAL THEOLOGY**

Grade 10

0.5 Credit

This course seeks deeper knowledge and understanding of all the major themes found in the creeds of the Church. It begins with the pursuit of objective truth and proof for God's existence. It continues by looking at our capacity for God, how God reveals Himself to us, and how we are to respond to God's revelation. Throughout the course, central themes will include our universal call to holiness and our role as Christians within the Kingdom of God. As the course focuses on the fundamental beliefs and teachings of the Church, emphasis will be placed on knowing the Faith in order to both live it out and defend it.

## **4230 SACRAMENTAL THEOLOGY**

Grade 10

0.5 Credit

This course will consider the sacramental life of the Church as the means by which Christians seek their ultimate goal: union with God. Beginning with a general consideration of the sacraments as signs which impart grace given to us by Christ, the course will progress to an in-depth investigation of each of the seven sacraments. Special emphasis will be placed on the matter and form of each sacrament, as well as on the grace received and the effects of each sacrament.

## **4320 MORAL THEOLOGY I**

Grade 11

0.5 Credit

This course will begin with an examination of truth and how we can know objective truth through the tools of philosophy, science, and revelation. Next, it will explore the topic of natural law, which God has built into our human nature. Topics for this part of the course include what it means to be a human being, especially in the areas of human action, human needs, human emotions, and human society. Next, the course will explore salvation history and divine law. The truths that will be highlighted include that we were created to live in relationship with God and others, that sin destroys those relationships and damages our human nature, and that Jesus Christ is the only way those relationships can be restored. Topics for this part of the course include Original Innocence, Original Justice, Original Sin, Sin, covenant, law, sacrifice, the person of Jesus Christ, the saving act of Jesus Christ, Divine Grace, and theological virtues. The unifying theme of this course is the human quest for happiness and the necessity of union with Christ in order to achieve this ultimate goal.

**4330 MORAL THEOLOGY II**

Grade 11

0.5 Credit

This course will begin by focusing on the confusing situation of morality today which, for Christians striving to follow their baptismal vocation to holiness, can only be alleviated by adherence to the principle norm of morality: Jesus Christ. The rest of the course is organized according to the Ten Commandments. Each unit will explore one of the Ten Commandments as well as specific moral issues that touch on that commandment. The general principles of natural law and divine law learned in Christian Morality I will be applied to making the correct moral decisions regarding each issue. Special emphasis will be placed on the dignity each person has as an Image of God. The focus of this course is to show practical ways that we can live our lives in cooperation with grace to grow in our life of love, in relationship to Jesus Christ and to each other. Unifying themes of this course are happiness, holiness, and virtue.

**4420 SPIRITUAL THEOLOGY**

Grade 12

0.5 Credit

The belief that underlies this course is the universal call to be holy, humble, prayerful disciples of Christ. As students read writings of saints, popes, and modern writers, they will grow in knowledge of what it means to live humbly and prayerfully in today's tumultuous world. Emphasis will be placed on using different methods of prayer to grow in self knowledge and in a deeper relationship with God. As they prepare to go out into the world, students will also study apologetics and will grow in their ability to explain and defend the faith.

**4430 CHRISTIAN STEWARDSHIP**

Grade 12

0.5 Credit

The focus of this course is to understand the importance of ministry in the church. The students will be placed in volunteer situations throughout the school community in order to be given the opportunity to put their faith into action. It is important for the students to realize their God given gifts and talents and their responsibility for sharing them in the future with the larger community.

**4450 ADVANCED SPIRITUAL THEOLOGY**

Grade 12

0.5 Credit

The purpose of this course is for students to continue growing in knowledge of themselves, of God, and in their relationship with Christ while also gaining a greater appreciation for the lives of the saints, what it means to pray, and what it means to live a holy, humble, and prayerful life. As they deepen their prayer life and their relationship with Christ, students will also be prepared to continue their faith growth after graduation. This will include a study of apologetics, where students will grow in their ability to explain and defend the Faith.

**4460 CHURCH HISTORY I (From Jesus Christ to the Middle Ages)** Grades 9,10,11,12

0.5 Credit

This course will explore the history of the Catholic Church from its foundation by Jesus Christ upon the Apostles, through the centuries, into the Middle Ages. It is a story of saints and sinners, highs and lows, the unfolding of God's providential plan.

In addition to giving perspective on past and present times ("history doesn't repeat itself but it rhymes"), this course will defend the Church where it has been unfairly maligned and promote an appreciation for the lives of saints.

**4470 CHURCH HISTORY II (From the Renaissance to Vatican II)** Grades 9,10,11,12

0.5 Credit

This course will review Catholic Church history from the Renaissance to the Second Vatican Council. It is a continuation of the Church History I class into modern times, but this class has no prerequisites.

## **BUSINESS & COMPUTER SCIENCE DEPARTMENT**

### **5217 ACCOUNTING I**

Grades 11, 12

0.5 Credit

**\*\*\* Offered fall semester**

This course will cover introductory accounting skills. Emphasis in this course will be placed on concepts of the accounting equation complemented by an understanding of a complete accounting cycle within a fiscal period. Students will gain skills in applying the concepts they learn by preparing accounting papers for a service business organized as a sole proprietorship. As time allows, students will also explore preparing papers for a merchandising business organized as a partnership

### **5218 ACCOUNTING II Independent Studies.**

Grades 11, 12

0.5 Credit

**\*\*\* Offered spring semester**

Students will continue their skills learned in Accounting I by preparing accounting papers for a service business organized as a partnership. Concepts of the entire fiscal period will be applied within the accounting equation for partnership businesses. Topics include: employees, tax deductions, and partnership expenses.

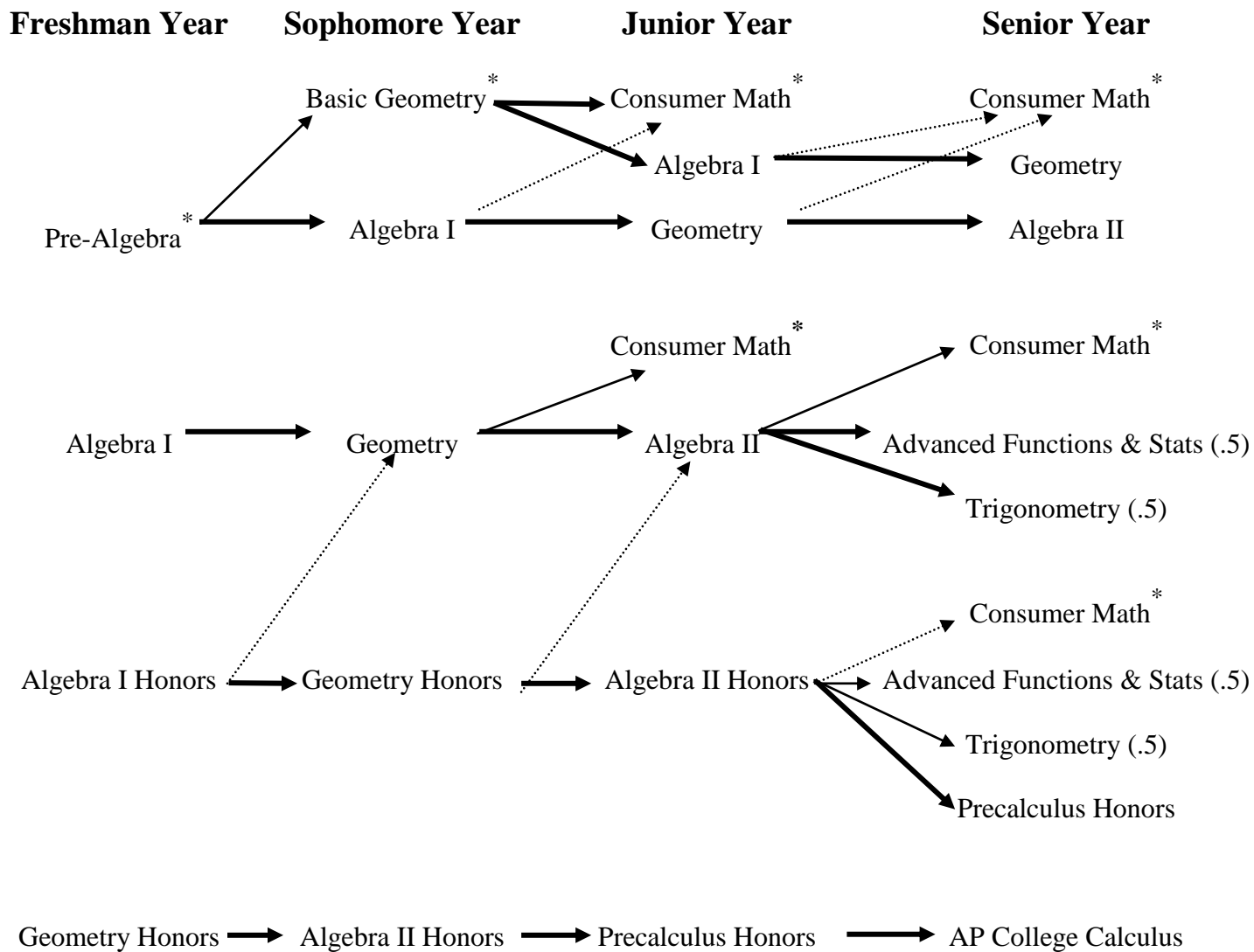
### **5220 COMPUTER APPLICATIONS**

Grade 9, 10, 11, 12

0.5 Credit

The course takes an in-depth look at the hands-on applications necessary for many careers and educational programs. Using Microsoft Office 2007, general computer concepts will be addressed. Applications to be investigated are Word, Excel, Power Point, and possibly Outlook or Access. Additionally, students will practice writing various types of professional letters, as well as a resumé.

## Mathematics Course Flowchart



**Note:** If any students wish to attempt the ACT exam before the second semester of their junior year, it may be to their benefit to take the elective course “Trigonometry” (offered in semester I) before the exam, so that they gain exposure to any advanced trigonometric functions used on that exam; such advanced trigonometric formulas will otherwise not be seen until Precalculus-Honors, semester II.

\*This Math course does not count towards admission requirements of four-year colleges.

# MATHEMATICS DEPARTMENT

*Continued enrollment in honors level math courses may be contingent on the student maintaining a “B-“ or higher average at all times.*

## **6100 PRE-ALGEBRA**

Grade 9

1.0 Credit

Prerequisite: Eighth-grade math

This course is intended for the student who may need additional preparation for Algebra I. Topics of study may include operations for whole numbers, decimals, fractions, integers, number theory, percent, ratio and proportion, inequalities, graphing, and solving basic linear equations.

## **6120 ALGEBRA I**

Grade 9, 10

1.0 Credit

Prerequisites: A “C-” average or higher in eighth-grade math or similar placement test results, and approval of eighth-grade math instructor.

This course covers the following content areas: number sets and their notation, properties, conditions and operations on rational expressions, formulae, the Cartesian plane, and a discussion of probability and statistics.

## **6180 ALGEBRA I HONORS**

Grade 9

1.0 Credit

Prerequisites: “B+” or higher average in eighth-grade math, or similar placement test results.

This course covers the same content areas covered in the Algebra I course but in greater depth and intensity. Additional topics may include distance and direction in the plane, direct and inverse variation, linear and quadratic functions, systems of equations, and special functions.

## **6200 BASIC GEOMETRY**

Grade 10, 11, 12

1.0 Credit

Prerequisites: Pre-Algebra or Algebra I, and approval of present math instructor.

This course provides the student with a general knowledge of the applications of geometry in the workplace. Topics covered are measurement, graphs, tables, formulae, triangle math, probability, and statistics.

## **6220 GEOMETRY**

Grade 10, 11, 12

1.0 Credit

Prerequisites: Algebra I and approval of present math instructor.

This course covers the following: basic linear and planar sets, angles, polygons, polyhedrons, circles, congruence, similarity, proofs, constructions, coordinate geometry, area, volume, probability and statistics. The presence of geometry in the natural and human-made world is also discussed.

**6280 GEOMETRY HONORS**

Grade 9, 10

1.0 Credit

Prerequisites: Previous semester grade “B-“ or higher in Algebra I Honors

This course provides a more in-depth study of the content areas of Geometry (Course 6220). The student receives an intensive treatment of plane, solid, coordinate, and transformational geometry.

**6320 ALGEBRA II**

Grade 10, 11, 12

1.0 Credit

Prerequisites: Geometry and approval of present math instructor.

This course is recommended for any student considering post-secondary education in a business/technology or science-related field. The topics of primary concern are the following: integers, polynomials, rational numbers and expressions, conditions over rationales, powers and roots of real and imaginary numbers, mappings, curves in the Cartesian plane, systems of equations and constant, linear and quadratic functions. This course uses a *TI-83 Plus* (or equivalent) graphing calculator.

**6380 ALGEBRA II HONORS**

Grade 10, 11

1.0 Credit

Prerequisites: Previous semester grade B- or higher in Geometry Honors and/or approval of present math instructor.

This course covers all of the content areas covered in Algebra II but in greater depth and with more intensity. It also includes an introduction to trigonometry and an introduction to conics. It is recommended for any student considering post-secondary education in a business/technology or science-related field. This course uses a *TI-83 Plus (or equivalent)* graphing calculator.

**6340 CONSUMER & CAREER MATHEMATICS**

Grade 11, 12

1.0 Credit

Prerequisite: Geometry or approval of present math instructor.

This course is designed as a third 1-credit math course for the student not bound for study in a business or science-related field at a college or tech school. It can be taken concurrently with another math course. Study includes reviews of basic math, algebra, and geometry skills, problem solving, application of math in areas such as income, checkbooks, investments, taxes, cars, insurance, and renting, buying, or building a house.

**6420 TRIGONOMETRY**

Grade 11, 12

0.5 Credit

Prerequisites: Algebra II and/or approval of present math instructor.

This course is designed for the student who has completed Algebra II and wishes to further their math education or at least maintain math skills. Topics studied include trigonometric and circular functions, their inverses and graphs, identities, and Trigonometric laws for non-right triangles. This course uses a *TI-83 Plus (or equivalent)* graphing calculator.

**6430 ADVANCED FUNCTIONS AND STATISTICS** Grade 11, 12

0.5 Credit

Prerequisites: Algebra II and/or approval of present math instructor.

This course is for students who have had at least Algebra II, who wish to further their math education or at least maintain math skills, and who wish to improve comprehension of logical reasoning. It would also be appropriate for any student of Pre-Calculus or Calculus. Topics studied include formal & informal logic, sequences, series, probability, and statistics. Additional topics may be exponential, logarithmic, and trigonometric functions, and matrices. This course uses a *TI-83 Plus* (or equivalent) graphing calculator.

**6480 PRE-CALCULUS HONORS**

Grade 11, 12

1.0 Credit

Prerequisites: Previous semester grade B- or higher in Algebra II Honors and/or approval of present math instructor.

This course explores Pre-Calculus topics, which may include linear relations and functions, the nature of graphs, nonlinear functions, trigonometric functions, identities and equations, and conics. This course uses a *TI-83 Plus* (or equivalent) graphing calculator.

**6585 AP COLLEGE CALCULUS**

Grade 12

1.0 HS Credit

(Math 220 = 4 college credits, Viterbo U.)

Prerequisites: Previous semester grade of “B+” or higher in Pre-Calculus Honors, similar placement test results, and approval of present math instructor.

This course can be taken in one of two ways:

1) as an AP Calculus AB course (requires testing fee, paid in early 2<sup>nd</sup> semester); the course will serve as preparation for the Advanced Placement Calculus AB examination in May. Note: since the AP test occurs well before the end of the academic year, the test will occur before all of the course material is covered, and it would be advisable for students to enhance their preparation for the AP test by other means (e.g. tutoring, study programs, software, etc.).

2) as a College Calculus course (through Viterbo University); if students register by the deadline (usually **May 15** of the previous year), pay the tuition and registration fees, and maintain at least a “C” average for all terms, students will receive 4 college math credits through Viterbo University. See the guidance office for details.

Topics include limits, first derivatives, higher-order derivatives, related-rate and tangent line approximations, derivative applications, anti-differentiation and integration, logarithmic, exponential, and other transcendental functions, and integration applications. This course uses a *TI-83 Plus* (or equivalent) graphing calculator.



## SCIENCE DEPARTMENT

**Graduation Requirements:** 3 credits of Science of which one credit must be from Biology, one credit from a Physical Science. Two credits must meet the lab requirement.

(Bio) = Fulfills biological science requirements

(Physical) = Fulfills physical science requirements

(Lab) = Fulfills lab requirements

(Non Lab) = Does not meet lab, biological or physical requirements

**7130 ASTRONOMY / GEOLOGY (Physical & Lab)**      Grade 9, 10, 11, 12      0.5 Credit

This course is a survey of geology and astronomy. Half of the course is in the geology area including rock, mineral identification. Other topics of earth science may be included such as surface forces, plate tectonics, and earth history. The second half of the course concentrates on astronomy: stars, galaxies, the planets, and their moons. A rock/mineral collection is required.

**7250 BIOLOGY I (Bio & Lab)**      Grade 9, 10      1.0 Credit  
**Fee - \$20**

Biology I is a course which enables students to proceed from a mastery of fundamental biological concepts to scientific investigation of the cell, genetics, plants, animals, and humans. The study of interrelationships of living things and their environmental adaptations should help to bring about an interest in and an appreciation for all living things. The students should gain a clear comprehension of the significance of life and its importance in human welfare. Lab investigations involve dissections.

**7280 BIOLOGY I HONORS (Bio & Lab)**      Grade 9, 10      1.0 Credit  
**Fee - \$20**

Prerequisite: Recommendation from 8<sup>th</sup> grade science instructor.

Same as Biology I but in greater depth and will have more difficult exams. Exams will account for 45% of the quarter grade. In the non-honors class, exams will account for 40% of the quarter grade.

**7340 CHEMISTRY I (Physical & Lab)**      Grade 10, 11, 12      1.0 Credit  
**Fee - \$25**

Prerequisite: Biology I and Algebra I

This course will cover areas in scientific measurement, atomic structure, chemical reactions, chemical names and formulas, ionization, matter and its changes, energy, behavior of gases, periodicity, kinetics, chemical quantities, and oxidation-reduction. Problem solving techniques will be emphasized. A solid math background is recommended.

**7380 CHEMISTRY I HONORS (Physical & Lab)**

Grade 10, 11, 12

1.0 Credit  
Fee - ~~\$25~~

Prerequisite: "B" average in Algebra I Honors and Biology I Honors, approval of present math and science instructors.

This course in modern chemistry is designed to meet the requirements of honors college preparatory students in this and allied areas of science, as well as a preparation for careers in applied science. Fundamental aims of this approach to chemistry are to present the basic principles of chemistry as an intellectual discipline, to develop interest in chemistry, and to identify promising students. Topics covered are similar to Regular Chemistry I. A mathematical approach to chemistry will be followed.

**7400 ENVIRONMENTAL SCIENCE (Bio, Non Lab)**

Grade 10, 11, 12

0.5 Credit

Prerequisite: Biology I or approval of instructor

This course is designed to develop the student's interest in, appreciation of, and sense of responsibility for our multifaceted environment. Emphasis is on textbook and activity work with enough outside reading to be able to understand what is observed in nature, the environment and our impact on them. This is an elective course, which does not fulfill a physical science or lab requirement. A leaf / aquatic macro – invertebrate collection required.

**7410 INTRODUCTION TO PHYSICS (Physical & Lab)**

Grade 11, 12

0.5 Credit

Prerequisite: Biology I and Chemistry I

Introduction to Physics is the study of matter and energy and their applications together with formulas and problem solving. Newton's laws, simple machines, fluids, waves, electricity, and magnetism are some of the topics covered. This is a physical science course. A project may be required.

**7420 MARINE BIOLOGY (Bio & Lab)**

Grade 10-12

0.5 Credit  
Fee - \$20

This course combined a week long supervised summer session conducted by the Institute of Marine Biology with a classroom discussion and research report conducted during the fall semester. Following the summer session, the student will be required to write a research report based on the explorations. Additional costs of the summer program are responsibility of the student. (The next offering will be the summer of 2011).

College credit is available for this course through University of Wisconsin Extension.

**7430 OCEANOGRAPHY / METEOROLOGY (Physical)**

Grade 10, 11, 12

0.5 Credit

Meteorology will be covered the first half of the class; we will study the atmosphere and the factors responsible for weather and climate such as latitude, air masses, cloud types and winds. We will discuss and learn to read weather maps and to predict the weather based on current conditions. During the oceanography segment of the class, we will study the physical and chemical features of the ocean such as salinity, currents, temperature and the ocean floor. A small segment of this class will address the organisms that live in the ocean.

**7440 ANATOMY AND PHYSIOLOGY (Bio & Lab)**      Grade 11, 12      1.0 Credit

**Prerequisite: Students may only enroll in this class with permission of the instructor.**      **Fee - \$20**

This course is for students who are interested in learning about the structure and function of the human body. Emphasis is given to improving the presentation skills of the students. This will be offered during the 2010-2011 school year.

**7450 HUMAN ANATOMY & PHYSIOLOGY HONORS (Bio & Lab)** Grade 11, 12      1.0 Credit  
**Fee - \$20**

Prerequisite: Biology I and Chemistry I and approval of Biology instructor.

Anatomy and Physiology is a course for students who are interested in learning about the structure and function of the human body. This course includes the major biological concepts with emphasis on human anatomy and physiology. Laboratory investigations involve extensive dissections.

**7470 CHEMISTRY II HONORS (Physical & Lab)**      Grade 11, 12      1.0 Credit  
**Fee - \$25**

Prerequisite: "B" average in Honors Algebra II and Honors Chemistry I and approval of current math and science instructors.

Chemistry II is an advanced course offered to juniors and seniors who have shown above-average ability and interest in Chemistry I. Theory and lab classes cover the study of molar and normal solutions, acid-base titration, reaction energy, chemical equilibrium, cation and anion analysis, and an introduction into organic, transition metals, and biochemistry. Students planning on a science-related career will find this course a comprehensive preparation. A project may be required.

**7480 PHYSICS HONORS (Physical & Lab)**      Grade 11, 12      1.0 Credit

Prerequisite: Honors Chemistry I, Honors Algebra II with a "B" average or above, and approval of current science and math instructors.

This course in physics is designed to meet the requirements of college preparatory students planning to major in Science or enter allied careers. Basic to the study of physics is the role of theory in the development of the understanding and interpretation of the physical world, to use mathematical analysis of physical phenomena and to acquire accuracy in the scientific method of laboratory work. The course is composed of two major areas: Mechanics and Modern Physics (covering topics similar to the Introduction of Physics course, but placing strong emphasis on mathematical analysis and problem-solving). A project may be required.

**7490 \*PACC INTRODUCTION TO  
MOLECULAR BIOLOGY (Biology & Lab)**

Grade 12

1.0 HS Credit  
4 College Credits  
**Fee—see below\***

Prerequisite: **Chemistry II Honors preferred and approval of instructor.**

This course is offered through St Mary's University of Minnesota and made available here on the Columbus Catholic High School campus. The course content includes an introduction to the study of metabolic processes of biological species at the molecular level. Emphasis is placed upon physiological processes and photosynthetic mechanisms including nutrition, gas exchange, transportation, and regulation. The aim is to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The course involves a strong laboratory component, including the construction of lab reports.

This course is recommended for students who will be entering college. Non-science majors may benefit from the completion of the General Education requirement in college. Prospective Science majors may wish to get an introduction to science study at the college level. For these students it is not intended to replace a first year biology course in college. **Students who enroll in this course must have earned a semester grade of A- in one of the following courses: Chemistry II Honors, Physics Honors or Anatomy and Physiology Honors.**

*\*You may earn college credits from the Program for Advanced College Credit (PACC) through Saint Mary's University of Minnesota. Students must apply by the deadline and pay the tuition fee. \*The fee was \$60.00 per semester credit for the past year. This is subject to change by St. Mary's. Students must purchase the book and pay a lab fee—the amount varies each year. Students in this program are officially enrolled as students of Saint Mary's and will receive a separate course grade, which will appear on their transcript for Saint Mary's. Credits are treated as transfer credits by the colleges and universities that students attend after high school.*

# PHYSICAL EDUCATION DEPARTMENT

Physical Education classes **can not** be repeated and receive credit, with the possible exception of strength training. Permission from the instructor to repeat strength training is required.

## **8110 PHYSICAL EDUCATION I**

Grade 9

0.5 Credit

The two main concerns of this course are to understand skills and work together with your peers. The activities in Physical Education will improve gross motor skills and physical fitness. Some of the activities are flag football, soccer, volleyball, floor hockey, basketball, softball, walking, jogging, ultimate Frisbee, archery, stunts and tumbling.

## **8230 PHYSICAL EDUCATION II**

Grade 10, 11, 12

0.5 Credit

Prerequisite: Physical Education I

This is an advanced course of physical fitness and gross motor skills. Students will learn all aspects of sport skills. Tests will be given with the course to improve gross motor skills. Strategies and game-like situations will be a focus for this course.

## **8240 PHYSICAL EDUCATION III**

Grade 11, 12

0.5 Credit

Prerequisite: Physical Education II

This is an advanced course of physical fitness and gross motor skills. Students will learn all aspects of sport skills. Tests will be given with the course to improve gross motor skills. Strategies and game-like situations will be a focus for this course.

## **8250 HEALTH**

Grade 10

0.5 Credit

Introduction to "Health by Choice" gives the students an awareness of certain diseases and how to possibly prevent or delay them, personal hygiene, nutrition, and human development and sexuality. This course teaches the importance of good health, making decisions about sex and pregnancy, use of tobacco, and use and abuse of drugs and alcohol. This course will also present basic first aid procedures to the students. There will be activities as well as lectures; videos and outside of class work on article critiques and health information.

## **8310 WOMEN'S FITNESS**

Grade 10, 11, 12

0.5 Credit

This Course is open to girls. The content of this course will be directed toward promoting and improving physical fitness. The course will focus on basic aerobic conditioning, bodybuilding and toning with activities such as strength training, yoga, and taeko.

**8320 LIFETIME SPORTS**

Grade 11, 12

0.5 Credit

Prerequisite: Physical Education I or II

Lifetime is a course so students can understand the rules of and gain an appreciation for lifetime activities. Some of the activities are beach and indoor volleyball, table tennis, badminton, roller blading, archery, tennis, basketball, and cross-country skiing. There will be gym and class work to be done for all sports and activities. The course also involves learning gross motor skills and aspects of each sport. Tests and written work are part of the course.

**8330 STRENGTH TRAINING**

Grade 10, 11, 12

0.5 Credit

This course is open to boys. The content of the course will be directed primarily toward conditioning and bodybuilding. The course is also designed to promote and improve physical abilities. It will include resistive exercises for all the major muscle groups of the body.

**TEAM SPORTS (See listings below)**

Grade 11, 12

0.5 Credit

Any junior or senior student / athlete who begins and finishes an athletic season in good standing with their respective coach may receive 0.5 credits for their participation once a year.

BASEBALL

SOCCER

BASKETBALL – BOYS

SOFTBALL

BASKETBALL – GIRLS

TENNIS – BOYS (SPRING)

CROSS COUNTRY

TENNIS – GIRLS (FALL)

FOOTBALL

TRACK AND FIELD

GOLF

VOLLEYBALL

HOCKEY

WRESTLING

# FAMILY AND CONSUMER EDUCATION DEPARTMENT

## **9000 BEGINNING FOODS**

Grade 9, 10, 11

0.5 Credit  
Fee - \$40

This is a course introducing foods and nutrition. An emphasis is placed on cooperative working in the kitchen, sanitation and safety, and the selection and purchasing of food. Food related concerns such as nutrition, food availability, and providing for your family are addressed. Possible lab units covered are desserts, cookies, cakes, pastries, candies, yeast, and quick breads.

## **9005 ADVANCED FOODS**

Grade 12

0.5 Credit  
Fee - \$70

This course stresses simple baking techniques, meal planning and service, plus the selection of foods and their preparation, with an emphasis on nutrition. There is a stress put on nutritious, economical and timesaving meals appropriate to the modern consumer. Investigation of the latest trends, equipment, and food related career is part of course study.

## **9015 GLOBAL FOODS**

Grade 9, 10, 11, 12

0.5 Credit  
Fee - \$70

Prerequisite: Beginning Foods or Advanced Foods

This is a one-semester course taking the student on a global foods tour. Cultural diversity and global awareness are important issues to be studied. Possible countries to be visited: U.S.A., Canada, Latin America, Southern Europe, Northern Europe, Eastern Europe, and Northern Asia, East and Southern Asia, South Asia, Southwest Asia, and North Africa, Africa South of the Sahara, Australia and Oceania. The student should have an adventurous spirit and be open to new culinary experiences.

## **9030 CHILD DEVELOPMENT I**

Grade 9, 10, 11, 12

0.5 Credit

Parenting and the Development of Children and Family Life are important components of this course. Specific units include prenatal care and development, preparation for parenting and family life, birth of the child, and physical and emotional care of the child. Special issues related to parenting and child development are included. Various field trips and guest speakers are arranged throughout the semester. (Possibility of fees for field trips).

## **9040 CHILD DEVELOPMENT II**

Grade 10, 11, 12

0.5 Credit

Prerequisite: Child Development I

This course is a continuation of Parenting and the Development of Children and Family Life units that were learned in Child Development I.

# TECHNOLOGY EDUCATION DEPARTMENT

## **9610 INTRODUCTION TO DRAFTING**

Grade 9, 10, 11, 12

0.5 Credit  
**Fee - \$25**

The purpose of this class is to provide the students with the basic understanding of technical drawing in contrast to artistic drawing. Students will become familiar with characteristics of drawing and relationship to design. While most of the class is centered around learning to use AutoCad drafting software. They will also get a basic understanding of the principles of drawing with conventional drafting tools. They will get an understanding of how drawings are used as communication in the technical world. We also learn and practice problem solving in a structured way.

## **9620 ELECTRICITY – AC/DC**

Grade 9, 10, 11, 12

0.5 Credit  
**Fee - \$25**

Students will be provided with the basics in the understanding of household current and the fundamentals of electronic components found in public address systems, lasers, remote radio control, and solar energy. Learning will be the hands on understanding of test equipment and tools that lend themselves to the troubleshooting and repair of electronics.

## **9650 BASIC AUTOMOTIVE**

Grade 11, 12

0.5 Credit  
**Fee - \$50**

Students will gain an understanding of the mechanical operation of the modern automobile. We research the needs and wants of the driver, the values of new and used cars and the maintenance requirements of various cars. Discussions are held on the financial aspects of car ownership and driver responsibility. In the process, we will learn to use hand tools and power tools in the process of maintaining and repairing cars. Some of the areas covered are general maintenance, cleaning and detailing and visual enhancements. Problem solving in a structured way is an important component.

## **9660 HOME REPAIR & MAINTENANCE**

Grade 9, 10, 11, 12

0.5 Credit  
**Fee - \$25**

Learn what tools to have on hand, and how to use them in keeping a home looking and functioning well. Areas covered will be the house structure, electrical and plumbing, appliances and yard equipment. As an end result, students will learn when not to do-it-yourself and call the professional. Problem solving in a structured way is an important component.

## **9680 BASIC METALS & METALWORK**

Grade 9, 10, 11, 12

0.5 Credit  
**Fee - \$25**

Students will learn the history of metal and metalworking. The fundamentals of working with metal will include cutting, welding, machining, bending and shaping. The tools and equipment that will be used include basic hand tools, oxy-acetylene torch, plasma cutter, stick welding, MIG and TIG welders, lathe, milling machine grinder, buffer, drills and metal benders. Problem solving in a structured way is an important component.