

Boylan Catholic High School Curriculum Guide 2011-2012

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The Curriculum Guide of Boylan Catholic High School is the official school publication of courses offered at Boylan for the 2011-2012 school year. It is intended to assist students in the planning of a four year program and selection of courses. Any other use is unauthorized and prohibited.

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PHILOSOPHY

Boylan Catholic High School is a Christ-centered faith community, which exists as a response to the mandate of Jesus: "Go and teach all nations...." Our purpose is to stimulate and guide students in their spiritual, intellectual, moral, emotional, social and physical development through the acquisition and use of knowledge.

In accord with the truths of the Catholic tradition, we base our teaching mission on the existence of God the Father, Son and Holy Spirit as proclaimed by the Roman Catholic Church.

Boylan also affirms the inherent dignity of every person; the God-given rights and consequent duties of citizens in society; the sacred right of the child of God to a Christian education; and the primacy of the parents in the education of their children.

GOALS

- To develop a faith response to God within the context of a Christ-centered educational community.
- To encourage the discovery and development of individual potential so as to deepen self-knowledge and self-esteem.
- To encourage and stimulate academic success in all areas of study.
- To foster an awareness of the individual's responsibility to self and to the community in order to deepen a commitment to peace and justice.
- To cultivate a caring educational environment conducive to Christian growth.
- To offer programs which integrate school, civic and Church communities.

CAREER PLANNING AND COURSE SELECTION

To the Student: Choosing courses that will meet your needs is difficult, particularly when you are unsure of a future profession or educational plans. Probably the single most important guideline in making course selections is to not limit your options. Give yourself as broad a selection of courses as possible with a challenge level that is consistent with your abilities. Seek help and advice from adults who care about you and are involved in your interest area. For more information contact the schools you are interested in attending after high school.

A. For the student interested in scientific or technical fields such as medicine, engineering, mathematics, computer science, etc.

1. English: Four years of credit in academic or honors courses
2. Mathematics: Four years of credit in academic or honors courses
3. Science: Three or four credits in academic or honors courses
4. World Language: At least two years of credit in the same language
5. Social Science: Three years of credit in academic or honors courses
6. Others: Choose courses that will give as broad a base as possible.

B. For the student interested in non-scientific service related fields such as business, education, social work, fine arts, law, politics, language, etc.

1. English: Four years of credit in academic or honors courses
2. Mathematics: At least three years of credit in academic or honors courses
3. World Language: At least two years of credit in the same language
4. Science: At least three years of credit in academic or honors courses
5. Social Science: At least three years of credit in academic or honors courses
6. Others: Choose courses that will give as broad a base as possible.

C. For the student interested in obtaining a two year degree, training in technical or service areas, joining the armed service or entering the work place.

1. English: Four years of credit
2. Mathematics: Three years of credit
3. Science: Two years of credit
4. Social Science: Three years of credit
5. World Language: Not required, but two years of the same language are recommended.
6. Others: Choose courses that will give as broad a base as possible. Sample technical, computer or vocational courses as electives.

ADMISSIONS TO COLLEGE

Boylan Catholic High School is accredited by the North Central Association (AdvanceEd) of Colleges and Secondary Schools, the Illinois State Office of Education and the National Catholic Education Association. Credits earned at Boylan are acceptable at any college or university in the United States. However, a diploma is not a guarantee of admission. Being accepted depends upon many things. Among these considerations are:

1. Whether or not you meet all the basic entrance requirements such as the combination of subjects taken, level of scholastic achievement, acceptable entrance examination scores.
2. Your personal qualifications such as your participation in sports, clubs, service activities, and your leadership and character.
3. Whether or not you send your application papers on time.

To get into the college of your choice, it is essential that you start planning early enough to meet all subject and grade requirements. College and university catalogs and Internet sites should be carefully studied. Guidance should be sought from parents, counselors and teachers.

- **Meet with your Counselor:** Plan your high school curriculum early to be sure you are covered for college requirements.
- **Explore your interests through your classes:** Consider taking classes not in the core curriculum such as art, drama and music to demonstrate a well-balanced academic background.
- **Master the basics:** Strengthen your reading, writing, math and vocabulary skills for college and scholarship essays as well as standardized tests.

Colleges are looking for diversity and rigor in the high school academic record. Below is a suggested college prep course load:

Units	Subject
4	English - Emphasizing written & oral communications and literature.
3-4	Social Science - Emphasizing history and government.
3-4	Mathematics - Algebra, geometry, algebra 2 or other advanced mathematics.
3-4	Science - Laboratory sciences such as biology, chemistry, physics, anatomy/physiology, environmental studies and earth science.
2	World language (2-4 years of the same language), music or art.

**Please note that each college or university may set higher minimum requirements for each subject area.
Students should contact each college for its minimum requirements.**

MINIMUM GRADUATION REQUIREMENTS

To graduate from Boylan, a student must successfully complete a minimum of 23.75 credits in the following areas:

Religious Studies	Eight Semesters	3 credits
English	Eight Semesters	4 credits
Mathematics	Six Semesters	3 credits
Social Science	Six Semesters	3 credits
Science	Four Semesters	2 credits
Physical Education	Seven Semesters	1 $\frac{3}{4}$ credits
Health	One Semester	$\frac{1}{2}$ credit
Consumer Education	One Semester	$\frac{1}{2}$ credit
Fine or Applied Arts	Two Semesters	1 credit
Elective Courses		5 credits
Christian Service		120 hours
Total for graduation		23.75 credits

Students must pass the Illinois and U. S. Constitution Tests.

** Biology is required.

*** Twenty (20) hours of service each year are required of freshmen and sophomores and 40 hours of service each year are required of juniors and seniors. Consult the Religious Studies entries for more information.

The Fine Arts or Applied Arts requirement may be met by passing a course in the Art, Business, Music, Family and Consumer Science, World Language or Industrial Arts departments.

SPECIAL CONSIDERATION COURSE LEVELS

Honors (H) and **Advanced Placement (A.P.)** courses are designed for students who show exceptional ability in an area. The students should meet individual department recommendations and expect additional demands. Honors and A.P. classes are weighted for the purpose of class rank. Class rank is generated at the semester and is part of the student's permanent record. Report card G.P. A.'s are not weighted. **Note:** Grades lower than "C" are not weighted.

Students receiving a quarter grade of "D" or lower will be considered for removal from the Honors section at the semester unless the student raises his/her grade to at least a "C".

Academic (A) courses are designed for students of average or above average ability. Academic courses are designed as college preparatory courses.

General (G) courses are designed for work in the basics of an area at a slower paced study.

PLACEMENT POLICY

Boylan makes every effort to place students in classes consistent with ability, past performance, academic need and course availability. Students requesting class placement, that is not consistent with the guidelines published in the Curriculum Guide, will be considered on an individual basis. Course offerings normally are consistent from year to year. Courses may be added or dropped as students' needs call for such action. Courses are subject to availability of teachers and school facilities.

PARENT OR STUDENT REQUEST FOR CHANGE OF SCHEDULE

1. Once a student registers for courses, he/she is to carry out that program. Determination of a schedule change is made by the Assistant Principal in charge of Academic Affairs.

2. The deadline for students or parents to request schedule changes will be printed on the student's schedule. Students receive a schedule for each semester.

Requests will be granted if:

- The change does not overload the requested course or section of the course that fits in the student's schedule.
- The change does not drop the student below the number of credits required.
- Only one five (5) day study hall is scheduled.
- The change is consistent with the appropriate challenge level.
- A schedule change fee and materials' fee for the new class(es) are paid.

3. If a course is dropped before the start of school but after materials have been ordered, no refund will be made for the cost of the class materials.

4. Requests to drop A.P. courses for the following school year will not be honored after May 15 of the current school year.

5. Seniors are to complete year long courses.

6. **No course will be dropped after the date on the schedule and before the end of the current semester for the following reasons:**

- Dislike of the teacher or course
- Desire for a different lunch period
- Credit for course not needed, or college doesn't require course
- Course is lowering G.P.A.
- Earning a failing grade in the course

7. Other requests will be considered on an individual basis.

SPECIAL COURSES

CRITICAL THINKING

Required Grade 9

¼ Credit

Critical Thinking is a mini-course required of all freshmen. The concepts are taught in a large group lecture followed by small group activities that give the students a chance to apply the concepts. The topics covered include the basics of logic, common errors in reasoning, scholarly debates, and using critical thinking to interpret advertisements and propaganda.

ILLINOIS VIRTUAL HIGH SCHOOL (IVHS) COURSES

Credits vary

Electives Grades 9-12

Students may enroll in IVHS courses with the permission of the Assistant Principal – Academics or the Interventions Counselor. A variety of courses are available. A student would receive a grade and credit but it is not computed in class rank or G.P.A. Guidelines are:

- Course may not replace a course offered at Boylan
- Course must be an elective
- Course may be taken to replace a failed course
- Cost is to be paid by student/parent.

DIRECTED LEARNING AND APPLICATION OF STUDY SKILLS

This course is held five days per week in the Academic Support Center and offers ½ credit per semester based on attendance and a semester grade point average of no less than 2.0.

Students having a private diagnosis of special needs as well as students receiving academic or other support from their current school or school district are eligible for this course. A student may also be referred to this course after placement screening.

The expectations for student performance are very high in the Boylan Academic Support Center. All learning styles are embraced as students strive toward greater academic success.

ROCK VALLEY COLLEGE

Elective: Grades 11, 12

Credits vary

Juniors or seniors who do not intend to attend college to receive a four-year degree should investigate the Rock Valley College vocational training programs. Interested students should contact their counselor. Enrollment is controlled and limited by Rock Valley College.

ADDITIONAL INFORMATION

The Student Handbook contains additional detailed information regarding Boylan's academic policies and requirements.

ART DEPARTMENT

ART 1 **911** (Academic)
1 Credit Full Year Elective: Grades 9-12
Prerequisite: A strong interest in art and the desire to work hard

The Art 1 course is open to all students with an interest in art and does not require any previous art experience. This yearlong course provides students with the fundamental skills necessary for more advanced studio work. Students explore a variety of media while gaining essential skills in drawing, color theory and composition. In addition to daily studio work, students can expect homework, quizzes and tests. This course is a prerequisite for all other studio art classes. A lab fee supplies most materials for the year. Matting of artwork is an additional expense.

ART 2 **921** (Academic)
1 Credit Full Year Elective: Grades 10-12
Prerequisite: Art 1, grade of A or B both semesters, departmental approval, strong interest and good work ethic

Art 2 is designed for students interested in developing and refining their technical skills in two-dimensional experiences of drawing and painting. Teacher assists students in developing high quality craftsmanship, originality and expression in their artwork. Student responsibilities include constructive use of class time, daily homework, project completion, quizzes and tests. A lab fee supplies most materials for the year. Matting of artwork is an additional expense.

STUDIO LAB 1A * **923 (1)** (Academic)
½ Credit One Semester Elective: Grades 10-12
Prerequisite: Successful completion of Art 1, departmental approval, strong interest and good work ethic

Studio Lab is designed to give art students media experiences not currently covered in yearlong offerings. The class emphasizes good composition and the creative process while students explore units in printmaking, ceramics, mixed-media and fiber. Class assignments vary from Studio Lab 1B. Student responsibilities include constructive use of class time, journal homework assignments, project completion, a written paper, quizzes and tests. A lab fee covers most of the necessary materials. Additional costs include matting artwork and any materials students may desire to supplement those offered in class.

*Students may enroll in either or both Studio Lab courses.

STUDIO LAB 1B *

½ Credit One Semester

Prerequisite: Successful completion of Art 1, departmental approval, strong interest and good work ethic

924 (2) (Academic)

Elective: Grades 10-12

Studio Lab is designed to give art students media experiences not currently covered in yearlong offerings. The class emphasizes good composition and the creative process while students explore units in printmaking, ceramics, mixed media and fiber. Class assignments vary from Studio Lab 1A. Student responsibilities include constructive use of class time, journal homework assignments, project completion, a written paper, quizzes and tests. A lab fee covers most of the necessary materials. Additional costs include matting artwork and any materials students may desire to supplement those offered in class.

*Students may enroll in either or both Studio Lab courses.

ART 3

1 Credit Full Year

Prerequisite: Art 2, grade of A or B both semesters, departmental approval, strong interest and good work ethic

931 (Honors)

Elective: Grades 11, 12

Honors level Art 3 encourages serious and dedicated students to explore new materials, experiment with three-dimensional media and continue to refine artistic techniques. The class is demanding and time consuming. Units of study include drawing and painting media, ceramics and relief sculpture. Teacher stresses innovation, style, and originality of expression in student artwork. Student responsibilities include constructive use of class time, daily homework, project completion, a written formal analysis of artwork, quizzes and tests. A lab fee supplies most materials for the year. Matting and photo printing fees for the journal are additional expenses.

ART HISTORY 1A*

½ Credit One Semester

Prerequisite: A strong interest in art history

935 (1) (Academic)

Elective: Grades 11, 12

The art history course provides students with an understanding and knowledge of the art and architecture of many world civilizations and cultures. This chronological art survey begins in the prehistoric period and ends with the Gothic style. Students learn to recognize and characterize artworks from the standpoints of style, time, place, media, method and beliefs. They develop skills and vocabulary necessary to critically evaluate works of art. Course work includes open discussions, text readings, essays, note taking, quizzes and tests as well as some studio activities. A lab fee covers class films and some personal art lab materials. This course is highly recommended for students wishing to pursue art, art history, architecture or history at the college level.

*Students may enroll in either or both non-A.P. Art History courses.

ART HISTORY 1B*

½ Credit One Semester

Prerequisite: A strong interest in art history

936 (2) (Academic)

Elective: Grades 11, 12

The art history course provides students with an understanding and knowledge of the art and architecture of many world civilizations and cultures. This chronological survey begins with the Renaissance and ends with the art of the present day. Students learn to recognize and characterize artworks from the standpoint of style, time, place, media, method and beliefs. They develop skills and vocabulary necessary to critically evaluate works of art. Course work includes open discussions, text readings, essays, note taking, quizzes and tests as well as some studio activities. A lab fee covers class films and some personal art lab materials. This course is highly recommended for students wishing to pursue art, art history, architecture or history at the college level.

*Students may enroll in either or both non-A.P. Art History courses.

ADVANCED PLACEMENT ART HISTORY 939 (A.P.)

1 Credit Full Year

Prerequisite: A strong interest in art history and departmental approval

Elective: Grades 11, 12

Advanced Placement Art History is a college level introduction to art history. This course will provide students with an understanding and knowledge of architecture and art within diverse historical and cultural contexts. Course work includes text and supplemental readings, note taking, writings, quizzes and tests. All students enrolled in this A.P. course will be required to take the Advanced Placement Test in May. A non-refundable fee for the A.P. exam is required. In addition, a lab fee will cover class videos and some personal art lab materials. This course is highly recommended for students wishing to pursue art, art history, architecture or history at the college level.

ART INTERNSHIP

½ Credit One Semester

Prerequisite: Very limited enrollment by departmental invitation, Art 3, grade of "A" both semesters and enrollment in Art 4

943 (1) 944 (2) (Academic)

Elective: Grade 12

Art internship offers highly motivated seniors the opportunity to explore independent art unit interests while assisting the department with clerical, display, lecture/demonstration, power point presentation and exhibition responsibilities. Students may register for one or both semesters. Students are responsible for constructive use of class time on artwork or assistant responsibilities, completion of two art projects per quarter, written exams, and matting artwork. A lab fee supplies most materials for the semester, although exploring new media may be an additional expense.

ART 4 STUDIO

1 Credit Full Year

Prerequisite: Art 3, a grade of A or B for both semesters and departmental approval

947 (Honors)

Elective: Grade 12

Honors Art 4 Studio is an accelerated and time-consuming course designed for the highly skilled and motivated senior. Participants produce large and complex works in a variety of media. A major focus of the Art 4 class is the development of personal expression and individual style while working towards mastery of materials and techniques. Teacher assists student in developing a body of work suitable for exhibits, portfolio competitions and college acceptance. Each student is required to hold a one-person exhibit at the Fine Arts Festival in May. Additional costs besides the lab fee include matting, photo printing fees and display booth construction supplies.

ADVANCED PLACEMENT STUDIO ART: DRAWING 949 (A.P.)

1 Credit Full Year

Prerequisite: Art 3, a grade of A or B both semesters, presentation of a portfolio of 8 quality art works before registration for senior classes and departmental approval

Elective: Grade 12

Advanced Placement Studio Art: Drawing is a course that involves the preparation and submission of a college level portfolio of artwork. The portfolio includes 12 images that demonstrate a variety of drawing skills, 12 images that show a unifying idea/concentration, 5 actual works of art that demonstrate accomplishment in drawing and a written commentary describing what the concentration is and how it evolved. Students will be required to meet with the classroom instructor over the summer before his/her senior year to begin writing/sketchbook assignments designed to develop an area of concentration or focus. The completed portfolio will be submitted in May. In addition, each student is required to hold a one-person exhibit at Boylan's Fine Arts Festival. Costs for this course include a non-refundable A.P. submission fee, a lab fee, matting of artwork, photo printing fees and display booth construction supplies.

BUSINESS DEPARTMENT

Freshman Offerings:

Introduction to Business
Information Processing 1
Information Processing 2

Sophomore Offerings:

Accounting 1
Introduction to Business
Information Processing 1
Information Processing 2
Introduction to Web Design
Introduction to Photoshop

Junior & Senior Offerings:

Accounting 1
Accounting 2
Accounting 3
Business Law
Consumer Education
Marketing
Information Processing 1
Information Processing 2
Introduction to Web Design
Introduction to Photoshop
Advanced Photoshop

Do you plan to start your own business or work for a business? Do you want to major in business (accounting, finance, marketing, economics, management, international business, etc.) in college? If so, give yourself a jumpstart in your core classes for a business major. Accounting, Business Law, and Marketing are generally required classes for anyone in a business related major or minor.

Most colleges also demand a proficiency test or a course requirement for computer applications. Information Processing 2 may give you the skills you need to pass the proficiency.

INTRODUCTION TO BUSINESS

1 Credit Full Year
Prerequisite: None

713 (Academic)
Elective: Grades 9, 10

This class will provide a clear understanding of the characteristics, organization and operations of business. Many of the introductory concepts covered provide an excellent background for the other courses offered in the business curriculum. The student will acquire a working vocabulary of business terms, become aware of the many activities and problems involved in operating a business and gain an appreciation of the importance of business; all while developing a plan to actually start a business.

INFORMATION PROCESSING 1

½ Credit One Semester
Prerequisite: None

715 (1) 716 (2) (Academic)
Elective: Grade 9-12

Note to freshmen: If a freshman elects 715, he/she must also take 718. Freshmen may not take 716.

Everyone will develop and/or improve their touch-typing skills in this lab-based class. We will also be learning to correctly format documents commonly used by students and in business. Those documents include: reports in Chicago style, MLA and APA, letters, memos, outlines and tables. Developing an ability to follow a style sheet will be emphasized. Many elements of Microsoft WORD 2007 will be covered beyond the basics.

INFORMATION PROCESSING 2-Applications 717 (1) 718 (2)

(Academic)

½ Credit One Semester

Elective: Grades 9-12

Prerequisite: Information Processing 1

EXEMPTION: 10th, 11th, 12th Graders: Must take a 5-minute timing with a minimum net speed of 30 words per minute. This must be accomplished and approved before registration. See Mrs. Weidman in room 121.

A lab based course designed to enhance application program skills. Currently uses Microsoft Office 2007 Professional Suite - word processing WORD, spreadsheet EXCEL, and presentation POWERPOINT, PUBLISHER and ACCESS – a data base program. *(Many colleges may demand a proficiency test or a course requirement for computer applications. Information Processing 2 can give you the skills you need to help pass the proficiency.)*

INTRODUCTION TO WEB DESIGN 721 (1) 722 (2) (Academic)

½ Credit One Semester

Elective: Grades 10-12

Prerequisite: Info Processing 2 or juniors and seniors with out Info. Pro.2 need departmental approval

The lab-based class will consist of developing web sites using the elements of good design. We will utilize HTML and also a web-editor program, Adobe CS4 Web Premium (Dreamweaver) suite of web design tools. Students must be able to perform on an individual level and also as members of a design team.

ACCOUNTING 1

729 (Academic)

1 Credit Full Year

Elective: Grades 10-12

Prerequisite: Minimum of “C” in math

Accounting is the language of all businesses—planning, recording, analyzing and interpreting financial information. It can also be used for personal record keeping. The class is designed to introduce students to the financial workings of service and merchandising businesses organized as single owner, partnerships, and corporations. Accounting is used in private enterprise, charities, and government agencies. Course includes an introduction to computerized accounting. *Give yourself a head start in college if you are planning on any type of business major or are considering owning your own business.*

INTRODUCTION TO PHOTOSHOP 731 (1) 732 (2) (Academic)

½ Credit One Semester

Elective: Grades 10-12

Prerequisite: Info Processing 2 or departmental approval (seniors only), 4.0 mega pixel or higher digital camera w/3x optical zoom or higher w/removable memory card and purchase of course book

This lab-based class will cover the work environment of Photoshop CS5 Extended. The student will learn the fundamental skills needed to utilize the tool sets when working with selections, layers, masks, channels, photo retouching, image enhancing, and graphic manipulation, effects, and color correction for creating optimized images for print or the web.

BUSINESS LAW

½ Credit One Semester

Prerequisite: None

733 (1) 734 (2) (Academic)

Elective: Grades 11, 12

The course of Business Law is designed to introduce students to laws and regulations that they will encounter in their everyday lives. The material covered will acquaint the students with the basic principals of law, emphasizing significant business situations which include but are not limited to: contracts, bailments, sales and employer employee relationships. This course is designed to develop an understanding of their rights in serving our economy in business and consumer roles. Considerable emphasis is placed on the American criminal justice system concerning family law, minor's rights and administration of wills. Arm yourself with the knowledge to protect yourself as well as your future assets.

ADVANCED PHOTOSHOP

½ Credit One Semester

Prerequisite: Introduction to Photoshop, invitation only (see instructor). Creativity and ability to work independently are musts.**735 (1) 736 (2)** (Academic)

Elective: Grades 11, 12

This lab based class will expand on the skills learned in the Introduction to Photoshop class. Students will design and complete numerous projects using advanced techniques covering all aspects of the Photoshop application (selections, layers, masks, channels, image enhancing, design, effects, etc.) to be used in print and web applications.

MARKETING

½ Credit One Semester

Prerequisite: None

739 (1) 740 (2) (Academic)

Elective: Grades 11, 12

Marketing is one of the most important functions in our modern American economy. This class introduces the student to the marketing concept and outlines the actual steps involved in bringing a product to the marketplace. Topics to be discussed include the functions of marketing, understanding the consumer's wants and needs and planning how to best satisfy those wants and needs. Gathering information from the Internet and developing an actual marketing plan are also a part of the curriculum.

ACCOUNTING 2

1 Credit Full Year

Prerequisite: Minimum of "B" in Accounting 1

749 (Honors)

Elective: Grades 11, 12

This course gives a detailed approach to corporate accounting with strong emphasis on advanced topics. The course prepares students who are college bound for careers in management, accounting and other related business fields. It includes a complete review of first year accounting, managerial accounting, departmental accounting and cost accounting. The course will use computerized accounting and spreadsheets extensively.

CONSUMER EDUCATION

½ Credit One Semester

GRADUATION REQUIREMENT**753 (1) 754 (2)** (Academic)

Required: Grade 11, 12

A course intended to help the student acquire the understanding necessary to achieve the greatest utilization of personal resources. The student studies the organization and operation of the American economic system and their role as a consumer in this system. The students examine such topics as budgeting, using credit, buying goods and services, renting and owning a home, buying insurance, making investments and using bank services.

Note: Students who successfully complete A.P. Microeconomics (467,468) satisfy the Consumer Education requirement.

ACCOUNTING 3

1 Credit Full Year

Prerequisite: Minimum of "B" in Accounting 2

767 (Honors)

Elective: Grade 12

This course is for those seriously interested in going in-depth into accounting procedures expanding upon the student's foundation with concepts of increasing complexity. The course will involve a substantial amount of self-discipline and motivation.

ENGLISH DEPARTMENT

The English Department bases its curriculum on the premise that it is essential to foster all the literacy processes, including reading, writing, listening and speaking. The curriculum is a four-year program in which written and oral communication skills are presented in a developmental sequence. Skills introduced freshman year are reinforced and strengthened during the next three years. In addition to language skills, each year's course addresses a particular aspect of literature. All freshman, sophomore and junior English classes address the same objectives and cover the same core material as outlined in each year's syllabus. Senior year offers students the opportunity to select two one-semester courses of interest. These courses, likewise, foster all the literacy processes.

Seniors are required to pass an English course each semester to meet graduation requirements. Yearbook, Library Internship and Introduction to Debate do not satisfy English requirements.

ENGLISH 1

1 Credit Full Year

211

Required: Grade 9

This course is designed to maximize student abilities and potentials in reading skills. Students will assist in developing their personal learning plan based on their identification of challenge areas as well as pretest recommendations. The pacing of instruction will be at the student's skill level. Students will read a variety of literary works including myths, short stories and an adapted Shakespearean drama. In addition to improving their reading skills, students will also strengthen their writing abilities. Emphasis will be on building strong sentences, constructing coherent paragraphs and writing a five paragraph essay. Throughout the year, students will engage in a wide variety of writing activities.

Reading placement scores and middle school coursework history determine a student's eligibility for this course. Placement in this class is made by Academic Support staff.

ENGLISH 1

1 Credit Full Year

213

Required: Grade 9

This course consists of three main components: literature, writing and oral communication. Literature study covers classical myths, folk literature and adapted Shakespearean drama. A particular focus of this year's literature study will be the heroic tradition. English I is designated a writing intensive course and as such writing will be a major focus the entire year. Emphasis will be on building strong sentences, constructing coherent paragraphs and writing a five paragraph essay. Oral communication explores the foundations of speaking and listening. Research and organizational skills, as well as delivery techniques, will be developed through informal and formal oral reports.

ENGLISH 1

1 Credit Full Year

215 (Academic)

Required: Grade 9

This course focuses on three main aspects of language art instruction: literature, composition and oral communication. Classical mythology, heroic literature and Shakespearean drama form the basis of literature studies. Students will trace the evolution of the hero from mythological beginnings to the present. English I is designated a writing intensive course. Emphasis will be on the process of writing: pre-writing, drafting, editing and publishing. Throughout the year, students will engage in a wide range of writing activities. Particular focus will be on building strong sentences, constructing coherent paragraphs and writing a five paragraph essay. Oral communication studies include the foundations of speaking and listening, research techniques and organizational strategies. Delivery techniques will be developed through formal and informal presentations.

ENGLISH 1

1 Credit Full Year

217 (Honors)

Required: Grade 9

English 1 begins the study of literature, composition and oral communication. Classical mythology, heroic literature and Shakespearean drama form the basis of the literature studies. Students will gain an understanding of the origins of literature, an appreciation for the ideas of Western civilization and knowledge of archetypes, classical allusions and the heroic pattern. English I is designated a writing intensive course. Emphasis will be on the process of writing: pre-writing, drafting, editing and publishing. Throughout the year, students will engage in a wide range of writing activities. Particular focus will be on building strong sentences, constructing coherent paragraph and writing the five paragraph essay. Oral communication studies include the foundations of speaking and listening, research techniques and organizational strategies. Students will strengthen their communication skills through a variety of formal and informal written and oral presentations. Students work at an accelerated pace and are expected to exhibit strong motivation and high academic goals.

ENGLISH 2

1 Credit Full Year

223

Required: Grade 10

Prerequisite: Signature of current English teacher

Sophomore English continues the studies begun in English 1: literature, writing and oral communication. Literature studies will be based on genre groupings representing a variety of historical periods and cultural backgrounds. Writing skills will continue to be developed with emphasis placed on organizing and presenting information in a formal research paper. Oral communication will build on the principles of oral presentation to include informative speeches.

ENGLISH 2

1 Credit Full Year

Prerequisite: Signature of current English teacher

225 (Academic)

Required: Grade 10

Sophomore English continues the studies begun in English 1: literature, writing and oral communication. Literature studies will be based on the genre groupings of fiction, poetry, non-fiction and drama. Selections represent a variety of historical periods and cultural backgrounds. One “coming of age” or “rite of passage” novel is studied. Writing instruction continues to stress the writing process with particular focus on organization of information, thesis development and presentation of evidence within a formal research paper. Oral communication builds on the principles of oral presentation introduced in English 1. Activities include a formal informative speech as well as poetry readings and dramatic recitations.

ENGLISH 2

1 Credit Full Year

Prerequisite: Signature of current English teacher

227 (Honors)

Required: Grade 10

Sophomore English continues the studies begun in English 1: literature, writing and oral communication. Literature studies will be based on the genre groupings of fiction, poetry, non-fiction and drama, representing a variety of historical periods and cultural background. At least one “coming of age” or “rite of passage” novel is studied. Emphasis will be placed on critical analysis of content and style. Continued development of the writing process will focus on organization of information, thesis development and presentation of evidence within a formal research paper. Oral communication will build on the principles of oral presentation to include informative speeches. Students work at an accelerated pace and are expected to exhibit strong motivation and high academic goals.

INTRODUCTION TO DEBATE

¼ Credit: One semester

Prerequisite: None

221 (1) 222 (2)

Elective: Grades 10-12

This course is designed for students who are interested in researching and discussing current events and controversial issues. Students will prepare and deliver structured debates after learning debate etiquette and formal debate procedure. This course will also provide instruction and practice in analytical listening, critical thinking, oral presentation, and research strategies, including evaluation and use of source material. **NOTE: This class meets on Tuesday and Thursday only. This class does not satisfy the English requirement. For sophomores this class would be scheduled in lieu of their Tuesday and Thursday study hall for one semester.**

MULTIMEDIA PRODUCTION 1 **231 (1) 232 (2)**
½ Credit One Semester Elective: Grades 10-12
Prerequisite: Recommendation from current English teacher

For students interested in pursuing the study of broadcast journalism, this course will give an introduction to basic radio and television production through the use of Internet Radio/Internet TV from planning to post-production. The course is offered in conjunction with iHigh.com, "America's first High School Sports Network". A principal objective of the course is to teach basic news gathering, scripting, editing and production. **Note: This class satisfies the English requirement for seniors; all others receive elective credit.** Enrollment is limited.

ENGLISH 3 **233**
1 Credit Full Year Required: Grade 11
Prerequisite: Signature of current English teacher

English 3 advances the study of literature, composition and oral communication. The course surveys American literature from 1600 to the present. Students will develop and strengthen communication skills through formal and informal written and oral presentation. A particular focus of instruction is teaching students to use logic, reason and supporting detail to defend an opinion.

ENGLISH 3 **235 (Academic)**
1 Credit Full Year Required: Grade 11
Prerequisite: Signature of current English teacher

English 3 advances the study of literature, composition and oral communication. A survey of American literature from colonial times to the present which corresponds to that studied in junior United States History – constitutes the basis of this course. Literary analysis forms the foundation of the composition studies. A particular focus of this year is argumentation and persuasion. Students will learn to identify persuasive techniques, analyze the logic and reason of an argument, and use logic, reason and persuasive techniques in developing their own arguments.

ENGLISH 3 **237 (Honors)**
1 Credit Full Year Required: Grade 11
Prerequisite: Signature of current English teacher

English 3 advances the study of literature, composition and oral communication begun in English 1. Students will undertake an in-depth survey of American literature covering the time period from 1600 to the present, a period that corresponds to the era covered in junior level United States History classes. Students work at an accelerated pace and are expected to exhibit strong self-motivation and high academic goals. Research-based literary analysis forms the basis of the composition studies. Oral presentations will be in the form of individual or group reports stemming from novel study as well as persuasive speeches based on literary and/or historical topics.

ADVANCED PLACEMENT LITERATURE/COMP. 239 (A.P.)
1 Credit Full Year Elective: Grade 11, 12
Prerequisite: Grade "B" or better in English 2 Honors or English 3 Honors and signature of current English teacher

This course is designed for talented students who wish to engage in an extensive and intensive study of literature. Students work at an accelerated pace and are expected to exhibit strong self-motivation and high academic goals. A.P. Literature involves students in close reading and critical analysis of literary texts. This class will prepare students to take the National Advanced Placement Literature and Composition Exam for college credit. Students taking this class are required to take the A.P. Literature exam. Class fee includes the exam cost.

Seniors are required to pass an English course each semester to meet graduation requirements. Yearbook, Library Internship and Introduction to Debate do not satisfy English requirements.

POPULAR FICTION 241 (1)
½ Credit First Semester Only Elective: Grade 12
Prerequisite: Signature of current English teacher

Readings in the short story, drama and non-fiction that have themes and ideas of contemporary concern are emphasized.

COMMUNICATION IN THE 21ST CENTURY 242 (2)
½ Credit One Semester Elective: Grade 12
Prerequisite: Signature of current English teacher

Students are engaged in the study of various forms of human communication: oral, written, visual, and electronic. After a brief historical overview of mass communication, the course will focus on two aspects of mass communication: 1) The verbal, oral, and technical skills used in mass communication. 2) The influence of all mass communication on 21st century society. A major goal of this course is to help students develop a critical attitude toward written, visual and electronic media.

LITERARY THEMES "The Shape of the Future" 243 (1) 244 (2) (Academic)
½ Credit One Semester Elective: Grade 12
Prerequisite: Signature of current English teacher

This course is designed to get students thinking about the face of the future and about their role in shaping that future. Students will read a variety of utopian and dystopian fiction and non-fiction that presents the hopes and fears other generations have had for the future. Classics through modern literature will provide the background to examine critical issues facing today's youth.

SENIOR COMPOSITION**245 (1) 246 (2)** (Academic)

½ Credit One Semester

Elective: Grade 11, 12

Prerequisite: Signature of current English teacher

Note: This course can be taken, in addition to English 3, by juniors who have achieved a “B” or better in English 2

This course is designed for students who desire to develop and strengthen their expository writing skills. Students will receive instruction in the elements of good writing with a concentration on such technical aspects as grammatical correctness, appropriate structure and effective style. Students will read from a variety of sources – both fiction and non-fiction – and produce formal expository responses to these pieces. Students will engage in language and writing activities that will help them become confident, competent and effective writers. This course is the prerequisite for Creative Writing. **This class satisfies the English requirement for seniors; all others receive an elective credit.**

BRITISH LITERATURE 1**247 (1)** (Honors)

½ Credit First Semester Only

Elective: Grade 12

Prerequisite: Grade “C” or better in Honors English 3 or AP Lit/Comp and signature of current English teacher. **Note:** Students will not be required to take British Literature 2.

This course traces the development of the British literary tradition from Anglo Saxon writing through the Neo-Classical Age (roughly 700 AD to 1800 AD). Students will read selections from all literary genres – fiction, poetry, drama, and non-fiction. Special focus will be on medieval heroic literature, Shakespeare’s sonnets and plays, and the satirical works of Addison, Swift and Pope.

BRITISH LITERATURE 2**248 (2)** (Honors)

½ Credit Second Semester Only

Elective: Grade 12

Prerequisite: Grade C or better in Honors English 3 or AP Lit/Comp and signature of current English teacher. **NOTE:** British Literature 1 is NOT a prerequisite for this class.

This course continues the survey of British literature begun in British Literature I. Study commences with the poetry and prose of the Romantics and concludes with some works by noted 20th century British writers. Some of the authors to be studied include: poets William Wordsworth, Elizabeth Barrett Browning and T.S. Eliot; novelists Charles Dickens, Mary Shelley and George Orwell; and playwrights George Bernard Shaw and Tom Stoppard.

CREATIVE WRITING**252 (2)** (Academic)

½ Credit Second Semester Only

Elective: Grade 12

Prerequisite: Grade “B” or better in academic English 3, signature of current English teacher and approval of course instructor based on a sample of student writing

This course is designed for the student who likes to write and who wishes to develop his/her creative writing talents. Students will read selections in the genre being studied and then produce original writings in a variety of forms including prose, poetry and drama. Students will be required to submit a portfolio representing the breadth and depth of their writing progress.

MODERN WORLD LITERATURE **253 (1) 254 (2)** (Academic)
½ Credit One Semester Elective: Grade 12
Prerequisite: Signature of current English teacher

Students will read works by modern writers representing a variety of cultural backgrounds. All genres – fiction, drama, poetry and non-fiction – will be studied. Writing will focus on strengthening literary analysis.

DEVELOPMENT OF DRAMATIC ARTS **255 (1) 256 (2)** (Academic)
½ Credit One Semester Elective: Grades 10-12
Prerequisite: Approval of class instructor, student must have faculty references

This course will follow the National Standards for Arts Education and will meet the English department's focus on fostering all the literacy processes: reading, writing, listening and speaking. Students will study acting, directing, theatre history, technical theatre, and media and theatre career opportunities. Writing is essential to the theatre process, so students will also read, write and evaluate plays, as well as view and critique electronic and live performances. **Students may take this course only once. For seniors, this class fulfills the English requirement. All others receive an elective credit. Class size will be limited.**

CREATIVE WRITING **257 (1)** (Honors)
½ Credit First Semester Only Elective: Grade 12
Prerequisite: Successful completion of Senior Composition as a junior or grade "C" or better in Honors English 3 or AP Lit/Comp

This course is designed to encourage the student who is serious about creative writing to develop his/her talents. Students will read selections in the genre being studied and then produce original writings in a variety of forms including prose, poetry and drama. Students will be required to submit a portfolio representing the breadth and depth of their writing progress.

ADVANCED PLACEMENT LANG./COMP. 261 (A.P.)
1 Credit Full Year Elective: Grade 12
Prerequisite: Signature of current English teacher, grade "B" or better in Honors English 3

This class previews the expectations of college composition. The course aims to develop a strong facility with the processes of writing, including drafting, revision and editing. Instruction and assessments in the second quarter will focus on the research paper. Readings from twentieth century fiction and non-fiction will be used as resources. Students taking this class will be required to take the AP Language/Composition exam. Class fee includes the exam cost.

YEARBOOK 1**283 (Academic)**

1 Credit Full Year

Elective: Grades 10, 11

Prerequisite: Approval of yearbook moderator, student must have faculty references

This course is a theory and production class in photojournalism. It teaches skill development in research, composition, grammar, computer applications, business, layout design and photography.

YEARBOOK 2**287 (Honors)**

1 Credit Full Year

Elective: Grades 11, 12

Prerequisite: Approval of yearbook moderator, student must have faculty references

Students continue the study of photojournalism begun in Yearbook 1. Areas of study include theme development, advanced layout design, ladder planning and secondary editorial responsibilities.

YEARBOOK 3**289 (Honors)**

1 Credit Full Year

Elective: Grade 12

Prerequisite: Approval of yearbook moderator, student must have faculty references.

This course is the most advanced level of photojournalism for the senior student. Students assume responsibility for planning and producing the yearbook. Students must function with mastery of technical skill and knowledge and superior organizational skills. The course also teaches good business and public relations practices.

LIBRARY INTERNSHIP**295 (Academic)**

1 Credit Full Year

Elective: Grades 10-12

Prerequisite: Application form available from librarian two weeks prior to registration. Three faculty references are needed and signature of the librarian.

A service oriented class teaching organizational skills, advanced research on computer databases and traditional research skills using book resources. Computer skills needed for successful completion of projects and circulation desk duties.

FAMILY AND CONSUMER SCIENCES DEPARTMENT

INTRODUCTION TO FOOD & CLOTHING 1011

1 Credit Full Year

Elective: Grade 9

Prerequisite: None

This course is open to freshmen only. It is designed to present basic subject matter in clothing, food and nutrition. Laboratory experiences will be an integral part of the course. Students will develop an accurate knowledge of applied nutrition and an understanding of basic principles of food preparation. They will develop skills in using equipment to produce simple, nutritious and attractively served meals and snacks. Food buying, safety and sanitation will be stressed. They will also learn the basics of clothing construction. Projects include simple garments that will give them a basic knowledge of interpreting pattern instructions and construction of a garment.

FOODS 1

1021

1 Credit Full Year

Elective: Grades 10-12

Prerequisite: Departmental approval

This course teaches the fundamentals of nutrition and how they apply to food preparation. Through "hands on" experiences, students will develop kitchen skills enabling them to produce simple, nutritious snacks and meals. Food and kitchen safety will be stressed.

CLOTHING: IMAGE & IMPACT

1023

1 Credit Full Year

Elective: Grades 10-12

Prerequisite: Departmental approval

This class is designed for the student who is interested in clothes and fashion. Students will learn to dress for their figure type, coloring and personality. Students learn to spot fashion trends and plan their wardrobes, not only for the present, but future needs. Students learn or perfect sewing skills. No previous sewing experience is necessary.

ADVANCED CLOTHING CONSTRUCTION 1026 (2)

½ Credit Second Semester only

Elective: Grades 11-12

Prerequisite: Introduction to Food/Clothing or Clothing and Image & Impact, department approval

This course is for the student with previous sewing experience. Emphasis is on advanced pattern and clothing construction techniques.

TAILORING**1028 (2)**

½ Credit Second Semester only

Elective: Grade 12

Prerequisite: Advance Clothing and departmental approval

This course is for the student with advanced clothing skills. Tailoring techniques for a coat or jacket will be emphasized along with special techniques used on difficult fabrics such as wool, knit, plaid and napped fabrics.

CONTEMPORARY FAMILIES**1035 (1) 1036 (2)**

½ Credit One Semester

Elective: Grades 11, 12

Prerequisite: Departmental approval

This course is designed to provide an opportunity for young men and women to understand the responsibilities of family life and parenting. Topics discussed in this course are interpersonal relationships, changing life styles and problems affecting families today. Activities include monthly presentations on current family issues.

CHILD DEVELOPMENT**1039 (1) 1040 (2)**

½ Credit One Semester

Elective: Grades 11, 12

Prerequisite: Must like children, departmental approval

Success in working with children begins by understanding children. This course deals with an overview of the physical, intellectual, social and emotional characteristics of the young child and is especially recommended for anyone considering a career in Early Childhood Education. Students are responsible for planning and teaching several playschool sessions for pre-schoolers.

WORLD CUISINE**1041(1) 1042 (2)**

½ Credit One Semester

Elective: Grade 12

Prerequisite: Departmental approval, "C" in Introduction to Food/Clothing or Foods 1 or a 2.3 grade point if no other Foods class has been taken

This course is designed for the academically motivated student who has an interest in gourmet cooking. Foods from around the world will be studied with emphasis on "authentic" food preparation. *Bon Appetit!*

INDUSTRIAL TECHNOLOGY DEPARTMENT

TECHNOLOGY CONNECTIONS

811

1 Credit Full Year

Elective: Grade 9

Prerequisite: None

Technology Connections explores the nature and uses of technology. Areas studied include energy and power technologies, communications technologies, biotechnologies, and manufacturing, construction and transportation technologies. A “hands on” approach helps students to understand and practice the processes used to imagine, design and create technology. Careers in a variety of occupations will be explored. Guest speakers will also be featured.

TECHNICAL DRAWING

813

1 Credit Full Year

Elective: Grade 9

Prerequisite: None

Students are introduced to concepts of technical illustration including basic geometry, sketching, dimensioning and some construction. The class includes introduction to computer aided design and drawing (CADD) and fulfills any prerequisite for courses requiring Introduction to CADD.

INTRODUCTION TO CADD

831 (1) 832 (2)

½ Credit One Semester

Elective: Grades 10-12

Prerequisite: Departmental approval

The class consists of Beginning AutoCAD® usage and sketching. AutoCAD® commands will be used to create multi-view, section view, auxiliary view and dimensioned drawings.

ADVANCED CADD

834 (2)

½ Credit One Semester

Elective: Grades 10-12

Prerequisite: Grade “C” or higher in 831/832 (Introduction to CADD)

The class teaches students advanced concepts of solid modeling. They learn advanced AutoCAD®, as well as Solid Edge® and Pro Engineer®. Projects will include modeling parts and assemblies and creating animations and exploded views.

ARCHITECTURE

833

1 Credit Full Year

Elective: Grades 11, 12

Prerequisite: Departmental approval

Students will design and create a set of house plans. The plans include: floor plans, elevation views, wall section, foundation plan, electrical plan, plot plan and site plan. The house that is designed is determined by the finances available and the lot purchased. A scale model of the proposed house will be created.

ENGINEERING GRAPHICS**835**

1 Credit Full Year

Elective: Grades 11, 12

Prerequisite: Grade of C or better in Introduction to CADD and departmental approval

A variety of engineering disciplines are introduced using AutoCAD® and sketching principles. Included are: bass wood bridge design and construction, surface developments, mapping, electrical and electronic diagrams, gears and cams, thread drafting, charts, geometric dimensioning and tolerancing. Field trips and guest speakers will be featured.

MECHANICAL AND ELECTRICAL SYSTEMS**837**

1 Credit Full Year

Elective: Grades 11, 12

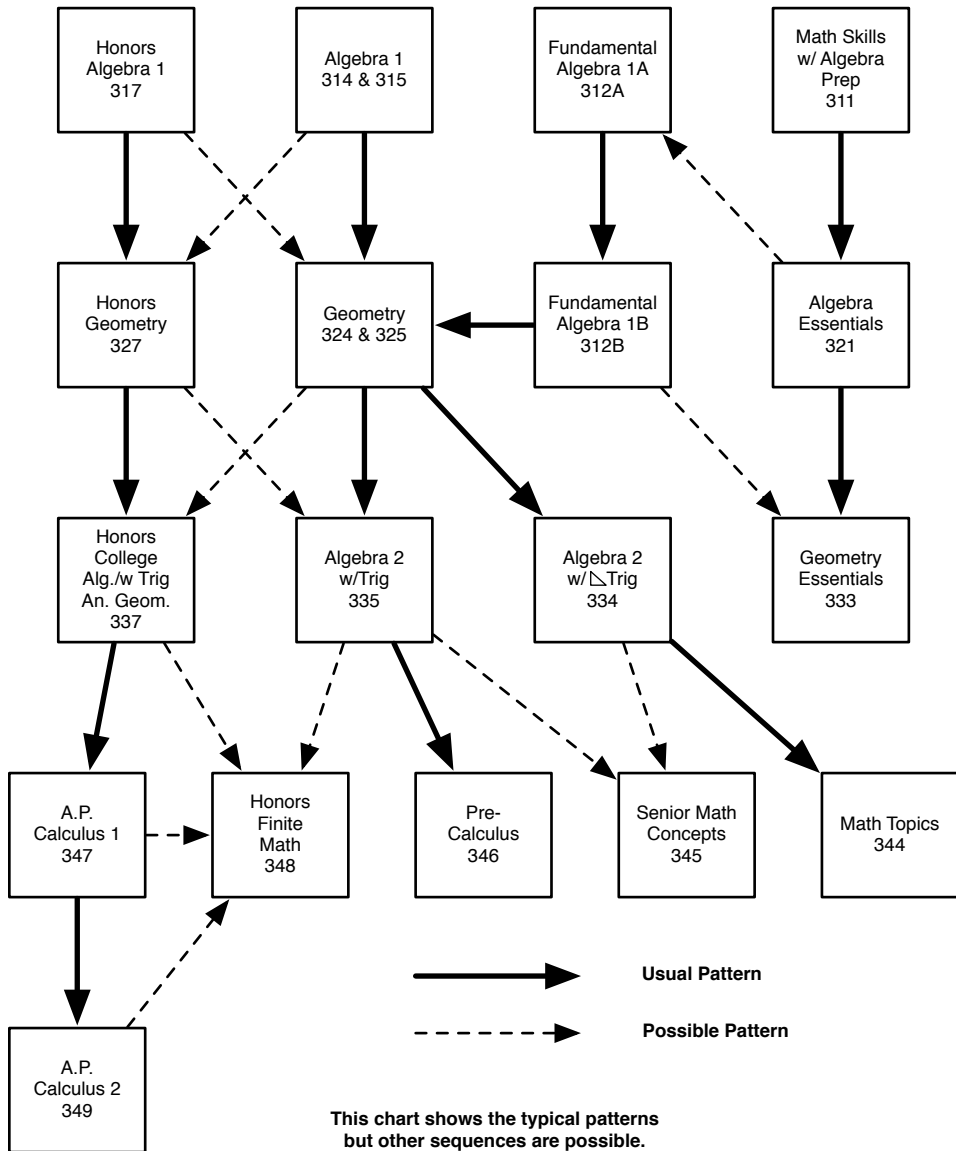
Prerequisite: Grade "C" or higher in Algebra 1(314-317) and Geometry (324 – 327) and departmental approval

Students will learn to design and build a small robot (VEX®). The class proceeds from defining concepts, making a proposal and creating the design through building and troubleshooting the final robot. Class work includes sessions on safety and project management, plus the physics necessary for motor design, speed and torque. Part of the course will include sessions on programming the robot for autonomous control. The language is ROBOTC®.

MATHEMATICS DEPARTMENT

Math Course Sequencing

Three years of mathematics are required for graduation.



This chart shows the typical patterns but other sequences are possible.

MATHEMATICS SKILLS w/ ALGEBRA PREPARATION **311**
1 Credit Full Year Grade 9
"TI 30XA" calculator required

This is a full year course for students who are below average in mathematical achievement. This is preliminary training for Algebra Essentials (321). Fundamental operations on numbers with special emphasis on fractions and decimals will be followed by basic algebraic concepts.

FUNDAMENTAL ALGEBRA 1A **312A**
1 Credit Full Year Grade 9
"TI 30XA" calculator required

This course covers the first semester of the academic Algebra 1 course. The course is designed for students who experience some difficulty in mathematics but are capable of mastering the concepts given more examples and more problems using the same reasoning skills. The course is designed to be followed by Fundamental Algebra 1B.

FUNDAMENTAL ALGEBRA 1B **312B**
1 Credit Full Year Grade 10
"TI 30XA" calculator required

A full year course that completes the study of Algebra begun in Fundamental Algebra 1A. Content approximates the same material as that covered in second semester of academic Algebra 1. With the successful completion of 312A and 312B, the student will have covered all concepts in the traditional Algebra 1 curriculum.

ALGEBRA 1 **314 315 (Academic)**
1 Credit Full Year Grade 9
"TI 30XA" calculator required

Algebra 1 is a standard one-year algebra course which studies the use of variables, basic arithmetic operations with real numbers and algebraic expressions, solving and graphing linear and quadratic equations, factoring techniques, rational and irrational numbers. Problem solving is re-enforced. The 314 course covers all topics in the 315 course but not in as much depth.

ALGEBRA 1 **317 (Honors)**
1 Credit Full Year Grade 9

This course includes the material of academic algebra but with a greater in-depth view of number properties and algebraic proofs. More emphasis is placed on interpreting and solving problems. Additional topics include solving quadratic equations, operations with radicals and the study of functions.

ALGEBRA ESSENTIALS**321**

1 Credit Full Year

Grade 10

Prerequisite: Mathematics 311 and departmental approval

"TI 30XA" calculator required

A course designed for the student with below average mathematical ability who has successfully completed Mathematics Skills with Algebra Preparation (311). Algebra Essentials teaches the basic concepts of Algebra 1 in a slow –paced approach. Because students learn in many different ways, emphasis is placed on instruction using a variety of modalities. When appropriate, manipulatives are used to provide a tactile activity promoting concept mastery.

GEOMETRY**324 325** (Academic)

1 Credit Full Year

Grades 9 -12

Prerequisite: Signature of Algebra 1 instructor and departmental approval

"TI 30XA" calculator required

The student is introduced to the meaning of deduction and proof. This course includes the study of points, lines, planes, triangles, circles, polygons, parallelism, congruence, similarity, geometric constructions, area and volumes. There is a heavy emphasis on logic and two column proofs. The 324 course covers all topics in the 325 course but not in as much depth and with less emphasis on "proof".

GEOMETRY**327** (Honors)

1 Credit Full Year

Grades 9, 10

Prerequisite: Signature of Algebra 1 instructor and departmental approval

"TI 30XA" calculator required

This course is an in-depth study of the topics included in academic geometry. Added emphasis is given to deduction with more difficult problems and proofs.

GEOMETRY ESSENTIALS**333**

1 Credit Full Year

Grade 11

Prerequisite: Algebra Essential 321 and departmental approval

"TI 30XA" calculator required

Geometry Essentials teaches the basic concepts of geometry in a step-by-step approach. The course is designed for students who need extra help grasping new concepts. The approach to geometry is based on algebra, constructions and three-dimensional geometric models. This is a less rigorous approach to geometry with the emphasis on application and the belief that all students can master basic geometric ideas.

ALGEBRA 2**334** (Academic)

1 Credit Full Year

Elective: Grades 11, 12

Prerequisite: 314 and 324 with test average of "C" or better

"TI 30XA" calculator required

This is the second year of algebra in which the structure and properties of real numbers are reviewed and extended. Problem solving techniques are developed for problems dealing with mixtures, uniform motion, work and percentages. Other topics include linear, quadratic and polynomial functions, systems of equations, irrational and complex numbers, exponential and logarithmic functions, progressions, factoring and graphing linear and quadratic inequalities. The course includes basic Trigonometry (right-triangle trigonometry).

ALGEBRA 2 WITH TRIGONOMETRY**335** (Academic)

1 Credit Full Year

Elective: Grades 10-12

Prerequisite: 314 and 324 with test average of "B" or better or 315 and 325 with test average of "C" or better, departmental approval.

"TI 83 Plus or TI 84 Plus" calculator required

This is the second year of algebra in which the structure and properties of real numbers are reviewed and extended. Problem solving techniques are developed for problems dealing with mixtures, uniform motion, work and percentages. Other topics include linear, quadratic and polynomial functions, systems of equations, irrational and complex numbers, exponential and logarithmic functions, progressions, factoring and graphing linear and quadratic inequalities. Trigonometry and analytic geometry are also covered in this course.

COLLEGE ALGEBRA/TRIG/ANALYTIC GEOMETRY**337** (Honors)

1 Credit Full Year

Elective: Grade 10, 11

Prerequisite: 317 with test average of "C" or better and 327 with test average of "C" or better, departmental approval.

"TI 83 Plus or TI 84" Plus calculator required

This is the second year of honors algebra stressing the structure of algebra, the development of computational skills and problem solving techniques. The course covers the fundamentals of trigonometry and analytic geometry as well as simple probability and matrix algebra. The student deals with the complex number system, logarithms, polynomial functions, determinants, sequences and series.

MATHEMATICS TOPICS**344** (Academic)

1 Credit Full Year

Elective: Grades 11, 12

Prerequisite: Test average of "B" or better in 334, departmental approval.

"TI 30X IIS" calculator required

A course designed for students who wish to take four years of mathematics and have been in the 314, 324, 334 track. The class includes a review of Algebra 2 and a study of trigonometry, probability, statistics, combinatorics and analytic geometry. Students will be exposed to the features of a graphing calculator and how it can be used to solve problems. This course is not open to students who have already taken 335 or 337.

SENIOR MATHEMATICS CONCEPTS 345

1 Credit Full Year

Elective: Grade 12

Prerequisite: Test average of "C" or less in 335 or test average of "A" in 334 and departmental approval.

"TI 83 Plus" or "TI 84 Plus" graphing calculator recommended.

A course designed for students who wish to take four years of mathematics and have been in the 315, 325, 335 track and have struggled or don't plan on taking Calculus. Also designed for high achieving 314, 324, 334 students who want to be in a more challenging class as seniors. The class includes a survey of Algebra 2 topics with extended work involving probability, statistics, sequences, matrices, and analytic geometry.

PRE-CALCULUS**346 (Academic)**

1 Credit Full Year

Elective: Grade 11, 12

Prerequisite: Test average of "C" or better in 335, departmental approval.

"TI 83 Plus" or "TI 84 Plus" graphing calculator required

A course for students wishing to take four years of mathematics at the academic level, which will prepare them for Calculus or other college level classes. Topics covered include functions and graphs, polynomial functions, trigonometry, analytic geometry, sequences, systems of equations and inequalities, matrices and an introduction to probability and statistics. Algebraic concepts will be reinforced with problem solving and applications being an integral part of the course. Students with a test average of "B" or better are eligible to take Calculus 347 or Finite Mathematics 348.

ADVANCED PLACEMENT CALCULUS I 347 (A.P.)

1 Credit Full Year

Elective: Grades 11, 12

Prerequisite: Test average of "C" or better in 337 or test average of "B" or better in 345, departmental approval.

"TI 83 Plus" or "TI 84 Plus" graphing calculator required

This course is based on the Calculus AB syllabus. Topics covered include a study of limits, continuity, differentiation of polynomial, rational, trigonometric, inverse trigonometric, exponential and logarithmic functions, analysis of the conic sections, applications of maxima and minima and integration of elementary functions. Techniques of integration, applications of integration including volumes of solids of revolution and slope fields are also included as topics in this course. Students taking this class will be required to take the A.P. Calculus AB exam. Class fee includes the exam cost.

FINITE MATHEMATICS**348** (Honors)

1 Credit Full Year

Elective: Grades 11, 12

Prerequisites: Courses 337, 347, 349 test average of "C" or better; 335, 345 test average of "B".

"TI 83 Plus" or "TI 84 Plus" graphing calculator required

This course is designed as an alternative to Calculus; however, it can be taken after completing the Calculus sequence. A student will study a wide range of advanced mathematical topics including the binomial theorem, sequences and series, arithmetic and geometric sequences, permutation and combinations, simple probability, matrices and linear programming, vectors, simple statistics, data analysis and determinants. This is a course designed to help students prepare for a course in college level mathematics. Students will also be introduced to the use of graphing calculators.

ADVANCED PLACEMENT CALCULUS II 349 (A.P.)

1 Credit Full Year

Elective: Grade 12

Prerequisite: Course 347 with test average of "B" or better and departmental approval.

"TI 83 Plus" or "TI 84 Plus" graphing calculator required

The first quarter is an intensive review of topics covered in Calculus I (347). Further studies include use of L'Hopital's Rule, solutions of elementary differential equations applied to growth and decay, slope fields and logistic curves and other techniques of integration. Series and sequences will also be considered. Emphasis will be on the topics covered in the Calculus BC syllabus with the aim that students be very well prepared for this particular examination. Students taking this class will be required to take the A.P. Calculus BC exam. Class fee includes the exam cost.

MUSIC DEPARTMENT

TREBLE CHOIR

1 Credit Full Year

Prerequisite: Director's signature

1101 (Academic)

Elective: Grades 9-12

Treble Choir is an introductory course in ensemble singing for women's voices. Students will learn the fundamentals of choral singing, including training in performance skills, tone quality, music reading, and part-singing. Treble Choir performs at concerts and functions throughout the school year and also shares its music during school Masses. No audition is required. Freshman girls wishing to sing in a choir should register for Treble Choir.

VOCE

½ Credit Full Year

Prerequisites: Private audition and director's signature

Co-requisite: Enrollment in Treble Choir or Concert Choir

1103 (Academic)

Elective: Grades 9-12

Voce is an auditioned chamber ensemble open to women who wish to further their understanding of *a cappella* singing. Singers in this course will develop confidence and musicianship in their work as a small ensemble. Voce performs at concerts and functions for the school and the community. This course meets from 7:00-7:50 am on Tuesdays and Thursdays. Students may audition for Voce at the beginning of the new school year.

CONCERT CHOIR

1 Credit Full Year

1105 (Academic)

Elective: Grades 9-12

1107 (Honors)

Elective: Grades 11, 12 with at least two years experience in high school choir

Prerequisites: Private audition and director's signature

Concert Choir is an advanced, auditioned vocal ensemble for men's and women's voices. Students will explore choral singing with further training in performance skills, tone quality, music reading, and voice blending. Students will work on advanced vocal music in four- to eight-part harmony. Concert Choir performs at concerts and functions throughout the school year and also shares its music during school Masses. Freshman boys wishing to sing in a choir should audition for Concert Choir. Honors Concert Choir students will be required to audition for district/all-state choir and to participate in IHSA solo/ensemble contest.

OCTAVES

1 Credit Full Year

1137 (Honors)

Elective: Grades 9-12

Prerequisites: Private audition and director's signature

Co-requisite: Enrollment in Concert Choir

Octaves is an auditioned chamber ensemble which performs *a cappella* music from a variety of genres, including madrigals, pop, and vocal jazz. This course is designed for students who have a high level of musical awareness and who can work well together as a small ensemble. Octaves perform at many concerts and functions for the school and the community. This course meets from 7:00-7:50 am on Mondays, Wednesdays, and Fridays. Students may audition for Octaves at the beginning of the new school year.

BEGINNING ACOUSTIC GUITAR

1 Credit Full Year

1119 (Academic)

Elective: Grades 10-12

Prerequisite: Director's signature

In this class, basic techniques of playing the guitar are introduced. This class is for beginners only. Students *must* own or have access to an acoustic (non-electric) guitar. This course covers both strumming and finger picking techniques.

Emphasis is on understanding basic music theory concepts and terminology centered around the guitar. Students will learn to read and write using musical notation, tablature, and lead sheets. Enrollment is limited.

GUITAR ENSEMBLE

1 Credit Full Year Elective: Grades 10-12

1125 (Academic)**1125H** (Honors with one year's experience)

Prerequisite: Director's signature, one or more years of formal training on guitar. Students *must be able to read music*, admission by audition only.

This course is for those who wish to study literature written and arranged especially for guitar and guitar ensembles. Students will work in groups and study a variety of musical styles; including classical, contemporary, Spanish, jazz, rock and folk. Students use both electric and acoustic (acoustic-electric or acoustic with pick- up) guitars for this class. Students will perform at school concerts and for occasional evening or weekend performances.

BEGINNING BAND

1 Credit Full Year

1123 (Academic)

Elective: Grade 9-11 or by permission

Prerequisite: Director's signature and limited to the following band instruments: flute, oboe, clarinet, bassoon, saxophone, French horn, trumpet, trombone, baritone, tuba, double bass or percussion. *Students who have not studied a band instrument but would like to start may see the Director for permission to sign-up.* Development of performance skills and appreciation of all styles of band literature is stressed. Emphasis will be on rhythmic accuracy, ear training, intonation, and tone production along with theory study. This course is a training band for beginning players in preparation for Concert Band. Students *should* provide their own instruments but must supply reeds (winds) or sticks and mallets (percussion). The music department may be able to provide some instruments for student rental. This group will perform as a part of the Pep Band and at school concerts.

JAZZ LAB

½ Credit Full Year

1113 (Academic)

Elective: Grades 9-12

This ensemble is available for students who would like to learn more about jazz but who are not yet available or eligible to play in the honors level jazz band. Students who play a non-standard jazz instrument but would like to learn to play jazz are also welcome. Students will be exposed to a variety of jazz styles and skills at a beginning to intermediate level. All students playing any instrument may join. *NOTE: Class will meet before school on Tuesday and Thursday from 7:10 to 7:50 AM.*

JAZZ BAND

1 Credit Full Year

1127 (Honors)

Elective: Grades 9-12

Pre-requisite: Enrollment is by audition and director's signature.

Jazz Band is limited to the following instruments: alto, tenor, and baritone saxophones, trumpet, trombone, electric guitar, bass guitar, piano, vibes, and drum set. Overall enrollment is limited. Students *should* supply their own instruments, but *must* supply their own reeds (winds), sticks and brushes (drum set). The music department may be able to provide some instruments for student rental. Jazz Band is a select, traditional jazz band that studies intermediate to advanced jazz literature ranging from swing, big band, be-bop, fusion, and contemporary styles. Students will also continue their development of listening skills and appreciation for all styles of jazz. Improvisation, jazz history and theory study will be stressed. This group will perform at school concerts, music festivals, contests, and for occasional evening or weekend performances. *NOTE: Class will meet before school on Monday, Wednesday, and Friday from 7:10 to 7:50 AM.*

STRING ENSEMBLE

1 Credit Full Year

1121 (Academic)

Elective: Grades 9-12

Prerequisite: Director's signature. *Private lessons outside of school are strongly encouraged.* This is an ensemble class for students of intermediate to advanced playing abilities and is not intended for beginners.

This ensemble is open to students who play violin, viola, cello, or double bass (acoustic) and will focus on students performing together. Emphasis is placed on tuning, rhythmic accuracy, attacks and releases, dynamics and other important musical aspects. This ensemble will perform at school concerts and may also perform at various public functions during school and for occasional evening or weekend performances. All students *must* supply their own instruments except double bass.

CONCERT BAND

1 Credit Full Year

1115 (Academic)

Elective: Grades 9-12

CONCERT BAND

1 Credit Full Year

1117 (Honors)

Elective: Grade 11, 12 with 2 or more years experience in high school band

Prerequisite: Private audition and director's signature

Private lessons outside of school are strongly encouraged.

Enrollment is limited to students playing one of the following instruments: flute, oboe, clarinet, bassoon, saxophone, French horn, trumpet, trombone, baritone, tuba, double bass (acoustic) or percussion. Students *should* supply their own instruments but must supply reeds (winds) or sticks and mallets (percussion). The music department may be able to provide some instruments for student rental. This course allows musicians to advance in their ability to perform individually as well as a group. This ensemble performs challenging concert band literature from diverse sources. This group will perform at band concerts, contests, and home football and basketball games. Students will also perform at various public functions during school and for occasional evening or weekend performances. Honors Concert Band students will be required to audition for district/all-state band and to participate in IHSA solo/ensemble contest.

MUSIC THEORY/COMPOSITION

½ Credit One Semester

1131 (1) **1132** (2) (Honors)

Elective: Grades 10-12

Prerequisite: Instructor's signature; at least three years of vocal/instrumental lessons.

Co-requisite: Current enrollment in a music ensemble at Boylan

Music Theory provides advanced music students the opportunity to study the fundamental building blocks of Western music. Areas of focus will include music symbolism, intervals, chord structures and progressions, and ear training. Students will apply this knowledge by analyzing classical works and composing their own. This course is a must for any student considering music as a career.

MUSIC TECHNOLOGY/SOUND PRODUCTION 1147 (Academic)
½ Credit One Semester Elective Grades 10-12
Prerequisite: Instructor Signature

Students will explore the technical side of music – learning and presenting projects dealing with radio, sound effects, movie soundtracks/dubbing, and the recording studio. Students will also learn about computer programs such as: Finale, Garage Band, Cake Walk, and Audacity. Students will learn how to set up and operate microphones to perform and to record sound as well as work a soundboard. No previous music experience is needed to take this class. The class will participate in running sound at concerts and masses. Students will also record concerts and make studio recordings of all our school music ensembles and produce quality audio CDs.

MUSIC HISTORY 1133 (1) 1134 (2) (Academic)
½ Credit One Semester Elective: Grades 9-12
Prerequisite: Instructor's signature

This course explores the creation of music and its influence on Western society throughout history. The class emphasizes key composers from each musical era, their most influential and recognizable works, and the ways in which their compositions influenced the lives of other composers and the world around them.

WORLD MUSIC 1143 (1) 1144 (2) (Academic)
½ Credit One Semester Elective: Grades 9-12
Prerequisite: Instructor's signature

This course provides students the opportunity to study music from cultures throughout the world. The course will relate the indigenous music of each culture to its customs and history. Students will study music from the United States and other Western nations to determine common themes throughout the wide body of musical works. Students will perform authentic multicultural music on genuine instruments and will analyze the music through written responses and discussion.

BEGINNING PIANO LAB 1145 (Academic)
½ Credit Full Year Elective: Grade 10
Prerequisite: Instructor's signature

This course is designed for students with little to no piano background to explore the basics of keyboard-playing technique. Students will learn to read music, to play by ear, and to play with minimal physical tension. Students will explore a variety of musical genres and will learn to play both individually and in groups. Students do not need to have access to a keyboard at home to succeed in this class. This course is designed for sophomores who are enrolled in PE on Monday, Wednesday, and Friday. Piano Lab will meet only on Tuesdays and Thursdays.

CLASS PIANO 1146 (Academic)
½ Credit One Semester Elective: Grade 11-12
Prerequisite: Instructor's signature

Class piano is designed for students who would like to progress quickly in their keyboard-playing skills. Students will learn to read music, to play by ear, and to identify chords which are common throughout Western music. Students will develop techniques which will help them to succeed in playing piano as a lifelong activity. Beginning piano students and intermediate players are welcome in the class. Course material will be differentiated to meet the ability level of each student enrolled. This course meets each day to help students to advance rapidly in their skill level.

PHYSICAL EDUCATION

HEALTH – Boys

½ Credit First Semester (Meets daily)

Prerequisite: None

010A (1)

Required: Grade 9

Health introduces the student to proper health care, knowledge of nutrition, body dynamics, mental health, drug and alcohol education. Ways of developing a healthy lifestyle are emphasized.

PHYSICAL EDUCATION 1 – Boys

¼ Credit Second Semester

Prerequisite: None

010B (2)

Required: Grade 9

P.E. 1 introduces the student to calisthenics, individual and team activities. Emphasis is on coordination, agility and physical fitness. Includes mandatory fitness testing.

PHYSICAL EDUCATION 1 – Girls

¼ Credit First Semester

Prerequisite: None

011A (1)

Required: Grade 9

The fundamentals of body mechanics and physical fitness will be stressed in various activities such as volleyball, soccer and track. The rules, skills and knowledge of these sports will be covered along with fitness conditioning. Includes mandatory fitness testing.

HEALTH – Girls

½ Credit Second Semester (Meets daily)

Prerequisite: None

011B (2)

Required: Grade 9

Health introduces the student to proper health care, knowledge of nutrition, body dynamics, mental health, drug and alcohol education. Ways of developing a healthy lifestyle are emphasized.

PHYSICAL EDUCATION 2 – Boys

½ Credit Full Year

Prerequisite: None

020

Required: Grade 10

Introduces the student to running and agility exercises aimed toward improving overall fitness. Calisthenics, team and individual activities (soccer, basketball, softball, dance) are aimed at improving team, individual and social skills. Includes mandatory fitness testing.

PHYSICAL EDUCATION 2 – Girls**021**

½ Credit Full Year

Required: Grade 10

Prerequisite: None

This course includes history, rules, game strategy and the theory of team sports such as basketball and softball. Additional activities will include square dance, line dancing, ballroom dancing, self-defense and parcourse running. All activities will emphasize physical fitness. Includes mandatory fitness testing.

PHYSICAL EDUCATION 3 – 4**034A (1) 034B (2)**

¼ Credit One Semester

Required: Grades 11, 12

Prerequisite: None

Coed

Students choose a variety of grouped activities each semester. These activities include team sports, individual sports, recreational activities, sports interests and fitness. The emphasis will be on lifelong fitness through participation.

P. E. PRACTICUM – Girls**035**

1 Credit Full Year, Meets Daily

Prerequisite: Member of the varsity basketball team and departmental approval

When the student's sport is in season, class time will be used for preparation in that sport. When the sport is not in season, the student will be involved in a physical fitness program. This course fulfills the P.E. requirement.

P.E. PRACTICUM – Boys**037 (1) 038 (2)**

½ Credit One Semester, Meets Daily

Elective: Grades 11, 12

Prerequisite: Junior or senior standing and departmental approval

When the student's sport is in season, class time will be used for preparation in that sport. When the sport is not in season, the student will be involved in a physical fitness program. This course fulfills the P. E. requirement.

RELIGIOUS STUDIES DEPARTMENT

CHRISTIAN SERVICE

20 hours per year

40 hours per year

Required

Grades 9, 10

Grades 11, 12

Boylan is dedicated to providing structured opportunities to share Christ with the world through an active life of service. Service may include: helping around the home, neighbors, the elderly; volunteering at church; community service activities such as in soup kitchens, hospitals, food pantries; at school through clubs, as retreat team members etc. Students are responsible for submitting "time cards" to their religion teacher. Hours are reported on the student's semester report card.

RELIGION 1: Introduction to Scripture

1 Credit Full Year

Prerequisite: None

Required: Grade 9

113

115 (Academic)

117 (Honors)

This course surveys divine revelation as expressed in Scripture (both Old and New Testaments) in an effort to provide a foundation for the truths, values and issues to be explored more thoroughly in succeeding years.

RELIGION 2: The Church and Catholic Identity

1 Credit Full Year

Prerequisite: None

Required: Grade 10

123

125 (Academic)

127 (Honors)

The first semester looks in depth at the meaning of the Church using both historical development and contemporary experiences. Second semester the students study and reflect upon an overview of Catholic dogmas, doctrines, teachings and laws and how they all come together to form our Catholic identity.

CATHOLIC CULTURE: Discovering Faith through Literature, Art, Video and Music

¼ Credit One Semester

Prerequisite:

Elective: Grade 10

121(1) 122(2) Academic

Students will gain an appreciation of Catholic Culture in the context of the arts: great and classic artwork, literature, music, video, and Church writings. The course is an elective course and does not satisfy any other religion department requirement. **This class meets on Tuesday and Thursday in place of the sophomore level study hall.** Students may register for either or both semesters.

RELIGION 3: Christian Morality **133**
½ Credit Full Year **135** (Academic)
Prerequisite: None **137** (Honors)
Required: Grade 11

Students study Catholic moral theory and principles as a framework for making moral decisions. Personal moral decision-making is analyzed and applied to various moral situations. Topics include: the nature and dignity of the person, Christian responsibility, the moral teaching of Jesus, conscience, law and freedom, sin, sexual morality, virtues and respect for life. The Commandments will be covered in depth and applied to everyday situations. The Church's teachings on issues such as abortion, euthanasia, capital punishment, poverty, nuclear war, and other contemporary peace and justice concerns are covered.

Seniors are required to pass one religion course each semester. One course must be Christian Lifestyles.

CHRISTIAN LIFESTYLES **145 (1) 146 (2)** (Academic)
¼ Credit One Semester Required: Grade 12
Prerequisite: None

Students will explore the role of Christian love as the foundation for our Christian vocations and lifestyles. The ideals inherent in Christian marriage, the single life and religious life will be explored in detail. Issues of communication, dating, love and sexuality will be explored, as these affect our Christian vocations.

APOLOGETICS: Why Be Catholic? **151 (1) 152 (2)** (Academic)
¼ Credit One Semester Elective: Grade 12
Prerequisite: Signature of current religion teacher

Students will learn to explain, debate and defend their Catholic Faith. Topics will include: Does God exist? Is there truth? Is Jesus God? Why be Catholic? and The Church in History: Good or Evil?

CATHOLIC SOCIAL JUSTICE **161 (1) 162 (2)** (Academic)
¼ Credit One Semester Elective: Grade 12
Prerequisite: Signature of current religion teacher

This course goes into depth on the major social issues of our time and how the Church responds to them. Topics covered will include: peace, racism, poverty, work, right to life and the environment.

COMPARATIVE RELIGION **163 (1) 164 (2)** (Academic)
¼ Credit One Semester Elective: Grade 12
Prerequisite: None

Students examine contemporary religions practiced in the United States and compare Catholicism to them. For each religion studied, a major Catholic belief will be examined to show the differences and similarities between the two faiths. This course will assist students to more deeply understand their Catholic Faith.

SCIENCE DEPARTMENT

The science department curriculum offers the student the opportunity to develop an awareness, appreciation and understanding of the natural environment through both lecture and laboratory. Although only two credits are required for graduation, one being a year of biology, most students at Boylan take three or four science courses in preparation for college, with the typical pre-college strand being biology, chemistry, and physics. Incoming freshmen who qualify to take Honors Algebra and Honors English are encouraged to elect Honors Physics First and consider AP Chemistry, AP Physics and/or AP Biology their senior year.

Freshman Year

Honors Physics First*
Integrated Science
Honors Biology *

Sophomore Year

Honors Biology
Biology
Honors Chemistry *

Junior Year

Honors Chemistry
Chemistry
Earth Science
Environmental Science
Introduction to Botany/Zoology
AP Chemistry *
Honors Physics *
Physics *
Honors Anatomy/Physiology *
* See explanation above

Senior Year

Honors Physics
Physics
Honors Anatomy/Physiology
Anatomy/Physiology
Chemistry
Environmental Science
Science Topics
AP Chemistry
AP Physics
AP Biology (Fall 2012)

INTEGRATED SCIENCE

1 Credit Full Year

515 (Academic)

Elective: Grade 9

Earth science and the physical sciences of chemistry and physics are studied. Students will develop the skills of observing, classifying, measuring, inferring and predicting through laboratory experiences. Communication through oral, written, mathematical and graphing methods will be utilized. Emphasis will be placed on integrating laboratory skills into written and oral reports. This course does not replace a full year of chemistry or physics. **Note:** Students taking 515 will not be permitted to take 534, Earth Science.

PHYSICS FIRST

1 Credit Full Year

Corequisite: Honors math and honors reading placement

517 (Honors)

Elective: Grade 9

A laboratory course utilizing mathematics to study the classical areas of mechanics, heat, sound wave phenomena, electro-magnetic theory, electricity, relativity and nuclear physics. Students will be expected to write two formal lab reports during the year. The typical sequence for students electing Physics First would be: Physics First, Biology, Chemistry and/or AP Chemistry, AP Physics, AP Biology, Anatomy/Physiology.

BIOLOGY 523
1 Credit Full Year Required: Grade 10
Prerequisite: Signature of current English teacher

Biology 523 is a laboratory course surveying life science that is designed for those who have little or no science background. This course deals with topics that include cell biology, human anatomy, physiology, evolution and ecology.

BIOLOGY 525 (Academic)
1 Credit Full Year Required: Grade 10
Prerequisite: Signature of current English teacher

Biology 525 is a laboratory course surveying all aspects of life science, including selected materials from cell biology, genetics, evolution, ecology, botany, zoology, human anatomy and physiology.

BIOLOGY 527 (Honors)
1 Credit Full Year Required: Grade 10
Prerequisite: Signature of current English teacher

Biology 527 covers the same content as 525 but selected areas are studied in greater depth and with emphasis on laboratory work. Students are encouraged to study additional topics in which they are especially interested.

INTRODUCTION TO BOTANY/ZOOLOGY 531
1 Credit Full Year Elective: Grade 11
Prerequisite: Biology 523

Introduction to Botany/Zoology is a laboratory course surveying plants and animals. This course is designed to compliment the material in Biology 523.

EARTH SCIENCE 534 (Academic)
1 Credit Full Year Elective: Grade 11
Prerequisite: Departmental approval

Earth Science is a laboratory course that will survey the areas of geology, meteorology, oceanography and astronomy. These areas will be studied utilizing the skills of observing, classifying, measuring, inferring and prediction. Communicating through oral, written and graphical methods will be utilized.

CHEMISTRY 535 (Academic)
1 Credit Full Year Elective: Grades 11, 12
Prerequisite: Test grade "B" or better in Geometry 324, "C" or better in Geometry 325, departmental approval and signature of current math teacher

Chemical and physical properties of matter are studied both in the laboratory and lecture. The how, why and to what extent chemicals combine provide the topics to be covered. The solving of related mathematical problems makes up one-third of the course.

CHEMISTRY**537 (Honors)**

1 Credit Full Year

Elective: Grades 11, 12

Pre-requisite: Test grade of "B" in Geometry 325 or "C" in Geometry 327, departmental approval and signature of current math teacher

Students will cover material similar to that of Chemistry 535 but in greater depth. Increased emphasis is placed on 'discovery' learning both in laboratory experiences and classroom work. Because of the added responsibility involved, only hardworking students who have proven their ability in both science and mathematics will be considered.

ENVIRONMENTAL STUDIES**539 (Academic)**

1 Credit Full Year

Elective: Grade 12

Prerequisite: Integrated Science 515, Earth Science 534 or Chemistry 535/537

This course will encompass the areas of biology, ecology, geology, hydrology, climatology, meteorology, oceanography and agronomy in both laboratory and lecture. Emphasis will be on integrating the laboratory skills into written and oral communication.

HUMAN PHYSIOLOGY/ANATOMY**541 (Honors)**

1 Credit Full Year

Elective: Grade 12

Prerequisites: Grade "A" in Chemistry 535 or "B" or better in Chemistry 537, "A" in Biology 525 or "B" in Biology 527, departmental approval

The structure and functions of the systems of the human body are studied, along with their diseases and disorders. A course designed for those interested in entering a biologically related career field. Lab work includes the study of cells, tissues, a cat dissection and sheep organ dissections.

HUMAN PHYSIOLOGY/ANATOMY**542 (Academic)**

1 Credit Full Year

Elective: Grade 11, 12

Prerequisite: Chemistry, "B" or better in Biology 525 or "C" or better in Biology 527, departmental approval

The systems of the human body are introduced. The structure and functions of the systems are studied, together with their diseases and disorders. A course designed for those interested in entering a biologically related career field. Lab work includes the study of cells, tissues, a cat dissection and sheep organ dissections.

SCIENCE TOPICS**543**

1 Credit Full Year

Elective: Grade 12

Prerequisite: Botany/Zoology 531

The physical sciences of chemistry and physics, along with some earth science, are studied through chosen topics. Students will develop the skills of observing, classifying, measuring, inferring and predicting through laboratory experiences. Communication through oral, written, mathematical and graphing methods will be utilized. Emphasis is on integrating lab skills into written and oral reporting.

PHYSICS**545 (Academic)**

1 Credit Full Year

Elective: Grades 11,12

Pre-requisite: Juniors –Geometry 325 test average of “A” or Geometry 327 test average of “B” and co-requisite of Algebra 335 or 337. Seniors – Algebra 335 or 337 test grade “C” or better. *A fourth year of math is highly recommended.* Departmental approval and signature of current math teacher

This course studies mechanics, vectors, heat, sound wave phenomena, electro-magnetic theory, electricity, relativity and nuclear physics. Classical physics is combined with modern physics in both laboratory and lecture formats.

PHYSICS**547 (Honors)**

1 Credit Full Year

Elective: Grades 11, 12

Pre-requisite: Juniors - Geometry 327 test average of “B” and co-requisite of Algebra 337. Seniors – Algebra 335 or 337 test grade “C” or better. *A fourth year of math is highly recommended.* Departmental approval and signature of current math teacher

Physics 547 has the same general course description as academic physics but with more emphasis on applying the mathematics to the concepts studied.

ADVANCED PLACEMENT BIOLOGY**557 (for Fall 2012)**

1 Credit Full Year

Elective: Grade 12

Pre-requisite: Grade “A” in Chemistry 535 or “B” or better in Chemistry 537, “A” in Biology 525 or “B” or better in Biology 527

Co-requisite or Pre-requisite Physics 517, Physics 545 or Physics 547, departmental approval

Three major areas of biology; molecules and cells, heredity and evolution, and organisms and population, will be used as a framework for this course. The student will utilize these to develop an understanding of the principal concepts of biology and the experience science as a process of problem solving and discovery. Lab activities will emphasize development and testing of hypotheses; collection, analysis, and presentation of data; and a clear discussion of results. Students in this class will be required to take the A.P. exam in May. Class fee includes the exam cost.

ADVANCED PLACEMENT CHEMISTRY**558 (A.P.)**

1 Credit Full Year

Elective: Grades 11, 12

Pre-requisite: B or better in Chemistry 537

Co-requisite: Physics 545 or 547 and fourth year of math

This course is intended for the student planning to major in science or engineering. A.P. Chemistry provides a solid foundation in reaction stoichiometry, kinetics and equilibrium. The course also provides a rigorous treatment of atomic theory as well as kinetics, gas laws, acid-base equilibrium, and oxidation-reduction. A short introduction to organic chemistry is also included. Students are required to take the A.P. exam in May. Class fee includes the exam cost.

ADVANCED PLACEMENT PHYSICS**559 (A.P.)**

1 Credit Full Year

Elective: Grades 11, 12

Pre-requisite: Physics 545 or 547 and departmental approval

Co-requisite: Calculus Pre/Co-requisite: Chemistry 535 or 537

Emphasis will be on topics covered in the Physics C-Mechanics syllabus with the goal that students will be prepared for this exam. A lab project is required first and third quarters. Students will be required to take the A.P. exam in May. Class fee includes the exam cost.

SOCIAL SCIENCE DEPARTMENT

Three (3) Social Science credits are required for graduation from Boylan. Students may satisfy this requirement by:

1. Passing World History (required grade 9, 1 credit), U.S. History (required grade 11, 1 credit), Government (Required grades 11 or 12, ½ credit) and at least one other Social Science course.
2. Students who choose to take Geography or European History as sophomores may take Government junior or senior year.
3. If enrollment warrants, Government may be offered as a summer course.

WORLD HISTORY

1 Credit Full Year
Prerequisite: None

413

415 (Academic)

417 (Honors)

Required: Grade 9

World History is a survey course focusing on prehistoric man, the ancient civilizations of Mesopotamia, the Ancient Egyptians, the Ancient Indian and Chinese civilizations, the Golden Age of Athens, the Roman Empire, Medieval and Renaissance Europe, the Reformation, the Age of Exploration, the French Revolution, Native American and African civilizations, the Industrial Revolution, Imperialism and W.W.I. Cultural aspects of each civilization are covered in the course. Research projects are integrated into the academic and honors levels.

ADVANCED PLACEMENT EUROPEAN HISTORY 427 (A.P.)

1 Credit Full Year
Prerequisite: Departmental approval

Elective: Grade 10 –12

Advanced Placement European History is a full year introductory college course covering the history of Europe from the Middle Ages through the present. This is an accelerated course in which students are expected to independently read a college textbook, primary and interpretative historical documents and complete outside research. Students are required to take the A.P. exam in May. A non-refundable fee for the A.P. exam is required.

UNITED STATES HISTORY

1 Credit Full Year

433

Required: Grade 11

Placement based on PLAN test score and World History grade

U. S. History is a general survey of American history through the Twentieth Century. The course is geared toward an appreciation for and an understanding of the development of the U. S. Emphasis is placed on reinforcement of reading, writing, and study skills pertinent to the subject matter.

UNITED STATES HISTORY**435** (Academic)

1 Credit Full Year

Required: Grade 11

Placement based on PLAN test score and World History grade

U. S. History is a general survey of American history through the Twentieth Century. The goals of this course are to objectively discern historical truth and interpret this country's development and history. A written research paper using primary sources is required.

UNITED STATES HISTORY**437** (Honors)

1 Credit Full Year

Required: Grade 11

Placement based on PLAN test score and World History grade

Honors U. S. History is a course taught through the mediums of a college text, individual research and a variety of resource materials. The course covers Colonization through the Twentieth Century. Emphasis is placed on retention, interpretation, analysis and evaluation of factual knowledge. Students are required to complete written, historical research projects.

ADVANCED PLACEMENT U. S. HISTORY**439** (A.P.)

1 Credit Full Year

Grade 11

Prerequisite: Departmental approval

Advanced Placement U. S. History is a full year introductory college course covering Colonization through the present. This is an accelerated course in which students will be expected to independently read a college textbook, primary and interpretative historical documents, and complete outside research. Students are required to take the A.P. exam in May. A nonrefundable fee for the A.P. exam is required. This course satisfies the graduation requirement.

GOVERNMENT**443**

Required: Grade 11 or 12

445 (1) 446 (2) (Academic)

½ Credit One Semester

447 (1) 448 (2) (Honors)

Prerequisite: Signature of current history teacher

Government is a semester course covering the origins and structure of the American government, the U.S. and Illinois Constitutions, the electoral process, state and local governments, and comparative political and economic systems. Students will take the U.S. and Illinois Constitution test.

ADVANCED PLACEMENT U.S. GOV. & POLITICS 449(1) 450(2) (A.P.)

Required: Grade 11 or 12

½ Credit One Semester

Prerequisite: Signature of current history teacher

Advanced Placement U.S. Government & Politics is an introductory college course. Students will interpret and analyze the various institutions, groups, beliefs, and ideas that comprise the U.S. political system. Students will be required to pass the U.S. and Illinois Constitution test and to take the A.P. exam in May. A nonrefundable fee for the A.P. exam is required. This course satisfies the graduation requirement.

PSYCHOLOGY

454(2)

½ Credit One Semester

Elective: Grade 12

Prerequisite: Signature of current History teacher

This introduction to the study of the science of psychology will encourage students to consider how psychological concepts apply to everyday living. Topics will include: myth vs. fact regarding psychology as a science, human development, states of consciousness, sensation/perception, learning, memory, psychological disorders, and social psychology.

PSYCHOLOGY

455 (1) 456 (2) (Academic)

½ Credit One Semester

Elective: Grade 12

Prerequisite: Signature of current History teacher

This is a semester-long introduction to the study of psychology, the science of behavior and mental processes. Topics include: what psychology is and how psychologists study people, human development, states of consciousness, learning, memory, psychological disorders, and social psychology. Students will be required to complete a semester project.

PSYCHOLOGY

457 (1) 458 (2) (Honors)

½ Credit One Semester

Elective: Grade 12

Prerequisite: Signature of current history teacher

An introduction to the study of psychology, the science of behavior and mental processes. Topics include: what psychology is and how psychologists study people, the brain and its relationship to human behavior, sensation and perception, states of consciousness, thinking and language, psychological disorders, and types of therapy. Students will be required to complete a semester project. Class is quick paced and writing-intensive.

ADVANCED PLACEMENT PSYCHOLOGY 459(1) 460(2) (A.P.)

½ Credit One Semester Elective: Grade 12

Prerequisite: Signature of current history teacher

Advanced Placement Psychology is an introductory college level psychology class. The course curriculum includes physiological psychology, developmental psychology, motivation and emotion, altered states of consciousness, learning, memory and mental illness. All students in this course are required to take the A.P. exam in May and a non-refundable fee for the A.P. exam is required.

WORLD GEOGRAPHY

465 (1) 466 (2) (Academic)

½ Credit One Semester Elective: Grade 10 or 12

Prerequisite: Signature of current history teacher

World Geography offers an overview of specific areas of the world by examining geographic location, land features, natural resources, major cities, political system, religion, economy and population distribution. This course familiarizes the student with areas of the world that are currently affecting world affairs. A research project is included as part of the course requirement.

ADVANCED PLACEMENT MICROECONOMICS 467(1) 468(2) (A.P.)

1/2 Credit One Semester Elective: Grade 11-12

Prerequisite: Departmental approval

Advanced Placement Microeconomics is an introductory college level economics class. Students taking the course will examine the theory of consumer behavior, the theory of the firm, and the behavior of profit-maximizing firms under various market structures. This course serves as a foundation for not only the future study of economics but also the related fields of business, finance, marketing, political science and mathematics. Students are required to take the A.P. exam in May. A nonrefundable fee for the A.P. exam is required. This course will satisfy the Consumer Education requirement for graduation.

WORLD LANGUAGES DEPARTMENT

SPANISH 1

615 (Academic)

1 Credit Full Year

Elective: Grades 9-11

Prerequisite: At or above grade level proficiency on language arts placement test, grades 10 and 11 must have departmental approval

Students will begin to use Spanish through classroom dialogues and learn vocabulary which will enable them to communicate on a very basic level. Grammatical structures are incorporated into the dialogues. Students will learn to make cultural comparisons between their own culture and that of the Spanish-speaking world. Students will be exposed to a variety of Spanish speakers through CD's and DVD's. Guided writing activities and paired activities are incorporated into the daily routine of the class. Students will learn about the culture and people of Mexico.

SPANISH 2

625 (Academic)

1 Credit Full Year

627 (Honors)

Elective: Grades 9-12

Prerequisite: Departmental approval, Academic: Spanish 1 grade "C" or "B"
Honors: Spanish 1 grade "B" or teacher approval

Spanish 2 helps the student become more orally proficient by reviewing previously learned structures and vocabulary while introducing new material. Guided and independent writing, listening activities, natural conversations and grammar exercises are the primary components of the class. Spanish 2 highlights Central American countries. Honor students are expected to begin using Spanish as a means of classroom communication by the second quarter.

SPANISH 3

635 (Academic)

1 Credit Full Year

637 (Honors)

Elective: Grades 10-12

Prerequisite: Departmental approval Academic: Spanish 1 and 2
Honors: grade "B" or better in Spanish 627 or teacher approval

Spanish 3 reviews thoroughly the grammatical structures introduced in levels 1 and 2 and expects the students to recall old vocabulary while learning new. A high degree of listening and oral proficiency is expected at the honors level. Writing skills will be developed through compositions and projects. Readings will be from authentic material, both fiction and non-fiction. The cultural diversity of South American countries will be studied in a variety of ways.

SPANISH 4

1 Credit Full Year

645 (Academic)**647** (Honors)

Elective: Grades 11, 12

Prerequisite: Departmental approval

Academic: Spanish 1, 2 and 3Honors: grade "B" or better in Spanish 637 or teacher approval

Spanish culture and civilization are studied via literary selections and authentic material. Students are prepared to take college entrance examinations. The student is expected to use Spanish as the prime means of classroom communication. Grammatical concepts are reviewed as needed. Authentic language tapes and videos are used to stimulate both listening and speaking. Semester projects, written and oral, presented in Spanish, are required.

ADVANCED PLACEMENT SPANISH 5

1 Credit Full Year

649 (A.P.)

Elective: Grade 12

Pre-requisite: A.P. teacher approval

Spanish 5 A.P. prepares the student to take the Spanish language Adv. Placement test. Emphasis is placed on integrating Spanish skills and using these skills in all communicative modes. The successful A.P. Spanish 5 student is able to work independently and is willing to give extra time to the class. A non-refundable fee for the A.P. exam is required.

FRENCH 1

1 Credit Full Year

651 (Academic)

Elective: Grades 9-11

Prerequisite: At or above grade level proficiency on language arts placement test, grades 10 and 11 must have departmental approval

Students are introduced to basic grammar forms and pronunciation of the language. Emphasis is placed on oral-aural proficiency through structured student dialogues, small group work, CD's and DVD's. Guided writing encourages self-expression and reinforce vocabulary and grammatical structures presented. The course provides an overview of French speaking people.

FRENCH 2

1 Credit Full Year

657 (Honors)

Elective: Grades 9-12

Prerequisite: French 1 and departmental approval

Basic grammar is reviewed and continues with work in the more advanced grammatical structures. Emphasis is placed on oral-aural proficiency through the use of student dialogues, natural conversations, CD's and DVD's. Guided and independent writing reinforces grammatical structures. This course provides a study of French speaking Canada and an overview of French speaking Africa.

FRENCH 3**661** (Honors)

1 Credit Full Year

Elective: Grades 10-12

Prerequisite: French 1, 2 and departmental approval

French III continues the study of idiomatic and grammatical French through the art of conversation a review of verb tenses covered in levels 1 and 2, and Photo Story presentations on art and French provinces. French will be used as the means of classroom communication. Reading skills will be developed through the use of contemporary short stories. Writing skills will be developed through composition. France and the culture of Francophone Countries is studied.

FRENCH 4**665** (Honors)

1 Credit Full Year

Elective: Grades 11, 12

Prerequisite: French 1, 2, 3 and departmental approval

French culture and civilization are studied by the use of literary selections from *Candide* to *The Little Prince* and by the use of Photo Story presentations on history. Students will read contemporary French through selected articles from Francophone literature. Emphasis will be placed on the ability to express himself/herself in oral and written French. Grammar will be reviewed. Comprehension CD's and DVD's reinforce oral-aural proficiency.

GERMAN 1**671** (Academic)

1 Credit Full Year

Elective: Grades 9-11

Prerequisite: At or above grade level proficiency on language arts placement test, grades 10 and 11 must have departmental approval

Students will learn to understand and speak simple, conversational German. Dialogues, oral drills and videos are used to reinforce vocabulary and grammatical structures. Students will read short stories and write original dialogues. Topics such as the geography of Germany, Austria and Switzerland, holidays and the relationship between English and German are presented through magazines, videos, internet and other media.

GERMAN 2**675** (Honors)

1 Credit Full Year

Elective: Grades 9-12

Prerequisite: German 1 and departmental approval

This course provides the opportunity to improve listening and speaking skills while placing greater emphasis on reading and writing skills. Readings, discussions and videos cover a variety of cultural, geographical, historical topics and characters. The video courses "*Komm Mit*" and "*Deutsch Aktuell*" will enhance the student's comprehension of the language and culture. Students will keep a weekly journal.

GERMAN 3

1 Credit Full Year

Prerequisite: German 1, 2 and departmental approval

677 (Honors)

Elective: Grades 10-12

While reviewing and completing grammar, the student will begin reading contemporary German. Readings will include German-speaking writers from newspapers, lectures, interviews, radio, poems and short stories. Problems of today's German speaking countries will be discussed. Writing skills will be practiced through composition and journal-keeping.

GERMAN 4

1 Credit Full Year

Prerequisite: German 1, 2, 3 and departmental approval

679 (Honors)

Elective: Grade 11, 12

This course is designed to improve the students' ability to read German literature. They will be introduced to the short stories of important writers such as Goethe, Kafka, Mann and other modern authors. Students will also read three selected works. Problems of today's German speaking countries will be discussed. Writing skills will be practiced through composition and journal-keeping.

MANDARIN CHINESE 1

1 Credit Full Year

Prerequisite: At or above grade level proficiency on language arts placement test, grade 11 must have departmental approval

681 (Academic)

Elective: Grades 9, 11

Chinese 1 focuses on basic communicative skills in Mandarin Chinese. Students will be introduced to the four tones of Mandarin, practice proper pronunciation, learn basic vocabulary in dialogue, as well as commonly used sentences for greetings, family life, school life and day-to-day conversation. Students will learn basic radicals that make up typical words. Chinese character writing will be practiced daily. Cultural highlights will be incorporated into each class.

FOUR YEAR EDUCATION PLAN

Freshman Year	Sophomore Year
<ol style="list-style-type: none"> 1. Religion 1 2. English 1 3. Math: 4. World History 5. Physical Education Health 6. Elective: 7. Elective: 	<ol style="list-style-type: none"> 1. Religion 2 2. English 2 3. Math: 4. Biology 5. Physical Education 6. Elective: 7. Elective:
Junior Year	
<p>1st Semester:</p> <ol style="list-style-type: none"> 1. Religion 3 Physical Education 2. English 3 3. U.S. History 4. Math: 5. Elective: 6. Elective: 7. Elective: 	<p>2nd Semester:</p> <ol style="list-style-type: none"> 1. Religion 3 Physical Education 2. English 3. U.S. History 4. Math: 5. Elective: 6. Elective: 7. Elective:
Senior Year	
<p>1st Semester:</p> <ol style="list-style-type: none"> 1. Religion Physical Education 2. English 3. Social Studies 4. Elective: 5. Elective: 6. Elective: 7. Elective 	<p>2nd Semester:</p> <ol style="list-style-type: none"> 1. Religion Physical Education 2. English 3. Social Studies 4. Elective: 5. Elective: 6. Elective: 7. Elective:
<p>Not all required courses are listed above. Be sure to check Minimum Graduation Requirements .</p>	