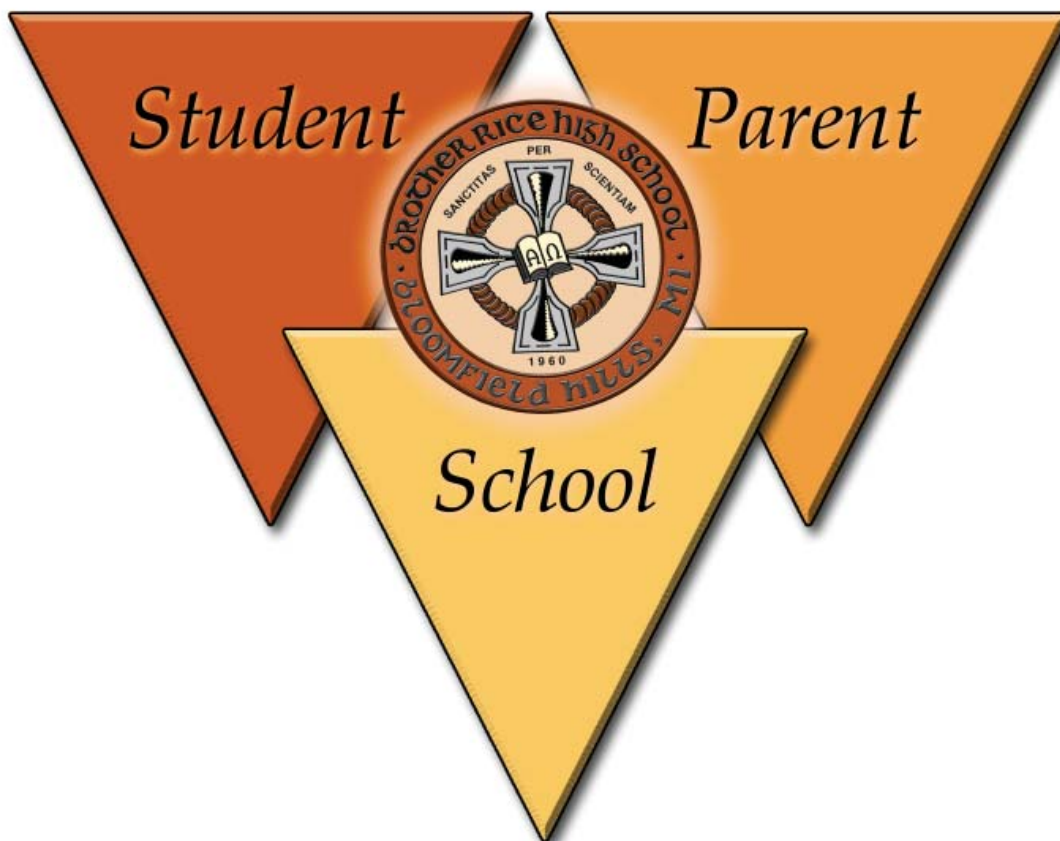


**The Three Party Partnership
for Excellence:**



BROTHER RICE HIGH SCHOOL

Course Description Handbook 2012-13

Three Party Partnership for Excellence

The Student, The Parents, The School



The Course Description Handbook assists students and their parents in choosing an appropriate course of study for the coming school year. It is advisable to check the graduation requirements as well as the course requirements for each year before making any course selections.

Courses are described according to department and in numbered series within each department in this handbook. As a general rule, courses in the 100 series are for freshmen, courses in the 200 series are for sophomores, courses in the 300 series are for juniors and courses in the 400 series are for seniors.

All courses are for one year and one credit unless otherwise noted.

Elective courses fall into two categories: academic electives which may be taken to fulfill the graduation requirements and enrichment electives, only one of which may be taken to fulfill course requirements for a given school year if only six courses are taken.

In some cases, admission to courses may require faculty or departmental approval. This fact is noted where necessary in the course descriptions.

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Graduation Requirements for the Class of 2013

American History	1½ credits
Computer Science	½ credit
English.....	4 credits
Government	½ credit
Health.....	½ credit
Foreign Languages (Same language, consecutive years)	2 credits
Mathematics (Mathematics in Senior Year)	4 credits
Physical Education.....	½ credit
Science (Biology and Chemistry or Physics)	3 credits
Speech.....	½ credit
Theology.....	4 credits
Western Civilization	1 credit
Electives	2 credits
TOTAL.....	24 credits

Course Plan

FRESHMAN YEAR:

- Theology
- Speech/Physical Education
- Western Civilization
- English
- Foreign Language _____
- Mathematics _____
- Study or Elective _____

SOPHOMORE YEAR:

- Theology
- Computer Science/Health
- English
- Mathematics _____
- Foreign Language _____
- Biology _____
- Study or Elective _____

JUNIOR YEAR:

- Theology
- English
- US History or AP US History
- Mathematics _____
- Chemistry or Physics _____
- Academic or Enrichment Elective _____
- Study or Elective _____

SENIOR YEAR:

- Theology
- English
- US Since 1900/Government or AP History/AP Gov't
- Mathematics _____
- Science _____
- Academic or Enrichment Elective _____
- Study or Elective _____

Honors & Advanced Placement Courses

In order for a student to be admitted to an Advanced Placement or honors level course, he must meet the requirements stated in the course description for a particular course AND is subject to departmental evaluation and approval of the department chairperson. AP courses require the taking of the AP exam and payment of the AP fee.

Homework Policy

Time spent doing homework can differ substantially from student to student. Such things as study skills and habits, time budgeting, reading level and speed, and innate intelligence can affect a particular student's study time relative to his classmates. However, a homework survey revealed that the majority of Brother Rice High School students spend an average of twenty to thirty-five minutes per night per class on each academic subject for total homework time of two to three hours.

While in-school study halls can reduce time spent at home on homework, the taking of an extra (seventh) course, an honors course or an Advanced Placement course can increase the necessary study time up to forty-five or sixty minutes per class. Work in certain courses such as Art, Word Processing, etc., is usually done during the classroom period with no formal homework assignment given.

In registering for courses, it is imperative that the student seek guidance from the teachers and counselors in attempting to schedule courses whose requirements are best suited to his academic needs and abilities.

Art Department

760 ART I

(Approval by Art Department)

Prerequisites: Some artistic talent and a serious interest in learning to draw are necessary. A drawing at the time of registration is required to determine the advisability of taking the course. The nature of this course requires the student have self-control and maturity to work independently in an art studio setting.

* This course has a limited enrollment.

This is an elective course for students who have some artistic talent and who are seriously interested in learning to draw. Upon completion of this course, the student will demonstrate a basic knowledge of the elements and principles of design as they relate to drawing. The student will show knowledge of the basic elements of Art: line, shape, value, texture, color, space and form. Using various combinations of material to create projects, students are challenged to become more proficient in their ability to draw so that drawing becomes a truly satisfying experience. Minimal homework is given and project grades are based on following criteria. Quizzes on vocabulary and concepts are given. A fee is charged for this course.

761 ART II

(Approval by Art Department)

Prerequisite: Successful completion of Art I.

Upon completion to this course, the student will demonstrate an increased ability to render form in such media as pencil, ink, conté, pastel, charcoal, colored pencil, markers and paint. He will be introduced to printmaking. Concepts in composition design, graphic design, and color theory are studied. Advanced problems in drawing, composition and subject matter are explored. The student will begin to build a portfolio of original art works. A sketch book will be kept and two hours of homework will be assigned each week. Quizzes on vocabulary and concepts are given. A fee is charged for this course.

766 ART III

(Approval by Art Department)

Prerequisites: Successful completion of Art I or Art II.

In this course the student will participate in a variety of short and long term projects in different media. The student's skill in three dimensional art work will be developed further. He will be introduced to sculpture, pottery and industrial design. The student will demonstrate a basic knowledge of the principles and elements of design and tactile qualities. The completion of a sketch book is required. Quizzes are given on concepts and vocabulary. A fee is charged for this course.

767 ART IV

(Approval by Art Department)

Prerequisites: Successful completion of Art I, II and III.

The student will demonstrate an ability to solve advanced problems in various media. Projects using scratch board, watercolor, acrylic, silk screen, collage, clay, plaster and mixed media are just some of the possibilities. A sketch book will be kept and weekly assignments given. Students should expect to do approximately two hours of homework per week. During the second semester some students may elect to work on a project of their own design. Those students interested in preparing a portfolio will be assisted in this project by the instructor. A fee is charged for this course.

768 ADVANCED INDEPENDENT STUDY IN ART

(Approval by Art Department)

Prerequisites: Successful completion of Art II or III plus instructor approval

This course is a directed independent study in studio art. Students who sign up for this course will complete individual contracts with the instructor at the beginning of each quarter. A fee is charged for this course.

769 PHOTOGRAPHY I

(Approval by Art Department)

Prerequisites: Students who have a serious interest in photography and are self motivated. Some experience in photography or art is helpful but not required. (One semester; 1/2 credit)

* This course has a limited enrollment of 12 students.

In this course, students must demonstrate their knowledge of the artistic and commercial uses for photography as well as the history of this medium. Topics to be covered include basic camera controls and how to use them as well as the elements and principles of design as they relate to photography. Most assignments will be shot using black and white film or a digital camera. An introduction to the use of computer software program Adobe Photoshop is also included. Students must have use of a 35 mm or digital camera with adjustable controls (manual setting options). A course fee will be charged for supplies. A supply list will be handed out and students will be responsible for purchasing their own film and photo paper. These items can be purchased at a local photo store or students may elect to order them through a discount mail-order store with the instructor.

770 PHOTOGRAPHY II

(Approval by Art Department)

Prerequisite: Successful completion of Photography I.

(One semester; 1/2 credit)

* This course has a limited enrollment of 12 students.

In this course, students will need to demonstrate learning about advanced photographic techniques, processes and approaches while refining their ability to see and think visually. Some of the technical processes to be covered include: advanced darkroom work, use of the medium format camera, and further development of skills using photography and the computer (scanner, Adobe Photoshop software program and digital camera). Assignments relating to documentary, fine art, and commercial applied photography will be completed. Students will begin to develop a portfolio of original photographs. A lab fee is charged for this course and students are responsible for purchasing their own film and paper.

771 ADVANCED INDEPENDENT STUDY IN PHOTOGRAPHY

(Approval by Art Department)

Prerequisites: Successful completion of Photo I and Photo II, plus instructor approval.

This course is a directed independent study in photography. Students who sign up for this course will complete individual contracts with the instructor at the beginning of each quarter.

Business Department

383 FUNDAMENTALS OF BUSINESS LAW

(Approval by Business Department)

The student will acquire a practical legal framework relating to his personal rights, obligations, and responsibilities, primarily within our business-oriented culture. The student will learn how to think analytically and systematically concerning legal situations, using both actual and hypothetical court cases to help him understand the fundamental principles of law. The student will study the law as an official statement of ethics: the moral guidelines which distinguish right and wrong conduct.

384 ACCOUNTING I

(Approval by Business Department)

Prerequisites: 2.0 GPA or better.

In this full year course the student will learn basic accounting principles, theory, and practice. In the first semester, the complete cycle for a sole proprietorship is taught. In term two the student will learn about specific areas of accounting such as payroll and cash systems, taxes, fixed assets and depreciation, and accrued income and expenses. The student will also be exposed to partnership and corporate accounting practices. Computerized accounting techniques and methods will be used in a variety of problem solving situations.

465 ECONOMICS

(Approval by Business Department)

Prerequisites: Seniors only with a cumulative GPA of 2.5 or higher.

In this full year course the student is expected to demonstrate both a theoretical and working understanding of economics. The student will be exposed to a study of supply, demand, price controls, and how business and industry operate in their relationship to public policy and labor. The determinants of wage and salary levels, interest rates, rent, profits and income determination are studied. The effects of unemployment and inflation, banking policies and government controls on the national income are introduced. A fee is charged for those who wish to take the optional AP test.

466 BUSINESS & PERSONAL FINANCE

(Approval by Business Department)

Prerequisites: Sophomore/Junior/Senior with a 2.0 GPA or better.

This full year course covers two major areas, business related and consumer related topics. The business topics include the economy, owning and operating a business, marketing, career planning, and human, financial and technological resources. The consumer topics include buying goods and services, credit, and money and risk management. Upon completion of this course, the student will have a better understanding of how to be successful in the business world along with how to manage personal finances.

Computer Science Department

248 INTRODUCTION TO COMPUTER SCIENCE

(One Semester; ½ credit course; required for all sophomores)

During this required, one semester course, students will learn the basic elements of a modern computer language (Java): formula construction, sequencing, looping and use of conditional statements. This course includes an introduction to binary numbers, Boolean logic, selected topics in Economics, plus basic spreadsheet construction using Excel. The main emphasis will be on converting a series of primarily written instructions into concrete actions to be performed by a computer. This requires an intense focus on the interpretation of those instructions and is intended to provide much practice to enhance the student's problem solving skills. These include logic, computational ability, attention to detail, disassembling a problem into its smaller components, hypothesis testing as well as patience and perseverance.

348 ADVANCED PROGRAMMING

(Approval by Computer Instructor)

Prerequisite: B or better in Introduction to Computer Science (248) or equivalent course.

This course offers students an opportunity to continue their studies in computer programming using JAVA. In this full year course, the student will learn such topics as sorting, use of matrices, file creation and manipulation, applet creation, and frames. The course will include an introduction to "html", a review of the spreadsheet and presentation software plus other application software as time permits and new software becomes available. A fee is charged for this course.

349 ADVANCED PLACEMENT COMPUTERS JAVA HONORS

(Approval by Computer Instructor)

Prerequisites: An A or B in Advanced Computers 348 or its equivalent, and a 3.4 GPA.

In this full credit course the student will take the advanced placement exam in the area of computer studies. High scores on this exam can be worth up to eight hours of college credit. The student will need to demonstrate a thorough understanding of the concepts of programming in order to do well in this course. The AP test fee and lab fee are required.

Drama Department

129 INTRODUCTION TO DRAMA

(Approval by Drama Instructor)

(One Semester, ½ credit)

This class is designed to offer the ninth grader an introduction to various aspects of drama. Upon completion, the student will demonstrate his knowledge of basic acting principles, basic vocal production, pantomime, improvisation, reader's theater, film study, play analysis, and a basic play production. Students will perform creatively from monologues, scene studies and one-act plays.

324 DRAMA I

(Approval by Drama Instructor)

(Full year course. 1 credit hour. Open to Grades 10-12)

This course requires that the student demonstrate his knowledge of the structure of drama and the basic techniques of acting: observation, concentration, imagination, emotional development, voice production, projection, and the basic techniques of play production. The student will do play reading, movie analysis, scene studies, monologues, choreography and musical theater, video filming and camera acting, as well as improvisation at the introductory level. These students work as support personnel for the Marian Rice Players' fall and spring productions.

426 DRAMA II

(Approval by Drama Instructor)

Open to Grades 11-12

Prerequisite: Drama I or consent of the instructor.

This course is an advanced level acting class and is only open to those students who have successfully completed Drama I, or who have permission of the instructor. The student will study beginning Shakespeare, performance study, advanced levels of scene studies, monologues, improvisation, musical theater and acting techniques. In the second semester, the student will focus on preparation and performance of full-length, legitimate plays which are done in repertory with the members of the class for performance to the public. These plays include a variety of genres and are selected from material recently performed on the professional stages throughout the country.

Engineering Department

446 ARCHITECTURAL DRAWING I

In this full year course the student will need to demonstrate the knowledge needed to create basic architectural drawings. The course is designed to impart to each student a basic knowledge of the principles of design and the elements of architectural drawing. The basic elements of architecture are studied: design concept development, the ability to perceive and manipulate special relationships, and graphical composition. Students are challenged to become more proficient in their ability to conceptualize, draw, and think independently. Most assignments are to be completed in class, but additional projects or assignments may be given that require the student to work outside the normal class period. Self-discipline is emphasized. A fee is charged for this course.

— Pre-Engineering Curriculum —

541 ENGINEERING DESIGN

(Approval by Pre-Engineering Department)

The student taking this full year course will learn the process of design development of a product and how a model of that product is produced, analyzed and evaluated, using a Computer Aided Design System. Various design applications will be explored with discussion of possible career opportunities. This is an introductory course, which develops student problem solving skills, with emphasis placed upon the concept of developing a 3-D model or solid rendering of an object. Students focus on the application of visualization processes and tools provided by modern, state-of-the-art computer hardware and software, Autodesk Inventor. A fee is charged for this course.

543 DIGITAL ELECTRONICS

(Approval by Pre-Engineering Department)

Prerequisite: Course 541 *Introduction to Engineering Design as well as completion of Algebra I and II.*

Digital electronics is a course of study in applied digital logic. The course is patterned after the first semester course in Digital Electronics taught in two- and four-year colleges. Students will study the application of electronic logic circuits and devices and apply Boolean logic to the solution of the problems. Such circuits are found in watches, calculators, video games, computers, and thousands of other devices. The use of smart circuits is present in virtually all aspects of our lives and its use is increasing rapidly, making digital electronics an important course of study for a student exploring a career in engineering or engineering technology. Using Circuit Maker, the industry standard, students will test and analyze simple and complex digital circuitry. Students will follow up their circuit designs by building actual circuits on Digitrainers. Additionally, they will learn to use multimeters to check the circuit's current, resistance, and voltage. A fee is charged for this course.

542 ADVANCED ENGINEERING TECHNOLOGIES

(Approval by Pre-Engineering Department)

Prerequisite: Course 543 *Digital Electronics.*

Students will learn the process involved in designing and executing an engineering project. The project will pertain to a new technology in the field of engineering. This project will include a definition of the project, a time schedule of the project, tracking and execution of project tasks, and a final presentation. This presentation will include visual representation, experimentation, and oratory. Software technologies, including web design, will be included in the visual representation of the presentation. The students will perform one or two project(s) per year. The size and scale of the project(s) will be dependent upon the size of the class. A fee is charged for this course.

English Department

It is the intention of the English Department to introduce BRHS students to classic literature and celebrated contemporary authors. For each grade level, at least one novel is designated for summer reading; two novels are designated for most honors classes. Furthermore, the Brother Rice English curriculum incorporates the following: literary analysis and interpretation, vocabulary, grammar, the MLA format for essays and research papers, presentation skills, discussion, and independent reading.

111 ENGLISH I HONORS

(Approval by English Department)

Prerequisite: *A score of 90th % ile in Verbal, Reading, and Language on the High School Entrance Exam.*

In this advanced course, the student will be exposed to an intensive study of literature accompanied by a comprehensive program in composition, grammar, vocabulary, and outside reading. This course is designed for the student who can work at an accelerated pace.

112 ENGLISH I

(Approval by English Department)

In this course, the student will be required to explore a systematic study of the various literary genres and do extensive work in grammar, composition, vocabulary and outside reading to enhance his written and verbal skills.

113 ENGLISH COMPOSITION

(Administration approval required; paired with course 114 in place of freshman foreign language.)

In this course, the student will do extensive review and practice work in basic grammar, composition, and vocabulary.

114 INTRODUCTION TO LITERATURE

(Administration approval required; paired with course 113.)

In this course, the student will be provided with an introduction to the basic literary genres through a systematic study of literature. The student will work extensively on reading comprehension.

211 ENGLISH II HONORS

(Approval by English Department)

Prerequisites: *A 3.4 cumulative GPA and B average in English I Honors or a 3.4 cumulative GPA and an A average in English 112.*

In this advanced course, the student will survey the best of American literature, from the time of the Colonies to the present, and trace some of the traditions and attitudes that have molded contemporary America. Designed for the student who can work at an accelerated pace; in this course, he will be expected to do outside reading and work extensively on composition, grammar and vocabulary.

212 ENGLISH II

(Approval by English Department)

In this course, the student will experience a survey of American literature as well as complete extensive work in grammar, composition, vocabulary, and outside reading.

213 ENGLISH 213

(Approval by English Department. Offered on a 'need' basis in consultation with English 113 instructor.)

Prerequisites: *This course is intended for students who have a 2.0 GPA or lower and a C average or lower in English 113 or a very low average in English 112.*

In this course, the student will do more extensive work in the language arts through a survey of American literature with special emphasis on language skills.

311 ENGLISH III HONORS

(Approval by English Department)

Prerequisites: *A 3.4 cumulative GPA and B average in English II Honors or a 3.4 cumulative GPA and an A average in English 212.*

In this advanced course, the student will survey the best of British literature and examine its influence on Western thought, especially in America. Designed for the person who can work at an accelerated pace, the student will be expected to do advanced work in composition, research, vocabulary, and independent reading with the intended purpose being to prepare serious and qualified students for the senior Advanced Placement English Program.

312 ENGLISH III

In this course, the student will be exposed to a chronological survey of British literature and its relevant history and will complete extensive work in composition, vocabulary and outside reading. Additionally, students will write a research paper and complete several SAT practice essays.

411 ENGLISH IV HONORS/ ADVANCED PLACEMENT

(Approval by English Department)

Prerequisites: *A 3.4 cumulative GPA and a B average in English III Honors or a 3.4 cumulative GPA and an A average in English 312.*

In this Advanced Placement course, the student will work extensively in reading (essays, short stories, novels, dramas, and poetry), writing, and developing vocabulary based on norms established by the College Entrance Examination Board. This is an extremely rigorous course designed for capable and ambitious students currently enrolled in the English 311 honors program. Students in this course will be required to take the English Advanced Placement Test at the end of their senior year. A fee is charged for the AP exam.

412 ENGLISH IV — MODERN LITERATURE/ EXPOSITORY WRITING

In this course, the student will be involved in the study of contemporary literature, primarily in the form of essays, short stories, novels and drama. The student will work to improve his reading speed, comprehension, vocabulary skills and literary enjoyment through class discussion. Integrated with the reading program is a course of expository writing in which the student will work to improve his writing, both in form and content; and stimulate logical and critical thinking with accurate and fluent articulation.

750 LIBRARY SCIENCE/LIBRARY ASSISTANTS

(Approval by Librarian)

The student will be provided with an introduction to library skills and use computer-related technology and audiovisual equipment. By assisting in the operation of the library, students will perform a valuable service to the school and the faculty. Included in this service are the circulation and processing of materials. Most importantly, by assisting in the retrieval of information, the student will develop his library skills. Registration for Library Science is scheduled at the beginning of the semester. This is done so that the course may fit into the free period slots. This course may only be taken as a seventh course.

781 PHOTO JOURNALISM/YEARBOOK

(Approval by Instructor)

In this course, the student will learn the principles of page design, copy writing, digital photography and online production of the Quest, the Brother Rice yearbook. This course may only be taken as a seventh course and meets every other day. This course is open to all levels; however, seniors must have previous Quest experience to be eligible to enroll. All students are required to attend a mandatory "Yearbook Workshop" prior to enrolling in this course.

782 JOURNALISM/NEWSPAPER

(Approval by Instructor)

In this course, students will learn both journalistic writing and desktop publishing. The class will produce a monthly Chieftain and periodic special editions as required. This course may only be taken as a seventh course, and meets every other day. Enrollment is limited to eight students and is only open to sophomores, juniors, and seniors with preference given to current staffers, and then upperclassmen. Students will only be considered for enrollment after submitting an MLA formatted essay detailing their reasons for wanting to join this class.

Language Department

Two consecutive years of the same language are required.

131 FRENCH I HONORS

(Approval by Language Department)

Prerequisite: 86th percentile or higher composite score on the High School Entrance Exam.

In this course the student will be introduced to the four basic language skills: (a) Listening Comprehension; (b) speaking; (c) Reading; (d) Writing.

132 FRENCH I

(Approval by Language Department)

The scope of this course is similar to French 131. The course differs in that some teaching materials and techniques are specially adapted to meet the unique linguistic needs of these students.

134 SPANISH I HONORS

(Approval by Language Department)

Prerequisite: 86th percentile or higher composite score on the High School Entrance Exam.

In this course the student will be introduced to the four basic language skills: (a) Listening Comprehension; (b) speaking; (c) Reading; (d) Writing.

135 SPANISH I

(Approval by Language Department)

The scope of this course is similar to Spanish 134. The course differs in that some teaching materials and techniques are specially adapted to meet the unique linguistic needs of these students.

139 LATIN I HONORS

(Approval by Latin Instructor)

Open only to grades 9-11

Prerequisites: 3.4 GPA and usually a minimum of a B average in most recently taken modern language course. Incoming Freshmen require Language Department approval and an 80th percentile or higher composite on the High School Entrance Exam. Latin may be taken by qualified students to fulfill the two-year language requirement for graduation.

This is an introductory Latin course in which the student will develop Latin reading skills and translation skills. Elements of Roman culture and history, as well as classical mythology are included. In this course, the student will enhance his language skills broaden his knowledge of English vocabulary which is in large part derived from Latin. This course is also available to qualified juniors as an elective course as part of their preparation for the SAT and ACT exams. Students are required to take the National Latin Examination for which there is a small fee.

231 FRENCH II HONORS

(Approval by Language Department)

Prerequisites: C in 131 French I Honors or A in 132 French I and a 3.4 GPA.

In this course, the student will continue to develop the four basic language skills of French I: (a) Listening Comprehension; (b) speaking; (c) Reading; (d) Writing. Certain aspects of French-speaking culture are introduced. The students in this section will be grouped homogeneously according to their achievement in French I.

232 FRENCH II

(Approval by Language Department)

The scope of this course is similar to French 231. The students in this section are homogeneously grouped according to scholastic ability and achievement in French I. This course differs from 231 in that some teaching materials and techniques are specially adapted to meet the unique linguistic needs of these students.

234 SPANISH II HONORS

(Approval by Language Department)

Prerequisites: A 3.4 GPA and a C in 134 Spanish I Honors or A in 135 Spanish I.

In this course, the student will continue to develop the four basic language skills of Spanish I: (a) Listening Comprehension; (b) speaking; (c) Reading; (d) Writing. Certain aspects of Spanish-speaking culture are introduced. The students in this section will be homogeneously grouped according to their achievement in Spanish I.

235 SPANISH II

(Approval by Language Department)

The scope of this course is similar to Spanish 234. The students in this section are homogeneously grouped according to scholastic ability and achievement in Spanish I. This course differs from 234 in that some teaching materials and techniques are specially adapted to meet the unique linguistic needs of these students.

239 LATIN II HONORS

(Approval by Latin I Instructor)

Prerequisites: A 3.4 GPA and a B average in Latin IH and approval of Latin I teacher. Intended for students taking Latin to meet the language requirement for graduation.

Similar in scope and goals to Latin I, this course allows the student to continue the program begun in Latin I. The student is expected to do the reading of more difficult selections in Latin. The study of advanced grammatical structures as well as some Latin composition work is included. The goals of this course include the development of the student's intellect through organized study, logical thought and the critical evaluation of written Latin. Students are required to take the National Latin Examination for which there is a small fee.

332 FRENCH III

(Approval by Language Department)

The scope of this course is similar to French 331. The students in this section are homogeneously grouped according to scholastic ability and achievement in French II. This course differs from 331 in that some teaching materials and techniques are specially adapted to meet the unique linguistic needs of these students.

331 FRENCH III HONORS

(Approval by Language Department)

Prerequisites: A grade of C in 231 French II H and 3.4 cumulative GPA or an A in 232 French II.

The student in this French III course will be required to: (a) review the first two years of grammar coupled with grammatical structures and idiomatic expressions; (b) develop reading skills; (c) improve verbal skills by means of spontaneous and prepared oral discussions. Students will be introduced to the writing of essays in French and complete reading selections that are studied and discussed in class. The class is conducted primarily in French.

334 SPANISH III HONORS

(Approval by Language Department)

Prerequisites: A grade of C in 234 Spanish II H or an A in 235 Spanish II with a cumulative 3.4 GPA.

In this Spanish III course, the student will: (a) review the first two years of grammar coupled with grammatical structures and idiomatic expressions; (b) develop reading skills; (c) improve verbal skills by means of spontaneous and prepared oral discussions. Students are introduced to the writing of essays and reading selections are studied and discussed in class. The class is conducted primarily in Spanish.

335 SPANISH III

(Approval by Language Department)

The scope of this course is similar to Spanish 334. The students in this section are homogeneously grouped according to scholastic ability and achievement in Spanish II. This course differs from 334 in that some teaching materials and techniques are specially adapted to meet the unique linguistic needs of these students.

339/439 LATIN III HONORS/LATIN IV HONORS

(Approval by Latin 239 Instructor)

Prerequisites: A 3.4 GPA and a B average in Latin 239 or 339 and approval of Latin II teacher

The student learns Latin prose and Latin poetry in alternating years. In the Latin prose year, works of Cicero, Caesar and other selected Roman writers are studied. Some excerpts from the New Testament are read in Latin as well. In the Latin poetry year, selected works of Virgil, Martial, Horace, Ovid and Catullus are read. In this two-year sequence, the study of advanced grammar, advanced vocabulary, and English words derived from Latin continues. The course is intended to prepare the student for literary studies on the university level and to challenge and develop the student's critical and logical skills.

430 FRENCH IV

(Approval by Language Department)

Prerequisites: C average in French III

The student in this French IV course, primarily an introduction to French literature, will be introduced to the enjoyment and enlightenment some of the most exciting examples of French literary art. The literary selections have been drawn from every century from the fifteenth to the twentieth and are studied according to genre. The selections include short stories, poems, essays, letters, maxims, and scenes from plays. The student will be introduced to more advanced grammatical concepts with a view to better understand the literary selections read.

432 AP FRENCH

(Approval by Language Department)

Prerequisites: B+ average in French III Honors and 3.5 GPA.

This course covers in a much greater depth of all the topics in French IV Honors. In addition, it offers an intensive training of (a) Listening Comprehension with CD's + listening to the teacher speaking entirely in French (b) Speaking (The student speaks French by answering questions, using his oral skill to create sentences and give comments about new vocabulary + idiomatic expressions (c) Reading (After reading each excerpt of a literary masterpiece, the student retells the story in his own words with comments regarding the theme, the plot and the images (d) Writing (The student writes a Composition in French using given vocabulary + a given topic after each Vocabulary test) The class is conducted entirely in French.

433 SPANISH IV

(Approval by Language Department)

Prerequisites: C average in Spanish III

In this course, the student will: a) review the first three years of grammar coupled with advanced grammatical structures and idiomatic expressions, b) survey Spanish and Hispanic literary masterpieces through the ages including the 20th century, and c) improve verbal skills by means of spontaneous oral discussion of literary works and by means of prepared oral resumes and presentations.

434 SPANISH IV HONORS

(Approval by Language Department)

Prerequisites: C average in Spanish III Honors and a GPA of 3.4.

In this course, the student will: (a) review the first three years of grammar coupled with advanced grammatical structures and idiomatic expressions; (b) survey Spanish literary works; (c) improve verbal skills by means of spontaneous oral discussions, prepared oral resumes and presentations. Students are required to write essays in Spanish. Reading selections and full length works are studied and discussed. The class is conducted in Spanish.

435 AP SPANISH

(Approval by Language Department)

Prerequisites: B+ average in Spanish III Honors and a GPA of 3.5.

This course covers in a much greater depth of all the topics in Spanish III Honors. In addition, it offers an intensive training of (a) Listening Comprehension with CD's + listening to the teacher speaking entirely in Spanish (b) Speaking (The student speaks Spanish by answering questions, using his oral skill to create sentences and comments about new vocabulary + idiomatic expressions (c) Reading (The student gives a summary in Spanish of the excerpt of the literary masterpiece which he has read + gives comments regarding the theme, the plot and the images (d) Writing (The student writes a Composition with given vocabulary + a given topic after each Vocabulary test). The class is conducted entirely in Spanish.

438 CLASSICAL GREEK HONORS

(Approval by Instructor)

Prerequisites: *Three years of a foreign language and 3.4 cumulative GPA.*

A one year elective primarily for high achieving seniors who wish to investigate the classical era in all its facets. Possible topics for the course include: Greek mythology, history, culture, philosophy, politics, rhetoric and also translation of certain Bible passages from the original Greek. Classical Greek is generally easier to learn for a student who has had Latin in the past, given a comparable morphology and grammar. Though the class is primarily for seniors the instructor may admit a junior who has demonstrated high academic achievement and has good grades in previous foreign language classes.

German is taught at Marian High School by Marian High School faculty. Registrants should be aware that scheduling difficulties can sometimes arise.

709 GERMAN I

Approval by Language Department

Students will be introduced to an elementary structure of the German Language. The four basic language skills are expected of the student: listening, speaking, reading, and writing, for the early mastery of grammar techniques and conversational patterns. Students are required to take the National German Exam.

710 GERMAN II

Prerequisite: *C in German I or Instructor approval*

With the continuation of the four basic skills acquired in German I, the student will further develop his ability to organize and express ideas in writing and speaking German. Additionally, the student will be exposed to a selection of cultural readings, selections in German, which contribute to the student's comprehensive understanding of the German-speaking countries. Students are required to take the National German Exam.

715 GERMAN III

Prerequisite: *C average in German II or Instructor approval*

The student will be exposed to advanced components of grammatical structure with the intent that he will improve his oral and written command of the language. The reading of literary and cultural texts is used to introduce the student to textual analysis and exposition. Students are required to take the National German Exam. This course is conducted in German.

720 GERMAN IV

Prerequisite: *C average in German III or Instructor approval*

The student in this advanced course with emphasis on contemporary German issues, will reflect on critical articles and modern literary selections. The student will study advanced aspects of grammar and is required to take the National German Exam. This course is conducted in German.

721 GERMAN V

2 semesters, 1 credit, open to grade 12

Prerequisites: *"B" in German IV and Instructor approval*

This course is designed for the advanced German student. The student will experience in-depth and intensive instruction of the four basic skills: reading, writing, speaking and listening. Tapes of native speakers, videos, internet projects and weekly writing and speaking assignments will enrich his study. Advanced texts will be used to study literary topics. This course will be conducted entirely in German. Students will be required to take the National German Exam and may opt to take the AP German exam in the spring.

336 AMERICAN SIGN LANGUAGE 1 (ASL)

Ordinarily, this course cannot be used to fulfill the foreign language requirement.

The course will cover ASL skills, both comprehension (receptive) and expressive (signing). Basic conversation skill will be developed, emphasizing vocabulary building as well as the structure and syntax of ASL. Studies will include an introduction to deafness, deaf culture, and history and literature.

337 AMERICAN SIGN LANGUAGE 2 (ASL)

Ordinarily, this course cannot be used to fulfill the foreign language requirement.

The course will cover advanced ASL skills, in both comprehension (receptive) and expressive (signing). Basic conversation skills will be advanced, emphasizing vocabulary building as well as the structure and syntax of ASL. Studies will include more information on deafness, deaf culture, as well as the history and literature of the deaf culture.

Mathematics Department

141 ALGEBRA I HONORS

(Approval by Math Department)

Prerequisites: *Scores on the High School Entrance Exam in quantitative, mathematics achievement, and composite of 90th percentile or above. A student below the 90th percentile wishing to take this course must take a placement test and score 80% or above.*

The study of equations and graphs is a focal point of this course for students with a strong mathematics background and high ability. Ideally, a student will understand and be able to solve problems in linear and quadratic equations as well as systems of equations in two and three variables. The study of applications and problem solving will also be stressed.

142 ALGEBRA IA

(Administration approval required)

Registration for this course means involvement in a two year math sequence: 143 Algebra IA and 243 Algebra IB

This course, along with course 243 Algebra IB (taken in sophomore year) is designed for students with more individualized needs in math. It will take the standard Algebra I curriculum and cover it in two years instead of one. Ideally, a student will understand and use variables and variable expressions, and solving, graphing and writing linear equations.

144 ALGEBRA I

(Approval by Math Department)

This course gives a good background for students who intend to take a standard three or four-year mathematics program. Standard algebraic skills and concepts are taught. Ideally, a student will understand and be able to solve problems in factoring, equation solving, the quadratic formula and graphing of equations and inequalities, systems of equations, exponents, quadratic equations, factoring, radicals and functions.

145 ALGEBRA II HONORS

(Approval by Math Department)

Prerequisites: *Full year Algebra I background (B or better grade in Algebra I Honors or A in Algebra I) and 3.4 cumulative GPA. For incoming 8th graders: (1) scores above 90th% (quantitative, mathematical, and composite) on the entrance exam, (2) a passing score of 80% or above on the Algebra I Placement Test given at Brother Rice in June and (3) a recommendation from 8th grade teacher.*

In this course, students with a strong Algebra I background will continue the study of algebraic structure. Functions and relations will be covered. Ideally, the student will understand and be able to do equation solving: linear - one and two variable, quadratic, exponential and logarithmic; sequences; series; matrices; determinants and probability. Taken as a freshman, this course will lead to the study of Calculus as a senior.

243 ALGEBRA IB

(Approval by Math Department)

This course, along with course 143 algebra IA (taken during freshman year) is designed for students with more individualized needs in math. It will take the standard Algebra I curriculum and cover it in two years instead of one. Ideally, the student will understand and be able to solve systems of equations, exponents, quadratic equations, factoring, radicals and functions.

244 ALGEBRA II

(Approval by Math Department)

Prerequisite: *Grade of C or better in Algebra I.*

In this course, algebraic structure is stressed. Ideally, the student will understand and be able to solve problems dealing with functions and relations including linear (one and two variable), quadratic, exponential and logarithmic. The student will also be exposed to the following topics: sequences, series, matrices, determinants and probability.

245 GEOMETRY with TRIGONOMETRY HONORS

(Approval by Math Department)

Prerequisites: *Grades of B+ or better in previous mathematics courses and a 3.4 cumulative GPA*

This course introduces the student to geometric terms, theorems, logic, formal and informal proofs. Ideally, a student will understand and be able to work with congruent triangles, parallelograms, circles and polygons. He will receive periodic reviews of algebra during this course of study. The student will receive an introduction to trigonometric and circular functions including the Law of Sines, Law of Cosines, trigonometric identities, trigonometric graphs, trigonometric inverses and solutions of triangles. This course is designed for the student who has a strong mathematics background.

341 PRE-CALCULUS HONORS

(Approval by Math Department)

Prerequisites: *Grades of B+ or better in previous math courses and a 3.4 cumulative GPA*

This course is designed to be a precalculus course with major emphasis on the study of functions. Ideally, a student will understand and be able to solve problems in the major areas of study: two-space analytic geometry, trigonometry, polar coordinates, exponential and logarithmic functions. Students will also have knowledge of polar coordinates, parametric equations, the theory and application of the limit of a function, and the definition and application of the derivatives. The student will comprehend the concepts of probability and statistics through a self-study program. This course is intended for the student with a strong mathematical background.

342 ALGEBRA 2

(Approval by Math Department)

This course is designed for students with more individualized needs in mathematics. It will take the standard Algebra II curriculum and present the major topics. In this course, algebraic structure is stressed. Ideally, the student will understand and be able to solve problems dealing with functions and relations including linear (one and two variable), quadratic, exponential and logarithmic. The student will also be exposed to the following topics: matrices, determinants and probability.

343 GEOMETRY

(Approval by Math Department)

This course introduces the student to geometric terms, theorems, logic, formal and informal proofs. Ideally, a student will understand and be able to work with congruent triangles, parallelograms, circles and polygons and complete periodic reviews of Algebra. Students will receive an exposure to some right triangle trigonometry. This course is designed for the student who has more individualized needs.

344 GEOMETRY with TRIGONOMETRY

(Approval by Math Department)

Prerequisites: *Grades of C or better in Algebra I and Algebra II*

This course introduces the student to geometric terms, theorems, logic, formal and informal proofs. Ideally, a student will understand and be able to work with congruent triangles, parallelograms, circles and polygons and complete periodic reviews of Algebra. The student will receive an introduction to trigonometric and circular functions including the Law of Sines, the Law of Cosines, trigonometric identities, graphs, and inverses as well as solutions of triangles.

441 ADVANCED PLACEMENT CALCULUS HONORS — AB

(Approval by Math Department)

Students will be required to complete an assignment during the summer, to be picked up in May. This assignment will serve as a review of the prerequisite material for the course. Students will be tested on this material the first week of school.

Prerequisites: *Grades of B or better in Algebra I and Algebra II (preferably Honors), an A average in both Geometry with Trigonometry Honors and Precalculus Honors and a GPA of 3.4 or better.*

This course covers all of the topics set forth by the College Board Advanced Placement Program in Calculus AB. Ideally, the student will understand and be able to work with the concepts of functions, graphs, and limits, along with their derivatives and applications of the derivative. Integral calculus and its applications will also be studied. This course is fast paced and designed for highly motivated and talented students. The AP Test and fee are required.

442 CALCULUS

(Approval by Math Department)

Prerequisites: *Grades of B or better in previous math courses: Algebra I, Algebra II, Geometry, Precalculus and a GPA of 3.4 or better.*

This course is designed for the strong mathematics student who anticipates continuing mathematical requirements in college. Ideally, a student will understand and be able to work with concepts of functions, graphs, and limits along with their derivatives and the applications of the derivative. Some integral calculus will be introduced.

445 PROBABILITY/STATISTICS & COLLEGE ALGEBRA WITH TRIGONOMETRY

(Approval by Math Department)

This course is designed for students who plan to enter fields such as economics, business, education, biology, medicine, and many others. Ideally, a student will understand and be able to work with the concepts of random variables, probability functions, and binomial and normal distributions. College Algebra with Trigonometry is an effective mathematical tool to prepare a student for college algebra or precalculus. Ideally, a student will understand and be able to work with the concepts of linear, quadratic, exponential, logarithmic, and systems of functions, as well as their graphs, solutions and applications. The student will receive an introduction to trigonometric and circular functions including the Laws of Sines and Cosines, trigonometric identities, graphs, inverses, and the Unit Circle.

444 PRE-CALCULUS

(Approval by Math Department)

Prerequisite: *Grades of B or better in previous math courses.*

This course is designed to be a strong fourth year math course with emphasis on applications and analysis of a variety of mathematical concepts. Ideally, a student will understand and be able to solve problems in major areas of study. These areas are: functions, vectors and trigonometry, inequalities, exponents and logarithms, analytic geometry. The student will also have knowledge of polar coordinates, parametric equations, and matrices. Admission to this course is ordinarily limited to seniors.

449 ADVANCED PLACEMENT CALCULUS — BC

(2 semesters at Marian)

Prerequisites: (All of the following): (1) Grades of B+ or better in previous math courses, (2) an A in Precalculus Honors, (3) a GPA of 3.4 or better, and (4) approval of mathematics department chairperson of Brother Rice.

This course is a first and second course of study in elementary calculus. Students will prepare for the Advanced Placement Calculus BC exam which could lead to an additional semester of college math credit beyond the Advanced Placement Calculus AB credit. In addition to the AB topics, students will study vector and parametric functions, their derivatives and applications, polar curves, additional methods of integration, sequence and series and convergence.

Music Department

122 CONCERT CHOIR / ADVANCED CHOIR

(Approval by Instructor)

Full year commitment. By audition only.

Concert Choir / Advanced Choir is a choral ensemble that embraces challenging and diverse choral literature, reinforces proper vocal production and interpretation and involves participation in two to three major school concerts per year. Students will rehearse, discuss, and perform a variety of musical styles and periods. Students will also work on vocal technique, basic theory, singing in various languages and performing several a capella pieces to practice proper intonation. Dress rehearsals, performances and concert dress are required.

123 CHAMBER ENSEMBLE

(Approval by Band Instructor)

Full year commitment. No audition necessary.

Instrumentation: Keyboards, winds and strings.

Scheduled class daily. This select group will perform a wide variety of music, including original pieces composed by its members as well as the standard repertoire and contemporary music. The group will perform at special events.

124 PEP BAND

(Approval of Band Instructor)

Full year commitment; 1/2 credit. No audition necessary.

Meets before school (7:00 - 7:50 a.m.) once a week. This ensemble performs at select home football games, home basketball and hockey games. This group performs spirit songs for the purpose of supporting and enhancing school spirit at athletic events. Some events will be student directed.

Note: Student may select pep band and jazz band.

125 JAZZ BAND

(Approval by Band Instructor)

Full year commitment; 1/2 credit. No audition necessary.

Meets before school (7 - 7:50 a.m.) twice a week. This ensemble performs at Christmas, Mid - Winter, Spring concerts and special events. Each member will be responsible for combining with the Pep Band for a number of athletic events which will be determined by the circumstances and number of students available. This group performs a mixture of jazz standards and classic rock. Some events will be student directed. Note: Student may select jazz band and pep band.

126 MUSICOLOGY/MUSIC THEORY/ MUSIC HISTORY

(Approval by Band Instructor)

Open to all

This full year course, open to all, is designed for students who are interested in exploring the many aspects of music. Students will learn about composers, musical styles and periods, and the elements of music using the following schedule: 1st semester — Blues, Jazz, Pop, Rock; 2nd semester — Orchestral, early through the present.

127 PRECISION DRILL TEAM

Full year commitment for special events; 1/2 credit

Elite group of percussionists, wind players and drill squad to perform high quality march formation and precision drills at special events. Outfitted for marching with the goal of enhancing school spirit and raise the visibility of artistic endeavors. Group will meet at specially scheduled times to accommodate the needs of its individual members.

* This course may be selected with a full academic load as it will meet at specially scheduled times.

128 CONCERT BAND

(Approval by Band Instructor)

Full year commitment. No audition necessary.

Scheduled classes daily. The concert band course is open to all students. One year or more of experience is required. The student will study and perform a wide variety of literature in many musical styles. The concert band performs for the Christmas, Mid-Winter and Spring concerts, and may participate in festival competition.

321 SONG WRITING & PRODUCTION

(Approval by Band Instructor)

Full year commitment. No audition necessary.

Designed for the creation and production of original music, the student will be expected to understand the fundamentals of music writing and have an interest in the technical end of production techniques. The students will systematically construct musical compositions using all theoretical principals of music. Semester I: Recording & Composition Techniques. Semester II: Compose & Record Project; Final Performance.

Physical Education Department

024 PHYSICAL EDUCATION I

(One Semester; 1/2 credit; pass/fail grade; paired with Speech)

Students will learn the fundamentals and skills of individual, team and lifelong sports that will lead to a value of lifelong physical activity. Units may include flag football, team handball, basketball, soccer, wrestling, as well as strength and conditioning and personal fitness. Students will be evaluated on homework, written exams, and physical skills test. Good sportsmanship, cooperation, and participation are required and will impact a student's grade.

026 HEALTH

(One Semester; 1/2 credit; graded; paired with

Computer Science and required for sophomores.)

Students will learn about health promotion and disease prevention; accessing valid health information and health promoting products and services; practice health-enhancing behaviors and reduce health risks; the influence of culture, media, technology, and other factors on health; to use interpersonal communication skills to enhance health; to use goal-setting and decision-making skills to enhance health; to advocate for personal, family and community health. Topics will be explored from a mental, physical, emotional, social and spiritual perspective. Presentations, research, and physical participation will be requirements in this class.

028 STRENGTH & CONDITIONING

(One Semester; 1/2 credit; pass/fail grade;

Approval by Physical Education Department)

(Open to all 10th-12th Grader)

Students will learn about muscular strength, muscular endurance, flexibility, body composition, and cardio respiratory endurance; and participate in an extensive and demanding program to improve these areas. Students' evaluation will include written and physical tests as well as homework. Participation, good sportsmanship, and cooperation will be stressed and can impact the student's grade.

153 GLOBAL SCIENCE

(Approval by Science Department)

Prerequisite: *A composite High School Entrance Exam score from 50th to 94th percentile.*

In the first part of the class, students will examine the physical characteristics and ongoing processes of the world in which they live. Students will develop an understanding of meteorology, climatology, geology, geomorphology and oceanography. Students will also study the specific ways in which man has detrimentally interacted with his natural environment, creating problems of global concern, by examining such topics as air pollution, water pollution, famine, climatic changes, ozone depletion, nuclear energy, chemical contaminants, solid waste disposal, urban crowding, alternative energy sources and the population explosion. A fee may be charged for this course.

154 INTRODUCTION TO THE SCIENCES

(Approval by Science Department)

Upon completion of this one semester course the student will demonstrate proper skills in the use of scientific equipment, effectively read and research a science book for maximum comprehension of the topic and use the internet for research techniques. He will measure in SI units (International System) of measurement and distinguish them from the English system of measurement. The student will develop skills to accurately gather data and organize it into graphs, tables, and diagrams. He will develop critical thinking skills to solve and analyze problems and issues.

251 BIOLOGY HONORS

(Approval by Science Department)

Prerequisites: *For freshmen a composite score of 95th percentile or above on the entrance examination and enrolled in an honors math class. For sophomores a 3.4 GPA in freshman year.*

In this course, students will study life, beginning with cellular organization, the Chemistry of Biology, Cell Division, Genetics, Evolution, Microbiology, Zoology, Botany, and culminating with Human Biology. Emphasis is placed on the student doing much outside reading and critical thinking. A fee may be charged for this course.

253 BIOLOGY

(Approval by Science Department)

Through this laboratory course students will develop an appreciation of the natural world with a study of the scientific method, the metric system, the origin of life, cells, heredity, the plant and animal kingdoms, bacteria and diseases. A fee may be charged for this course.

352 CHEMISTRY HONORS

(Approval by Science Department and Math Instructor)

Prerequisites: *For juniors, a minimum GPA of 3.4, a minimum of B in Biology and a minimum of a B in Algebra I and II. For sophomores, a minimum GPA of 3.4 and a minimum of a B in Algebra I H or Algebra II H.*

In this full year course students will develop a workable knowledge of the names and properties of the common elements and compounds they form, states of matter, atomic theory, chemical bonding, acid-base theory, equilibrium. Students will develop the ability to apply concepts learned in class to life situations. A workable knowledge of algebra is necessary for success in this course. Students generally should be expected to spend at least 45 minutes a night completing assignments and reviewing class materials. A fee may be charged for this course.

353 CHEMISTRY IN THE COMMUNITY

(Approval by Science Department with written consent of parent)

Prerequisite: *Biology*

This year-long course will enable students who plan to pursue careers in fields other than engineering or medicine to recognize the impact of chemistry on society by addressing chemistry related technology issues such as water supplies, chemical resources, petroleum, food, nuclear chemistry, air, climate, health and the chemical industry. Students will understand core concepts and apply them to societal issues. A fee may be charged for this course.

354 CHEMISTRY

(Approval by Science Department)

Prerequisites: *For seniors and juniors a minimum GPA of 2.5, and a minimum of C in Algebra II. For sophomores a minimum GPA of 2.5, and a minimum of B in Algebra I.*

Students in this full-year course will learn the names and properties of the common elements and compounds they form, states of matter, atomic theory, chemical bonding, acid-base theory, equilibrium. Students will also predict chemical reactions and learn stoichiometry. The course integrates laboratory experiences with classroom theory. A workable knowledge of algebra is absolutely necessary. A student should expect to spend 45 minutes each night completing the required assignments. A fee may be charged for this course.

450 EARTH SCIENCE

(Approval by Science Department)

Prerequisites: *Successful completion of Biology and Algebra 1*

In the first part of the class, students will examine the physical characteristics and ongoing processes of the world in which they live. Students will develop an understanding of meteorology, climatology, geology, geomorphology and oceanography. They will also study the specific ways in which man has detrimentally interacted with his natural environment, creating problems of global concern, by examining such topics as air pollution, water pollution, famine, climatic changes, ozone depletion, nuclear energy, chemical contaminants, solid waste disposal, urban crowding, alternative energy sources and the population explosion. A fee may be charged for this course.

451 CONCEPTUAL PHYSICS

(Approval by Science Department and Math Instructor)

Prerequisites: *Successful completion of Biology and Algebra I and have at least a 2.00 GPA.*

This full-year course presents physical concepts of motion, momentum, and energy, properties of matter, electricity, magnetism, and mechanics in familiar English. Students will be able to use equations as guides to thinking and comprehend concepts before calculations are done as a key to develop students' interests. The student will develop an understanding of scientific theories by qualitative analysis. A fee may be charged for this course.

452 PHYSICS HONORS

(Approval by Science Department and Math Instructor)

Prerequisites: *Successful completion of Biology, Chemistry, Geometry, Algebra II, and a minimum GPA of 3.4, and a minimum grade of B in mathematics. The student must also be concurrently enrolled in Pre-Calculus or Calculus.*

This laboratory class will enable the student to understand: Newtonian mechanics, fluid mechanics, heat, thermodynamics, sound, and optics. He will apply his knowledge of mathematics in problem solving along with the graphical analysis of data, and applications to the physical world. Students in this course will develop the ability to function proficiently in a first semester college physics class. Students complete approximately 15 lab experiments a year. Use of laptops will be required for some labs and technology will be used extensively to support instruction. A fee may be charged for this course.

454 PHYSICS

(Approval by Science Department)

Prerequisites: Successful completion of *Biology, Chemistry, Geometry, B average in Algebra II, and cumulative GPA of 2.7 or better.*

This laboratory class will enable the student to develop knowledge of the following topics: Newtonian mechanics, fluid mechanics, heat, thermodynamics, and sound. An emphasis is placed on the application of forces and energy in the physical world. Use of laptops will be required for some labs and technology will be used extensively to support instruction. A fee may be charged for this course.

458 ORGANIC CHEMISTRY HONORS

(Approval by Science Department)

(One semester; ½ credit)

Prerequisites: Minimum grade of B in *Biology and Chemistry, and cumulative GPA of 3.4.*

In this one semester course students will learn the physical properties of carbon compounds such as alkanes, alkenes, alkynes, alcohol, phenyls, ethers, esters, carbohydrates, lipids and proteins. Students will develop a workable knowledge in order to succeed in a premedical curriculum in college. A fee may be charged for this course.

459 ANATOMY & PHYSIOLOGY HONORS

(Approval by Science Department)

(One semester; ½ credit)

Prerequisites: Minimum grade of B in *Biology and Chemistry, and cumulative GPA of 3.4.*

This one semester course will enable students to achieve an in-depth understanding of the structure and function of the mammalian animal. Through the dissection of the cat and other similar animals, the students will develop a connection of the cat to humans on a systemic level. A fee may be charged for this course.

725 AP BIOLOGY

This AP class, taken at Marian High School, is subject to administrative approval as well as Marian's school rules, grading scale and calendar schedule.

(Approval by Instructor)

Prerequisites: Honors *Biology, Honors Chemistry and an additional semester of science. Genetics is highly recommended. A 'B-' or better is required in the mentioned courses. Requires AP Application approval. Excellent non-Honors Biology/ Chemistry applicants may be approved with teacher recommendation.*

This college level course is for independent learners. In it the student explores advanced topics in cell biology, genetics and evolution, ecology, and plant and animal physiology. Numerous lab investigations permit students opportunities to become acquainted with advanced laboratory techniques. Class materials, information, activities, and expectations prepare students to take the Biology Advanced Placement Exam. College credit may be awarded for high scores. Due to extensive time requirements for this course, classes begin at 7:15 a.m., three days weekly until early May. One weekend is required to conduct biotechnology labs.

727 AP CHEMISTRY

(Approval by Instructor)

Prerequisites: B in *Honors Chemistry or A in Chemistry, A in Algebra II or Honors Algebra and AP Instructor approval.*

This AP course, open to grades 11 and 12, is designed to be the equivalent of the honors chemistry course taken during the first year of college. The topics students will explore in depth are: 1) structure of matter, 2) kinetic theory of gasses, 3) chemical equilibria, 4) chemical kinetics, and 5) basic concepts of thermodynamics. The laboratory is an integral part of the course. The experiments will be both qualitative and quantitative using modern instrumentation. The course will contribute to the development of the student's abilities to think clearly and to express ideas orally and in writing with clarity and logic. Students are provided with the materials, information and skills necessary to prepare for the Chemistry Advanced Placement Exam. Students not electing to take the exam will be well-prepared for introductory college chemistry courses.

Due to the extensive laboratory requirements for this course, classes will begin at 7:30 a.m. at least three days weekly. Students will also be required to participate in lab work on an independent basis with teacher supervision.

729 AP PHYSICS - B

(Approval by Instructor)

Prerequisites: B in *Honors Physics or A in Regular Physics. Students are required to provide a laptop for class.*

This second-year course in physics will allow students to gain a deeper understanding of mechanics, electricity, magnetism, thermodynamics, optics and modern physics. The students will develop the ability to perform college-level laboratory experiments and to keep a proper scientific laboratory notebook. This class will go beyond Honors Physics in both depth of material and scope of topics covered. Students will be provided with information and skills to take the Physics Advanced Placement Exam. Due to extensive time requirements for this course, classes meet before school twice weekly. Please see instructor for more information.

Social Studies Department

161 WESTERN CIVILIZATION HONORS

(Approval by Social Studies Department)

Prerequisite: A composite score of 90th % ile on the *High School Placement Test and must be taken with 111 English I Honors.*

This survey course, which focuses upon the development of western civilization, will allow the student to examine chronologically the evolution of civilization from its earliest origins through the imperialism of the late 1800's. The students will become acquainted with the basic evolutionary nature of world history while at the same time tracing the origins and development of many modern institutions and values.

162 WESTERN CIVILIZATION

(Approval by Social Studies Department)

This survey course, which focuses upon the development of western civilization, will allow the student to examine chronologically the evolution of civilization from its earliest origins through the imperialism of the late 1800's. The students will become acquainted with the basic evolutionary nature of world history while at the same time tracing the origins and development of many modern institutions and values.

163 WESTERN CIVILIZATION

*(Approval by Administration and Social Studies Department)
(Course paired with 113 English Composition)*

This survey course, which focuses upon the development of western civilization, will allow the student to examine chronologically the evolution of civilization from its earliest origins through the imperialism of the late 1800's. The students will become acquainted with the basic evolutionary nature of world history while at the same time tracing the origins and development of many modern institutions and values.

168 ADVANCED PLACEMENT EUROPEAN HISTORY

This AP class, taken at Marian High School, is subject to administrative approval as well as Marian's school rules and grading scale.

Prerequisites: *Successful completion of A.P. European History application process, a 3.4 GPA, and minimum standing as a sophomore.*

The Advanced Placement program in European History is designed to provide students with the basic chronology of major events from the Renaissance to the present as preparation for the AP College Board examination. If you enjoy voicing your opinions and actively participating in philosophical classroom discussions, than this is the right class for you. Students will be taught to write thesis-proving examinations and analytical papers equivalent to those made by full-year introductory college courses. Admission to the AP program depends upon a student's completion of an application form which will be reviewed by the Social Studies Department for final approval.

261 WORLD IN THE 20TH CENTURY

*(Approval by Social Studies Department)
(One Semester; 1/2 credit; paired with Course 262)*

Prerequisite: *World History and a minimum of sophomore standing.*

This course is largely a chronological investigation of the major historical developments of the 20th century. Through the use of films, lecture, discussion and readings, the student will ideally develop an understanding of the following major topics: (1) colonial and imperialist rivalries, (2) WWI and its origins, (3) peacemaking and the aftermath of the war, (4) 1930's and the Great Depression, (5) WWII and its origins, (6) Cold War, (7) search for peace in the Middle East, (8) Vietnam, (9) current international conditions.

262 WORLD GEOGRAPHY

*(Approval by Social Studies Department)
(One Semester; 1/2 credit; paired with Course 261)*

Prerequisite: *World History and a minimum sophomore class standing.*

In this one semester course, the student will develop an understanding of the basic principles of physical geography as embodied in the disciplines of meteorology, climatology, geology, geomorphology and oceanography. The student will then apply these skills to specific regions of the world, such as Western Europe, the Middle East, South America, etc., noting the characteristics of climate, topography, agriculture, industry, manufacturing and demography which give these areas their distinctive cultural nature. Extensive use of maps and map skills are included.

361 UNITED STATES HISTORY ADVANCED PLACEMENT HONORS

*(Approval by Social Studies Department)
Prerequisite: Minimum GPA 3.4*

On completing this course students will be prepared to take the Advanced Placement Test given in May of their junior year. Students will have the knowledge and analytical skills commensurate with an introductory level college class. This course demands a significant degree of intellectual curiosity, self-motivation, and seriousness of purpose. Special emphasis is given to research and writing skills. Students will assess historical material, its reliability, importance and relevance, and to weigh the evidence and interpretations presented in historical scholarship. The course examines U.S. history from its earliest beginnings up through the Clinton Administration. Recommended for NHS members. AP Exam and Fee are required.

362 UNITED STATES HISTORY

(Approval by Social Studies Department)

This course traces, in a largely chronological manner, the historical development of the United States. Through the use of films, lectures, discussion and readings, the student will gain an understanding of the following major topics: (1) early settlement and colonial America, (2) the American Revolution, (3) the establishment of a nation and the War of 1812, (4) the Age of Jackson, (5) the causes and conflict of the Civil War, (6) Reconstruction, (7) the Gilded Age, (8) World War I, (9) the Interwar Period: the Roaring Twenties and Great Depression, (10) World War II, and (11) the Modern Era including the Cold War.

366 PSYCHOLOGY

(Approval by Instructor)

Psychology is the scientific study of human behavior. In this introductory course, students will study a variety of topics including: the history of psychology, scientific methodologies, the nervous system, consciousness, sensation and perception, memory and learning, motivation, human sexuality, and abnormal psychology. This course is oriented to seniors, but juniors may be allowed in as space permits.

461 UNITED STATES SINCE 1900 ADVANCED PLACEMENT HONORS

*(Approval by Social Studies Department)
(One Semester; 1/2 credit; paired with Course 463)*

Prerequisites: *Minimum of C in Course 361 or an A in Course 362, and a cumulative GPA of 3.4.*

This course is the completion of History 361 and students will be prepared to take the Advanced Placement Test, which is administered in May. Success on the Advanced Placement Test allows students to earn college credit in history. Students will have the factual knowledge and analytical skills commensurate with an introductory level college course. This course demands a significant degree of intellectual curiosity, self-motivation and seriousness of purpose. Special emphasis is given to research and writing skills. Students will assess historical materials, their reliability, importance and relevance and weigh the evidence and interpretations presented in historical scholarship. The course traces the development of the United States from the administration of McKinley through Watergate. The AP test and fee are required.

463 AMERICAN GOVERNMENT ADVANCED PLACEMENT HONORS

AP Government students will be able to identify and explain the workings of, as well as the key members of the Legislative Branch, the Judicial Branch, and the Executive Branch of both the federal and state governments. Students will also be able to explain the significant events of the framing of the Constitution as well as the passage of each Amendment. Students will understand the process of elections as well as campaign contributions and current limitations and proposed reforms. A fee is required for those electing to take the AP exam.

462 UNITED STATES SINCE 1900

(Approval by Social Studies Department)
(One Semester; ½ credit; paired with Course 464)

Prerequisite: History 361, 362 or 363.

Through the use of films, lectures, discussion and readings, the student will ideally understand the major developments in the United States from the era of Theodore Roosevelt to the present. Major topics of concern will include Progressivism, Woodrow Wilson and World War I, the Roaring Twenties, the Great Depression, World War II, the Cold War and the Consumer Culture, the Eisenhower Years, the New Frontier and the Great Society, the Vietnam War, Watergate and beyond.

464 AMERICAN GOVERNMENT

(Approval by Social Studies Department)
(One Semester; ½ credit; paired with Course 462)

Prerequisite: History 361, 362 or 363.

Through the use of political theory and practical application, the student will ideally achieve an understanding of the structure and operation of our state, local and national governments. Emphasis will be placed upon the three branches of government and their operation and interaction on the state and national levels.

Speech Department

118 SPEECH

(One Semester; ½ credit; paired with P.E. I)

In this course the student's public speaking experience is developed as a basic skill in the oral communication process. The student will gain poise, confidence, effective verbal and nonverbal delivery skills, organizational techniques and structure in delivering speeches. The student will have his learning enhanced with computer interaction through the use of an online textbook and website dedicated to engaging him more thoroughly in applying concepts and theories of the communication process. Technical skills in multimedia presentations are also emphasized. Each freshman is required to take this one semester course.

119 INTRODUCTION TO DEBATE

(Approval by Instructor)
(Fall Semester; ½ credit)

Prerequisites: Students should have a minimum GPA of 2.5 and freshman should have a 50th percentile composite score on the High School Entrance Exam.

In this course the student is introduced to the basic theory of Argumentation and Debate and is provided with an open forum for these skills to be tested in the marketplace. Acceptance may rely on adequate verbal and reading skills as demonstrated by the entrance examination. The student will focus on the basic skills of the debate process, identifying and analyzing issues, organizing ideas for effective written and oral persuasive communication and gathering and evaluating information. Debate is based upon research of current social issues. Students must be able and willing to spend time outside of the classroom doing pertinent research.

120 FORENSICS

(Approval by Instructor)
(Spring Semester; ½ credit)

Prerequisite: Speech 118

Students will explore all areas of Public Address including: Extemporaneous, Impromptu, Informative, Sales, Broadcasting, Oratory Persuasive Speaking. They will also explore all areas of Oral Interpretation of Literature through performance. Students may choose, analyze, edit and perform literature from all genres including: Prose, Poetry, Drama, Dramatic Duo, Storytelling and Multiple Interpretation. Problems in performance and experimenting in style will be evaluated with more advanced students. Students are encouraged to perform outside of the classroom and to participate in Forensics as a co-curricular activity. Forensics adjudication outside of the classroom and in a competitive environment, allows for further evaluation of the student's communication skills.

318 ADVANCED DEBATE

318 H ADVANCED DEBATE HONORS

(Approval by Instructor)
(Fall Semester; ½ credit)

Prerequisite: An A in Introductory Debate or Debate Team experience, 3.4 GPA for Honors Status

This course can be taken as an Honors course by discretion of the instructor and the completion of all required coursework. The Honors requirement includes a 3.4 GPA status and also the completion of a minimum of 20 rounds of competitive interscholastic debate outside the classroom. In this course the student will develop further enrichment and refinement of the debate process. Although acceptance into the Advanced course may require participation in debate interscholastic competition, some exceptions can be made. The student will learn to focus on advancing his skills in the debate process, and identifying and analyzing current social issues. Peer mentoring of novice debaters outside of class time allows for further growth in the communication process and the sharing of knowledge and ideas. Students are also required to spend a considerable amount of time outside of the classroom doing pertinent research. The course is designed the same as Debate 119, but allows for further enrichment of all that is outlined.

319 ADVANCED FORENSICS

(Approval by Instructor)
(Spring Semester; ½ credit)

Prerequisite: Forensics 120

This course is the same as all that is outlined under Forensics 120, but allows the student to further enrich his advanced communication skills and performance. Outside adjudication through competitive interscholastic Forensics events is strongly encouraged. This course may be repeated multiple times if competing in interscholastic competitive Forensics events.

102 THEOLOGY I: THE REVELATION OF JESUS CHRIST IN SCRIPTURE/WHO IS JESUS CHRIST?

This course is a full year freshman course. Semester 1 is intended to give students general knowledge and appreciation of Sacred Scripture. Through the study of the Bible, the student will come to encounter the Living Word of God, Jesus Christ. The student will learn about the Bible, authored by God through inspiration, and its value to people throughout the world. Reading the Bible, familiarization of the structure of the Bible with particular attention to the Gospels, will help the student to grow to know and love Jesus Christ more personally. Semester 2 is intended to introduce students to the mystery of Jesus Christ, the living Word of God, the Second person of the Blessed Trinity. It continues what Semester 1 began. The student will come to understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who He is, the student will also learn who He calls them to be.

202 THEOLOGY II: THE MISSION OF JESUS CHRIST (THE PASCHAL MYSTERY)

(One Semester; 1/2 credit; paired with 203)

Prerequisite: *Theology I*

This course is a one semester course intended to help the student understand all that God has done for us through His Son, Jesus Christ. In this course of study, the student will learn that for all eternity, God has planned for us to share eternal happiness with Him, which is accomplished through the redemption that Christ won for us. The student will learn that they share in this redemption only in and through Jesus Christ. The student will be introduced to what it means to be a disciple of Christ, and what the life as a disciple entails.

203 THEOLOGY II: JESUS CHRIST'S MISSION CONTINUES IN THE CHURCH

(One Semester; 1/2 credit; paired with 202)

Prerequisite: *Theology I*

This course is a one semester course that follows The Mission of Jesus Christ. This course will help the student understand that in and through the Church they encounter the living Jesus Christ. The student will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by Him through the Holy Spirit. The student will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. The students will learn not so much about events in the life of the Church, but about the sacred nature of the Church.

Retreat Policy: *All students are required to attend their class retreats organized through their theology classes and the Campus Ministry Office. All teachers are notified in advance of the students participating in the retreat and they will make special arrangements for missed work. No notes from parents dismissing students from the retreat will be accepted.*

302 THEOLOGY III: LIFE IN JESUS CHRIST

Prerequisites: *Theology I and II*

This course is intended to help the student understand the essential message of Christ's moral teaching and the importance of love of God and love of neighbor. Conscience formation and an understanding of the Commandments will assist the students in their ability to make good moral decisions in line with the teachings of Jesus Christ.

401 THEOLOGY IV: LIVING AS A DISCIPLE OF JESUS CHRIST IN SOCIETY

(One Semester; 1/2 credit; paired with 402)

Prerequisites: *Theology I, II and III*

In this course, the student's mind is opened to the social, political and economic injustices which exist in our global community, with the hope of challenging him to begin an ongoing process of conscience education regarding his Christian responsibility to deal with social problems in a positive manner. Social teachings of the Catholic Church will be stressed.

402 THEOLOGY IV: VOCATIONAL & FAMILY ISSUES

(One Semester; 1/2 credit; paired with 401)

Prerequisites: *Theology I, II and III.*

The student in this course will learn about the relational, emotional, physical and spiritual aspects of sexuality, marriage and family living. Students will be helped to gain a mature understanding of the varied responsibilities of dating, courtship, marriage and family life. Teachings of the Catholic Church are stressed.

CHRISTIAN SERVICE REQUIREMENTS FOR ALL STUDENTS

As part of the theological education of the Brother Rice student, Christian Service work is required of each student, and must be completed by May 6th of the academic year.

— Edmund Rice Outreach to the Poor —

Brother Rice High School encourages its students to have a diversity of Christian Service experiences. The program requires students to perform fifteen (15) hours of service per year. Students MAY complete a maximum of five (5) hours working at Brother Rice serving the school community at such functions as the Open House and auction, while at least ten (10) hours MUST be done out of school, working with a charitable organization, health care facility or church. Hours completed during the summer months MAY be applied toward the following year's requirement. Hours completed beyond the required 15 per year MAY NOT be carried over and applied to the next year's requirement.

Examples of service. **School:** A student may help at the Auction or Open House. Throughout the year other in-school service opportunities will be announced. **Church:** This category includes helping at liturgies, in the office, in religious education, maintenance, or in the parochial school. **Charitable Organization:** This would include opportunities like American Cancer Society, American Red Cross and others. Examples of **work with the poor, sick, elderly or disadvantaged** would include: soup kitchens, homeless shelters, Focus: HOPE, nursing homes, hospitals and Special Olympics. **No service work may be done for Marian High School.**

Approval for Christian Service work is at the discretion of the Campus Minister. Students who do not complete the required number of Christian Service hours by May 7 will be suspended until the requirement is met.



Essential Elements of an Edmund Rice Christian Brother Education

The Essential Elements of an Edmund Rice Christian Brother Education calls educational ministry sites and those working in them to ...

I. Evangelize Youth within the Mission of the Church.

- proclaim the Good News of Jesus Christ in word and deed
- permeate the entire curriculum, activities, and all aspects of the educational process with the Gospel message of Jesus Christ
- encourage young people to a deeper relationship with Jesus Christ
- provide opportunities for liturgies, retreats, vocation awareness workshops and daily prayer

II. Proclaim and Witness to Catholic Identity.

- give priority to religious instruction with opportunities for faith development and theological understanding
- participate in the sacramental life of the Church and model a living faith through the use of rituals and symbols
- foster devotion to Mary and the communion of saints
- ensure that Catholic identity permeates all endeavors: all classes and activities, procedures and policies, services and programs

III. Stand in Solidarity with those Marginalized by Poverty and Injustice.

- promote policies and structures that reflect a climate of compassion for the poor and disadvantaged
- include education and advocacy for peace, justice, global awareness and care for the Earth
- prepare students to work toward the creation of a just society
- encourage ministry experiences that work with and serve the poor and marginalized
- support mission areas at home and abroad
- establish tuition and scholarship policies that open educational opportunities to the poor and disadvantaged

IV. Foster and Invigorate a Community of Faith.

- provide a disciplined, safe atmosphere in which students are free to grow and take responsibility

for their own learning and for the life of the community

- sustain compassionate, respectful relationships among all stakeholders
- be in union with the Church through commitment to service and formation of community
- encourage faculty and staff to give daily witness to their integral role in communal faith formation
- embrace the human condition and welcome God's healing

V. Celebrates the Value and Dignity of Each Person and Nurture the Development of the Whole Person.

- promote respect for each individual as created in the image and likeness of God
- value the diversity of the human family and seek to reflect diversity among the student, faculty and staff
- promote strong programs for personal, professional, and pastoral care
- offer co-curricular activities and programs that are important to a student's holistic education
- strive to provide just remuneration for faculty and staff

VI. Collaborate and Share Responsibility for the Mission.

- empower all members of the community to share in the mission
- work with parents who are the primary educators
- collaborate with Edmund Rice Christian Brother ministries on local, regional, and international levels
- foster a deeper understanding of the vision of Blessed Edmund
- promote active participation in governance by boards and diocesan officials

VII. Pursue Excellence in all Endeavors.

- promote a strong academic curriculum and cultivate a desire for excellence
- develop an educational culture that fosters the growth of the whole person, higher-order thinking, and life-long learning



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