

## **Contents**

Course Selection Procedure.....	2
Placement Testing .....	3
Academic Program .....	4
Grading System .....	4
Honors .....	5
Honors/Advanced Placement Programs.....	5
Requirements for Graduation.....	5
Course Requirements.....	6
Required Courses.....	6
Credit Requirements by Subject Area.....	7
Aquinas Department.....	8
Art & Music Department.....	9-10
Business Department.....	11-12
Computer/Technology Department.....	12
Virtual High School.....	12
English Department.....	13-17
Foreign Language Department.....	17-19
Health, Physical Education & Driver Education.....	20-21
Mathematics Department.....	22-24
Science Department.....	25-29
Social Studies Department.....	30-32
Theology Department.....	33-34
Vocational Technical Program (Bethlehem).....	35-36

## **NOTRE DAME HIGH SCHOOL COURSE SELECTION PROCEDURE**

- ❑ Review the appropriate Course Selection Form for your grade.
- ❑ Review each department's academic flow chart (departments listed in alphabetical order).
- ❑ Review the course descriptions, listed by department, found in this book. Pay particular attention to the prerequisites listed after the individual course descriptions. Please do NOT register for courses in which you do not meet the course prerequisite.
- ❑ For all incoming ninth grade students – **placement testing** will be required for scheduling of Math and English courses. Please refer to the Notre Dame web page for the dates and times the tests will be offered <http://www.ndcrusaders.org>. Placement tests may also be required for mid-year academic transfer students
- ❑ Current students must obtain the necessary teacher signatures *prior* to submitting their course selection forms to their homeroom teachers.
- ❑ Discuss all selections with parent.
- ❑ Students are required to have six major courses per semester.
- ❑ Complete Course Selection Form and submit to Notre Dame High School.

\*Notre Dame Administration reserves the right to schedule students into classes as they deem necessary based upon the following:

- Schedule Conflicts
- Enrollment
- Student Aptitude
- Availability of Staff
- On-line Availability
- Other Concerns

Dear Students,

The Notre Dame High School Course Selection Book contains information about the courses that are available at Notre Dame for the 2020-2021 Academic Year.

Please discuss these offerings with your parents, teachers, and counselor so that you make intelligent decisions concerning the courses that you will study next year. Once your decision is made, have your teachers sign your course selection form and have your parents sign the COMPLETED FORM. You must have a teacher from each major subject area sign your course selection sheet. **Please list alternative electives** in case of a scheduling conflict that would not allow you to get scheduled for your first choice. It is also possible for an elective course to be dropped if an insufficient number of students choose to take the course or if it is not possible to schedule a teacher for it. **All students must have six (6) major courses scheduled per semester.**

I will be visiting your Theology classes in February to complete the scheduling process. All course selection sheets must be signed by Monday, March 9, 2020

Any student who does not have his or her course selection paper completed and handed in by **March 9, 2020** will be considered as a new student and will be charged a fee of **\$60.00** (Please note: this applies to students currently attending ND). This is necessary because of the increased clerical work involved in processing late requests.

Please choose your courses carefully so that you make the best possible decisions in keeping with your goals and academic abilities. If you are choosing a course that has certain prerequisites, make certain that you have met those prerequisites. It is very important for students to be serious about their first enrollment choices. Therefore, **all students are expected to continue in and complete the courses selected. There is no Drop/Add period once classes have begun.** Often students and parents are under the impression that classes can be tried for a few days and dropped by picking another class or classes can be dropped if a student is failing. **This is not true.**

The entire Master Schedule, staff assignments, class size, material resources, and course offerings, are generated based upon student requests for classes. Each time students change their minds, the integrity of the Master Schedule is compromised. **It is of vital importance that students are serious about their first choice of classes.**

If you have any questions, please feel free to contact the guidance counselor at 610-867-7012 or me at 610-868-1431, extension 114 prior to submitting your course selection form.

Sincerely,  
Mrs. Jaclyn Friel, M. Ed.  
Assistant Principal

## ACADEMIC PROGRAM

The academic program at Notre Dame High School conforms to the recommendations of the State Department of Public Education and the regulations of the Allentown Diocese. Courses are offered in such a way that all students may choose those subjects that will enable them to prepare for the vocation they wish to follow. Course selection and pre-registration are made after the first semester reports are issued.

The Notre Dame High School Course Selection information will be available on-line during the second semester. Courses are added or deleted according to the students' needs and the school's ability to meet these needs. The counselor, the teachers, the department chairpersons, and the members of the administration offer help in the selection of courses.

## DIOCESE OF ALLENTOWN - NOTRE DAME HIGH SCHOOL

### GRADING SYSTEM

**\*Grades are accessible to parents through the ND Website parent portal.** Grades are entered weekly by the classroom teacher.

### HONORS

Honors will be awarded at the end of each quarter, the end of each semester, and the end of the year. Honors will be awarded to the students who meet the following criteria:

Distinguished Honors - a grade of 93 or above in all subjects

First Honors – a grade of 93 or above in all subjects with the exception of one grade which should not be lower than an 85.

Second Honors – a grade not lower than 85 in all subjects.

To receive honors, all subjects and disciplines must be passed for that particular marking period. Honors will be noted on the report card only, and not on the permanent record card.

**\*College courses taken off-campus will be reviewed for honors consideration.**

## HONORS/ADVANCED PLACEMENT PROGRAMS

The honors and advanced placement programs at Notre Dame High School are intensive courses that are accelerated and enriched in each area of study. These courses are designed to challenge very capable students with content, activities, and resources that are substantially more demanding than “regular” level courses.

Students who have been successful in honors/advanced placement level programs have several common attributes. The first is a keen interest and motivation in academics in general, and in specialized subjects. Their previous grades are extremely high and they have a reputation of being strong, independent students. They demonstrate an ability to combine and/or analyze information and reach conclusions. Most students enrolled in these courses are excellent and avid readers.

Courses specifically entitled “advanced placement” prepare students to participate in the Advanced Placement tests given each May by the College Board. These college level tests measure student learning in specific content areas. Many colleges recognize the results of these tests and use the scores to assist in the placement of incoming freshmen. Some colleges offer advanced standing or even credit recognition for successful performance on these tests. Since policies and procedures at all colleges differ, please inquire at the colleges of your interest for specific details and guidelines. Notre Dame High School *does* require students enrolled in advanced placement courses to take the Advanced Placement tests. Please note; a fee is required to take these tests.

## REQUIREMENTS FOR GRADUATION

The following are the minimum requirements set down by the Pennsylvania Department of Education and the Diocese of Allentown for the graduation of a student from Notre Dame High School:

Twenty-eight (28) credits are required for graduation

4 credits in Theology

4 credits in English

3 credits in Social Studies (American Cultures, Western Civilizations, & P.S.E.)

3 credits in Mathematics

3 credits in Science

7 credits in Electives \*2 elective credits must be from the Foreign Language Department

4 credits in other required minors

\*\*\* Any change in the requirements must have the approval of the Principal and the Vice Principal.

## COURSE REQUIREMENTS

*\*All students are required to have six (6) major courses per semester.*

### **MINOR COURSES:**

- PERSONAL FINANCE MANAGEMENT (9)
- MUSIC APPRECIATION (9)
- PHYSICAL EDUCATION (9)
- STUDY SKILLS (9)
  
- DRIVER EDUCATION (10)
- INTRO TO ART (10)
- SAT PREP COURSE (10)
- SOCIAL TRANSITIONS (10)
  
- COLLEGE AND CAREER PLANNING (11)
- ART HISTORY (11)
- HISTORY OF MUSIC (11)
- PUBLIC SPEAKING (11)

## **Credit Requirements by Subject Area**

### **Theology**

- 4 Credits Required

### **English**

- 4 Credits Required

### **Math**

- 3 Credits Required

### **Science**

- 3 Credits Required
- Physical Science-freshman year
- Biology-sophomore year

### **Social Studies**

- 3 Credits Required
- American Cultures-freshman year
- Political Science and Economics (PSE)-senior year

### **Foreign Language**

- 2 Credits Required
- Must be 2 credits for the same language

### **Minors**

- 4 Credits Required
- Minor classes are not optional

### **Electives**

- A total of 5 elective credits over 4 years will be required

## **AQUINAS DEPARTMENT**

The Aquinas Program is a Christ-centered, quality academic education within a Catholic school environment for young adults with learning disabilities. Students are encouraged to work to their full potential and to be respectful of others. Emphasis is placed on helping students gain self-confidence and develop a positive attitude toward academic achievement.

Students are scheduled into regular high school classes, with the exception of one period a day. For one period students are scheduled in the resource room for instruction in organizational and study skills. The teacher/student ratio is approximately 1:5. Students have a full academic schedule; modifications and adaptations are developed through consultation between the Aquinas Program teacher and subject area teachers. These adaptations are specified on the students' Individual Instructional Programs (IPs).

Admission into the Aquinas Program is determined through review of educational testing. For further information on the Aquinas Program, please speak with the principal, Mrs. Jaclyn Friel. at 610-868-1431, extension 114; Deputy Superintendent for the Diocese of Allentown, Dr. Brooke Cortese-Tesche at 610-866-0581, extension 25.



## **ART and MUSIC DEPARTMENT**

### **COURSE DESCRIPTIONS**

**(701) INTRO TO ART    .20 credit                      College Prep                      GRADE 10**

This course will introduce students to various types of art medium, including an introduction to drawing with pencil, pen, colored pencil, and oil pastels. In painting, the students will explore color through painting with tempera paint and water colors. The course will also introduce the student to various artists of the twentieth century and help the student talk about works of art. The course will help the student think of creative solutions to various problems.

**(702) ART 1            .5 credit                      College Prep                      GRADE 11-12**

This art course involves the students in art specific topics. In a topic such as folk art, students learn about folk art works and produce works in a similar fashion as folk artists. In other topics such as art and music, and art and math, students explore the relationships between the two areas. They produce work that uses the connecting elements and principles. Students work in traditional media and explore various other ways of making art. They use paper make, collage work, and 3D constructions. Art is produced with creative thinking as a starting point.

**(703) ART 2            .5 credit                      Honors                              GRADE 11-12**

This art course continues the skills and concepts begun in Art 1.

**(726) DRAWING 1            .5 credit                      College Prep                      GRADE 11-12**

In this one semester course, the students will learn basic drawing and composition skills. They will use pencil, colored pencil, charcoal, pastel, pen, and ink. Still life, figure drawing, perspective and landscape will be among the topics that students will be given from which to work and learn.

**(728) DRAWING 2            .5 credit                      Honors                              GRADE 11-12**

A one semester course, Drawing 2 continues skills begun in Drawing 1. Students strive to increase their skills in using various media such as charcoal, pen, ink, and pastels. They will practice rendering objects realistically and dramatically.

**(727) PAINTING 1            .5 credit                      College Prep                      GRADE 11-12**

In this one semester course, the students will learn the basic painting skills and techniques in the media of crayons, water color, acrylic, and/or oil. Students will work on using the elements of art as they design compositions and learn color theory.

**(729) PAINTING 2            .5 credit                      Honors                              GRADE 11-12**

Painting 2 continues skills begun in Painting 1. Students will increase their ability to use various media such as acrylics, watercolor, pastels, and oil sticks to create effective and dramatic compositions.

**(680) GRAPHIC DESIGN            .5 credit                      College Prep                      GRADE 11-12**

This semester course is an introduction to computer graphics using the Adobe Photo Shop program. Students will learn and apply the tools introduced in this program. In this computer graphic environment, students will enhance their creative thinking while solving design problems.

**(685) CULTURE AND CINEMA .5 credit College Prep GRADE 11-12**

Have you ever wondered what message a film is trying to convey to the audience? Students interested in film analysis will learn through films in a fun and engaging manner with reflection on films as a true art form expressed by writers, directors, and actors. Students will discover the elements of what makes a good film and understand the role movies play in our daily lives and in society. Students will create original story and film a short movie as part of the final grade.

**(713) MUSIC THEORY 1 1 credit College Prep GRADE 11-12**

This course is designed to teach music from an analytical standpoint involving theory, practice and the structure of tonal music. The course will span from general to advanced application and strategy with the depth of information being strictly dictated by student ability and participation. This course has no previous educational requirements for admission and is by no means designed to discourage the student with little or no musical experience.

**(740) Band 1 credit College Prep GRADES 9-12**

Band is a performance based class for students interested in instrumental music. Students will develop skills and technical proficiency on their instruments while learning their important role within the musical ensemble. Throughout the school year, students will experience a wide variety of musical genres and styles in many different performance settings. Achievement will be demonstrated through evaluations, rehearsals and performances in solo, small and large ensemble settings. Attendance for outside performances is required.

# BUSINESS DEPARTMENT

## COURSE DESCRIPTIONS

**(660) PERSONAL FINANCE .5 credit College Prep GRADE 11-12**

Students will gain practical life skills and knowledge necessary in all aspects of dealing with everyday personal finance matters. Topics will include, but are not limited to career planning, budgeting, banking services, credit management, loans, insurance and retirement planning. These areas of interest will be reinforced with real life applications.

**(655) ENTREPRENEURSHIP .5 credit College Prep GRADE 11-12**

This course is designed to explore the entrepreneurial process. Students will be introduced to the concepts of recognizing needs and opportunities, company formation, production, risk, marketing, finance, human resources, global competition, and legal, ethical and social issues involved with starting a business. Not only will students research and discuss throughout history, but will also prospect ideas for their very own potential future businesses.

**(651) MARKETING 1 .5 credit College Prep GRADE 11-12**

This course is an exploration of the basic theories dealing with the business economy. It will introduce the student to marketing throughout history including social media marketing and e-commerce of present day, the marketing mix and concept, determining market and distribution channels, sales promotions and public relations, marketing mix and concept, determining market and distribution channels, sales promotions and public relations, market research and planning, and much, much more.

**(656) PERSONAL FINANCE MANAGEMENT for Freshman .25 Minor GRADE 9**

Students will gain practical life skills and knowledge necessary in all aspects of dealing with everyday personal finance matters. Topics will include, but are not limited to budgeting, banking services, credit management, loans, insurance, and retirement planning. This is a minor course to be completed by all freshman.

**(657) COLLEGE & CAREER PLANNING for Juniors .25 Minor GRADE 11**

Students will look forward into their future through this course exploring next steps as they near high school graduation. Topics will delve into resume creation, social media management, dressing for success, test taking preps for college discussions, applying for jobs and college, interviewing skills, long range planning and goals, self-assessments, and much more. This is a minor course to be completed by all Juniors

**(650) THE LAW .5 credit College Prep GRADE 11-12**

This course will explore the basic US legal system, teach vocabulary and theories of everyday legal matters, policies, and concepts. Discussion of various topics in law such as poverty law, family law, criminal law, corporate law, sport & entertainment law, constitutional law, business law, etc. will be explored along with a touch of legal research & writing, moot court, and death penalty/punishment/deterrent discourse. Teaching will be through textbook, lecture, and case law.

**(649) MEDIA, SPORT & ENTERTAINMENT MARKETING & LAW .5 credit College Prep  
Grade 11-12**

This course is designed to introduce students to the ever popular and evolving topics and professional career paths of marketing and law in the intertwined fields of media, sports, and entertainment. Topics to be explored are social media marketing, brand awareness, advertising, event promotion, endorsements, sales, analytics, sponsorship, media rights, finance, intellectual property, stadium and arena development, antitrust legislation, agent relationships, dispute resolution, and more.

## **COMPUTER/TECHNOLOGY DEPARTMENT**

### **COURSE DESCRIPTIONS**

**(658) INTRO TO PROGRAMMING AND COMPUTER SCIENCE 1 credit College Prep  
GRADE 11-12**

Computer Science and computational problem solving are fundamental skills for engaging the 21<sup>st</sup>-century marketplace of ideas and economies. We believe that all students should have the opportunity to learn these skills as they will use them in whatever career they are likely to enter.

This course is inspired by a highly successful Intro Computing course (15-112, Fundamentals of Programming and Computer Science) that has been taught at Carnegie Mellon University for the past 10+ years. It is predicated on the notion that learning about programming and computer science should be fun and engaging. This requires interesting problems to solve, as computational problem-solving is the core of computer science. It is why we choose to first expose students to graphical problems in CS1: they are visually engaging, allow for multiple correct solutions, and provide visual cues when a solution goes awry.

This course is taught using Brython, a powerful in-browser Python interpreter, to allow students to write real Python code from any browser.

Prerequisite for CS1: No prior programming experience is required for CS1

## VIRTUAL HIGH SCHOOL

Several students will have the opportunity to participate in a cutting-edge instructional program, Virtual High School. More and more colleges are offering this form of self-paced instruction as a way to earn a degree, especially at the graduate level.

The Virtual High School is an exciting initiative that allows a student tremendous flexibility to take an online class. There are over 300 courses available, and most of the Advanced Placement courses are offered. Only courses that are **not normally** offered at Notre Dame High School will be open for enrollment. Students will take their class from an accredited and credentialed instructor. They will join a class of approximately 25 students, potentially from around the world, by logging on and taking the course during the school day, when it is most convenient to the student's schedule. A 43-minute period is set aside each day in the normal school day for students to work on their lessons, however, work done on the computer outside of class requires a broadband internet connection.

The course work is intense. Students need to be highly motivated and must be able to work will independently. The 15 week sessions, which are less than a normal academic semester, require approximately 10 hours of work a week to stay up with the class.

***Students are required to have the approval of Assistant Principal and also the appropriate department chair for the course.*** Once classes begin, students will not be allowed to drop a VHS course. The VHS instructor, and not the teachers at Notre Dame, assigns grades. The grades assigned will be part of the student's grade point average. Notre Dame's grading plan will be in effect for these classes. Students may take a maximum of one VHS class per semester. Once enrolled, students may not drop the class because of the additional financial cost incurred by Notre Dame. For more information, interested students and their parents are urged to investigate the program by logging on to the website [www.govhs.org](http://www.govhs.org)

## ENGLISH DEPARTMENT

**(111) HONORS SURVEY OF LITERATURE 1 credit Honors GRADE 9**

The focus of this course is to cover literature at an accelerated pace and require a greater amount of independent study with an emphasis on critical thinking and writing

**Prerequisite:** Qualifying score based on the freshman placement test.

**(112) SURVEY OF LITERATURE 1 credit College Prep GRADE 9**

The focus of this course is the thematic study of literature, the development of writing and the strengthening of vocabulary.

**Prerequisite:** Qualifying score based on the freshman placement test.

**(113) ENGLISH 1 1 credit Basic Level GRADE 9**

The focus of this course is on foundational reading and writing skills. Students examine various literary genres and are provided with reinforcement in the fundamentals of grammar and writing skills.

**Prerequisite:** Qualifying score based on the freshman placement test.

**(121) HONORS AMERICAN LITERATURE 1 credit Honors GRADE 10**

This course will include an in-depth study of American literary classics from pre-colonial times to present. This course will cover literature at an accelerated pace and require more extensive independent learning with an emphasis on critical thinking and analytical skills.

**Prerequisite:** Current teacher recommendation and 88 or above in Honors Survey of Literature, 93 or above in College Prep Survey of Literature

**(122) AMERICAN LITERATURE 1 credit College Prep GRADE 10**

This college preparatory course is a survey of American literary works from pre-colonial times to the present. It will cover a wide range of genres and styles while further developing the critical thinking and analytical skills achieved in Survey of Literature, both in class discussions and in written responses to literary works.

**Prerequisite:** Current teacher recommendation and 87 or below in Honors Survey of Literature, 70 or above in College Prep Survey of Literature, 95 or above in English 1

**(123) ENGLISH 2 1 credit Basic Level GRADE 10**

This course is designed to help students gain understanding and appreciate the impact American Literature has had on the development of our nation. Selections contain an array of genres consisting of early American, classic and contemporary works. As students examine the various genres of American literature, they will develop basic language arts skills in the areas of vocabulary development, reading comprehension, the writing process, and grammatical structures.

**Prerequisite:** Current teacher recommendation and 69 or below in College Prep Survey of Literature, 70-94 in English 1

**(130) LITERATURE 1 1 credit College Prep GRADE 11**

This college prep course is an alternative to British Literature and is accepted as a Level 2 or college prep level course. The focus of the course will be the study of famous authors and literary genres with an emphasis on improving writing skills. Basics of research will be covered and a modified research paper required.

**Prerequisite:** Current teacher recommendation and 70-80 in College Prep American Literature, 95 or above in English 2.

**(131) HONORS BRITISH LITERATURE    1 credit    Honors    GRADE 11**

This course will cover literature at an accelerated pace and require extensive independent learning with an emphasis on critical thinking and analytical skills. Students will read works from British writers in the Anglo-Saxon period through the modern era. Emphasis will be placed on the study of literary techniques, forms, and themes. Writing assignments will focus on critical analysis of literature. Additionally, students will learn the rudiments of writing a research paper.

**Prerequisite:** Current teacher recommendation and 88 or above in Honors American Literature, 93 or above in College Prep American Literature

**(132) BRITISH LITERATURE    1 credit    College Prep    GRADE 11**

This course will familiarize students with British writers from the Anglo-Saxon period through the modern era. Emphasis will be placed on the study of literary techniques, forms, and themes. Writing assignments will focus on critical analysis of literature. Additionally, students will learn the rudiments of writing a research paper.

**Prerequisite:** Current teacher recommendation and 87 or below in Honors American Literature, 80 or above in College Prep American Literature

**(141) HONORS WORLD LITERATURE    1 credit    Honors    GRADE 12**

This course is a survey/study of the major literary topics and themes from across the globe throughout many time periods. A wide range of genres and styles will be covered. It will cover literature at an accelerated pace and require more extensive independent learning with an emphasis on critical thinking and analytical skills both in class discussions and in independent writing. A research paper will be required.

**Prerequisites:** Current teacher recommendation and 88 or above in Honors British Literature, 93 or above in College Prep British Literature

**(142) WORLD LITERATURE    1 credit    College Prep    GRADE 12**

The focus of this preparatory course will be the study of selected classics in World Literature. Through these works, students will be introduced to major topics and themes of the multi-cultural world throughout written history. Students will hone critical thinking and analytical skills both in class discussions and in independent writing. A research paper will be required.

**Prerequisite:** Current teacher recommendation and 87 or below in Honors British Literature, 80 or above in College Prep British Literature, 95 or above in Literature 1

**(134) LITERATURE 2    1 credit    College Prep    GRADE 12**

This course is an alternative to World Literature and is accepted as a Level 2 or college prep level course. The focus will be a continued study of famous authors and all literary genres with renewed emphasis on improving writing skills. A research paper will be required.

**Prerequisite:** Current teacher recommendation and 70-80 in College Prep British Literature, 95 or above in English 3

**(160) HONORS JOURNALISM 1    1 credit    Honors    GRADE 11-12**

This elective course focuses on developing the skills necessary to produce the school newspaper. Students will write, edit, and design issues of *The Crusader* and *The Young Crusader*. Emphasis will be placed on developing a journalistic writing style suitable to news, features, editorial, and sports articles. Students develop a proficiency in computer design using Microsoft Publisher. Time outside of class is required to complete interviews, report, write, design, etc. Class size is limited.

**Prerequisite:** Current teacher and Honors Journalism teacher recommendations; as well as, 88 or above in prior-year Honors English course or 93 or above in prior-year College Prep English course

**(161) HONORS JOURNALISM 2    1 credit    Honors    GRADE 12**

This *elective* course is open to students who have successfully completed Honors Journalism 1. The class will run concurrently with Journalism 1. Students will develop newspaper guidelines, and update graphic elements of computer design. Students in Honors Journalism 2 will function as managing editors of *The Crusader*, overseeing the entire writing and production process. Time outside of class is required to complete work. Class size is limited

**Prerequisite:** Honors Journalism teacher recommendation, 88 or above in Honors Journalism 1

**(164) HONORS COLLEGE WRITING 1    1 credit    Honors    GRADE 12**

This writing-intensive course is designed to advance writing skills for students entering a four-year college or university. Emphasis is placed on the study of writing techniques and forms. The course covers writing and literature topics at an accelerated pace and requires extensive independent learning, critical thinking, and analysis. The focus is on preparing students for the rigors of college writing through a range of writing assignments as well as related study of literary works from various genres.

**Prerequisite:** Current teacher and College Writing teacher recommendations; as well as, 88 or above in Honors British Literature, 93 or above in College Prep British Literature and successful completion of 5-paragraph essay assignment

**(165) COLLEGE WRITING    1 credit    College Prep    GRADE 12**

This writing-intensive course is designed to develop writing skills for students entering a four-year college or university. Emphasis is placed on the study of writing techniques and forms. The course covers writing and literature topics and requires independent learning, critical thinking, and analysis. The focus is on preparing students for the rigors of college writing through a range of writing assignments as well as related study of literary works from various genres.

**Prerequisite:** Current teacher and College Writing teacher recommendations; as well as, 87 or below in Honors British Literature, 88 or above in College Prep British Literature and successful completion of 5-paragraph essay assignment



**(166) AP ENGLISH LANGUAGE AND COMPOSITION 1 credit Advanced Placement  
GRADE 12**

The content for this course complies with the requirements set forth in the College Board English Language and Composition course description and the syllabus used is approved by the College Board AP course audit committee. Students will be required to read and write in a variety of rhetorical contexts and purposes with a focus on nonfiction sources at an accelerated pace. Students who elect to take this course are required to take the AP English Language and Composition exam in May. (Fee required.)

**Prerequisite:** Current teacher and AP English Language and Composition recommendations, 93 or above in British Literature

## **FOREIGN LANGUAGE DEPARTMENT**

Each student is expected to study a foreign language for two consecutive years. Once the student begins the study of a chosen language, he/she is expected to take the second year of that language unless some other decision is reached in consultation with the student's current language teacher. A placement test will be given to new students who are coming into our school, or to students who request to advance in the language level.

### **COURSE DESCRIPTIONS - Foreign Language Department**

**(508) SPANISH FOR BEGINNERS 1 credit Basic GRADES 9-12**

The purpose of this course is to create cultural awareness and develop fundamental language skills in Spanish. Students will learn basic pronunciation, vocabulary, and grammatical patterns. Students will complete exercises in listening, reading, writing and speaking in the target language. This course is an ideal starting point for any student who has never studied Spanish before. Students will be assigned to this course by the department chairperson and/or administration.

\*Subject to modifications by the administration.

**(520) SPANISH 1 1 credit College Prep GRADE 9-10-11**

The student is immersed into the discovery of the Spanish language and culture. On this level, the student will be introduced to the fundamentals of conversational and grammatical patterns through oral and written practice. Class activities include the integration of technology. An effort is made to present basic vocabulary and grammar in the target language. By means of these exercises, the student should achieve a comfortable proficiency at this level in using the skills of listening, understanding, reading, writing, and speaking.

**Prerequisite:** The student must have attained at least a seventh grade reading level and a knowledge of basic English grammar.

**(522) SPANISH 2 1 credit College Prep GRADE 10-11-12**

This course aims to continue the development of the four basic skills of language acquisition. Students review grammar extensively and will be expected to apply these skills in communicative activities in the classroom. The use of the target language is continued.

**Prerequisite:** Grade 70 or above in Spanish 1 and the teacher's signature.

**(524) HONORS SPANISH 3 1 credit Honors GRADE 11-12**

This course is a review as well as an expansion of the most difficult grammar points in the Spanish language and an introduction to Spanish literature. Reading comprehension skills are polished through excerpts from various Spanish and Latin American literature pieces, such as *Don Quixote*. Classes are mostly conducted in the target language.

**Prerequisite:** Grade 85 or above in Spanish 2 and the teacher's signature

**(525) HONORS SPANISH 4      1 credit      Honors      GRADE 12**

During this course student are exposed to numerous literature pieces from Spanish and Latin American authors. The students will have the opportunity to apply advanced grammar and vocabulary studied previous years. Extensive writing and discussion in Spanish is expected.

**\*Prerequisites:** Grade 85 or above in Spanish 3 and the teacher's approval.

**(510) FRENCH 1      1 credit      College Prep      GRADE 9-10-11**

French 1 serves as an introduction to the language and culture of French-speaking people throughout the world. The goal of this course is a mastery of the four basic language skills with particular emphasis on the development of good pronunciation and strong oral skills. After the first year, the student should possess a basic vocabulary and should know the basic grammar of the French language. These goals should always be pursued in the target language.

**Prerequisites:** The student must have attained at least a seventh grade reading level and have knowledge of basic English grammar.

**(511) FRENCH 2      1 credit      College Prep      GRADE 10-11-12**

French 2 continues to build the foundation begun in French 1. The development of the four language skills continues. The course goes into the study of grammar in depth, expands vocabulary toward a greater proficiency, and at all times stresses the use of French as the primary language of communication.

**Prerequisites:** Teacher's signature and grade 70 or above in French 1.

**(512) HONORS FRENCH 3      1 credit      Honors      GRADE 11-12**

French 3 builds upon the vocabulary and grammar foundations of French 1 and French 2. The development of the four skills is continued with emphasis upon reading and writing. Cultural aspects of modern-day France are also studied and select twentieth century literature is discussed.

**Prerequisites:** Grade 85 or above in French 2 and the signature of the French teacher

**(513) HONORS FRENCH 4      1 credit      Honors      GRADE 11-12**

This course builds upon the vocabulary and grammar foundation of French 1, 2, and 3. The development of the four skills is continued with emphasis upon reading and writing, preparing the student for solid college foundation. It also presents an overview of the complete history of France up to and including the twenty century. French achievements in the arts, sciences, and literature will be discussed in conjunction with the historical events of the period. Excerpts from the works of the authors of the time will be read in an effort to relate the impact of life upon literature.

**Prerequisites:** Grade 85 or above in French 3 and the signature of the French teacher.

**(530) GERMAN 1      1 credit      College Prep      GRADE 9-10-11**

Students will be introduced to German language and culture. The student will learn basic pronunciation, vocabulary, and grammatical construction through oral and written practice. The instructor will use the target language as much as possible in class in order to create the context for language development. Language, custom, and culture are incorporated with all lessons.

Opportunities for multi-tiered learning will be provided. These opportunities will take the shape of class projects such as Advent calendars, family trees, making up German restaurant menus, making and sampling German cuisine, in addition to videos and movies. By these means students should begin to cultivate a facility with both spoken and written German, as well as German culture.

**Prerequisite:** Students must have attained at least a seventh grade reading level and knowledge of basic English and grammar.

**(532) GERMAN 2            1 credit            College Prep            GRADE 10-11-12**

German 2 continues to build the foundation begun during German 1. Developing the four language skills of speaking, understanding, reading, and writing underlies the work of the course. Classes will continue utilizing material that integrates the study of German language, customs, and culture in both traditional and multi-tiered fashion. In addition, the use of dictation exercises, the reading of short selections from German folktales, and simple compositions with continued study of German grammar and vocabulary will comprise the work of the course. Finally, German as the primary language of communication will be stressed.

**Prerequisites:** Grade 70 or above in German 1 and the teacher's approval.

**(533) HONORS GERMAN 3    1 credit            Honors                    GRADE 11-12**

Students will continue their development of German language, culture, and history. Practice of spoken and written German will be expected. In addition, students will learn genitive case, demonstrative pronouns, adjective endings, accusative, dative, and accusative/dative prepositions, compounds, conjunctions, and past perfect tense. Through projects and group activities, students will increase their appreciation for German culture and history. We will engage much more in literature and discuss German history, while keeping an eye on current events. Such topics as: restaurants, food, festivals, health, travel, and the environment will be studied.

**Prerequisites:** 85 or above in German 2 and the teacher's approval.

**(534) HONORS GERMAN 4    1 credit            Honors                    GRADE 12**

Emphasis in the German 4 will be on speaking, writing, and reading. Practice of both spoken and written German will be expected. Personal speeches and essays in the target language will be used. Reading will emphasize the literature of German folklore, the "novellas" of eighteenth and nineteenth German-speaking authors, as well as select readings from Goethe's *Faust*. Students will also study German art, architecture, music, and philosophy.

**Prerequisites:** 85 or above in German 3 and teacher's approval.

**ENGLISH LANGUAGE LEARNERS 1 (ELL1) 1 credit            ALL GRADES**

This is a required course for English Language Learner students who have not reached the necessary level of English proficiency to achieve success in academics according to Diocesan and SEVIS guidelines. The course is equivalent to one "language" credit.

The course is designed to establish a foundation in English literacy and language acquisition for students with English as a second language. Students will develop reading, writing, speaking and listening skills through focused instruction and learning strategies, with an emphasis placed on building vocabulary and learning through practical application.

This course was developed according to the guidelines as set forth by the PA Dept. of Education's "Standards for English Language Development".

**ENGLISH LANGUAGE LEARNERS 2 (ELL2) 1credit            ALL GRADES**

This course further develops the English Language Learner's skills designed to give the students more advanced language abilities. Components of the course include reading literature, improving grammar, writing and listening skills. A greater emphasis is placed on broadening the student's active vocabulary in order to become proficient in English. This course is equivalent to one "language" credit.

This course was developed according to the guidelines as set forth by the PA Dept. of Education's "Standards for English Language Development"

# HEALTH, PHYSICAL EDUCATION & DRIVER EDUCATION

## COURSE DESCRIPTIONS - Health, Physical Education & Driver Education

**(850) DRIVER EDUCATION .25 credit College Prep GRADE 10**

The course in Driver Education will attempt not only to teach the basic driving skills but also to help the student develop good understanding, attitudes and judgment for safe driving in our increasingly complex traffic situation.

**(821) SOCIAL TRANSITIONS .25 credit College Prep GRADE 10**

This minor course is a violence-prevention, self-development curriculum that incorporates spirituality in the context of the inherent dignity of the human person. Students learn skills that help them recognize and speak out effectively against injustice, and to help them develop healthy relationships. Further, students learn the importance of “owning” their behavior while learning how to make good decisions, maintaining confidentiality, and effectively communicating. Since many of the sessions are gender-specific, the curriculum is equally relevant to boys and girls.

**(865) SELF DEFENSE AND WELLNESS .5 credit College Prep GRADE 11-12**

Arm your body, and be able to protect yourself with assertive self-defense moves. Refresh your mind with a strong outlook and build positive mental strength; learn verbal confrontation skills, and safety strategies. Lift your spirit with an abundance of wellness resources to present your STRONGEST SELF. Be consistently present, having a sense

**(810) PHYSICAL EDUCATION / WELLNESS .25 credit College Prep  
GRADE 9-10-11**

The physical education program will promote the physical facet of the total person. This class provides students with the fundamental skills of team sports, individual and lifetime sports, and recreation activities. Seniors are given the option of satisfying the requirement through independent study. The student *must* secure the approval of the department chairperson prior to registering as an independent study.

**(860) SPORTS MANAGEMENT I .5 credit College Prep GRADE 11-12**

This semester class will give students an overview of sports management from a potential career perspective.

**(846) PRINCIPLES OF SUCCESSFUL COACHING .5 credit College Prep GRADE 11-12**

This course is a comprehensive introduction to the coaching profession. Emphasis is placed on sport at the high school and club levels. Consideration is also given to coaching at other levels, such as youth, recreational and intercollegiate sport programs. The primary goal of the course is to develop and enhance students' knowledge and understanding of concepts and techniques of coaching and their application to achieving important objectives in working with athletes.

**(870) KINESIOLOGY .5 credit College Prep GRADE 11-12**

Kinesiology examines human movement from a mechanical prospective. Students will participate in different laboratory activities to take measurements while walking, running, jumping, as well as throwing and striking a projectile. Classes will apply Newton's law, basic algebra, and trigonometry to analyze data collected from laboratory activities.

**(871) TONE & STRENGTHEN .5 credit College Prep GRADE 11-12**

In response to the headlines concerning lack of exercise and the effects on one's health, Notre Dame is offering a semester class for interested students to change their level of exercise! During the semester, students will have the opportunity to develop their own personal fitness program. Three days each week will be spent in the weight room or using strength training videos, and two days will involve the group participating in a cardio workout. The goal is for each participant to develop an active lifestyle that will have positive effects now and for the future. Whether you are an experienced athlete or a beginner in exercise, this class will benefit your overall health and wellness.

**(848)12th Grade Physical Education and (849) Health .5 credit College Prep GRADE 12**

This course is designed to offer the students a class in which they will participate in P.E. for one semester of the school year. The students will participate in organized activities in which team activities, personal fitness/wellness and sport specific skills will be taught. In the second semester of the class, students will be taught Health in a classroom setting. Areas of focus will be concepts of health, healthful living and safety and injury prevention.

# MATH DEPARTMENT

## COURSE DESCRIPTIONS

**(311) HONORS ALGEBRA 1      1 credit      Honors      GRADE 9**

This course offers an in-depth study of the topics included in the Algebra 1 course. In addition to the topics listed in the Algebra 1 course description, the following topics are included: slope, compound equations and inequalities, fractional equations, complex fractions, radicals, and radical equations.

**Prerequisites:** *Qualifying score based on the freshman placement test.*

**(312) ALGEBRA 1      1 credit      College Prep      GRADE 9**

This course provides the student a college-preparatory foundation in the fundamental concepts of algebra. Topics include: algebraic concepts of operation, solving equations in one and two variables, solving inequalities in one and two variables, word problem applications, operations on polynomials, special products and factoring, the coordinate plane, graphs of linear equations, functions and relations, and an introduction to rational expressions.

**Prerequisites:** *Qualifying score based on the freshman placement test.*

**(313) BASIC ALGEBRA 1, PART 1      1 credit      Basic Level      GRADE 9**

This course, in conjunction, with Basic Algebra 1, Part 2, will present the fundamental Algebra 1 topics taught over two years to allow the students to process the material at a pace conducive to their learning abilities. The course will cover operations and properties of real numbers, solving equations and problems in one variable, and solving inequalities. Students who are placed in this course are committed to taking Basic Algebra 1, Part 2 the following school year.

**Prerequisites:** *Qualifying score based on the freshman placement test.*

**(323) BASIC ALGEBRA 1, PART 2      1 credit      Basic Level      GRADE 10**

This course is the sequel to Basic Algebra 1, Part 1. The material covered in this course includes: Functions and their graphs, solving linear equations and inequalities, rational expressions and exponents.

**Prerequisites:** *Current teacher recommendation, grade 70 or above in Basic Algebra 1, Part 1.*

**(321) HONORS GEOMETRY      1 credit      Honors      GRADE 10-11**

This course investigates the traditional topics of a high school geometry curriculum including the study of angles, lines, planes, properties of polygons, circles, similarity, congruence, area, volume, and proof writing.

**Prerequisites:** *Current teacher recommendation, 88 or above in Hon. Algebra 2; 95 or above in Algebra 2*

**(322) GEOMETRY      1 credit      College Prep      GRADE 10-11**

This course covers the traditional topics of a first year geometry course including: angles, lines and planes, parallelism, properties of polygons, congruence and similarity of polygons, area and volume, introductory coordinate Geometry, and construction.

**Prerequisites:** *Current teacher recommendation, 70 or above in Algebra 2*

**(333) BASIC GEOMETRY    1 credit    Basic Level    GRADE 11**

This course includes the traditional topics of Geometry with less emphasis on deductive proofs and more emphasis on applications of geometric logic in everyday life. Theorems are investigated through practical work with protractors, compasses, and rulers.

**Prerequisites:** *Current teacher recommendation, grade 70 or above in Basic Alg. 1, Part 2*

**(331) HONORS ALGEBRA 2    1 credit    Honors    GRADE 9-10**

This course includes a study of the real and complex number system. Major topics include the study of first and second degree equations and inequalities, functions, polynomials, rational and radical expressions and equations, and matrices. A TI-83/84 graphing calculator is required for this course.

**Prerequisites:** *Current teacher recommendation, grade 88 or above in Honors Algebra 1 or grade 95 or above in Algebra 1, or qualifying score on freshman placement test.*

**(332) ALGEBRA 2    1 credit    College Prep    GRADE 9-10**

This course, which includes a study of the real number system, emphasizes factoring of polynomials, operations with algebraic polynomials, functions and their graphs, solutions and graphs of quadratic equations and inequalities, and complex numbers. A TI 83/84 graphing calculator is required for this course.

**Prerequisites:** *Current teacher recommendation, grade 70 or above in Algebra 1, or qualifying score on freshman placement test.*

**(343) BASIC ALGEBRA 2    1 credit    Basic Level    GRADE 12**

This course includes the traditional topics covered in Algebra 2 with less emphasis on theory and more practice in application. Algebra 1 topics are reinforced and expanded to include the study of second-degree (quadratic) equations and inequalities. This is a terminal algebra course and does not lead to placement in the Algebra 3 with Trig. course.

**Prerequisites:** *Current teacher recommendation and grade of 70 or higher in Basic Geometry.*

**(342) ALGEBRA 3 WITH TRIGONOMETRY    1 credit    College Prep    GRADE 11-12**

This course includes the study of topics from Algebra 2 that typically are not covered due to time constraints. The student will learn about polynomials, functions, (including rational, logarithmic and exponential functions), right triangle and analytical trigonometry, matrices, and probability and statistics (time permitting.) A TI-83/84 graphing calculator is required for this course.

**Prerequisites:** *Current teacher recommendation and completion of Algebra 2 and Geometry with a grade of 80 or higher or completion of Honors Algebra 2 and Honors Geometry with a grade below 88.*

**Note:** *Students that take Algebra 3 with Trigonometry in 11<sup>th</sup> grade will not qualify to take Honors Precalculus the following year.*

**(341) HONORS PRE-CALCULUS    1 credit    Honors    GRADE 11-12**

Topics consist of the study of functions, including polynomial, exponential, logarithmic, and trigonometric functions and their applications, conic sections, matrices and probability and statistics. (Time permitting). A TI-83/84 graphing calculator is required for this course.

**Prerequisites:** *Current teacher recommendation, grade 88 or above in Hon. Alg. 2 **and** Hon. Geometry or grade 95 or above in Alg. 2 **and** Geometry.*

**(344) CONCEPTS OF ALGEBRA WITH TRIGONOMETRY 1 credit College Prep GRADE 11-12**

This course is designed for seniors who do not meet the minimum grade prerequisites for Algebra 3 with Trigonometry but would like to take a fourth year of math. Topics will be similar to those covered in the Algebra 3 with Trigonometry course but taught at a slower pace. Those topics will include a review of algebra, functions and graphs, polynomial and rational functions, right triangle and basic analytical trigonometry, exponential and logarithmic functions, matrices, and probability and statistics. (Time permitting.) A TI-83/84 graphing calculator is required for this course.

Prerequisites: Current teacher recommendation and completion of two years of College Prep Algebra and College Prep Geometry with a grade between 75 and 80

**(354) AP CALCULUS (AB) 1 credit Advanced Placement GRADE 12**

The content for this course complies with the requirements set forth in the College Board Calculus (AB) course description and the syllabus used was approved by the College Board AP course audit committee. Topics covered include limits, derivatives, definite and indefinite integrals and their applications. Students who elect to take this course are required to take the AP Calculus (AB) exam in May. (Fee required.) A TI-83/84 graphing calculator is required for this course.

**Prerequisites:** Current teacher recommendation, Completion of Honors Pre-Calculus with a grade of 90 or higher, and Department Chair approval.

**(351) HONORS CALCULUS 1 credit Honors GRADE 12**

The course will cover limits, derivatives, and integrals with applications from Analytic Geometry. It will stress practical rather than theoretical aspects and will emphasize the use of real-life applications. This course will NOT prepare the students for the AP Calculus Exam. A TI-83/84 graphing calculator is required for this course.

**Prerequisites:** Current teacher recommendation, grade 85 or above in Honors Pre-Calculus.

**(352) PROBABILITY AND STATISTICS 1 credit Honors GRADE 12**

This course will involve the student in developing critical attitudes towards collecting, treating, and analyzing data. Topics include: methods for describing sets of data, probability, random variables, sampling distributions, confidence intervals, and hypothesis testing. A TI-83/84 graphing calculator is required for this course.

**Prerequisites:** Current teacher recommendation, grade 88 or above in Alg. 3 with Trig., or 70 or above in Honors Pre-calculus

*Students who wish to take a summer course in mathematics need the prior approval of the department chair, guidance counselor, and assistant principal. Completion of a summer course does not allow for movement from a basic level class to a college prep level class or from a college prep class to an honors class.*



# SCIENCE DEPARTMENT

## COURSE DESCRIPTIONS

**(415) BASICS CONCEPTUAL PHYSICS 1 credit                      Basic level                      GRADE 9**

Conceptual physics is a two-semester; laboratory-based science course with an emphasis on the scientific method and the fundamental principles of physics. This course offers the subject matter of a traditional physics course emphasizing physics in a low-mathematical context. This course is designed to provide students with a foundation for further study in other sciences. General areas of study will include mechanics, properties of matter, heat, sound and light. Students will apply algebraic skills to problem solving through the course. Prerequisite: Concurrent enrollment in Algebra I

**(413) CP CONCEPTUAL PHYSICS 1 credit                      College Prep                      GRADE 9**

Conceptual Physics is a two-semester, laboratory-based science course with an emphasis on the scientific method and fundamental principles of physics. This course is designed to provide students with a foundation for further study in biology, chemistry and the advanced science courses. General areas of study will include mechanics, properties of matter, heat, sound and light. Students will apply algebraic skills to problem solving throughout the course. Prerequisite: Concurrent enrollment in CP Algebra I

**(411) HONORS CONCEPTUAL PHYSICS                      1 credit                      Honors                      GRADE 9**

Conceptual physics is a two-semester, laboratory-based science course with an emphasis on the scientific method and the fundamental principles of physics. This course offers the subject matter of a traditional physics course emphasizing physics and seeking to improve students' math skills by applying algebraic skills to problem solving, and introduce students to higher order thinking. This course is designed to provide students with a foundation for further study in biology, chemistry, and the advanced science courses. General areas of study will include mechanics, properties of matter, heat, sound, light, electricity and magnetism, atomic and nuclear physics and relativity. Students will apply algebraic skills to problem solving throughout the course Prerequisite: Concurrent enrollment in Honors Algebra I.

**(420) BASIC BIOLOGY                      1 credit                      Basic                      GRADE 10**

This full-year course introduces to the student basic biological principles. A systemic approach to understanding these basic principles is employed in the classroom. Interactive science note books will be used. Students will be able to identify ideas they do not understand and reinforce the ideas that they do understand. Hands-on experience in the laboratory is provided to reinforce concepts learned in class. This will be offered pending number of students signed up and availability of scheduling.

Prerequisite: Recommendation of current conceptual physics. Student must have completed Conceptual Physics (regular or basic) before scheduling this course.

**(422) BIOLOGY** **1 credit** **College Prep** **GRADE 10**

This full-year course introduces the science students to biological principles in the fields of cytology, zoology, botany, human development, genetics, evolution, and ecology. Selected laboratory experiences and dissections are provided to reinforce the concepts to be mastered. A science project may be required.

Prerequisites: Grade 80% or above in Conceptual Physics; 95/0+ in Basic Physical Science & Recommendation of the teacher.

**(424) HONORS BIOLOGY** **1 credit** **Honors** **GRADE 9-10**

This full-year course is designed for the above-average student who is adept at, and interested in science. Major biological concepts in the fields of cytology, zoology, botany, human development, genetics, evolution, and ecology are presented in class lectures using a combination of phylogenic and systemic approaches. Selected laboratory experiences, dissections, and supplemental readings serve to reinforce the concepts to be mastered. Students may be required to complete independent research projects during the school year.

Prerequisites: A grade of 85% or above in Honors Conceptual Physics or 95 or above in College Prep Physical Science is required. Incoming freshmen must receive a passing grade on the math placement exam, a 93% or above on the 8<sup>th</sup> grade general physical science final exam, and take Honors Algebra 2 concurrently.

**(428) ADVANCED PLACEMENT BIOLOGY** **1 credit** **GRADE 11-12**

This course follows the College Board Examination guidelines for Advanced Placement Biology, which consists of an intensive review and in-depth study of areas that were introduced in Biology I. Attention is given to the application of science practices, laboratory investigation, and collaboration with colleagues as related to overarching themes in modern biological science. In addition to class time, students will need to spend at least seven and a half hours per week studying outside of class. Interested students should refer to AP policies. A packet will be distributed in May that will assist students to review certain concepts over the summer. The packet must be completed and turned in on the first day of class and an entrance exam will be given within the first week of class. Students will need to stay after school or come early one or two days a week to perform laboratory experiments. Prior to the student's enrollment in AP Biology, parents and students must sign a letter of understanding.

Prerequisites: 90% in Honors Biology or 95% in General Biology, 93% in and a passing grade on the entrance exam.

**(432) CHEMISTRY 1** **1 credit** **College Prep** **GRADE 10-11-12**

This course introduces the student to the basic principles of chemistry including atomic theory, chemical reactions, and stoichiometry. Problem solving and development of thinking skills are emphasized. Where possible, the course work is supported by laboratory work.

Prerequisites: Grade 80% or above in Biology (422) and Algebra 2 and must have taken Algebra 1 (Not Algebra 1 Part 1 & 2) and current science teacher recommendation

**(434) HONORS CHEMISTRY                      1 credit                      Honors                      GRADE 10-11-12**

This is a high level college preparatory course designed for students who exhibit an aptitude and interest in science and math. Problem solving and analytical thinking skills are emphasized. The course examines the basic principles of chemistry including atomic theory, periodic laws, chemical reactions, stoichiometry, and energy considerations. Where possible, the course work is supported by laboratory work.

Prerequisites: Grade 87% or above in Honors Biology and Honors Algebra 2, 95% or above in General Biology and mathematics, current science teacher recommendation.

**(438) ADVANCED PLACEMENT CHEMISTRY                      1 credit                      GRADE 11-12**

This AP Chemistry course is designed to be the equivalent of the General Chemistry course usually taken during the first college year. This course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. In addition to class time, students will need to spend at least seven and a half hours a week studying outside of class. All students interested in AP Chem should refer to NDHS AP policy. A review packet will be distributed in May in order to assist the students in review of the material. Students will need to stay after school or come in early one or two days a week to perform laboratory experiments. Prior to the student's enrollment in AP Chemistry, parents and students must sign a letter of understanding.

Prerequisites: 90% or above in Honors Chemistry 1, 97% or above in General Chemistry, 90% in Honors Algebra 2, recommendation of current chemistry teacher, and a passing grade on the entrance exam (Honors Chemistry material).

**(442) GENERAL PHYSICS                      1 credit                      College Prep                      GRADE 12**

This is a college preparatory course designed to expose students to the theory and application of such topics as motion, dynamics, heat, light, sound, and electricity. It is a problem-solving course taught with emphasis on the development of independent thinking skills. It will be supported by laboratory work as time allows.

Prerequisites: 80% in Conceptual Physics or Chemistry, 85% or above in Algebra 2 and Trigonometry (may be taken concurrently), as well as current science AND math teacher recommendations.

**(444) HONORS PHYSICS                      1 credit                      Honors                      GRADE 11-12**

This high level course is designed for students who desire to prepare themselves for college level science and math courses. This mathematical science course entails in-depth study of motion, dynamics, heat, light, sound, and electricity, as well as an introduction to quantum mechanics and nuclear physics.

Prerequisites: 85% or better in Honors Conceptual Physics or Honors Chemistry, Algebra 2, AND Honors Trigonometry/Honors Pre- Calculus (may be taken concurrently), as well as current science AND math teacher recommendations.

**(448) ADVANCED PLACEMENT PHYSICS            1 credit            AP            GRADE 12**

This AP course is designed to be the equivalent of the General Physics course usually taken in college. This course will encourage the students to think critically by using guided inquiry and student-centered learning. The students will be expected to spend at least seven and a half hours a week of study outside of class time. Students should also be prepared to stay after school one or two days a week to perform laboratory experiments. A packet of summer assignments will be distributed in May to be turned in on the first day of school. All students interested in AP Physics should refer to the NDHS AP policy. Prior to enrollment, students and parents will be required to sign a letter of understanding.

Prerequisites: 90% in Honors Physics and Honors Algebra II or 95% in General Physics and General Algebra II, recommendation of current Physics teacher, and a passing grade on the entrance exam.

**(449) CP ANATOMY AND PHYSIOLOGY   1 CREDIT            COLLEGE PREP            GRADE 11-12**

Anatomy and Physiology college prep is a full year laboratory science course elective designed to engage the students in a study of structure and function in living organisms. Students will participate in investigations and activities that will explore the microscopic structure of single cells as they relate to the function of the human body systems. The diversity of living systems is stressed throughout the course. Laboratory work including dissections, student presentations, are an integral component of this Anatomy and Physiology college prep course.

Prerequisite: A grade of 80 or better in General Biology

**(450) HONORS ANATOMY AND PHYSIOLOGY   1CREDIT            HONORS            GRADE 11-12**

This academically rigorous course is designed for those students who have the initiative to work independently on a number of topics. It is designed to give an in-depth presentation of the anatomy, physiology and pathology of selected systems of the human body. It will rely heavily on background established in Biology. The course is paced so that it provides a challenge to scientifically adept and motivated juniors and seniors. Selected laboratory experiences, dissections, and readings are an integral part of the learning experience.

Prerequisites: 80% or above in Honors Chemistry

**(451) EARTH AND SPACE SCIENCE Semester I   .5 credit            College Prep            GRADE 11-12**

This semester course is for the student interested in taking a science course that focuses on the study of the Earth's lithosphere, atmosphere, hydrosphere, and its celestial environment. Students enrolled in this course analyze and describe Earth's interconnected systems and how they are changing due to natural processes and human influence. Hands-on activities and laboratory experiments will be performed to further enhance learning.

Prerequisites: Current science teacher recommendation and successful completion of two years of science.

**(453) AGRICULTURAL SCIENCE Semester 2   .5 credit            College Prep            GRADE 11-12**

This semester course is for the student interested in taking a science course to explore the fundamentals of horticulture and the basics of gardening. The students will be kept abreast of current issues dealing with career possibilities in horticulture science. Hands-on activities and laboratory experiments will be performed to further enhance learning

Prerequisites: Current science teacher recommendation and successful completion of two years of science.

**(452) ENVIRONMENTAL SCIENCE            1 credit            College Prep            GRADE 11-12**

This full-year course is for the student who needs a third year of science, but does not require chemistry or physics. Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students enrolled in this course conduct in-depth scientific studies of ecosystems, population dynamics, resource management, and environmental consequences of natural and anthropogenic processes. Students formulate, design, and carry out laboratory and field investigations as essential course components. Students completing Environmental Science acquire the essential tools for understanding the complexities of national and global environmental systems. Hands-on activities and laboratory experiments will be performed to further enhance learning.

Prerequisites: Current science teacher recommendation and successful completion of two years of science.

**(456) FORENSIC SCIENCE            .5 CREDIT            COLLEGE PREP            GRADE 11-12**

Forensic Science is the application of science (chemistry, physics, and biology) to the criminal and civil laws that are enforced by police agencies in a criminal justice system. It includes the investigation of fingerprinting, fiber analysis, ballistics, arson, trace evidence analysis, poisons, drugs, blood spatters, and blood samples. Students are taught the proper collection, preservation and laboratory analysis of various samples.

Prerequisites: Successful completion of at least two years of science including Biology. Chemistry is recommended for this course but not required.

# SOCIAL STUDIES DEPARTMENT

## COURSE DESCRIPTIONS

**(212) AMERICAN CULTURES (1877 - PRESENT) 1 credit College Prep  
GRADE 9**

American Cultures is a course of historical study of American history from the end of Reconstruction to the present. The students should have a background in American history from their study in the lower grades; this course will build on that background. The historical periods presented have been chosen for their relevance to today's world.

**(213) HONORS AMERICAN CULTURES 1 credit Honors GRADE 9**

This course will demand independent reading of both the textbook and of supplemental material. Topics covered will be essentially the same as the regular level course, with a deeper investigation and at a faster pace. Students will be required to demonstrate superior writing skills and will be challenged to develop historical thinking and analysis.

**Prerequisite:** 90 overall average in grade 8; recommendation of Dept. Chair.

**(222) WESTERN CIVILIZATIONS 1 credit College Prep GRADE 10**

This course will emphasize a chronological and concept based approach to past cultures and civilizations, which connect with and have greatly influenced our present society and historical era. Students will study history from the earliest civilizations to the present. Emphasis will be on those western cultures that have had the most influence upon western civilization and life.

**(223) HONORS WORLD CULTURES 1 credit Honors GRADE 10**

This course will demand independent reading of both the textbook and of supplemental material. Topics covered will be essentially the same as the Western Civilizations regular level course, with a deeper investigation and at a faster pace. Students will be required to demonstrate superior writing skills and will be challenged to develop historical thinking and analysis.

**Prerequisite:** 93 average in a regular level history course, or a 90 average in an honors level course; approval by Dept. Chair

**(242) P.S.E. 1 credit College Prep GRADE 12**

Political Science and Economics is a course designed to prepare seniors for their place in American society. Dealing with an in-depth examination of the American governmental system, initial topics center on general theories of how governments have developed and concentrate on the evolution and interpretation of our Constitution. Emphasis on current events related to course topics. The economics portion of the course addresses practical economic issues. What is the role of the informed consumer in our economic system? Topics include income tax, banking and credit, college financing and insurance.

**(243) HONORS POLITICAL SCIENCE 1 credit Honors GRADE 12**

This course will demand independent reading of the textbook as well as supplemental readings which will accompany the topics covered. The topics covered will be essentially the same as the regular level courses, with a deeper understanding and a faster pace.

**Prerequisite:** 93 average in a regular level history course the previous year, or a 90 average in an honors level course.

**(256) AMERICAN CRIMINAL JUSTICE .5 credit College Prep GRADE 11-12**

This course will explore the American criminal justice system, its unique history, the areas of law enforcement, the state and federal court systems, and the state and federal prison systems. Students will learn through projects, lessons, guest speakers relevant to the class.

**(257) CURRENT EVENTS .5 credit College Prep GRADE 11- 12**

This course is designed to provide a realization of local, state, national, and international current issues. Through the use of the media (printed and electronic – i.e., Upfront and Channel One), students will gain an awareness of events shaping their world. Grades will be determined by the successful completion of course requirements. These will include proper notebook completion, quizzes, written and oral reports on assigned readings and viewing projects, and final examination.

**(254) ADVANCED PLACEMENT U.S. HISTORY 1 credit AP GRADE 11-12**

This course, comparable to a college introduction survey-seminar course, is offered to highly motivated juniors and seniors. Colonial to present history of the United States will be studied. Requirements include extensive individual reading and research on a variety of seminar topics. Superior writing skills are expected and required. Students are also required to take the AP United States History Exam in May and are exempt from the Notre Dame final exam. The registration fee for the AP exam must be paid by the student.

**Prerequisite:** Achieving the minimum recommended critical reading and writing scores for AP US History in the PSAT/NMSQT and approval of the department chairperson.

**(255) ADVANCED PLACEMENT EUROPEAN HISTORY 1 credit AP  
GRADE 11-12**

This course, comparable to a college introduction survey-seminar course, is offered to highly motivated juniors and seniors. European history from the 1300s to present will be surveyed using the text and supplemental readings and presentations. Superior writing skills are required. Students must pay the registration fee and take the AP European History exam in May and are exempt from the Notre Dame final exam.

**Prerequisite:** Achieving the minimum recommended critical reading and writing scores for AP European History in the PSAT/NMSQT and approval of the department chairperson.

**(259) WORLD GEOGRAPHY (EXPLORING YOUR WORLD) .5 credit**

**College Prep GRADE 11-12**

Where are you in this world? What is the world all about? Oceans, continents, clouds, earthquakes, languages, populations: examining and applying the five Themes of Geography will help explain and find answers to these topics. In addition, maps, maps, maps help students picture the world and their place in it. This class presents opportunities to develop students' awareness and to transform that awareness into practical knowledge of today's world.

**(260) INTRODUCTION TO SOCIOLOGY .5 credit College Prep GRADE 11-12**

Introduction to Sociology is a one-semester course that is designed to introduce students to the sociological study of society. We will focus on major themes in Sociological thinking including the interplay between the individual and society, how society is both stable and changing, the causes and consequences of social inequality, and the social construction of human life. This is a largely discussion based course with daily notes and writings. There will be quizzes throughout the semester and an end of term essay that will demonstrate student's understandings of social interaction, social institutions, and social change.

**(261) INTRODUCTION TO PSYCHOLOGY .5 credit College Prep**

**GRADE 11-12**

Introduction to psychology is a one-semester course that examines an individual's experiences and behavior and his/her relationship to the behavior of others. Psychology attempts to answer the why of behavior and forces us to examine self. Emphasis will be on the following topics: Learning, Personality, Intelligence, Biological influences on behavior, as well as our senses.

**(265) HOLOCAUST/GENOCIDE: HUMAN CATASTOPHES**

**.5 credit Honors GRADE 11-12**

Holocaust and Genocide Studies will enhance students' study of the Holocaust as a significant event in human history, to recognize the complexity of choices made by individuals, and to define the role and responsibility of the individual to uphold the principles of moral and ethical behavior.

This course will promote critical thinking and interaction skills among students in a civil and socially responsible manner while examining the effects of prejudice, bigotry, and anti-Semitism.

During this intense, challenging, and comprehensive study, students will experience Holocaust and Genocide primary sources, survival testimony, and literature. Student's work will be assembled and maintained in a comprehensive portfolio.

**Prerequisite:** Satisfactory completion of both American and Honors World Cultures, with a Honors World minimum grade of 93. Students must be admitted by interview.



## **THEOLOGY DEPARTMENT**

### **(050) INTRODUCTION TO CATHOLIC THOUGHT 1credit College Prep GRADE 9,10,11,12**

This course is designed for students transitioning to ND who have a limited knowledge base in Roman Catholic doctrine. The course is not a remedial presentation, but rather a foundation for future religious study. Topics to be included will be an introduction to Scripture, the sacraments and symbols of the Church, ethics and moral principles, and Catholic thought and spirituality.

**\*\*\*Enrollment will be limited to students entering Notre Dame for the first time.**

### **(010) THE REVELATION OF JESUS CHRIST IN SCRIPTURE .5 credit College Prep GRADE 9**

The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible they will come to encounter the living Work of God, Jesus Christ. In the course they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. If they have not been taught this earlier, they will learn how to read the Bible and will become familiar with the major sections of the Bible and the books included in each section. The students will pay particular attention to the Gospels, where they may grow to know and love Jesus Christ more personally.

### **(015) WHO IS JESUS CHRIST .5 credit College Prep GRADE 9**

The purpose of this course is to introduce students to the mystery of Jesus Christ, the living Word of God, the Second Person of the Blessed Trinity. Students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn about who he calls them to be.

### **(020) THE MISSION OF JESUS CHRIST .5 credit College Prep GRADE 10 (The Paschal Mystery)**

The purpose of this course is to help students understand all that God has done for us through his Son, Jesus Christ. Through this course of study, students will learn that for all eternity, God has planned for us to share eternal happiness with him, which is accomplished through the redemption Christ won for us. Students will learn that they share in this redemption only in and through Jesus Christ. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails.

### **(025) CHRIST'S MISSION CONTINUES IN THE CHURCH .5 credit College Prep GRADE 10**

The purpose of this course is to help the students understand that in and through the Church they encounter the living Jesus Christ. They 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 students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. In this course, students will learn not so much about events in the life of the Church but about the sacred nature of the Church.

**(030) SACRAMENTS AS PRIVILEGED ENCOUNTERS .5 credit College Prep  
GRADE 11**

The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life.

**(035) LIFE IN CHRIST .5 credit College Prep GRADE 11**

The purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples

**(040) RESPONDING TO THE CALL OF JESUS CHRIST .5 credit College prep  
GRADE 12**

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

**(045) Living as a Disciple of Jesus Christ in Society .5 credit College Prep  
GRADE 12**

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

## VOCATIONAL TECHNICAL PROGRAM

The time shared vocational-technical program is scheduled in collaboration with the **Bethlehem Area Vocational-Technical School (BAVTS)**, which serves students who reside in the Bethlehem, Northampton, and Saucon Valley school districts, and the **Career Institute of Technology (CIT)**, which services students who reside in the Pen Argyl, Bangor, Easton, Nazareth, and Wilson school districts. Notre Dame High School Administration recognizes that some high school students have special aptitudes and abilities in vocational and technical subjects which cannot be adequately provided for in the academic high school program. Therefore, students entering grades 11 and 12 who reside in one of the above-mentioned districts may apply to their respective vocational-technical school. While 10<sup>th</sup> grade student also have the option to apply, it is not recommended due to the increased likelihood of scheduling conflicts resulting in the need to take several summer classes to fulfill graduation requirements. Students who attend a vo-tech program will attend Notre Dame High School for three (3) periods each day, and the remainder of the school day will be spent at the vocational-technical school. Students Will receive three (3) credits for each year that they attend vo-tech. For further information and a complete list of courses offered, please contact the Guidance Office at 610-867-7012. **Please note that students who enroll in a vocational-technical school program are still required to complete ALL graduation requirements set by Notre Dame High School in addition to their Vocational-technical program requirements.** Because of the instruction time lost in traveling to and from the vo-tech school, students *will* typically be at least one (1) credit short each year they attend vo-tech, and will need to make these credits up through independent study options, online classes, summer school, or a combination of these methods. Students registering for vo-tech are expected to attend their district vocational school regardless of the Notre Dame academic calendar. If the vocational school is in session on a day that Notre Dame is not, you are still expected to attend you to-tech program.

### PROGRAMS OFFERED

#### BETHLEHEM AREA VOCATIONAL-TECHNICAL SCHOOL

**Construction Cluster:** Cabinetmaking, Carpentry, Carpentry & Building Trades, Electrical Construction, HVAC, Masonry, Plumbing

**Creative Cluster:** Commercial Art, Fashion Industries Graphic Communications, Video Media Arts, Web Design & Development

**Culinary Arts Cluster:** Culinary Arts, Baking

**Health Cluster:** Medical Sciences, Health Careers

**Services Cluster:** Cosmetology, Protective Services

**Transportation Cluster:** Automotive Technology, Auto Collision

**Manufacturing Cluster:** Academy of Engineering, Electronic Engineering & Manufacturing, Precision Machining, Welding Technologies

*For program descriptions and other information, visit [www.bethlehemavts.org](http://www.bethlehemavts.org)*

## **CAREER INSTITUTE OF TECHNOLOGY**

Administrative Office Technology  
Automotive Collision & Refinishing  
Automotive Technology  
Building Construction Technology  
Building & Property Maintenance  
CAD & Engineering Graphics  
Computer Systems Networking & Telecommunications  
Cosmetology  
Culinary Arts  
Electrical Construction Technology  
Electronics Technology  
Health Related Technology  
Heating, Ventilation, Refrigeration, and Plumbing  
Hospitality & Lodging  
Machine Tool Technology  
Marketing & Advertising Technologies  
Masonry  
Occupational Child Care  
Protective Services  
Welding Technology

*For program descriptions and other information, visit [www.citvt.com](http://www.citvt.com)*

***Please schedule an appointment with your school counselor if you wish to apply.***