Notre Dame High School
Course Selection Guide


2024-2025

Dear Students,
The Notre Dame High School Course Selection Book contains information about the courses that are available at Notre Dame for the 2024-2025 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.

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. In addition, full credit classes cannot be changed mid-year.

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 1201 prior to submitting your course selection form.

Sincerely,


Mrs. Dena Farrell, M. Ed.
Assistant Principal

## Notre Dame High School Course Selection Procedure

- Review the appropriate Course Selection Form for your grade.
- 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.ndcrusders.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 selections forms.
- Discuss all selections with parent(s).
- Students are required to have six major courses per semester, in addition to the Health/PE and minors in grades $9-11$. Students must have a total of 8 credits.
- 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


## 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 course

## 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:

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 honor roll considerations.
Principal's List GPA $\geq 3.75$ - no grade below 90
Gold Honors GPA $\geq 3.5$ - no grade below 85
Blue Honors GPA $\geq 3.0-$ no grade below 80

## 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:

Thirty-two (32) credits are required for graduation

- 4 credits in Theology
- 4 credits in English
- 3 credits in Social Studies (American Cultures, World Cultures, \& P.S.E.)
- 3 credits in Mathematics
- 3 credits in Science
- 8 credits in Electives *2 elective credits must be from the foreign Language Department
- 3 credits in other required minors
- 1 credit in Health/PE each year
***Any change in the requirements must have the approval of the Principal and the Assistant Principal.


## CREDIT REQUIREMENTS BY SUBJECT AREA

## Theology

- 4 Credits Required

English

- 4 Credits Required


## Math

- 3 Credits Required


## Science

- 3 Credits Required
- Conceptual Physics - Freshman year
- Biology - Freshman year


## Social Studies

- 3 Credits Required
- American Cultures - Freshman year
- World Cultures- Sophomore year
- Political Science and Economics (PSE) - senior year


## Foreign Language

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

Minors

- 3 Credits Required, 1 credit per year in grades 9-11
- Minor classes are not optional


## Electives

- 8 credits 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 developing a positive attitude toward academic achievement.

Students are scheduled into regular high school classes, with the exception of one period every other day. For that 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 though consultation between the Aquinas Program teacher and subject area teachers. These adaptations are specified on the students' Individual Instructional Programs (IPs). Students in the Aquinas Program are eligible to take any course for which they qualify. Students in the Aquinas program who elect to attend Vo-Tech or CIT, may not be eligible to remain in the Aquinas program.

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 1114; Deputy Superintendent for the Diocese of Allentown, TBD.

## ART and MUSIC DEPARTMENT

## COURSE DESCRIPTIONS

## (701) THE ARTS . 25 credit Minor Cycle Grade 9

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 help the student think of creative solutions to various problems.

## (702) ART $1 \quad .5$ 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, 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 College Prep Grade 11-12

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

## (726) DRAWING $1 \quad .5$ 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 College Prep 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 College Prep 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.
(705) MUSIC . 25 credits Minor Cycle GRADE 10

This 9-week course will focus on the ability to understand and perform written music. Many people see music as something to enjoy, but far too complicated to truly understand. This class music will demystify written music and give each student the opportunity to interpret the "dots on the page" through the use of keyboard and battery percussion. This class will also continue the study of music history. This time, focusing on the popular culture music of the cinema and television.

## (710) MUSIC APPRECIATION . 25 credits Minor Cycle GRADE 9

This 9 -week course will focus on music and its use in our world, from its origins into the early $20^{\text {th }}$ century. The universal aspects of music, such as relations between particular periods of music, will also be explored. By studying the history of music, we will identify and hopefully - and rather appropriately learn to appreciate music's many uses, including religious, emotional, social, intellectual, and cultural connections.

## (713) MUSIC THEORY $1 \quad 1$ 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.

## (730) HISTORY OF MUSIC . 25 credits Minor Cycle GRADE 11

This 9 -week course will focus on popular music history of the $20^{\text {th }}$ and $21^{\text {st }}$ centuries. For the first half of the class, we will study the history rom Folk music to modern Country music. For the remainder of class, we will study the history from the Blues to modern R\&B and Hip-Hop. We will be using the music in these histories as case studies, building up the students' knowledge and experience to give them the tools to complete their final project: Writing their own song.
(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 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
## GRADE 11- <br> (660) PERSONAL FINANCE 5 credit College Prep 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 . 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 MGMT . 25 credit 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 . 25 credit 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) ADULTING 101 . 5 credit College Prep GRADE 11-12

In this course students will learn how to set goals, make decisions and problem solve in order to help them become successful adults and valuable members of society. A focus on how the problem-solving process can help you reason through real life issues is stressed in the class, as well as common problems in communication and strategies to solve them. Constructive methods for dealing with and resolving conflict are introduced. Analyzing various education and training options is also an important topic in the class.

## ENGLISH DEPARTMENT

 COURSE DESCRIPTIONS
## (111) HONORS SURVEY OF LITERATURE \&

## COMPOSITION 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 \& COMPOSITION <br> 1 credit College Prep 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 <br> 1 credit Basic Level <br> 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.
.25
(116) SAT PREP
credit Minor Cycle GRADE 10
SAT Prep prepares students for the SAT Critical Reading test. Students will learn strategies for success on the test, including time management, SAT-specific strategies, vocabulary and more.
(121) HONORS AMERICAN LITERATURE \& COMPOSITION 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 \&

 COMPOSITION 1 credit College Prep GRADE 10This 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, 7094 in English 1.
(130) LITERATURE $1 \quad 1$ 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 \&

## COMPOSITION 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. Students moving from World Lit to Honors Brit Lit must submit a writing sample and receive approval from current Honors Brit Lit teacher.

## (132) BRITISH LITERTURE \& COMPOSITION 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 \&

 COMPOSITION 1 credit Honors GRADE 12This 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 \& COMPOSITION

## 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, 70-94 in Literature 1.

## (160) HONORS JOURNALISM $1 \quad 1$ 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 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

 \& LITERATURE 1 credit Honors GRADE 12This 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 5paragraph essay assignment.
(165) COLLEGE WRITING \& LITERATURE 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 5paragraph essay assignment.

## (166) AP ENGLISH LANGUAGE AND COMPOSITION

## Advanced

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 Honors British Literature.

## (167) THEATER CLASS . 5 credit College Prep GRADE 11-12

Whether you have some or no experience in theater, this course will open new doors and provide a firm understanding of the actor's craft. We will begin with some basic improvisatory exercises to explore basic principles of acting, which will help you expand your expressive capabilities, imagination and spontaneity, and give you greater confidence on stage and in front of people. At the same time, you will use your growing knowledge of the craft to analyze the work of actors on stage and film. Finally, you will work on scenes and monologues from various plays, giving you the basic tools of text analysis, the principle took with which an actor figures out a text. It is my hope to incorporate performance opportunities with an audience throughout the semester.

## (168) CREATIVE WRITING 5 credit College Prep GRADE 11-12

Students in this writing-intensive elective course will read, critique, and compose original poetry, essays, short fiction, and creative non-fiction. Students will examine the works of published writers as well as peers to discover, expand, and refine their own skills, voice, and repertoire. Drawing inspiration from their own life and experiences as well as the works of notable authors, students will compose a plethora of original prose, helping to incorporate their own unique creativity and style in their written work. The course is designed to mold students as both dynamic writers as well as readers who think as writers. It provides an opportunity for upper class high school students to pursue advanced creative writing work. Each student will submit at least one completed piece for publication in a yearly literary magazine.

## (170) AP LITERATURE .5 credit College Prep GRADE 12

The content for this course complies with the requirements set forth by the College
Board English Literature and Composition course description and the syllabus is approved by the College Board AP course audit committee. The purpose of this class is to provide students with the opportunity to read, analyze research, discuss, and write about literature with the depth and sophistication expected in an introductory college class. This will be accomplished through the study of a wide range of authors and various genres, including novels, short stories, poems, and plays. Students will be encouraged to appreciate the beauty and artistry of literary works while developing close reading, critical thinking, oral communication, and writing skills. Students who elect to take this course are required to take the AP English Literature and Composition exam in May (Fee Required).
Prerequisite: Summer reading requirement. Current teacher and AP English Literature and Composition teacher recommendation, as well as a 93 or above in Honors British Literature or a 90 or above in AP English Language and Composition.

## FOREIGN LANGUAGE DEPARTMENT COURSE DESCRIPTIONS

## (520) SPANISH $1 \quad 1$ 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 21 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 31 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 $4 \quad 1$ 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 $1 \quad 1$ 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 21 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 $3 \quad 1$ 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 $4 \quad 1$ 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.

## (540) ITALIAN $1 \quad 1$ credit College Prep GRADE 9-11

In this course students will be introduced to the Italian language and culture. Students will learn basic pronunciation, vocabulary, and grammatical construction through oral and written practice. Material will be presented in meaningful activities that emphasize all four language skills: speaking, listening, reading, and writing. Cultural knowledge that will build a deeper understanding of Italy is a crucial component of the course content. The instructor will use the target language as much as possible in class to create the context for language development.
Prerequisites: The student must have attained at least a seventh-grade reading level and have knowledge of basic English grammar.

## (541) ITALIAN $2 \quad 1$ credit College Prep GRADE 10-12

In Italian 2 students will continue to build upon the foundation learned in Italian 1. Further development of the four language skills of speaking, listening, reading, and writing is an essential part of this course. Classes will continue to utilize material that integrates the study of the Italian language, customs, and culture in both traditional and multi-tiered fashion. Italian as the primary language of communication will be stressed.
Prerequisites: Grade 70 or above in Italian 1 and the teacher's approval.

## (542) HONORS ITALIAN 31 credit Honors GRADE 11-12

The focus of the Italian 3 curriculum is to increase the student's ability to communicate in Italian.
Students will continue to build on the skills acquired in Italian 2, striving for a higher level of sophistication and fluency in writing, reading, listening, and speaking. In this course, students will be exposed to vocabulary, grammar, an in-depth understanding of contemporary Italian culture, distinctive and cohesive integration of videos, as well as reading various forms of literature.
Classes are mostly conducted in the target language.
Prerequisites: Grade 85 or above in Italian 2 and the teacher's approval.

# HEALTH, PHYSICAL EDUCATION \& DRIVER EDUCATION COURSE DESCRIPTIONS 

## (850) DRIVER EDUCATION

.25 credit Minor
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.

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

Learn to shield yourself by arming your body with the BEST, STRONGEST version of yourself. Arm your body and be able to protect yourself with assertive self-defense moves. Learn \& practice basic kicks \& punches given a variety of life-like scenarios. Refresh your mind with a strong outlook when we are building positive mental strength; learn verbal confrontation skills and safety strategies. Lift your spirit with an abundance of wellness resources including, confidence builder activities. Students will practice being consistently present in heart, mind and soul; students have the opportunity to demonstrate this by being alert and having a sense of their surroundings with confidence through physiological and psychological exercise to concept any situations with this course. Shield your body from vulnerability and present the world with your well-rounded, STRONGEST version of yourself.

## (810) PHYSICAL EDUCATION/

 WELLNESS . 5 credit College Prep GRADE 9-11The 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.

## (860) SPORTS MANAGEMENT 1 . 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 SUCCESSFULL

 COACHING . 5 credit College Prep GRADE 11-12This 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.

## (862) ADVANCED TEAM SPORTS . 5 credit College Prep GRADE 11-12

This course is designed for advanced physical education athletes/students. This course provides an opportunity for students to perform in a variety of competitive sports. It is appropriate for students who are team sports oriented, including but not limited to: football, soccer, Frisbee, basketball, hockey, handball, lacrosse, softball, volleyball, and tennis. Various other vigorous team activities may be supplemented depending on space availability. This is a coed class that is offered to 11th and 12th grade students.

## (871) TONE \& STREGHTHEN . 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. Approximately 60\% of the class will be spent in the weight room or using strength training videos, and the remainder 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.

## (855) FIRST AID TRAINING . 5 credit College Prep GRADE 11-12

Students will learn emergency first aid treatment and prevention of injuries. This will help students learn the appropriate steps necessary to help the victim until professional help arrives. If time permits students will take their tests needed to be First Aid and CPR certified.

## MATH DEPARTMENT COURSE DESCRIPTIONS

## (311) HONORS ALGEBRA $1 \quad 1$ 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 $1 \quad 1$ 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 11 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 conductive 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 21 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.
(324) SURVEY OF MATHEMATICS 1 credit College Prep GRADE 12

This course is designed for those students who would like to take a fourth year of math but do not qualify or do not want to take College Prep Pre-calculus. The curriculum will cover topics typically found in introductory college level math classes such as sets, logic, number theory, probability and statistics, number systems and consumer math.
Prerequisite: Current teacher recommendation and completion of two years of College Prep Algebra and College Prep Geometry with a grade between 75 and 86 or completion of Honors Algebra 2/ Honors Geometry with a grade below 80.

## (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 21 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 right triangle trigonometry and matrices (time permitting). 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 21 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 21 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 seconddegree (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) CP PRE-CALCULUS

1 credit College Prep GRADE 11-12
This course will cover topics typically found in a Pre-calculus course but at a college prep level. The student will learn about properties of functions, polynomials, rational functions, exponential and logarithmic functions, right triangle and analytical trigonometry, matrices and probability and statistics (time permitting.) It is expected that students who register for this class have a strong algebraic background in various algebra 2 topics such as factoring and solving equations. 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 87 or higher or completion of Honors Algebra 2 and Honors Geometry with a grade between 80 and 87. Note: Students who take this class in $11^{\text {th }}$ grade are not eligible to take AP or 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 TI83/84 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.

## Advanced <br> (345) AP PRE-CALCULUS 1 credit Placement GRADE 11-12

The content for this course complies with the requirements set forth in the College Board Pre-calculus course framework. Topics covered include Polynomial and Rational Functions, Exponential and Logarithmic Functions, and Trigonometric and Polar Functions. If time permits, the additional topics of Functions Involving Parameters, Vectors, and Matrices could be covered (although those topics will not be covered on the AP exam.) Students who elect to take this course are required to take the Pre-calculus exam in May. (Fee required.) A TI-83/84 graphing calculator is required for this course.
*For those students that will attend DeSales University upon graduation from Notre Dame, college credit will be given by DeSales for successful completion of the course.
Prerequisites: Current teacher recommendation, Grade of 90 or higher in Honors Geometry and Honors Algebra 2 and Math Department Chair Approval. May only be taken by Sophomores with approval from the Assistant Principal.

## (354) AP CALCULUS (AB) <br> 1 credit 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.
*For those students that will attend DeSales University upon graduation from Notre Dame, college credit will be given by DeSales for successful completion of the course. Prerequisites: Current teacher recommendation, Grade of 90 or higher in Honors Precalculus or Grade of 86 or higher in AP Precalculus and Math 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 or grade of 80 or higher in AP 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 CP Pre-Calculus 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
#### Abstract

GRADE

\section*{(415) BASICS CONCEPTUAL PHYSICS 1 credit Basic Level 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, Part 1.


## (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 physic courses 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 Level 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 $1 \quad 1$ 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. Science projects and group work will be required. Prerequisites: $80 \%$ minimum grade in Conceptual Physics or; 95\% minimum grade in Basic Conceptual Physics and Recommendation of the teacher.
(424) HONORS BIOLOGY 1 credit Honors GRADE 9-10

This full-year course is designed for the student who is adept at, and interested in science. Major biological concepts in the fields of cytology, zoology, botany, genetics, evolution, and ecology are presented in class lectures. These concepts are reinforced through laboratory experiences, dissections, and supplemental readings. Students will be required to complete independent research and group projects to improve higher order thinking skills.
Prerequisites: $85 \%$ minimum grade in Honors Conceptual Physics or $95 \%$ minimum grade in CP Conceptual Physics. Incoming freshmen must receive a passing grade on the math placement exam, and take Honors Algebra 2 concurrently.
(426) MEDICAL MICROBIOLOGY \& INFECTIOUS DISEASES .5 credit College Prep GRADE 11-12
Medical Microbiology and Infectious Diseases (Semester Course)
Medical microbiology and infectious diseases covers mechanisms of infectious disease transmission, principles of aseptic practice, and the role of the human body's normal microflora. The biology of bacterial, viral, fungal, and parasitic pathogens and the diseases they cause will be discussed along with public health threats, antibiotic resistance and the microbiome.
There will be a laboratory component to this course.
Prerequisite: 80 or better in biology with a junior or senior status.

## (428) ADVANCED PLACEMENT

## BIOLOGY 1 credit Advanced Placement GRADE 11-12

This is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. The AP Biology course is equivalent to a two-semester college introductory biology course for biology majors. The framework of this course specifies what students must know, be able to do, and understand, with a focus on the big ideas that encompass core principles, theories, and processes of the discipline. The framework also encourages instruction that prepares students for advanced work in STEM and life science-related majors.
Laboratory Requirement: This course requires approximately $25 \%$ of instructional time spend in handson laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.
Prerequisites: Students should have successfully completed Honors Biology and Honors Chemistry, or earned a 90 or better in CP Chem.

## (432) CHEMISTRY $1 \quad 1$ 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 Advanced Placement 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 Chemistry 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.

## (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 (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 courses 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 Pre-Calculus (may be taken concurrently), as well as current science AND math teacher recommendations.

## (448) ADVANCED PLACEMENT PHYSICS

## 1 credit Advanced Placement 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.

## (449) CP ANATOMY AND

 PHYSIOLOGY 1 credit College Prep GRADE 11-12Anatomy 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 both General Biology and General Chemistry (or be taking chemistry concurrently).

## (450) HONORS ANATOMY AND

 PHYSIOLOGY 1 credit Honors GRADE 11-12This 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 1 . 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 11-12This 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. Handson 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 or various samples.
Prerequisites: Successful completion of at least two years of science including Biology. Chemistry is recommended for this course but not required.

## (431) CHEMISTRY IN THE COMMUNITY 1 credit Basic Level GRADE 9

Chemistry in the Community is a first-year high school chemistry course that teaches chemistry concepts through the lens of societal issues. The seven units use real world examples to expose students to concepts in materials science, environmental chemistry, organic chemistry, biochemistry, and industrial chemistry. This course is designed for the student who is not necessarily interested in a career in the sciences. Students evaluate date and make decisions based on their observations and knowledge gained through the curriculum.
Prerequisites: Passing grades in Basic Biology or Biology 1.

## SOCIAL STUDIES DEPARTMENT COURSE DESCRIPTIONS

## (212) AMERICAN CULTURES (1877PRESENT)

## 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: Placement is dependent on English placement test score.

## (222) WORLD CULTURES 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 college prep level history course, or a 90 average in an honors level history 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 college prep level history course the previous year, or a 90 average in an honors level history 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 <br> 1 credit Advanced Placement 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: Students must have a minimum of $90 \%$ in both Honors World Cultures and Honors American Literature.

## (255) ADVANCED PLACEMENT

 EUROPEAN HISTORY 1 credit Advanced Placement GRADE 11-12This course, comparable to a college introduction survey-seminar course, is offered to highly motivated juniors and seniors. European history from the 1300 s 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: Students must have a minimum of $90 \%$ in both Honors World Cultures and Honors American Literature.

## (259) WORLD GEOGRAPHY (EXPLORING

 YOUR WORLD) . 5 credit College Prep GRADE 11-12Where 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 discussionbased 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.

## THEOLOGY DEPARTMENT COURSE DESCRIPTION

## (010) FRESHMAN THEOLOGY 1 . 5 credit College Prep GRADE 9

## (The revelation of Jesus Christ in scripture)

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) FRESHMAN THEOLOGY 2 . 5 credit College Prep GRADE 9

(Who is Jesus Christ)
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) SOPHOMORE THEOLOGY 1

. 5 credit College Prep GRADE 10

## (The Mission of Jesus Christ)

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) SOPHOMORE THEOLOGY 2 . 5 credit College Prep GRADE 10

## (Christ's Mission continues in the church)

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) JUNIOR THEOLOGY 1 <br> .5 credit College Prep GRADE 11

## (Sacrament as privileged encounters)

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) JUNIOR THEOLOGY 2 . 5 credit College Prep GRADE 11

## (Life in Christ)

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) SENIOR THEOLOGY 1 . 5 credit College Prep GRADE 12

## (Responding to the call of Jesus Christ)

The purpose of this course is to help students discover why life with Christ in his Church is more coherent, reasonable, noble, and attractive than any alternative the culture offers. This course will provide young adults with the skills to articulate the faith and equip them to uncover the errors present in secularism as well as many contemporary religions, cults, and sects. The hallmark of this course is to appreciate the Catholic Church as founded by Jesus Christ, and therefore free from errors in matters of faith and morals.

## (045) SENIOR THEOLOGY 2 . 5 credit College Prep GRADE 12

(Living as a disciple of Jesus Christ in society)
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.

## (031) SOCIAL JUSTICE . 5 credit College Prep GRADE 11-12

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.

## VHS LEARNING

If a student is interested in taking a class/subject not currently offered at Notre Dame, they may have the opportunity to take the course through our online provider, VHS Learning. Students enrolled in these classes have one (1) period of their regular class schedule set aside to work on their online class, but should be advised that they will also need to complete work outside of the school day (a standard level VHS course requires 6-8 hours per week, an Honors level course requires $8-10$ hours per week, and an AP course requires 10-12 hours per week). The coursework is accessible to students anywhere that they have internet access. Using the VHS platform, students communicate with their online teacher, complete weekly coursework, and participate in discussion boards with classmates from around the world. The VHS teacher will set weekly assignments and due dates, and it is the student's responsibility to adhere to these.

Over 300 courses (including Advanced Placement) are offered through this program. The course work is intense; to be successful, students must be highly motivated, able to work independently, and have strong time management skills.

Students must have the approval of the Assistant Principal and the appropriate department chair to register for a VHS course. Once classes begin, students are NOT permitted to drop a VHS course for any reason. The VHS instructors, not the teachers at Notre Dame, assign grades. The grades are included as part of the student's grade point average, and Notre Dame's grading plan applies to these courses. Students may take a maximum of one (1) VHS course per semester.

For additional information, including the catalog of all available courses, please visit www.vhslearning.org.

## VOCATIONAL-TECHNICAL PROGRAMS

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 serves 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 $10^{\text {th }}$ grade students 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. 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 vocational-technical 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 in the Aquinas program who elect to attend Vo-Tech or CIT, may not be eligible to remain in the Aquinas program.

Students registering for vocational-technical school 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 your Vo-tech program.

## PROGRAMS OFFERED

Bethlehem Area Vocational-Technical School (BAVTS)<br>Construction: Carpentry/Building Trades, Electrical Construction, HVAC, Masonry, Plumbing Creative: Commercial Art/Graphic Communications, Video \& Media Arts, Web Design Culinary: Commercial Baking, Culinary Arts<br>Health: Academy for Medical Science, Health Careers, Intro to Sports Medicine Careers Manufacturing: Academy for Applied Engineering, Automated Manufacturing Technology, Electronics Technology, Industrial Design/Advanced Manufacturing, Welding<br>Service \& Safety: Computer Networking, Cosmetology, Esthetics, Protective Services<br>Transportation: Automotive Collision Repair, Automotive Technology

For program descriptions and other information, visit www.bethlehemavts.org

## Career Institute of Technology (CIT)

Construction: Building \& Property Maintenance, Building Construction Technology, Electrical Construction Technology, HVR\&P, Masonry

Engineering \& Information Technology: CAD/Engineering Graphics, Computer Systems Networking \& Telecommunications, Electronics Technology

Health \& Human Services: Cosmetology, Culinary Arts, Early Childhood Education, Health-Related Technology, Marketing \& Retail Services, Protective Services

Manufacturing: Automotive Collision Technology, Automotive Technology, Machine Tool Technology, Small Engine \& Outdoor Equipment Technology, Welding Technology

For program descriptions and other information, visit www.citvt.com
Please schedule an appointment with your school counselor if you wish to apply.

