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## Course Catalog 2013-2014

Notre Dame High School, San Jose, California


A Catholic college Pregaratory High school for Young women Since 1851

Dear Students and Parents,

The process of planning the program of studies for the young woman at Notre Dame High School is an important one. Notre Dame has developed a support system to enable the student and parent to make the best-informed decisions possible. This course catalog, along with the planning and scheduling forms, is designed to be helpful in organizing your thoughts and choices. One must keep in mind Notre Dame's graduation requirements and college and university requirements when making long range plans. These plans must start from the first year of high school, remembering that changes may be made as goals and abilities are clarified. Notre Dame wants to provide you with as much information as possible. Your mentor, counselor, and teachers are important to your academic planning and are available to you for any support and information you may need.

Sincerely,

Mary Beth Riley
Principal

Janice Tupaj-Farthing
Vice Principal, Academic Affairs
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## Guidelines for Course Selection

- Students must complete 235 credits to graduate.
- All students must take Peace and Social Justice in their junior year. Two other semesters of Religious Studies electives must be taken between junior and senior year.
- Students are required to complete 25 credits in general electives.
- Students must take six (6) classes each semester.
- If you are a senior taking a college class, you only need five (5) classes on campus. You must register for 6 classes and we will make the adjustment when you present proof of registration. Students considering this must meet with their counselor to discuss their program options before enrolling in the college class.
- Students must successfully complete all Community Service Learning requirements.
- Students may satisfy the UC and CSU entrance requirements by completing any two semesters of acceptable Visual/Performing Arts courses provided that both courses are from a single Visual and Performing Arts area.
- The current requirement for Modern Language study at Notre Dame is two years. However, both the Administration and the Modern Language Department, in consultation with the Director of College Counseling, recommend that most students at Notre Dame complete a four-year sequence in one language.
- The current graduation requirement for Mathematics study at Notre Dame is three years. The Mathematics Department strongly recommends that all students enroll in a math course beyond Algebra II. As they prepare for college, most students are required to take some form of standardized math test-SAT, SAT II, ACT, ELM during their senior year. In a recent communication from the Office of the Chancellor of the California State University, "All students are encouraged to take Mathematics in their senior year of high school since students whose last math course was completed in the junior year or earlier often have difficulty with the required college-level mathematics courses and with the Entry Level Mathematics (ELM) requirement." (Focus on Mathematics booklet, CSU)


## Scheduling Instructions

## Preparation

Although your long range plans change as you learn more about yourself, a helpful preparation for your registration process includes the following steps:

1. Write out your long-term goals.
2. List all the colleges and universities to which you might like to apply. There are four different college/university systems available to Notre Dame students: The University of California, the California State University, private colleges or out of state public universities and the community colleges. When you are choosing your courses and planning your high school program, it is IMPORTANT to be aware of the admission requirements of each of the college or university systems. Each system may have: 1) an examination requirement (SAT/ACT/SATII), 2) a scholarship requirement (GPA), 3) a subject requirement
3. If the admission requirements of the colleges on your list vary, choose the one with the most rigorous requirements as the guide for the courses you choose to take.
4. Review the four year plan that you developed with your counselor.
5. As you read the course descriptions carefully, check prerequisites.
6. Guided by the graduation requirements and your goals, plan your course of studies for the year.

## Completing your On-line Scheduling Form:

1. Course selection will take place on-line through PowerSchool. You will receive your login information in the mail.
2. In the course request process for some subjects, students will have the opportunity to choose a first-choice and alternate course. As much as possible, these requests will be honored; however, in some cases another course may be inserted into the student's schedule due to the constraints of the schedule and when sections are actually offered. An appropriate alternative for fulfillment of the particular graduation requirement will be offered.
3. All students are required to take 6 classes each semester. A seventh class may be taken if the student has at least a 3.2 GPA for the semester prior to scheduling.
4. The online course selection process will identify your availability for any Honors or AP courses you have applied to take.
5. When an alternative course is necessary, you will be prompted to indicate an alternative.
6. Review your program with your mentor.
7. After making your final selections, print out your course selections, have your parents sign the printout and return to your mentor by the deadline.

## POLICY REGARDING DROPPING A CLASS OR CHANGING A SCHEDULE

Only under special circumstances (as described below) may a student drop a class or ask for a change of schedule.

Requests to change a class must be made within the FIRST week of each semester. If a request is made after the first marking period, the student will receive a "WF" (Withdraw failing) in the dropped class as the semester grade. The WF is not calculated in the GPA but does show on the transcript.

Following are the criteria used for determining what action is to be taken when a request is made to change or drop a class. Each request is looked at individually in the light of the criteria below. The final decision will be made at the discretion of the Vice Principal, Academic Affairs.

1. Serious difficulty with subject matter after reasonable attempts to improve have been made by the student.
2. Serious, irreconcilable conflict between a teacher and student following sincere attempts to solve problems.
3. Health problems which mandate removal from a course.
4. Too difficult a schedule given academic workload and student ability.

In the case of yearlong courses, a student may drop at the semester if her semester grade is a D or below and the following conditions have been met:

1. In consultation with her instructor and advisor, it is agreed that it is in her best interest to withdraw from the class because of ability. This presumes that the student has worked consistently and to the best of her ability in the previous semester.
2. The course is not needed for graduation, is an elective, or an alternative schedule can be developed (based on space available).

In adjusting a schedule, keep in mind that all students (freshmen, sophomores, juniors and seniors) must take a minimum of six classes.

## THE PROCEDURE FOR DROPPING A CLASS:

1. The student must make an appointment to see her counselor.
2. When appropriate, the student must speak with her teacher in order to obtain their approval to drop the class. The teacher will provide their feedback and/or approval directly to the student's counselor.
3. The parent/guardian must write a note of permission to the counselor for the student's file. This note must include the name of the course she is dropping, as well as the course to be added as a replacement.
4. Parent permission with the $\$ 20$ fee for the schedule change must be returned to her counselor.

## NOTRE DAME REQUIREMENTS FOR GRADUATION

TOTAL CREDITS REQUIRED FOR GRADUATION: 235 (one semester $=5$ credits). The 235 credits should include the following courses:

| ENGLISH: |  |  |  |
| :---: | :---: | :---: | :---: |
| 40 credits to include: | Freshman | English I | 2 sem |
|  | Sophomore | English II | 2 sem |
|  | Junior | English III | 2 sem |
|  | Senior | English IV | 2 sem |
| GENERAL ELECTIVES: |  |  |  |
| 25 credits to include: | At any level | Any area of students' choice | 5 sem |
| MATHEMATICS: |  |  |  |
| 30 credits to include: | At any level | Geometry | 2 sem |
|  | At any level | Algebra II | 2 sem |
|  | At any level | any other courses listed | 2 sem |
| MODERN LANGUAGE: |  |  |  |
| 20 credits in the same language to include: | $\begin{array}{ll}\text { At any level } & \text { Frenc } \\ 30 \text { cr }\end{array}$ | Spanish sequence s recommended | 4 sem |
| PHYSICAL EDUCATION: |  |  |  |
| 10 credits to include: | Freshman grades 10-12 | Intro to Healthy Living Elective | $\begin{aligned} & 1 \text { sem } \\ & 1 \text { sem } \end{aligned}$ |
| RELIGIOUS STUDIES: |  |  |  |
| 35 credits to include: | Freshman | Self, Spirituality and Scripture | 2 sem |
|  | Sophomore | Gospel Stories, Gospel Choices | 2 sem |
|  | Junior | Peace and Justice | 1 sem |
|  | Junior or Senior | Electives | 2 sem |
| SCIENCE: |  |  |  |
| 30 credits to include: | Freshman or Sophomore | Biology | 2 sem |
|  | At any level | Physical Science elect. | 2 sem |
|  | (see department requirements on page 31) |  | 2 sem |
| SOCIAL STUDIES: |  |  |  |
| 35 credits to include: | Freshman | Global Studies | 1 sem |
|  | Sophomore | Modern World History | 2 sem |
|  | Junior | U.S. History | 2 sem |
|  | Senior | U.S. Government | 1 sem |
|  |  | Elective | 1 sem |
| VISUAL AND PERFORMING ARTS: |  |  |  |
| 10 credits to include: | At any level | Electives | 2 sem |

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## COMMUNITY SERVICE LEARNING REQUIREMENT

Notre Dame High School requires community service learning as part of the graduation requirement. Notre Dame strives for a mutually beneficial program for our students and the community. This requirement is part of our Graduation Outcomes as we prepare young women to be socially responsible and to answer the call for social justice. Our community service learning program meets the school's mission, the Sisters of Notre Dame de Namur's mission, and teaches students what they need to know for life - - giving to the community in which they live.

The outcome of community service learning is to instill in our students the love of service for others and challenge them to live out the Gospel values through a commitment to social justice, compassion, respect for the dignity of all persons, and awareness of the needs of others. The program strives to connect classroom learning with service so that the student understands that what she is learning can be applied towards reaching out to others. It is our belief that our students learn they have so much to offer, but even more to gain from their commitment to helping others.

It is our desire to make this experience of service to others a rewarding learning opportunity. It is with this philosophy that we designed a unique service program to meet those objectives. We look forward to working with every student and to assist her in the journey to become an active and caring member of her community.

## FRESHMEN YEAR REQUIREMENT:

Freshmen are required to attend the Frosh Day of Service and provide 10 hours of service with women and children during the school year. Activities include tutoring, teaching, mentoring, and providing service at an agency event. Filing or grading papers does not count towards required hours.

## SOPHOMORE YEAR REQUIREMENT:

Sophomores are required to provide 15 hours of service with marginalized and vulnerable populations during the school year (i.e. the elderly, the physically/mentally impaired, refugees, and/or migrant workers). Activities include leading games, socializing with clients, providing meals, and volunteering at special events hosted by the agency.

## JUNIOR YEAR REQUIREMENT:

Juniors are required to provide 20 hours of service at one agency to address a local issue of the student's choice (i.e. environment, health care/hospital work, or work with the socio-economic disadvantaged). Activities may include park clean-ups, planting trees, participating in an advocacy, volunteering at events hosted by the agency, volunteering at a hospital, and serving meals. 10 hours may be completed during the summer prior to junior year.

## SENIOR YEAR REQUIREMENT:

The Senior Service Learning Project ( 25 hours) will provide the student the opportunity to gain experience in social activism and advocacy. As students grow in their understanding of justice and personal formation as members of a community beyond Notre Dame, they will apply their talents and knowledge, will become more open to growth and the pursuit of leadership, and understand how one walks with both feet of Christian service. Direct service is highly encouraged to be completed during the summer between junior and senior year.

## COLLEGE ADMISSION REQUIREMENTS

The following requirements for the UC, CSU, and private colleges are only an outline of those stated completely in the college admissions materials. These are the minimum requirements to be eligible for admissions consideration. Students who are typically admitted may take a more challenging program and/or have significantly higher GPAs than the minimum. Please consult the college counselor for more complete information. The UC websites, www.universityofcalifornia.edu; www.ucop.edu/doorways; and the CSU website, www.csumentor.edu, provide useful information.

CALIFORNIA STATE - UNIVERSITY OF CALIFORNIA COLLEGE ENTRANCE REQUIREMENTS

| COURSE | C.S.U. and U.C. SYSTEM |
| :--- | :--- |
| US History/ <br> Social Studies | 2 years including US History and World History |
| English | 4 years |
| Foreign Language | 2 years 3 years recommended |
| Mathematics | 3 years 4 years recommended - including |
| Algebra II |  |$|$| Arts | 2 yearlong visual or performing arts |
| :--- | :--- |
| Laboratory Science | (Biology, Chemistry, Physics) <br> 3 years recommended |
| College Prep Electives |  |

[Most Private Colleges have college entrance/requirements similar to UC and CSU] Unless otherwise noted*, all academic courses listed in this catalog meet both the CSU and UC entrance requirements.

* [Courses which do not meet entrance requirements at this time: Yearbook I, Yearbook II, Physical Education, Dance I, Fitness for Life, Self Spirituality and Scripture, Gospel Stories, Gospel Choices, Faith Values and Lifestyles, Women, Creativity, and Spirituality, Gifts, Leadership and Spirituality, Women of Scripture/Women of Service, Web Design, Video Production, Robotics, and all Student Assistantships]


## EXAM REQUIREMENTS:

 exams in Math and Science. See the College Counselor.
C.S.U.: SAT I or ACT

PRIVATE COLLEGES: Some private colleges require the SAT or ACT plus SAT II subject tests; refer to the specific college's website for admission test requirements.

GPA REQUIREMENTS: When calculating the GPA for eligibility, extra points may be assigned for up to four units (eight semesters) of UC certified honors level and AP courses taken in grades 10 and 11. See the College Counselor for a list of approved honors courses.
U.C. system: B or better grades are very important for admission. All required courses must be completed with a grade of "C" or higher. Students with a GPA of at least a 3.00 are index.
C.S.U.: All required courses must be completed with a grade of "C" or higher. A 2.0 or higher GPA for all courses taken in grades 10-12, excluding physical education, is required to be clearly eligible to apply. Students with a GPA between 2.0 and 3.0 may be eligible to apply if their SAT scores meet the requirements listed in the eligibility index.

## C.S.U. ELIGIBILITY INDEX

The eligibility index is a weighted combination of a student's grade point average during the final three years of high school and a score on either the ACT or the SAT I. The minimum eligibility for consideration for admission to the CSU is:

```
Total SAT I score +
(800 x high school grade point average) = 2900 or
(10x total ACT score) + (200 x high school grade point average) =694
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## COMMUNITY COLLEGES

Admission to California community colleges is open to all high school graduates.
A student attends a community college for a variety of reasons:

1. to take all the undergraduate General Education courses needed in order to transfer to a four-year college/university.
2. to take a two year skill program and complete the education in the two years. (example: LVN (Licensed Vocational Nurse) - two-year program)
3. to improve one's GPA and take courses necessary to gain admission to a four year college/university. (If one is not eligible upon graduation from high school, one can complete course requirements to transfer to public or private colleges.)

If you are planning to attend a community college you are encouraged to pursue a college preparatory high school program modeled after the U.C. or California State University requirements. This will prepare you to transfer to a four-year college or university after completing the community college program with the required transferable credits and the appropriate grade point average.

## PRIVATE COLLEGES/UNIVERSITIES

Private colleges make selective decisions regarding applicants for admission based on the following criteria: 1) high school record; 2) scores on College Entrance Examination Board tests (SAT I/ACT/SAT II) 3) school recommendations; 4) personal factors such as extracurricular involvement, character and leadership; 5) "fit" for the university.

You are encouraged to refer to the website of the college/university that you are interested in to learn the specific requirements.

## STEP TO COLLEGE

This is a California State University Program designed to foster collaboration between universities and high schools to increase high school matriculation to college. In addition, this program gives exceptional students the opportunity to experience the college environment and to increase their chances of being successful in college later in life. Step to College is open to students who are at least 16 years of age or are in their junior or senior year of High School. You may sign up for three to six units of university credit per semester, and will actually take courses on the SJSU campus. For more information, contact the Office of Registrar Services at 408-924-5680.

San Jose State sponsors a low-cost concurrent enrollment program for area high school students through the Step-to-College program. Students must have permission from their school principal and meet all the San Jose State University courses prerequisites, including placement exams. Contact the Registrar's office at San Jose State University for more information.

Through the Step to College program students who are approved by a Notre Dame High School counselor or the Vice-Principal, Academic Affairs may enroll in classes at San Jose State University for a nominal fee. This program is a privilege which is reserved for students who are in good academic standing. Students are also expected to enroll in at least 5 classes at N.D. Ordinarily, students must be seniors and must have maintained at least a 3.0 GPA. Juniors who have completed ND's offerings in math or foreign language may also request permission to participate. Students are required to submit an official transcript of their SJSU grades to the registrar at ND at the end of each semester. San Jose State classes will be taken for college credit and will not count toward ND's graduation requirements. Step to College students are expected to maintain satisfactory academic performance in all classes at ND and at SJSU.

Students enrolled in Step to College classes must have written permission from their parents to walk to and from SJSU without supervision. After registration they must report, in writing to the College Counselor, the name and schedule of the SJSU class(es). They are required to sign in and out with the attendance office each time they leave. If a student will miss part of a class at ND due to the schedule of her SJSU class, she must have advance permission, in writing, from the teacher whose class is affected.

Students who are planning to take Fall classes at SJSU must get ND approval by June 29, or they will not be granted permission to leave campus during the day. Permission to register for Spring semester classes must be requested before Christmas vacation. Step to College students register at SJSU on a space available basis. Although there is some flexibility, ND cannot guarantee that a student's schedule can be arranged to accommodate SJSU classes. Students may not register with SJSU without receiving prior permission from ND.

## ENGLISH

# [Unless otherwise noted, all academic courses in this department meet both CSU and UC entrance requirements] 

Notre Dame's English curriculum is sequential. Literature based, it encourages student-centered classrooms which balance active discussion and cooperative learning with short lectures and hands-on activities. Each level has required core readings. An instructor may supplement these with works from a list of approved texts, thereby allowing for variation and flexibility in the individual classroom. The curriculum provides frequent opportunities for building vocabulary as well as for developing oral and written skills. In addition, the program promotes learning outside the classroom, including field trips to relevant stage and cinema productions, art exhibits, and local lectures. Students who receive below a " $C$ " in their core English classes and who wish to maintain their eligibility for admission to a four year college are encouraged to take a UC approved summer school class. Summer reading, assigned in June, is required for each level.

## ENGLISH I - THE SELF WITHIN THE GLOBAL COMMUNITY <br> \#1010 10 credits - - Grade 9

English I provides students with skills in basic literary analysis, vocabulary building, research and fundamental composition. Emphasis is placed on understanding literary concepts such as irony, symbolism, motif, theme, characterization, and conflict. Concurrently, students practice the basics of successful expository and narrative writing. These units focus on properly structuring multi-paragraph essays, making optimum use of transitions, and effectively defending a thesis statement. First semester, cross-curricular support in research techniques is provided for the Religious Studies department's Women's Place Project. Second semester, students again make use of these skills for a short literary research project. Critical thinking and oral expression are rigorously encouraged. The themes covered at this level include identity, coming of age, the hero within, and one's relationship with the world. Film as a literary genre is also studied.

## ENGLISH II - HUMAN IDENTITY IN A WORLD OF CONFORMITY AND REBELLION; UTOPIAS AND DYSTOPIAS; THE BEHAVIOR BEHIND THE HOLOCAUST

## 10 credits - - Grade 10

Prerequisite: English I

The sophomore year assumes an understanding of the fundamental principles of literary analysis and composition skills introduced in English I. In English II, students become proficient in literary analysis, as well as expository and persuasive writing. In addition, the curriculum stresses vocabulary building, critical thinking, and oral expression. Students are encouraged to participate actively in class discussions and Socratic seminars. The $10^{\text {th }}$ grade curriculum includes an interdisciplinary study of human behavior that gives rise to catastrophic events like The Holocaust. The course focuses on themes such as identity, conformity, rebellion, inclusion/exclusion of groups, utopias/dystopias. Cross-curricular connections will be made throughout the year through assessments and discussions with World History and Religious Studies classes. Racism, prejudice and anti-semitism are analyzed through literature, essay and discussion. Timed writings, a research paper and frequent unit essays are required.

This survey of American literature assumes competency in literary analysis and composition to allow for the study of more advanced literature and the development of the student's personal style and voice in writing. Vocabulary building, unit assignments, timed writing, and a research project are required. Major themes focus on the pursuit of the American Dream, the formation of the American character and one's place within that. A major research paper related to The American Dream completes the study.

## The English Department strongly recommends that students take courses that reflect a breadth of interest and knowledge in the field of English. The Department retains the right to limit the number of available sections of each course.

## $19^{\text {th }}$ CENTURY BRITISH NOVELS <br> \#1001

## 5 credits -- Grade 12

Prerequisite: English III

The purpose of this one semester senior course is for students to explore a selection of the most significant works of the Victorian Era. Students will examine how and why the novel came to dominate the literary world during Victoria's reign, the relationship between narrative and social reality (issues of class and gender), the application of psychological realism to the portrayal of characters, and the form and aesthetics of the novel and what changes occur over the course of the century. The course will include an in-depth examination of several novels, by authors like Bronte, Collins, Austen and Hardy. During the study of each of these novels, students will research the historical context and social norms/changes of the period through non-fiction written during that period.

## INTEGRATING CULTURE, VOICE, AND IDENTITY

\#1008
5 credits - - Grade 12
Prerequisite: English III

The purpose of this course is for students to explore authors who write at the intersection of cultures. Students will examine what it means to be a "hyphenated" or labeled individual and what it means to live at a cultural crossroad. Through the study of vocabulary terms, reading of fictional novels, poetry, short stories, memoirs, autobiographies, and graphic novels, the viewing of film, and the composition of analytical essays, students will discover how one defines and claims one's own identity or what happens when someone else defines one's identity. Students will synthesize research and knowledge gained from reading, viewing, and discussion to construct written analyses and apply the information during final assessments. Readings will include Barefoot Heart, The Namesake, Color of Water, and American Born Chinese among others.

## INTRODUCTION TO POETRY

\#1005

## 5 credits -- Grade 12

## Prerequisite: English III

This semester elective in English is open to any senior interested in developing a richer understanding and enjoyment of poetry. Our approach to poetry is gradual and especially suited to those who think they can't read poetry. Over the course of the semester, however, we consider matters of poetic form (stanza structure, rhythm, and meter), diction (word choice, sound), rhetoric (metaphor, irony, and symbolism), and content
(poems of love, death, war, parent-child relations, race, and gender). We will read poems ranging from the Renaissance to contemporary poetry and songs. Students will keep a regular reading journal, offer an in-class presentation of a poem, write an original poem, and write essays about poems.

SHAKESPEARE: THE COMEDIES [will be offered in the 2013-14 school year]

## 5 credits - - Grade 12

Prerequisite: English III

This one semester class rotates each year: Tragedies and Histories is offered one year and Comedies the next.* It is designed for students with a love for drama and a strong curiosity about Shakespeare and his plays. Close, dramatic readings of the plays, student-directed enactments, and critical viewing of video performances provide the core content. Students learn about Shakespeare and his time and about those incredible plays. The Tragedies and Histories include works such as Hamlet, Macbeth, Henry V, and Richard III. This is for the student who enjoys philosophical discussions and a look at the more serious side of the human condition. The Comedies include works such as Much Ado About Nothing, A Midsummer Night's Dream, The Taming of the Shrew, and The Comedy of Errors. This is for the student who enjoys delving beneath the surface of humor to find the life lessons which can be learned from a study of the lighter side of the human condition. For both classes, unit essays and a semester project are required.

## MONSTERS: OUR DARK MIRROR

This semester course, part of the twelfth grade curriculum, explores the societal concept of monsters, both literal and figurative, throughout literature, from classical monsters like Frankenstein's creature to the more modern Edward Cullen. This course is an intensive writing, text-based, advanced-level course aimed at enriching the experience of textual literary study and expository, critical and analytical writing. Using major works of fiction, short stories, poetry and nonfiction, students will contemplate what role monsters have in the development of humankind and how monsters have changed as the fears of society change. Students will explore how authors subvert the traditional presentation of heroes, by presenting narratives of the antihero and will analyze the expectation of monster as the other.

TAPESTRY OF VOICES: BEARING WITNESS THROUGH ORAL HISTORY \#1048 5 credits - - Grade 12
Prerequisite: English III

Students will consider the complicated aspects of living in the United States by studying and producing true stories told through oral history interviews. At their core, oral histories "amplify unheard voices," and in this course students will explore this amplification in two ways. First, students will study and analyze oral history pieces, including literature, podcasts, photography, film, and theatric performances. In specific, the literature and oral history which is studied in the course bears witness to individual stories, telling what it means to live in regions of urban America, the American South, and Central California. Some of the works which will be studied include Mules and Men, by Zora Neale Hurston, Twilight: Los Angeles by Anna Deaveare Smith, and Voices from the Storm: The People of New Orleans on Hurricane Katrina and Its Aftermath, by Voices of Witness. Secondly, students will apply their analytical skills by gathering with digital recorders, transcribing, editing, and creating their own oral history projects. By the end of the course, students will have showcased their oral history projects by presenting them to the downtown San Jose community in a public venue.

Science fiction writers envision the effects of environmental, technical, medical and psychological changes upon human beings. Their visions predict and question, provoke and inspire. In this course, students will read works by some of the most-respected authors in the genre, such as Asimov, Bradbury, Clarke, Gibson, Heinlein, Herbert, LeGuin, and Miller. Students will read and discuss three novels and a variety of short stories and excerpts in some cases supplemented by film. They will also write at least three expository essays and several shorter creative pieces.

## Honors Program

Honors classes are offered at each level and are designed for the student who excels in English. Except for the senior level, the core material in these classes is the same as the college preparatory courses offered; however, at the honors level the pace is quicker and more intense, and the course of study is enhanced with additional works of literature. Placement into the honors program is based on academic performance in the humanities, writing samples, and teacher recommendation. Students in the honors program must have at least an $82.5 \%$ to qualify for the next level. Students in regular college prep classes must have an $92.5 \%$ at the end of the semester to apply to the program.

## Prerequisites for Honors Courses in English

| Course being applied for: | Grades must be maintained throughout the year |
| :--- | :--- |
| English II Honors <br> or <br> English III AP <br> or <br> or <br> English IV AP | Students currently in the Honors English Program -- with a grade of 82.5\% (B) or <br> higher automatically continue in the honors program -students do not need to <br> submit an application. |
|  | Students currently in the Honors English Program - with a grade percentage <br> between $82.4 \% ~ \& ~ 79.5 \% ~(B-) ~ a t ~ t h e ~ e n d ~ o f ~ t h e ~ f i r s t ~ s e m e s t e r ~ m u s t ~ r e t e s t ~ a n d ~$ |
|  |  |

## ENGLISH I HONORS - THE SELF WITHIN THE GLOBAL COMMUNITY

\#1013 10 credits - - Grade 9
Prerequisite: see Prerequisites for Honors Courses in English on page 5

Freshman Honors is designed for students who have demonstrated exceptional reading and composition skills. Emphasis is placed on literary analysis, critical thinking, development of strong voice and style, and mastering the elements of expository and narrative writing. First semester, cross-curricular support in research techniques is provided for the Religious Studies department's Women's Place Project. Second semester, students again make use of these skills for a short literary research project. Critical thinking and oral expression are rigorously encouraged. Themes the students delve into include identity, coming of age, the hero within, and one's relationship with family and the world. Film as a literary genre is also studied. Students participate in Socratic seminar and in debate.

# ENGLISH II HONORS - IDENTITY: CONFORMITY AND REBELLION; UTOPIAS/ DYSTOPIAS; THE PSYCHOLOGY BEHIND THE HOLOCAUST 

Prerequisite: see Prerequisites for Honors Courses in English on page 5

Sophomore Honors assumes competency in critical thinking, literary analysis, and expository writing skills. Advanced skills in style, voice and persuasive composition are mastered. The $10^{\text {th }}$ grade curriculum includes an interdisciplinary study of the human behavior that gives rise to catastrophic events like The Holocaust. Crosscurricular connections will be made throughout the year through assessments and discussions with World History and Religious Studies classes. The honors level literature includes 1984, Brave New World, Antigone, Oedipus the King, Julius Caesar, Merchant of Venice, The Sunflower, and Jane Eyre as well as film as literature and short stories and essays. A research paper is required.

ENGLISH LANGUAGE AND COMPOSITION AP
THE VOICE OF AMERICA FROM 1620 TO THE PRESENT
\#1045

## 10 credits - - Grade 11

Prerequisite: see Prerequisites for Honors Courses in English on page 5
Fee: Advanced Placement Exam

In the Advanced Placement course, students read a wide variety of fiction and nonfiction texts, examine the thematic, literary, and rhetorical techniques employed by the writers, and effectively communicate their understanding of these elements both orally and in writing. In preparation for the rigors of college-level courses, extensive time is devoted to developing critical reading strategies for primary and secondary source materials, always seeking to determine what a writer's stylistic and linguistic choices reveal about his or her audience, purpose, persona, and message. Specifically, the course readings allow for the study of language itself-diction, varying sentence structures, logical organization of ideas, the elements of classical rhetoric, controlling tone, and achieving and maintaining voice. In addition, students will be required to define and explore different strategies used by orators and to apply these techniques to their oral assignments, including formal speeches, dramatic interpretations, and Socratic seminars. Readings range from early American prose writing (Puritans and Revolutionary era writing) through such twentieth century novels as The Great Gatsby and The Hours.

## ENGLISH LITERATURE AND COMPOSITION AP

A STEP BACK IN TIME: THE CANON OF WORLD LITERATURE - BEOWULF TO VIRGINIA WOOLF
10 credits - - Grade 12
Prerequisite: see Prerequisites for Honors Courses in English on page 5
Fee: Advanced Placement Exam

AP English Literature is a senior-year course that expands and develops skills in critical reading and writing about literature. The course stresses a critical awareness of genre, theme, and style, focusing on British, American and world literature and including fiction, drama, poetry, expository prose, and literary criticism. Readings range from Chaucer and Shakespeare to Pirandello, from Austen to Conrad to Morrison. Assignments emphasize the maturation and refinement of personal expression and style at a level equivalent to composition assignments at the freshman college level.

## FILM AS LITERATURE <br> \#1030 <br> 5 credits -- Grade(s) 10, 11, 12 <br> Prerequisite: None

This one-semester class is designed for students with a strong interest in cinema as an art form. Students will study the history of cinema, explore cinematic techniques, discuss film theory, and examine literary devices that apply to filmmaking. Additionally, they will consider how movies reflect, change, and/or create social values. Close critical viewing, student-centered discussions, and brief lectures make up the core content to the course. Students will study numerous films and examine excerpts of films which exemplify cinematic history, theory, or technique. Unit essays, oral presentations, readings, quizzes, and a semester project are required. Film as Literature does not replace the required core courses in English.

## JOURNALISM

\#1034

## 10 credits - - Grade(s) All

Prerequisite: C or better in English

This course, designed for students with a love of writing, develops journalistic writing, objective style, and teaches In Design, layout, and editing skills. Students are responsible for producing the school newspaper, the Crown and Shield. Once the instructor has covered the basics of journalism, the class is run like a real newsroom and is primarily student-directed. Like Yearbook, this class can be taken several times during a student's four years. The course does not replace the core English requirement. This course is offered as an $8^{\text {th }}$ period class after school.

## CREATIVE WRITING

\#1032
5 credits -- Grade(s) 10, 11, 12
Prerequisite: None

This one-semester workshop-style course for sophomores, juniors, and seniors fosters the development of each student's unique voice through the writing of original fiction and non-fiction works in prose, poetry, drama, and non-traditional/experimental genres. Students will read extensively, write daily and frequently perform works in small and large groups in order to build comfort with oral delivery. Students will also learn and practice techniques of constructive critiquing, so that they can give and receive helpful feedback on a regular basis. Each student will set individual goals for success at the beginning of the semester, and will frequently revisit those goals to assess her progress toward them. Students will complete and present various writing projects throughout the semester, the culmination of which will be a final portfolio, which is the representation of what a student considers to be her greatest accomplishments, her greatest struggles, and her greatest improvements.

YEARBOOK \#6055 10 credits -- Grade(s) All

## Prerequisite: None

Does not meet CSU/UC requirement

Students will function as staff members and learn various aspects of the yearbook publication process such as layout and design, copy writing, photography, budget and finance, and promotion and publicity. The book is built on-line. During both semesters, students are responsible for producing complete layouts in order to meet publication deadlines. This course is offered as an $8^{\text {th }}$ period class after school Monday through Thursday.

YEARBOOK II
10 credits - - Grade(s) 10, 11, 12
Prerequisite: Yearbook I
Attendance at Publisher's Yearbook Camp (1 week during summer)
English grade of B or better and Photography experience required
Does not meet CSU/UC requirement

Yearbook II is a course designed for the student with interests in publication, layout design, editing, and/or journalism. The course begins during the summer at Yearbook Camp, where students and the advisor meet to plan the theme, general layout and design of the entire book. When school begins, students function as editors or section leaders of the Yearbook and master complicated design and layout techniques as well as the publication process. Yearbook I and II students work as a team to complete the book; Yearbook II students are expected to assume leadership positions. This course is offered as an $\mathbf{8}^{\text {th }}$ period class after school Monday through Thursday.
COMPETITIVE DEBATE

| 2.5 credits - - Grade(s) All | \#1043 |
| :--- | :--- |
| Prerequisite: None |  |
| Does not meet CSU/UC requirement |  |

The purpose of this course is to give the competitive debate student the opportunity to improve her communication skills through actively competing in local and state debate tournaments. As a debater, students will learn to research and create affirmative and negative arguments and briefs, and learn the format of Lincoln-Douglas, Parliamentary an Policy debate. Debaters must compete in a speech event. Students enrolled will be expected to compete in a minimum of three debate tournaments a semester, attend weekly meetings, and practice at least twice a week. Experienced debaters will be expected to coach at least once a week. This course is offered as an $8^{\text {th }}$ period class after school through the Speech \& Debate program.

## FORENSICS

\#1044
2.5 credits - - Grade(s) All

Prerequisite: None
Does not meet CSU/UC requirement

This course is designed for the student who has and/or wants to compete for the Notre Dame Forensics Team. The student will gain valuable skills in oral delivery, critical thinking, analysis of current events, and team work. Students may choose one or two of the twelve state approved Individual Events to compete in. Interpretation events are: Humorous, Dramatic, Duo, Thematic, and Original. Oratory events are: Original Oratory, Original Advocacy, Original Prose and Poetry, and Expository. Extemporaneous events are: Domestic Extemp, Foreign Extemp, and Impromptu. Students enrolled will be expected to prepare their own piece, attend weekly meetings, practice with the team at least once a week (more during weeks before tournaments), compete in a minimum of two tournaments per semester, critique the tournaments they attend, and turn in assignments related to their events. This course is offered as an $8^{\text {th }}$ period class after school through the Speech \& Debate program.

## VISUAL AND PERFORMING ARTS

## [Unless otherwise noted, all academic courses in this department meet both CSU and UC entrance requirements]

> Students who have completed any yearlong visual art class are eligible to sign up for any of the one semester classes with the exception of Special Projects /Directed study which has additional requirements.

| INTRODUCTION TO VISUAL EXPRESSION |
| :--- |
| $\mathbf{1 0}$ credits -- Grade(s) All |
| Prerequisite: None |
| Fee: $\$ 85$ |

No prior experience is needed - all skill levels are welcome! Activities and projects are specifically designed to introduce the student to the principles and elements of art. Techniques covered include: use of line and contour, light and shadow, shape and space, three-dimensional perspective, composition, and portraiture. In addition to using a variety of media (pencil, charcoal, oil pastel, watercolor, acrylic paint, collage) the student will study art and artists from a historical perspective. There will be fieldtrips to local galleries and museums.

## PHOTOGRAPHY YEAR

## 10 credits - - Grade(s) All

Prerequisite: none *
Fee: \$95

This course inspires the students to use photography as a manner of visual expression. During the first semester students develop compositional skills, an understanding of the basic principles of 35 mm camera use, basic black and white darkroom techniques, and an appreciation of the history and development of photography as a fine art form. During the second semester students refine and expand their newly acquired skills as they are introduced to new photographic, darkroom and digital techniques. They will be challenged to prepare work to be entered in a number of shows/contests and Notre Dame publications. Students are required to do shooting primarily outside of class time. Students will be required to do one research and one artist interview paper.
*A 35 mm manual single lens reflex film camera is a plus for the student. We have some loaners which

CERAMICS YEAR
\#6045

## 10 credits - - Grade(s) All

## Prerequisite: None

Fee: \$80

An introduction to the nature of clay, including the three basic hand-building techniques: pinch, coil and slab; and wheel thrown methods. Various glaze, surface enrichment techniques, and firing processes are studied. The course provides students with an opportunity to create decorative, functional and sculptural ceramic ware. Lectures and projects of ceramic forms from both ancient and contemporary cultures are studied to enrich the students' knowledge of ceramics. There will be field trips to local galleries, museums and ceramic studios.ADVANCED CERAMICS ~ CERAMICS II
5 credits - - Grade(s) 10, 11, 12
Prerequisite: Completion of Ceramics Year
Fee: \$65

This semester class offers beginning students an opportunity to explore ceramics as a media of personal expression creating sculptural and functional works. For the student with ceramics experience the class allows for more focused concentration in either of the two fore mentioned directions. For all student levels, introduction/review of ceramics basics will be useful in assuring skills mastery. There will be opportunities for students to do choice works as well as assigned projects and the class could be custom tailored to students looking to expand a fine arts portfolio.

ADVANCED PHOTOGRAPHY ~ DIGITAL PHOTOGRAPHY
5 credits - - Grade(s) 10, 11, 12
Prerequisite: Completion of Photography Year
Fee: \$70

This semester of study encourages the serious photo student to refine and expand her compositional skills as she develops an understanding of camera optical controls and digital imaging. Projects will be presented in high quality inkjet prints digitally on a variety of media. Students will need minimally a 5 Megapixel digital camera. A DSLR digital camera is not required but a camera with separate shutter and aperture is a plus. Students will develop a body of work, some of which will be entered into local shows/contests or could be used to apply for portfolio building. Projects will be created with ongoing individual consultation with the instructor. For this class on power point presentation will be required. Evaluations will be based on the technical quality, complexity, and visual impact conveyed by the work. Students are required to do shooting outside of class and are expected to come prepared for effective use of class time.
MIXED MEDIA PAINTING

| 5 credits -- Grade(s) $10,11,12$ |
| :--- | :--- |
| Prerequisite: Completion to Introduction to Visual Expression |
| Fee: $\$ 65$ |
| Does not meet CSU/UC requirement |

This course explores the theory and practice of combining painting and drawing with other artistic elements. Projects may incorporate unusual surfaces, small objects, multiple medias, fragments of other artwork, or text. Students will learn how to make transfers from their own illustrations and found images. The course covers critical thinking and critical discourse regarding the student's artwork, art history and aesthetics. Students are expected to spend time outside of class gathering images and found materials to be used in artwork. Fieldtrips to local galleries and museums will provide inspiration.

INTRODUCTION TO GRAPHIC DESIGN \#2155

## 5 credits -- Grade(s) 10, 11, 12

Prerequisite: None
Fee: \$70
Does not meet CSU/UC requirement

Believe it or not, design has a major influence on our daily lives- whether it is found on the box of your morning cereal, the logo on your favorite T-shirt, or the movie poster advertising the latest feature film, this imagery plays a leading role in our consumerist society. In this course, students will be introduced to design
fundamentals while using the Adobe Illustrator software. This course combines the theory and practice of 21st century technology with traditional artistic practices. Students will be engaged in critical thinking and discourse regarding works of art, including their own, as well as regarding the significance of the "human element" while creating art with modern technology. Fieldtrips to local galleries and museums will provide inspiration for classroom discussion, as well as for students' own works of art.

ADVANCED ART
\#6210
5 credits - - Grade(s) 10, 11, 12
Prerequisite: Completion of Introduction to Visual Expression
Fee: \$65

This semester course encourages the serious art student to refine and expand techniques in painting and drawing. Students will create conceptual and formal strategies around self expression and the student's artistic interests. Each project will encourage critical thinking, problem solving, and aesthetic discussion. In addition, projects will focus on building strong compositional skills as well as development of original concepts. Fieldtrips to local galleries and museums will provide inspiration.

## SPECIAL PROJECTS / DIRECTED RESEARCH

## 5 credits - - Grade(s) 12

Prerequisite: Advisors approval, Department Chairperson approval, discussion with the Vice Principal, Academic Affairs

## Does not meet CSU/UC requirement

This course of independent study is for the self-motivated art student who has completed the Art Department's course offerings in her chosen media. The focus may be either pictorial or spatial in nature [photography, painting, drawing, ceramics, mixed media, etc.]. Student must design a semester's course of study for themselves, outline a written project, and procure a project advisor. The advisor must approve the course of study and the final project in advance. This course allows time for the serious student to pursue art in depth and for academic credit.

- Students may complete an Art Special Project only if they have successfully completed all of the available courses.
- Students who wish to complete an Art Special Project must first identify an advisor, provide a written description of the project, and submit the advisor-signed proposal to the department chairperson and the Vice Principal, Academic Affairs for approval
- If the advisor is no longer available to oversee a project when school begins the following year, the student must identify another advisor.
- No projects should begin without prior approval.
- All projects must be approved by May $1^{\text {st }}$ of $11^{\text {th }}$ grade.

DRAMA 1 ~ THEATER DEVELOPMENT AND PERFORMANCE \#6410 10 credits -- Grade(s) All

## Prerequisite: None

This beginning drama course introduces students to an overview of the elements and traditions of theater. It encourages self-expression through performance. It provides a broad overview of theater history and information on a major playwright from each period. Exercises using the techniques of observation, concentration, and sense/ emotional memory allow students to explore the fundamentals of acting. Through written self-evaluation, reflective essays, and constructive critique students engage in critical analysis. Through improvisation, pre-production preparation, rehearsal, and performance, students develop communication and cooperative skills. The class culminates in students' preparing and performing audition pieces in front of local theater professionals.

A full year course for 5 units, students would meet eight times in the first semester - once every two weeks from 3 to 5 p.m. for a focused workshop on a discipline of stagecraft: set design, lighting design, sound design, costume design, make-up design, and dramaturgy. At the end of the first semester, they will choose one discipline to focus on, researching, designing and presenting a concept in their discipline for a production based upon an agreed upon text. Students will work with guest artists, gaining an understanding of the give and take necessary to bring a production to full life, and learn to give each other positive feedback alongside theater professionals.

DANCE: GENESIS - SURVEY OF DANCE TECHNIQUES AND AESTHETICS
\#2550
5 credits -- Grade(s) 10, 11, 12
Prerequisite: None - Limited enrollment, preference will be given to seniors. This class is for Visual and Performing Arts credit but can be taken exclusively for a Physical Education credit.
CSU/UC approval pending
This course is designed to give an introductory view of dance as an art form. Our main focus will be to introduce and establish various dance techniques, investigate the history of dance, condition the body to maximize strength, and analyze the various aesthetics of dance. Dance will be integrated through video, literature and live performance. We will culminate our overall knowledge by pairing historical landmarks with the evolution of dance today.

DANCE: REVELATION - COMPOSITION AND PERFORMANCE

## 5 credits - - Grade(s) 10, 11, 12

Prerequisite: Survey of Dance Techniques and Aesthetics or Instructor Approval. This class is for Visual and Performing Arts credit but can be taken exclusively for a Physical Education credit. CSU/UC approval pending

This course will focus on the technique, structure and creation of expressive choreography for performance. Each student will gain knowledge of body function and ability, while exploring its possibilities and limitations. With the foundation of the history of dance, the goal of this course is to provide a knowledge base, practical skill and performance experience in dance. Students will develop a working dance portfolio that can serve as a stepping stone toward further studies.

## SYMPHONIC BAND

## 10 credits -- Grade(s) All

Prerequisite: Some music experience

Students with instrumental music experience may choose to participate in the Notre Dame/Bellarmine Symphonic band class. The ensemble will rehearse and perform a variety of music and work to refine each member's own performance skills stressing ensemble musicianship and expression. This course requires that each student provide her own instrument and have already reached some level of proficiency. This class meets prior to the start of the school day and is taught on Bellarmine's campus.

5 credits -- Grade(s) All
Prerequisite: None
Does not meet CSU/UC requirement

This one semester class will explore the essentials and various aspects of web design and web site development. The class will include introduction to Web 2.0 technologies, history of the web, web design standards and principals. Students will create hand coded HTML web pages, and use web editing software to create an entire web site. Students will be introduced to CSS programming as well.

## FILM MAKING <br> \#2099 <br> 5 credits - - Grade(s) All <br> Prerequisite: None <br> Does not meet CSU/UC requirement

This one semester elective course is a hands-on introduction to film making. Students will learn film editing basics in Adobe Premiere Elements, and the use audio and video conversion software. Students will generate content through instruction in scripting, storyboarding and directing.

ADVANCED VIDEO PRODUCTION
\#2100

## 5 credits - - Grade(s) All

Prerequisite: Proof of working knowledge of video editing techniques - instructor approval Does not meet CSU/UC requirement

This one semester class is designed for students who already have a working knowledge of video editing techniques and are interested in refining their video production skills. Using Adobe Premiere Elements Pro you will create short documentary and scripted films. The focus of the class will be creating films that are audience ready, while exploring your vision as a film-maker.

## EXTRACURRICULAR ELECTIVES

## MUSICAL THEATER

\#6311

## 2.5 credits - - Grade(s) All

Prerequisite: None
SPRING SEMESTER ONLY
Does not meet CSU/UC requirement

This performance-based class exposes students to all the aspects of producing a musical play. It encourages students to participate at all levels of performance, including drama, dance and vocal. During the course of the rehearsal schedule, students will learn the basic terminology of musical theater, how to operate within a strict rehearsal regimen and how to apply themselves to learning dialogue, songs and dances. The students will be required to participate in the spring musical at the end of the rehearsal schedule.

## 2.5 credits - - Grade(s) All

Prerequisite: None
Does not meet CSU/UC requirement

## [Fall] Dance Workshop - Survey of Dance in Musical Theater (off-season)

This is a non-performance class exposing students to the debrief and brainstorm processes of dance in musical theater. Students will learn the history of dance in musical theater and create dances that incorporate theatrical elements. This is not a performance class, however, students are highly recommended (but are not required) to participate in the Spring musical during the following semester.

## [Spring] Dance Workshop - Dance Production in Musical Theater (in-season)

This performance-based class exposes students to the choreographic production of musical theater. It encourages students to participate at all levels of performance, including choreography, in addition to drama. During the course of the rehearsal schedule, students will learn the basic terminology of musical theater and dance. Students will be required to participate in the spring musical at the end of the rehearsal schedule.

DANCE TEAM ~ CHEERLEADING
2.5 credits per semester - year long class - - Grade(s) All

Prerequisite: audition
Does not meet CSU/UC requirement

The Notre Dame Dance Team (Cheerleaders) consists of 7 individuals from each class. This extra-curricular activity is a leadership position. Students must display good citizenship, school spirit, and will support and abide by the school rules. Students are required to attend weekly morning practices, various leadership meetings, meet deadlines for yearly events, organize and promote student, class and school participation. Students must maintain a 2.5 GPA and cannot hold an ASB or class office.

TECHNICAL THEATER \#6312
2.5 credits - - Grade(s) All

Prerequisite: None
Does not meet CSU/UC requirement

This class is designed to include technical training for interested students within the context of crewing a live theatrical performance. Students will focus on the technical aspects of theater including lights, sound and stage crew with the course culminating in class members "crewing" a live production which will be presented before an audience. Students will also assist in the design, building and painting of sets used in the show. This class is offered in the fall and spring.

## 2.5 credits - - Grade(s) All

Prerequisite: Audition
FALL SEMESTER ONLY
Does not meet CSU/UC requirement

This advanced drama course will consist of the cast members selected to perform in Notre Dame's fall play. Students will learn how to study a script, develop a character and participate in a rigorous rehearsal schedule. The class will culminate in several live performances of the selected play in front of a live audience. This class is by audition only.

## PLAY AND PERFORMANCE

\#6314
1.0 credits - - Grade(s) All

Prerequisite: None
Does not meet CSU/UC requirement

Students attending the English Department trip to Ashland have the option of reading the plays ahead of time and meeting in a symposium both before and after the trip. Students will analyze the texts for understanding of plot and learn how staging might influence or alter the meaning of the text. Afterward, students will create a reflective project or essay demonstrating their understanding of the differences between what they read and what they saw. This option is also available for students who attend the London Theater Tour offered every other summer.

CHAMBER ENSEMBLE \#6320
2.5 credits -- Grade(s) All

Prerequisite: Audition for placement
Does not meet CSU/UC requirement
Fee: \$220

Notre Dame's ensemble devoted to performing classical music, the group meets Wednesday mornings in the Chapel from 7:00-7:45 a.m. for ten weeks each semester. Students can be at any level of skill, beginner or advanced, and material will be chosen to highlight the instruments involved - violin, cello, viola and double bass.

## JAZZ ENSEMBLE

 \#6325
## 2.5 credits - - Grade(s) All

Prerequisite: Audition for placement Does not meet CSU/UC requirement
Fee: \$220

Guitar, Bass, Keyboard, Drums, Trumpet, Saxophone, and Flute - all welcome to join the Jazz Ensemble. Students will meet once a week on Friday morning in the Chapel from 7:00-7:45 a.m. for ten weeks each semester. Students can be at any level of skill.

## 5 credits - - Grade 12

Prerequisite: Advisor approval, Department Chairperson approval, discussion with Vice-Principal, Academic Affairs
Does not meet CSU/UC requirement

The Senior Honors Project is a course of independent study designed for academically motivated seniors who have exhausted the curricular offerings in a particular academic department. The students must design semester courses of study (Art, English, Modern Language, Social Studies) for themselves, outline a written project and procure a project advisor. The advisor must approve the course of study and the final project in advance. This course allows time for the serious student to pursue areas of interest in depth and for academic credit.

Students may complete a Senior Honors Project only if they have successfully completed all of the available courses in a given department.
Students who wish to complete an honors project must first identify an advisor, provide a written description of the project, and submit the advisor-signed proposal to the department chairperson and the vice-principal, academic affairs for approval.
If the advisor is no longer available to oversee a project when school begins the following year, the student must identify another advisor.
No projects should begin without prior approval.
All projects must be approved by May $1^{\text {st }}$ of $11^{\text {th }}$ grade.

## MATHEMATICS AND COMPUTER SCIENCE

Six semesters required and must be completed in regular session. Geometry and Algebra Il are required courses.

## [Unless otherwise noted, all academic courses in this department meet both CSU and UC entrance requirements]

SEQUENCE OF COURSES: The customary sequence is Algebra I, Geometry, and Algebra II. Exceptions may be made with the prior approval of the department chairperson.

DOUBLING UP: A student may petition to enroll in Geometry/Geometry Honors and Algebra II/Algebra II Honors concurrently. A student may elect to take one or none of these courses at the honors level. It is highly recommended that Algebra II Honors be taken. Petitions are available from the department chairperson or current Algebra I/Algebra I Honors teacher. Approval of the petition will be based on her performance in Algebra I/Algebra I Honors (which includes but is not limited to quality of work, class participation and co-curricular commitments). A student must maintain a B average in both courses or the Algebra II/Algebra II Honors will be dropped at the semester.

SUMMER SCHOOL: No credit towards graduation requirements is given for courses taken in summer school. Summer school courses are taken for the following purposes:

- To make up credit lost because of an "F" grade.
- To improve skills (and grade) of a prior course.
- To prepare for a course.
- For enrichment.

Courses taken in summer school will be recorded on the individual student's official transcript but will receive no credit towards the graduation requirement of three years of mathematics taken on the Notre Dame campus.

Enrolling in a summer school class in order to accelerate to the next level is NOT recommended. The speed at which the subject is taught and the necessity to skip topics create gaps in knowledge that contribute to problems in subsequent courses.

If, in spite of the above caution, a student chooses to enroll in a summer school Mathematics course with the intent to accelerate, then it will be approved ONLY for GEOMETRY. In addition, she must:

1. Maintain a grade of at least an A in Algebra I or A- in Algebra I H for all grading periods.
2. Obtain an application for pre-approval of the summer school class from her current teacher.
3. Complete the application for pre-approval and submit the application to the Mathematics Department Chair for approval before enrolling in the summer school course.
4. Enroll in an accredited summer school program. Enrollment at tutoring centers does not qualify.
5. Send summer school transcripts (not copies of report cards) to the Notre Dame registrar AND the Mathematics department chairperson for grade verification
6. Take a department exam and score at least an $85 \%$ before enrolling in the next course in the sequence.

If these conditions are not met, the students WILL BE REQUIRED to take the yearlong course in sequence at Notre Dame.

The current requirement for Mathematics study at Notre Dame is three years. The Mathematics Department strongly recommends that all students enroll in a fourth year of math, choosing from Trigonometry/PreCalculus, Calculus AB, Calculus BC, Statistics, or Computer Programming AP as appropriate.

As they prepare for college, most students are required to take some form of standardized math test SAT, SAT II, ACT, ELM during their senior year. In a recent communication from the Office of the As they prepare for college, most students are required to take some form of standardized math test SAT, SAT II, ACT, ELM during their senior year. In a recent communication from the Office of the Chancellor of the California State University, "All students are encouraged to take Mathematics in their senior year of high school since students whose last math course was completed in the junior year or earlier often have difficulties with the required college-level mathematics courses and with the Entry Level Mathematics (ELM) requirement." (Focus on Mathematics booklet, CSU)

## CALCULATORS: Students may use calculators in all courses most of the time. The Texas Instruments TI84 Plus or Silver Edition is required for all courses.

It is not the intent of this policy to imply that calculators may be used at all times. In order to teach and reinforce critical thinking skills, it may be necessary to disallow calculators for particular topics and/or tests.

## ALGEBRA I

## 10 credits - - Grade 9

Prerequisite: None

Algebra I is an introductory course in the symbolic language of mathematics. In Algebra I, the traditional mathematical concepts of addition, subtraction, multiplication, division, raising to a power, and taking a root are extended to expressions that contain unknown quantities. This course works with data from science, emphasizes techniques for data analysis, and use technology tools such as the graphing calculator to help visualize important concepts. Other topics such as statistics, probability, and discrete math may be added as time permits.

GEOMETRY \#2030

## 10 credits - - Grade(s) 9, 10, 11

Prerequisite: C - or better in Algebra ।

Geometry is an investigative course in inductive reasoning and logical thinking, consisting of taking given information and using it along with acquired knowledge to arrive at a logical conclusion. Hands-on investigations, postulates, theorems, and definitions are the key tools used in this process. The geometric figures (triangle, parallel lines, parallelograms and other selected polygons and circles) are introduced to acquire specific knowledge of their properties and to help illustrate the logical processes.

ALGEBRA II
\#2040

## 10 credits - - Grade(s) 10, 11, 12

Prerequisite: C - or better in Algebra 1

Algebra II expands upon the topics of Algebra I and takes a graphical approach to the study of functions and equations, linear, quadratic, cubic and some higher order functions. The course includes complex numbers, exponential functions, and logarithms, as well as other related topics.

This yearlong course takes a graphical approach to the in-depth study of trigonometry and PreCalculus topics. The course focuses on the equations and graphs of various types of functions as well as the operations and applications of vectors, polar coordinates, logarithms, conic sections, sequences and series, counting techniques and probability. If time permits, an introduction to limits is also included.

## Honors Program

## Prerequisites for Honors Courses in Mathematics

| Course being applied <br> for: | Grades must be maintained throughout the year <br> Geometry Honors <br> Algebra II Honors$9^{\text {th }}$ grade - score 80 or better on Algebra competency test <br> $10^{\text {th }}$ grade - Algebra I grade of A or better - or - - <br> - Algebra I Honors grade B+ or better |
| :--- | :--- |
| Algebra I grade of A or better OR Algebra I Honors grade of B+ or better <br> Geometry grade of A- or better OR Geometry Honors grade of B+ or better OR <br> Geometry or Geometry Honors taken concurrently with petition and teacher <br> recommendation |  |
| Honors <br> Trig/PreCalculus | Completion of Algebra II with a grade of A- or better - - or - - <br> Completion of Algebra II Honors with a grade of B or better |
| Calculus AB-AP | Submission of an application <br> Minimum requirement is completion of Trig/PreCalculus with a grade of B or <br> better - or - Trig/PreCalculus Honors with a grade of B- or better |
| Calculus BC-AP | Completion of Calculus AB with a grade of C or better |
| Computer <br> Programming AP | Submission of an application <br> Minimum requirement is completion of Algebra II with a grade of B- or better -or- <br> Algebra II H with at least a grade of C+. |

CALCULATORS: Students may use calculators in all courses most of the time. The Texas Instruments TI83, T184 Plus or Silver Edition is required for all courses. NOTE: Other brands and models of calculators will not be supported by the department. There are some models that will not be permitted in the classroom.

It is not the intent of this policy to imply that calculators may be used at all times. In order to teach and reinforce critical thinking skills, it may be necessary to disallow calculators for particular topics and/or tests.

## ALGEBRA I HONORS

10 credits -- Grade 9
Prerequisite: Department approval

Algebra I Honors is a fast-paced course for those students who have completed an introductory Algebra course but who do not score sufficiently high on the competency test to exempt Algebra I. In addition to the traditional topics of Algebra I, this course works with data from science, emphasizes techniques for data analysis, and uses technology tools such as the graphing calculator to help visualize important concepts. Other topics such as statistics, probability, and discrete math may be added as time permits.

## 10 credits - - Grade(s) 9, 10

Prerequisite: see Prerequisites for Honors Courses in Mathematics on page 18

In addition to the topics of Geometry, this accelerated course focuses on problem solving, logic, formal proof, advanced constructions and additional topics as time permits. Students will incorporate geometric concepts and work collaboratively on a year-long City Project culminating in a scale model of a city.

## ALGEBRA II HONORS

\#2045

## 10 credits -- Grade(s) All

Prerequisite: see Prerequisites for Honors Courses in Mathematics on page 18

In addition to the topics of Algebra II, this accelerated second year course in Algebra will focus on problem solving and accuracy. This course includes an in-depth study of matrices, sequences and series, and other topics as time permits.

## HONORS TRIGONOMETRY/PRE-CALCULUS

\#2055

## 10 credits -- Grade(s) All

Prerequisite: see Prerequisites for Honors Courses in Mathematics on page 18

In addition to the topics of Trigonometry/Pre-Calculus, this accelerated course focuses on problem solving, extensive graphing techniques, extensive use of trigonometric identities, further applications in conic sections, parametric equations, an in-depth look at vectors and its applications and other topics as time permits.

## CALCULUS AB -AP

\#2060
10 credits - - Grade(s) 10,11, 12
Prerequisite: see Prerequisites for Honors Courses in Mathematics on page 18
Fee: Advanced Placement Exam

Calculus is the mathematics of motion and change. This course reviews the coordinate plane, then relates the rates of change of a function to that coordinate plane. Topics studied are derivatives and their applications, integration and applications of the definite integral, transcendental functions, methods of integration and application to plane curves.
This course will prepare the student to take the AB level Advanced Placement Calculus Examination in May.

CALCULUS BC - AP \#2063
10 credits -- Grade(s) 11, 12
Prerequisite: see Prerequisites for Honors Courses in Mathematics on page 18
Fee: Advanced Placement Exam

This yearlong elective course will include techniques and application of integration that are not included in Calculus $A B$, the Calculus of conics, parametric equations, polar coordinates and applications; infinite series, and vector equations. Also included is an extensive review for the AP Calculus BC test.
This course will prepare the student to take the BC level Advanced Placement Calculus Examination in May.

## STATISTICS

## 5 credits -- Grade(s) 11, 12

Prerequisite: Completion of Algebra II

In this one semester course the student will study some of the basic concepts of statistics and probability as encountered every day in the newspapers, sports, business and government. Through this course students will be able to determine what the statistics are illustrating and to distinguish between valid statistical use and statistical abuse.

## COMPUTER SCIENCE A: AP

\#2080

## 10 credits - - Grade(s) 10, 11, 12

Prerequisite: Completion of Algebra II with a grade of at least B- or Algebra II H with at least a grade of C+

This year long elective course is an introduction to programming using the JAVA programming language. Students will be using a gaming platform to understand the basics of programming. Students will build applications and games with specific scenarios. In the process, students will learn a brief history of computers and the development of the higher-level languages, the fundamentals of programming, basic problem solving techniques, professional ethics, and the software development process. The programming focus will be on the primitive data types, control structures, classes, objects, loops, arrays, inheritance, exceptions, GUIs, applets and algorithm analysis. Priority is given to seniors.
This course will prepare the student to take the Computer Science A Advanced Placement Examination in May.

INTRODUCTION TO ENGINEERING

## 5 credits - - Grade(s) All

Prerequisite: Enrollment in Geometry or higher
Does not meet CSU/UC requirement

Students will learn the basics of different aspects of Engineering. Basic physics concepts will be introduced that include gears, levers, pulleys, simple projectile motion, simple harmonic motion, and other hands-on concepts. An introduction to basic programming techniques will include data types, iteration statement, decision statements, testing and debugging. An introduction to robotics will include basic circuits, circuit design and the use of a CAD system.

## ROBOTICS

\#8325
5 credits -- Grade(s) All
Prerequisite: NONE
2.5 credits per semester

Does not meet CSU/UC requirement

Students will learn the basics of building structures, simple machines, use of gears and torque, motors, pneumatics, various sensors, electric circuits, and programming through the afterschool program. These basic concepts will be applied to building robots in small teams to complete various challenges. Students will apply principals of engineering and design as they work to build robots for competition. This is an $8^{\text {th }}$ period class that meets Tuesday and Thursday in 2 hour sessions.

## MODERN LANGUAGE <br> Four semesters of the same language are required

## [Unless otherwise noted, all academic courses in this department meet both CSU and UC entrance requirements]


#### Abstract

The current requirement for Modern Language study at Notre Dame is two years. However, both the Administration and the Modern Language Department, in consultation with the Director of College Counseling, recommend that most students at Notre Dame complete a four-year sequence in one language. All students who finish Level II with a "B" (as well as any strong "C+" students with a teacher recommendation) are encouraged to pursue the advanced levels in the language. The Modern Language Department considers Levels III and IV as essentially one course and therefore does not anticipate that grades vary significantly from Level III to IV. Students should also keep in mind that the rigor of their senior year schedule is far more important for college admissions than their senior year grades.

For students who are particularly gifted in language, there is also the opportunity to double up on languages, picking up Level I of the other language as a sophomore or junior. For the student who is not qualified to go on to Level III, there is also the option of taking two years of a different language, again demonstrating to the college admissions committees that the student is pursuing a rigorous schedule as a senior.

\section*{FRENCH I} \#4000

\section*{10 credits - - Grade(s) 9, 10, 11}

Prerequisite: Department approval


This course is designed to give students an introduction to the French language. Grammar, vocabulary and culture are taught through the four basic communication skills: listening, speaking, reading, and writing. Students will often work in pairs and teams to do written and oral exercises as well as skits and presentations. Students will be writing paragraphs, which will increase in difficulty and length, with each unit. Oral proficiency and class participation are critical to success at this level.

Each lesson focuses on an aspect of life in French speaking countries which high school students can appreciate - school, home, family, food, travel, etc. In addition, these cultural lessons will allow the students to compare and contrast their customs and beliefs with those of people in French-speaking countries.

## FRENCH II

\#4010

## 10 credits - - Grade(s) All

Prerequisite: French I with a grade of C or better both semesters and on the final exam or teacher approval

This course builds on the French I curriculum. Students will further develop speaking and listening skills through conversation, discussion of class materials and oral presentations. Their writing will continue to improve through assigned paragraphs and compositions. There will be $3-4$ written and/or oral projects.

Prerequisite: French II with a grade of $B$ or better both semesters and on the final exam or teacher approval

This course, conducted primarily in French, concentrates on elevating language skills to students' thought level. Students will move toward self-expression through various activities. Class discussion of reading materials along with debate and dramatizations will be used. Grammar will be reviewed and new, more complex structures will be introduced. Formal writing introduced in French II will continue. Students will study French culture, songs and short stories, and conduct research on various topics.

SPANISH I
\#4050
10 credits - - Grade(s) 9, 10, 11
Prerequisite: Department approval

This course is designed to give the students an introduction to the Spanish language. Grammar, vocabulary and, culture are taught through the four basic communication skills: listening, speaking, reading, and writing. Students will often work in pairs and teams to do written and oral exercises as well as skits and presentations. Students will write paragraphs which will increase in difficulty and length with each unit. Oral proficiency and class participation are critical to success at this level.

Each lesson focuses on an aspect of life in Latin America and/or Spain which high school students can appreciate - school, home, family, food, travel, etc. In addition, these cultural lessons will allow the students to compare and contrast their customs and beliefs with those of people in Spanish-speaking countries.

SPANISH II
\#4060

## 10 credits - - Grade(s) All

Prerequisite: Spanish I with a grade of C or better both semesters and on the final exam or teacher approval

This course builds on the Spanish I curriculum. Students will further develop speaking and listening skills through conversation, discussion, and oral presentations. Their writing will continue to improve through assigned paragraphs and compositions. In addition there will be 3-4 written and/or oral projects. Their oral work will be evaluated through classroom presentations and performances. Grammar, especially verb tenses, will be emphasized at this level. The cultural lessons will focus on routines, travel, cuisine, pastimes, shopping, health, cities and the countryside as well as Spanish and Latin American traditions.

## SPANISH III

\#4070

## 10 credits - - Grade(s) 10, 11, 12

Prerequisite: Spanish II with a grade of B or better both semesters and on the final exam or teacher approval

This course will further develop the student's ability to comprehend and use the target language, both in written and oral form. Topics include: interpersonal relationships, city activities and giving directions, media, family relationships and nature. Students will review and expand grammar concepts, vocabulary and verb forms which include the subjunctive. Appreciation of literature will be increased by reading a novel in Spanish. Students will become involved in the community while creating an immersion project and interviewing a native Spanish speaker.

This course would follow Spanish III or any subsequent course in the curriculum. The emphasis is learning about Hispanic culture and history, while expanding vocabulary, developing communication skills, and working through individual problem areas in grammar. This would also be an option for students who have an interest in additional study in Spanish as a supplement to the normal course of study or as an extension for those who finish Spanish IV AP or Spanish V AP. Heritage speakers of Spanish who chose to take French as an academic subject may also enjoy taking this class as an opportunity to learn more about their background and the diversity of the Spanish-speaking world.

## Honors Program

## Prerequisites for Honors Courses in Modern Language

| Course being applied for: | Grades must be maintained throughout the year |
| :--- | :--- |
| Spanish II Honors, | Entry into honors level classes is based on: |
| Spanish III Honors, AP |  |
| Spanish Language and | -grade of A- or better both semesters (verification of June grades) <br> Culture, AP Spanish |
| Literature and Culture <br> or | - teacher recommendation based on: the quality and quantity of oral |
| French II Honors, French <br> work, effort, and grades <br> III Honors, AP French <br> Language and Culture | any student with a passing grade of C- or better and the ability to <br> comprehend the spoken target language, may enroll in AP Language <br> and Composition |
|  | Students, who are currently enrolled in an honors level class, must maintain a <br> B average in that class and fill out an application in order to continue in the <br> Honors program. |

Suggested course sequence for honors students is:
Level I; Level IIH; Level III H; AP Language and Culture; AP Literature and Culture, Advanced Culture and Conversation

FRENCH II HONORS
\#4015

## 10 credits - Grade(s) 10, 11, 12

Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24

The pace in French II H is faster than that of regular French II, thus allowing the students to acquire more knowledge with the expectation of a higher level of proficiency. Written work will be frequent with greater depth and detail. Students will be challenged to speak freely and frequently in the target language; oral proficiency will be emphasized. In addition, the students will read and discuss several literary extracts including a unit on The Holocaust, using the original French text of Night by Elie Wiesel. This unit will be a precursor to the work in French III Honors where students move away from "tourist" vocabulary and start to talk about issues that engage and inflame their spirits..

This is a literature-based, honors level advanced language class where students will use their abilities as self-motivated learners to: develop a broad vocabulary, elevate grammar usage to a level of sophistication that will allow the student to express ideas clearly and concisely, refine reading skills, and speak and write with a level of sophistication that is suitable both to the content and their age. This will be accomplished through the use of film and literature based around 4 themes: friends and family, schooling, women's rights, and immigration and racism. The students will read: Petit Nicolas, Une Si Longue Lettre, Le Racisme Expliqué à Ma Fille, and Le Petit Prince. Students will develop comfort in speaking by working daily in small groups. Oral assessments will consist of taped commentary, debates, Socratic seminars, and class discussion. Written work will include writing, discussion and reaction questions, compositions, and 4 culminating written pieces - an illustrated book, a research paper, an additional chapter of a book and free choice.

## AP FRENCH LANGUAGE AND CULTURE

 \#4030
## 10 credits -- Grade(s) 11, 12

Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24
Fee: Advanced Placement Exam

Students will prepare for university level language study and for the AP exam given in the spring through the reading, writing, speaking and listening components of this course. There will be a comprehensive review of grammar with emphasis on complex structures and stylistic use. Students will read a variety of literary genres including short story, poetry, novel, essay and newspaper as they study life in the Francophone world. Readings will include the following topics, as set forth by the College Board: art, global challenges, families and communities, the quest for self, contemporary life, and science and technology. Students will discuss readings in a seminar style setting and prepare both group and individual presentations. Written assignments will allow the students to show creativity, cite evidence, and express opinions.

## SPANISH II HONORS

\#4065

## 10 credits - - Grade(s) All

Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24

This course builds on the Spanish I curriculum. Students will further develop speaking and listening skills through conversation, discussion, and oral presentations. Their writing will continue to improve through assigned paragraphs and compositions. In addition there will be 3-4 written and/or oral projects. Their oral work will be evaluated through classroom presentations and performances. Grammar, especially verb tenses, will be emphasized at this level. The cultural lessons will focus on routines, travel, cuisine, pastimes, shopping, health, cities and the countryside as well as Spanish and Latin American traditions.

The pace in Spanish II H is faster than that of regular Spanish II, thus allowing the students to acquire more knowledge with the expectation of a higher level of proficiency. Written work will be frequent with greater depth and detail. This writing process will also include the pen-pal program with River Glen School. Students will be challenged to speak freely and frequently in the target language; oral proficiency will be emphasized. In addition, the students will read and discuss several literary extracts, including an illustrated version of Don Quijote de la Mancha.

## 10 credits - - Grade(s) All

Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24

Spanish for Heritage Speakers Honors is the first course of a two-year program designed to address the needs of those students who learned Spanish at home or in another immersion environment. Students will learn both academic and professional Spanish, preparing them for university study of the language. Students will study grammar formally and focus on their unique reading and writing needs and skills. In addition, students will develop an understanding of the various forms of speech - colloquial, professional, and conversational and when to use each. This course develops cultural literacy and exposure to different cultural groups through readings and film and addresses the role of the heritage speaker in the global community. As one of the few honors level classes available to freshwomen, this class is an excellent introduction to the high expectations of honors study at Notre Dame.

Spanish for Heritage Speakers Honors es el primer curso de español para hispanohablantes de un programa de dos años diseñado para atender las necesidades únicas de las alumnas que han aprendido el español en familia u otro ambiente de inmersión. Aprenderán a expresarse usando el español académico y profesional en preparación para el estudio a nivel universitario. Estudiarán la gramática de manera formal y mejorarán su comprensión de lectura y composición formal según sus necesidades. Además, desarrollarán su manejo de los registros del español - el estilo de comunicación coloquial, profesional y conversacional - y los momentos adecuados para su uso. Este curso ampliará el conocimiento cultural de la alumna sobre varias comunidades hispanas mediante lecturas y películas y trata el papel del hispanohablante en la comunidad global. Como uno de los pocos cursos de honores disponibles para la alumna del primer año, es una introducción excelente a las altas expectativas del estudio a nivel de honores en Notre Dame.

## SPANISH III HONORS

\#4075

## 10 credits - - Grade(s) 10, 11, 12

Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24

The third year of Spanish will further develop the student's ability to comprehend and use the target language, both in written and oral form. Topics include: interpersonal relationships, city activities and giving directions, media, family relationships and nature. Students will review and expand grammar concepts, vocabulary and verb forms which include the subjunctive.

This advanced course in Spanish will go beyond the work of Spanish III, with more detailed and in-depth writing and discussion. It will challenge the students' ability to comprehend and use formal and informal Spanish, both in oral and written forms, as well as to compose expository pieces. Novels, plays and other literary selections relevant to cultural themes will be read in their original form. Additionally, students learn the complexities of Hispanic immigration in the US through a curriculum that addresses these issues academically while simultaneously involving student in the local Spanish-speaking community.

## 10 credits - - Grade(s) 10, 11, 12

Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24
Fee: Advanced Placement Exam

Using Spanish-language literature, news articles, film and music as a framework for language study, this course focuses on the advanced listening, speaking, reading, and writing skills necessary for upper-division college study in the Spanish language. This class, conducted entirely in Spanish prepares the students for the Advanced Placement Spanish Language Exam by developing critical thinking and academic skills as well as striving for a sophisticated level of expression in Spanish, both orally and in writing. A detailed review of grammar and vocabulary will take place throughout the year, as well as an emphasis on extemporaneous discussion and composition writing, literary analysis and cultural awareness. The themes for study are: global challenges, science and technology, contemporary life, personal and public identities, families and communities, and beauty and aesthetics

## 10 credits -- Grade(s) 10, 11, 12

Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24
Fee: Advanced Placement Exam

AP Spanish Language and Culture - Heritage is the second year course of the program for heritage speakers and will prepare the heritage student for the Advanced Placement Language exam. This course will continue developing advanced strategies for reading and writing and will polish students' grammatical and lexical accuracy while preparing them for study at the university level (or the following class, AP Spanish Literature and Culture). Students will focus on critical thinking skills, literary analysis, cultural awareness and developing their own voice in writing. The themes for study are: global challenges, science and technology, contemporary life, personal and public identities, families and communities, and beauty and aesthetics.

AP Spanish Language and Culture - Heritage es el segundo año de estudio en el programa para hispanohablantes y preparará a la alumna hispanohablante para el examen Advanced Placement de español. Este curso continuará desarrollando estrategias avanzadas para la lectura y la composición y puliendo la precisión del lenguaje, mientras prepare a la alumna para el estudio del español en la universidad (o el siguiente curso de literatura, AP Spanish Literature and Culture). Las alumnas se enfocarán en el desarrollo del pensamiento crítico, el análisis literario, la conciencia cultural y el desarrollo de su propia voz en la escritura. Los temas de estudio son: los retos globales, la ciencia y la tecnología, la vida contemporánea, las identidades personales y públicas, las familias y comunidades, y la belleza y la estética.

# Prerequisite: see Prerequisites for Honors Courses in Modern Language on page 24 

Fee: Advanced Placement Exam

AP Spanish Literature and Culture is an advanced Spanish class that surveys Peninsular and Latin American literature from the Middle Ages to today. It is the equivalent of an upper-division college course and serves as an introduction to literary analysis and discussion of Spanish-language literature. Beyond developing reading comprehension, students will actively engage with text, understand the context in which it was written, think critically about its themes and greater message, and analyze the author's craft. The class is conducted entirely in Spanish and students will learn the terminology and academic language to discuss content, structure, theme, character development, and figurative language. They will also write interpretive and analytical compositions and work to develop their academic writing skills in Spanish. The primary goal for the class is that students enjoy reading the classics of Spanish-language literature and develop their autonomy in reading on all levels. Summer reading required.

## SPANISH IMMERSION AND HOME STAY

## 5 credits -- Grade(s) 10, 11, 12

Prerequisite: None
This course will be offered every other year - - Odd numbered summers

This is a 8 day home stay/immersion trip to Costa Rica planned and chaperoned by 2 Notre Dame teachers. Students stay with families in pairs and attend classes daily. They will take a placement test upon arrival and be placed in a class commensurate with their abilities. The classes are limited to a maximum of 6 students.

This trip is a cross-curricular trip with the Science Department and will include cultural activities such as cooking classes, salsa lessons, and an environmental study of turtles and the rainforest.

In addition, after this extensive study experience, the student may opt to challenge to the next level of Spanish.

## HISTORY THROUGH ART

\#7001
5 credits -- Grade(s) 10, 11, 12
Prerequisite: None
This course will be offered every other year - - Even numbered summers
This is a 2 week trip to France and Spain sponsored by NETC and chaperoned by 5-6 Notre Dame teachers. The itineraries vary each year, but always include Madrid and/or Barcelona, and Paris.

Language, Art), independent study project based on art work created during a particular era, movement, political event, etc. in France or Spain. Students will do research prior to departure to chose a topic, artists, and art works. During the trip they will view the works of art, taking notes and photos, make journal entries, do an interview with a native speaker, and create a final project. Students will be required to have access to 2 resources (books) in the target language.

In 2014, the trip will be sponsored by both the Modern Language Department and the Social Studies Department.

## ON THE FRONT LINES!

"March" through the halls of Versailles at the eve of revolution, walk along the beaches of Normandy and relive the Allied invasion, and gaze at the Valley of the Fallen created at the hands of the Spanish dictator. The history, art and culture of Spain and France will be integrated themes as you experience both the historical sites and current conditions of these two remarkable European countries. A trip not to be missed!

Credits will be conferred upon completion of the final project - no later than November 1

Supplemental Travel Credits - these credits do not apply towards Notre Dame's graduation requirements. They are credits that will be included on the transcripts as additional summer school experiences.

## PHYSICAL EDUCATION

Two semesters required

## INTRODUCTION TO HEALTHY LIVING

## 5 credits -- Grade 9 - required class

## Prerequisite: None

Does not meet CSU/UC requirement
This required course will combine physical education units with life skills, empowerment activities and self defense skills. The course will be divided into 3 core segments: team building and sportsmanship; personal fitness including Tae-Bo, Kick boxing, and core conditioning; and, a health and wellness unit addressing issues related to adolescent development and relationships. In addition to classroom activities related to developing healthy relationships, the unit will teach physical self-defense skills.

TEAM AND INDIVIDUAL SPORTS \#2500
5 credits - - Grade(s) 10, 11, 12
Prerequisite: None
Does not meet CSU/UC requirement

This is a semester course for students who enjoy team and individual sports activities. The course will cover basic skills, history, rules, game strategy, and sportsmanship. Activities will be based on the season, class size, and student interest. Sports activities might include, but are not limited to, volleyball, floor hockey, badminton, pickleball/paddle tennis, basketball, ultimate Frisbee, flag football, Tae Bo, kickboxing, lacrosse and performance enhancement training.


This course is designed to give an introductory view of dance as an art form. Our main focus will be to introduce and establish various dance techniques, investigate the history of dance, condition the body to maximize strength, and analyze the various aesthetics of dance. Dance will be integrated through video, literature and live performance. We will culminate our overall knowledge by pairing historical landmarks with the evolution of dance today.

DANCE: REVELATION - COMPOSITION AND PERFORMANCE \#2555 5 credits - - Grade(s) 10, 11, 12
Prerequisite: Survey of Dance Techniques and Aesthetics or Instructor Approval. This class is for Visual and Performing Arts credit but can be taken exclusively for a Physical Education credit.
CSU/UC approval pending
This course will focus on the technique, structure and creation of expressive choreography for performance. Each student will gain knowledge of body function and ability, while exploring its possibilities and limitations. With the foundation of the history of dance, the goal of this course is to provide a knowledge base, practical skill and performance experience in dance. Students will develop a working dance portfolio that can serve as a stepping stone toward further studies.

This one semester course is designed for students who would like to develop an understanding of yoga from the fundamentals of breathing to varying pose combinations. The course will focus on yoga and the spine, standing, sitting, kneeling, supine, prone, and arm-support poses. Students will develop the skills needed to properly stretch, utilizing the body's core muscles to build strength and flexibility. Previous yoga experience is not required.

## FITNESS FOR LIFE

\#2700
5 credits -- Grade(s) 10, 11, 12
Prerequisite: None

## Does not meet CSU/UC requirement

This is a semester course to prepare students for a lifetime of fitness. Students will determine their own fitness and exercise needs, and plan their own personal fitness program. The course will cover how to exercise properly, when and where to exercise, plus injury prevention and therapy. The course will include the following conditioning activities: aerobic dance (low impact), step aerobics, weight training, Tae Bo, kickboxing, Zumba and performance enhancement training.

## INTERSCHOLASTIC ATHLETICS

Prerequisite: Approval from the Athletic Director
Does not meet CSU/UC requirement

This course is open to any $10^{\text {th }}-12^{\text {th }}$ grade student who competes on a Notre Dame Interscholastic Team. Students may elect to receive 1 semester elective PE credit for their participation in a varsity level or equivalent sport.
To qualify for credit, students must meet the following criteria:

- Participate for 1 full season in a varsity level or equivalent sport at Notre Dame
- Meet daily attendance guidelines for practices and competitions as established by the team coach/athletic director.
- Adhere to team rules and guidelines by the coach.
- Adhere to athletic policies as stated in the Notre Dame Athletic Handbook.

Students wishing to exercise this option should elect this course at the scheduling time in March. The Athletic Director with the team coach will verify that the student has met the requirements for credit at the end of the season. The verification will be submitted to the registrar with a Pass/Fail grade.

## RELIGIOUS STUDIES <br> Seven semesters required

## [Unless otherwise noted, all academic courses in this department meet both CSU and UC entrance requirements]

During their first two years of study at Notre Dame, students are required to take core courses in Religious Studies that provide them with foundations in theology, scripture study, and discernment. Self-discovery and creative self-expression are woven throughout. Juniors and seniors are required to take two semesters of Religious Studies elective courses in addition to the required social justice course taken in their junior year (a total of three semesters).

The commitment to act on behalf of justice and to serve others is rooted in the Gospel. It is important that students have the opportunity to examine justice issues and to place them within the context of their theological and scriptural studies in addition to their own experience serving the community. Therefore, the student has two options in approaching her upper-division coursework. She may either take:

- Two semesters of Religious Studies courses in her junior year (Peace and Social Justice as well as one other elective) and one semester of Religious Studies electives in her senior year.


## OR

- One semester of Religious Studies (Peace and Social Justice) in her junior year and two semesters of Religious Studies electives in her senior year.


## CONFIRMATION PROGRAM:

Notre Dame offers a program for students to prepare to celebrate the Sacrament of Confirmation. The program is offered every other year for junior and senior students only. No academic credit is given, but students who wish to take advantage of the program agree to:

- enroll in and complete the FAITH, VALUES AND LIFESTYLES course
- obtain their home parish pastor's permission
- attend their grade level retreat the year of Confirmation
- complete their grade level community service requirement
- meet with the group of candidates and program coordinator for ongoing spiritual formation and reflection
Confirmation occurs in the spring at a school liturgy with satisfactory completion of the requirements. This program will be offered during the 2014-15 school year.

SELF, SPIRITUALITY AND SCRIPTURE \#2801

## 10 credits - - Grade 9

## Prerequisite: None

## Does not meet CSU/UC requirement

This year-long course engages students in an exploration of themselves as young women growing in mind, body and spirit. In the first semester, students study the nature of faith, the basic beliefs of Catholic Christianity and the charism of St. Julie Billiart and the Sisters of Notre Dame de Namur. Throughout the course a cross-curricular study of women who have significantly contributed to humanity serves as models for students' own spiritual and personal journeys. The second semester includes an overview of Hebrew Scriptures that notes the formation of scripture and its interpretation in context of Catholic understanding. Over both semesters, students explore diverse images of God and are exposed to a variety

## 10 credits -- Grade 10

Prerequisite: None
Does not meet CSU/UC requirement

The gospel stories are filled with themes relevant not only to Jesus' time but to the modern day as well. In this course, students will take a "then and now" approach to gospel values and moral decision-making. This framework enables the students to consider the original contextual meaning of the gospel stories during Jesus' time, and how these themes relate to contemporary social issues and their own lives. The course takes an inter-disciplinary approach to basic moral questions and ethical concerns within relationships with self, others, and God by integrating themes of human rights in the $20^{\text {th }}$ and $21^{\text {st }}$ centuries also explored in English and Social Studies.

PEACE AND SOCIAL JUSTICE \#2811

## 5 credits -- Grade 11

## Prerequisite: None

Justice flowers through right relationships; the primary way to establish peace in human society. This course aims to raise awareness of social injustice in order to build right relationships in this world of extreme material inequities. Students will consider how a responsible world citizen thinks critically about injustice. The classroom community will study root causes of injustice and begin to practice long-term advocacy actions to change societal structures for good. Students will be challenged to consider their own role in creating a more just world and encouraged to act in accordance with their own beliefs regarding these issues. We will examine Church Doctrine, specifically Catholic Social Teaching, and Scripture that address social issues such as poverty, discrimination, environment, and violence. The class content and process invite deeper understanding to prepare students for the Senior Service Learning Project. Students will leave the class better prepared to think broadly about social inequity and act locally.

## ELECTIVES

WORLD RELIGIONS

Prerequisite: None

In this comparative study of great world religions, students have the opportunity to examine other faith traditions, thereby giving their own beliefs new meaning and fresh perspective. The course explores the religious beliefs of Hinduism, Buddhism, Judaism, Christianity, and Islam, empowering students to examine religion as an inseparable part of every culture and promote tolerance and peaceful coexistence through understanding multiple traditions. Students examine the similarities and differences that these religions have in relationship to each other and with Catholic Christianity. Each religion is approached through the lens of seven dimensions: experiential, mythic, doctrinal, ethical, ritual, social, and material of art and architecture. Group projects focus on looking at each religion through its ritual and practice. This course is designed to assist students as spiritual seekers, both in their own journey while also understanding the journeys of their global brothers and sisters.

Sacramental spirituality is explored in this course as an optimal way to grow and be fully alive. Course content will consider how faith and values are the framework for an authentic lifestyle and how to be in right relationship with self, others, and God. We explore how is revealed through the seven Sacraments of the Catholic Church. Through class discussion, sharing of personal experience, and various projects, students are challenged to examine the choices they are making in light of Gospel values and consider vocations they may be called to in the future.
** This course is mandatory for students planning to be confirmed with the Notre Dame Community.

## INTRODUCTION TO PHILOSOPHY

\# 2816
5 credits -- Grade(s) 11, 12
Prerequisite: None

The "love of wisdom" and the search for truth are as old as history. This course is intended to familiarize students with the origins and basic perspectives found in Western philosophy and other philosophical traditions using a chronological, historical approach. Emphasis is placed on how philosophy, as a whole, and great thinkers over time have approached the fundamental questions of being and value. Students examine philosophical ethics and Catholic moral tradition to further develop a means of discerning God's will in their lives. This is rooted in an understanding that the moral life is the universal human experience of seeking to know the meaning and purpose of existence. The course also explores moral issues and cultural values in contemporary society and evaluates them from a variety of perspectives, namely Catholic Christianity. The course culminates in the student composing her own philosophy.

| CONTEMPORARY THEMES IN LIBERATION |
| :--- |
| 5 credits -- Grade(s) 11, 12 $\# 2818$ <br> Prerequisite: None  |

As people of faith, we are called to counter the pervasive presence of oppression in the world around us and within our own selves. This course offers an interdisciplinary and global approach to explore systemic and personal oppression and the human desire for liberation, both literal and metaphorical. Specific focus is given to gender, poverty, and ecology through social analysis and the lens of various liberationist theologies. Disciplines explored include: history, sociology, philosophy, economics, science, and theology. Participation in Notre Dame's Service Learning and City as Classroom programs is integral to this course.

5 credits -- Grade(s) 11, 12
Prerequisite: Interview with instructor may be necessary.
Fees: Fees will be collected for field trips
Does not meet CSU/UC requirement

This course is a "pilgrimage of the heart" as students learn to pray their life experiences through the media of creativity and spirituality. It will offer the student the opportunity to make this pilgrimage through a variety of art projects, prayer experiences and journal writing to discover the source of her own creativity as the Sacred dwelling within her. To this end, application of the language of aesthetics will be used to uncover meaning in images of the Feminine Divine with particular focus on images of Jesus Christ. Students will support each other in providing peer feedback with this vocabulary as they move towards deeper understanding of creativity and spirituality. Prayer experiences will include art as contemplation, meditation, yoga movement, walking the labyrinth and student-led prayer.

## SPIRITUALITY OF LEADERSHIP

## 5 credits -- Grade(s) 11, 12

Prerequisite: Application submitted to Campus Ministry. Interview with instructor may be required.
Does not meet CSU/UC requirement

The profound effects and possibilities of a woman's leadership are the focus for this semester course. Students will engage with models of leadership found in scripture and religious traditions as well as cultural perspectives on leadership. Students will also explore their own giftedness as an expression of God's goodness while they consider the strength of their emerging leadership potential. In the preparation and implementation of one school-wide liturgy and the Breakaway Days, this course will offer both theoretical and practical experiences of spiritual leadership at Notre Dame.

This course is required for any student wishing to serve on the Peer Ministry Leadership Team. Students seeking to hold leadership positions on campus (i.e. ASB, TASC, SLC, Class Councils, retreat and club leaders) are highly encouraged to consider this course.

## SCIENCE

## Six semesters required

## [Unless otherwise noted, all academic courses in this department meet both CSU and UC entrance requirements]

GRADUATION REQUIREMENTS: Three years of lab science required to include: Two semesters (one year) of biology taken in the freshmen or sophomore year; two semesters (one year) of a physical science elective and two semesters (one year) of a second life or physical science elective. "Physical Science" includes all levels of Chemistry and all levels of Physics. "Life Science" includes the courses Biology, AP Biology, Biology II and AP Environmental Science. *

[^1]| BIOLOGY (required) |
| :--- |
| $\mathbf{1 0}$ credits -- Grade(s) 9, 10 |
| Prerequisite: None except for Freshmen * |
| Fee: Fees will be collected for field trips |

Biology is a required laboratory course that fulfills one year of Notre Dame High School's graduation requirement for science. The major emphases of the course are on the nature of science, evolution (change over time) and the relationships among living things. Topics to be studied will include: the nature of science, the scientific method, the microscope, physical and chemical basis of life, cell anatomy and physiology, genetics, heredity, evolution, classification, botany, phylogenetic biology and comparative anatomy. The student will have the experience of participating in a variety of laboratory experiments, working with both living and preserved specimens. Other presentation methods in class will include: lecture/demonstration, discussions, problem worksheets, videos, computer labs and individual research using school and private resources. Student learning will be evaluated by written homework, written lab reports, model building, oral reports, quizzes, tests and an individual science experiment.

Freshman Prerequisite: completion of or concurrent enrollment in Geometry or Geometry Honors

## HUMANS IN THE BIOSPHERE:

ECOLOGY, BIOTECHNOLOGY AND HUMAN PHYSIOLOGY

Prerequisite: Completion of Biology with a C or better both semesters
Fee: Fees will be collected for a field trip to the Monterey Bay Aquarium.

Humans in the Biosphere: Ecology, Biotechnology and Human Physiology is an elective laboratory course that is a continuation of Biology. The first semester will start with a survey of biomes, ecology and population growth including the role of humans in the biosphere. Bioethics will be explored during a unit on biotechnology. First semester will conclude with a survey of the diversity of life including viruses, monerans, protists, fungi and plants. Second semester will cover comparative anatomy of vertebrates with an emphasis on human physiology and anatomy. Dissections are a required part of the second semester. The student will have the experience of participating in a variety of laboratory experiments, working with
both living and preserved specimens. Other presentation methods in class will include:
lecture/demonstration, discussions, problem worksheets, videos, computer labs and individual research using school and private resources. Student learning will be evaluated by written homework, written lab reports, model building, oral reports, quizzes, and tests.

This course is not intended to be a replacement for Chemistry or Physics. Students planning on a science major in college should not take this course in lieu of Physics; however non-science majors could take this as their third year of science. Seniors have enrollment priority for this class.

| CHEMISTRY | \#3500 |
| :--- | :--- |
| $\mathbf{1 0}$ credits - Grade(s) 10, 11, 12 |  |
| Prerequisite: C or better in Biology both semesters <br> Concurrent enrollment in or completion of Algebra II |  |

Chemistry is a physical science laboratory course which emphasizes chemical changes, applied mathematics and the scientific method. Topics will include: molecular and atomic theory, the Periodic Table, stoichiometry, physical properties of matter, gas laws, thermodynamics and chemical reactions. The student will have the experience of participating in a variety of laboratory experiments. Other presentation methods include: lecture/demonstration, Socratic seminar, discussions, problem worksheets, games, songs, videos, computer labs and research. Student learning will be evaluated by written homework, written lab reports, model building, oral reports, quizzes, tests and a laboratory research project.

CONCEPTUAL CHEMISTRY
\#3515

## 10 credits - - Grade(s) 11, 12

Prerequisite: Completion of Biology
Department approval

Conceptual chemistry is a physical science course that emphasizes chemical changes, applied mathematics and the scientific method. Topics to be studied include: molecular and atomic theory, the Periodic Table, stoichiometry, physical properties of matter and chemical reactions. This chemistry course is designed for students who need more support making the applications between Algebra II and Chemistry. The student will have the experience of participating in a variety of laboratory experiments. Other presentation methods include: lecture/demonstration, discussions, problem solving, games, songs, videos, computer labs and research. There will be individualized instruction to develop specific student skills as identified. Student learning will be evaluated by written homework, written lab reports, model building, oral reports, quizzes, tests and a laboratory research project.

10 credits -- Grade(s) 11, 12
Prerequisite: C or better in Algebra II and Chemistry (both semesters)
Completion or current enrollment in Trigonometry or Department approval
Fee: Fees will be collected for a field trip to the Exploratorium.

Physics is a one-year elective laboratory course. The course is structured so that there is first a conceptual understanding and then an employment of highly effective problem solving methods to support the physical laws fundamental to all sciences. The course will cover motion, forces, vectors, momentum, energy, simple machines, waves, sound, light, reflection, refraction, lenses, mirrors, electricity, magnetism, and atomic theory. The student will have the experience of participating in a variety of laboratory experiments. Other presentation methods in class will include: lecture/demonstration, discussions, problem solving, videos, computer labs and individual research using school and private resources. Student learning will be evaluated by written lab reports, quizzes, tests, oral presentations, and a Physics/science project or research paper.

This course is suggested for students planning to attend a U.C. campus and especially for those planning to major in math, science or engineering.

## Honors Program

## Prerequisites for Honors Courses in Science

| Course being <br> applied for: | Grades must be maintained throughout the year |
| :--- | :--- |
| Honors <br> Chemistry | An A- in both Biology and Algebra II or concurrent enrollment in Algebra II Honors <br> Minimum GPA of 3.5 <br> Note: The score on the January Biology final exam will be a factor in chemistry <br> honors placement. There will be a problem-solving question that requires the <br> student to apply her understanding of the scientific method and assess her ability to <br> design a controlled experiment |
| Honors <br> Physics | Completion of Calculus AB or concurrent enrollment in Calculus AB <br> Minimum GPA of 3.5 |
| AP Physics | Completion of Calculus AB and concurrent enrollment in Calculus BC <br> Minimum GPA of 3.5 |
| Honors <br> Biology | $92 \%$ (or above) on the HSPT <br> $10^{\text {th }}$ grade reading level (or above) on HSPT <br> A's in 7 |
| Concurrent enrollment in Geometry Honors or higher as a freshman |  |$|$| An A in Biology (both semesters) and an A in Chemistry or a B or better in Honors |
| :--- |
| Chemistry |
| Minimum GPA of 3.5 |

* The requirements noted above for honor science and AP classes are minimum requirements. A class may fill without providing a seat for all candidates who have the minimum requirements. Placements are made using Fall semester grades. If a student's grades drop during the second semester the student may be removed from the class.

10 credits -- Grade(s) 9, 10
Prerequisite: see Prerequisites for Honors Courses in Science on page 38
Fee: Fees will be collected for field trips

Honors Biology is a required laboratory course that fulfills one year of Notre Dame High School's graduation requirement for science. Honors Biology studies the same topics as the required biology course but in greater depth. In addition, there will be enrichment activities for each unit that will include investigating current topics, reading scientific articles and designing experiments. The honors biology student will be expected to be a highly engaged, independent learner. The major emphases of the course are on the nature of science, evolution (change over time) and the relationships among living things. Topics to be studied will include: the nature of science, the scientific method, the microscope, physical and chemical basis of life, cell anatomy and physiology, genetics, heredity, evolution, classification, botany, phylogenetic biology and comparative anatomy. The student will have the experience of participating in a variety of laboratory experiments, working with both living and preserved specimens. Other presentation methods in class will include: lecture/demonstration, discussions, problem worksheets, videos, computer labs and individual research using school and private resources. Student learning will be evaluated by written homework, written lab reports, model building, oral reports, quizzes, tests and an individual science experiment.

## AP BIOLOGY <br> 10 credits -- Grade(s) 11, 12 <br> Prerequisite: see Prerequisites for Honors Courses in Science on page 38 <br> Fee: Advanced Placement Exam; Fees will be collected for field trips.

This course is designed to be the equivalent of a college introductory course usually taken by Biology majors during their first year. The textbook used in AP Biology is college level and the labs are the equivalent of those done by college students. The course aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The primary emphasis will be on developing an understanding of concepts. This conceptual understanding includes: a grasp of science as a process rather than as an accumulation of facts, personal experience in scientific inquiry, recognition of unifying themes that integrate the major topic of biology, and the application of biological knowledge and critical thinking to environmental and social concerns. The three general areas that will be covered are: Molecules and Cells, Heredity and Evolution, and Organisms and Populations. The topics of study will include: chemistry of life, cells, cellular energies, heredity, molecular genetics, and evolutionary biology, diversity of organisms, evolution, structure and function of plants and animals, and ecology.

HONORS CHEMISTRY \#3550

## 10 credits -- Grade(s) 10, 11

Prerequisite: see Prerequisites for Honors Courses in Science on page 38

Chemistry Honors is a fast paced physical science laboratory course which investigates the basic structure of matter through lecture, discussion, lab work, extensive reading and independent research. This course emphasizes chemical changes, applied mathematics, the scientific method and problem solving. Topics to be studied include molecular and atomic theory, physical states of matter, chemical reactions, the Periodic Table, organic chemistry, acid-base chemistry, redox reactions, molecular structure, colloidal properties, reaction rates, equilibrium, electro-chemistry, stoichiometry, thermodynamics, kinetics, gas laws, physical
properties of matter and nuclear chemistry. The student will have the experience of participating in a variety of laboratory experiments. Other presentation methods in class include: lecture/ demonstration, discussions, problem worksheets, games, songs, videos, computer labs and research. Student learning is evaluated by written homework, written lab reports, model building, oral reports, quizzes, tests and a laboratory research project.

HONORS PHYSICS

## 10 credits -- Grade(s) 11, 12

Prerequisite: see Prerequisites for Honors Courses in Science on page 38
Fee: Fees will be collected for field trips to the Exploratorium.

Honors Physics is a one-year, Calculus-based laboratory Physics class. It is intended to prepare students interested in science and engineering for a standard first year college physics course. Students will develop an understanding of fundamental physical laws and the ability to apply and manipulate these laws using mathematical problem-solving techniques. Concepts will be discovered and reinforced using a variety of laboratory experiments and demonstrations.

Topics covered include motion, forces, momentum, energy, simple harmonic motion, electricity, magnetism, optics, atomic theory, nuclear physics, and topics in modern physics. Mathematical application of Calculus and Trigonometry techniques are applied whenever relevant. Student learning will be evaluated by written lab reports, tests, quizzes, oral presentations, and an individual science project or research paper.

## This course is suggested for students planning to attend a U.C. campus and especially for those planning to major in Math, Science or Engineering

## AP PHYSICS C: MECHANICS

## 10 credits - - Grade(s) 11, 12

Prerequisite: see Prerequisites for Honors Courses in Science on page 38
Fee: Advanced Placement Exam; Fees will be collected for field trips.

AP Physics C: Mechanics is a yearlong course that provides instruction in the following six context areas: kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. This course will include a hands-on laboratory component comparable to a semester-long introductory college-level physics laboratory. Students will spend a minimum of 20 percent of instructional time engaged in hands-on laboratory work. Each student is expected to complete a lab notebook.
This course is equivalent to a first-year college physics class and is designed to prepare students for the AP Physics C Mechanics Exam given in May. This course follows the syllabus for that examination, and students passing the exam may receive college credit. The course requires and employs a basic understanding of calculus (differentiation and integration).
This course will focus on two major activities:
A. Discovery of concepts via scientific inquiry and critical thinking skills. Much of the learning will be independent. The teacher will provide the introduction and background, the teacher will then assign a task, problem, or question (perhaps more than one at a time). The students will work individually or in groups, often with hands-on equipment and materials, to complete the task. Often, the students will be asked to present solutions to the class and/or to critique or verify the solutions of others. The goal is that the students will see a variety of ways to solve the same problem.
B. Laboratory application of physics knowledge.

## 10 credits -- Grade(s) 11, 12

Prerequisite: see Prerequisites for Honors Courses in Science on page 38
Fee: Advanced Placement Exam; Fees will be collected for field trips.

The AP Environmental Science course is designed to be the equivalent of an introductory college course in environmental science. It is a rigorous science course that stresses scientific principles and analysis with a strong laboratory and field investigation component. Environmental Science is interdisciplinary yet has several major unifying themes which are: science is a process; energy conversions underlie all ecological processes; the Earth itself is one interconnected system; humans alter natural systems; environmental problems have a cultural and social context and human survival depends on developing practices that will achieve sustainable systems. Topics to be studied include ecosystems, the flow of energy, the cycling of matter, the solid earth, the atmosphere, the biosphere, human population dynamics, renewable and nonrenewable resources, land use, waste disposal, environmental and global changes and their consequences, and environment and society. Students will acquire skills in specific laboratory techniques and procedures such as collecting and analyzing water samples. Students will conduct long-term studies and will analyze real data. Fieldwork may include a trip to a local public facility such as a water-treatment plant.

## ELECTIVES

## INDEPENDENT SCIENCE RESEARCH PROGRAM \#3700 <br> 5credits - - Grade(s) 9, 10, 11, 12 <br> Prerequisite: completion of summer research program; concurrent enrollment in or completion of biology honors

You can now continue your independent summer research project with the support of an ND science teacher mentor. You will be required to attend regularly scheduled scientific talks at Notre Dame and in the community (Stanford, SLAC, SJSU, and others as identified). You will present your project at a local or regional science fair. Students in this program will develop an independent plan of study with their science mentor and will provide proof of attendance at a pre-determined minimum number of activities (lectures, research, outreach, presentations).

## SOCIAL STUDIES

## Seven semesters required

All students are required to take seven semesters of social studies. The required courses include: global studies ( $9^{\text {th }}$ grade), world history ( $10^{\text {th }}$ grade), American history ( $11^{\text {th }}$ grade), government ( $12^{\text {th }}$ grade), and one social studies elective course ( $12^{\text {th }}$ grade).

## [Unless otherwise noted, all academic courses in this department meet both CSU and UC entrance requirements]

## GLOBAL STUDIES \#1506

## 5 credits - - Grade 9

Prerequisite: None
This semester class will focus on themes of geography and its affect on major regions of the world. Global and regional issues will be examined in the following areas: Latin America, Africa, the Middle East, and South and East Asia through the use of case studies. Students will study these areas through the five major geographic themes: physical and human geography, region, movement, and human-environmental interaction. Special attention will be given to the issue of human rights in contemporary societies around the world. This course will provide a foundation for the 10th grade World History course. Important skills will be introduced and reinforced throughout the semester, such as study and test taking skills, writing, critical thinking, listening and reading comprehension.

MODERN WORLD HISTORY \#1510

## 10 credits -- Grade 10

Prerequisite: None
Fees will be collected for field trips
This one-year required course will explore the themes of modern world history with emphasis on the period from the 1400s to the present day incorporating themes from the Facing History program and curriculum. Using case studies from different regions of the world, students will study the impact of science, religion, culture, revolution, nationalism, and democracy on the human condition throughout history. Crosscurricular connections will be made throughout the year through assessments and discussions with Religious Studies and English courses. During the second semester an in-depth study of events leading to and following World War II as well as the Holocaust will be conducted. Historical events are connected to the present day condition of the world. Diverse instructional methods are used in class including discussions, lectures, group activities, simulations, and individual reading. Student assessment will be varied but can include tests, group and individual projects, quizzes, and homework. As a result, students will develop writing, critical thinking, reading comprehension, study, and note taking skills.

In this class, students will study the major turning points in United States History in the twentieth century. Following a review of the nation's beginnings, students will seek to understand the people and events that led to the emergence of the United States as a major world power. Students will consider the major social and political movements which have shaped the country. Students will evaluate past events with regard to ethical and moral criteria and their impact on life in the United States today. The class will challenge students to critically examine the country's history and its influence on contemporary society nationally and internationally.

## U. S. GOVERNMENT

 \#15005 credits - - Grade 12
Prerequisite: None
Fees will be collected for field trips
This one semester course examines the development of the U.S. system of government and how the process works today. Students will examine the foundational documents and principles of our government. Careful study of the three branches of the federal government will incorporate current events to illustrate how each institution works and interacts. Students will explore the political process to see how citizens can participate in civics through individual action, interest groups, and political parties. Moreover, students will trace the evolution of civil rights and liberties and how they are protected and challenged today. Students not only explore how the governmental system works, but how to be active citizens who are involved in the process and in their communities. Students will engage in debates, writing assignments, group work and independent research.

Honors Program

## Prerequisites for Honors Courses in Social Studies

| Course being applied for: | Grades must be maintained throughout the year. An application is needed from all students |
| :---: | :---: |
| Global Studies Honors | - National Percentage score of $85 \%$ or better on the basic skills reading subtest on the HSPT <br> - A 3.0 in Global Studies Honors or a 3.5 in Global Studies is needed to apply for World History AP |
| World History AP | - In required Social Studies courses a minimum grade of C in an AP course is needed to move into another AP Social Studies course |
| U.S. History AP | - Humanities (English courses, Social Studies elective courses, Philosophy) a GPA of at least 3.3 |
| U.S. Government and Politics AP | - Teacher recommendations from English and Social Studies may be requested for review <br> - Counseling feedback will be collected <br> - Standardized test scores will be consulted <br> - An entrance exam for each class will be conducted for those students not currently enrolled in an AP or honors class. These exams will assess critical thinking and analysis skills of the students |
| AP Psychology | Priority is given to seniors. A 3.5 overall GPA is required to apply. |

## 5 credits -- Grade 9

## Prerequisite: see Prerequisites for Honors Courses in Social Studies on page 43

UC/CSU Approval pending
The content of this course is similar to the Global Studies course. The depth of study in each area provides more critical analysis and the pace will be accelerated. College level texts will be incorporated as well as primary sources.
WORLD HISTORY AP - INTRODUCTION TO ADVANCED PLACEMENT

## 10 credits -- Grade 10

Prerequisite: see Prerequisites for Honors Courses in Social Studies on page 43
Fee: Advanced Placement Exam; Fees will be collected for field trips

This course will focus on a greater understanding of the global processes and interactions with different human societies primarily from 500 CE to present day. Through a combination of content reading, AP writing and analytical skill work, this course is advanced. The course highlights the nature of changes in international frameworks and discusses their causes and consequences. In addition, comparisons among major societies will be discussed. The long-term objective is for students to demonstrate a clear understanding of how the big picture of world history helps in understanding the complexities of today's world. College credit may be awarded for passing the exam in May.

## U. S. HISTORY AP

## 10 credits - - Grade 11

## Prerequisite: see Prerequisites for Honors Courses in Social Studies on page 43

Fee: Advanced Placement Exam; Fees will be collected for field trips

This course is designed to provide students with the analytical skills and factual knowledge needed to deal critically with the problems and materials in United States history, from pre-Columbian time to the present. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance and to weigh the evidence and interpretations presented in historical scholarship. Extensive reading and writing is required as well as additional class meetings outside of regular hours (after school, Saturdays, over spring break). The AP exam will be taken in lieu of the second semester final exam. If a student chooses not to take the AP exam, she will be required to take the second semester final.

## U. S. GOVERNMENT AND POLITICS AP \#1545 <br> 5 credits - - Grade 12 <br> Prerequisite: see Prerequisites for Honors Courses in Social Studies on page 43 <br> Fee: Advanced Placement Exam; Fees will be collected for field trips

The Advanced Placement U.S. Government and Politics program is designed to teach U.S. constitutional government based on principles of philosophy, political beliefs and behavior, political parties and interest groups, national institutions and policy processes, and law. Emphasis is given to the relationship of the citizen to the structure and function of the American constitutional system. This course is designed to enable students to develop a critical perspective of government and politics in the United States. The nature of the American political system, its development over the past two centuries, and how it works today are examined. In addition to a study of the governmental structure of the U.S., the course will include
a broad overview of basic economic principles, theories and practices. Both general concepts and specific case studies are used to in class.

AP Government and Politics is a highly structured, very demanding college-level course. Students are required not only to read thoroughly the college-level text, but also to augment this material through research and reading of supplemental articles and then critically apply the findings to the political nature of current governmental policies and analyze the ramifications of these policies. One of the primary objectives of this course is to expose students to all areas of information covered on the US Government and Politics AP Examination. Thus it is imperative that a high-level academic environment exist and that the student is dedicated to learning, is highly motivated, and is willing to put forth both in and outside of the classroom the time and effort required for a course of this intensity.


## $12^{\text {th }}$ GRADE ELECTIVE COURSES

## All $12^{\text {th }}$ grade students must take one social studies elective course in addition to the required government course.

## AP PSYCHOLOGY (yearlong course)

## 10 credits - - Grade 12

Prerequisite: see Prerequisites for Honors Courses in Social Studies on page 43
This class is offered to seniors only.
Fee: Advanced Placement Exam; Fees will be collected for field trips

AP Psychology is a yearlong course that will introduce students to the systematic, scientific study of mental processes as well as the behavior of humans and animals. Students will be exposed to the science of psychology, as well as the role of the brain and nervous system in regards to the emotions, cognitions and behavior of an organism. In addition, the course will include the study of sleep, learning, memory, intelligence, motivation and emotion. Students will also study developmental psychology, personality theories, anxiety and mood disorders and their treatment. The course will also include the study of ethics and methods psychologists utilize within their science and practice. College credit may be awarded for passing the exam in May.

Why does the price of gasoline rise and fall? Why are businesses constantly introducing new products and services? Why do workers with more education and experience usually earn more money than high school students? Should the government raise taxes or lower them when the economy is in trouble? This course will explore these questions and many others. The course is a one-semester course designed to give the student a broad overview of basic economic principles, theories and practices. The student will evaluate the role of government, business, labor and the consumer in a market economy. Special emphasis will be given to economic interdependence, the emergence of the global economy and its effects. In addition, "life
economic skills" like resume writing, dos's and don'ts of job interviewing, creating a personal budget, how to shop for insurance, and credit will be addressed.

CONFLICT IN THE MODERN WORLD

## 5 credits - - Grade 12

Prerequisite: None
This class is offered to seniors only.
Fees will be collected for field trips

Conflict in the Modern World is a one semester Social Studies elective which offers the student the opportunity to examine the causes of conflict in the world today by studying the roles of culture, ethnicity, and ideology. We strive to understand the root causes of some of the conflicts in our world today by analyzing geography (political and physical), history, economics, politics, and culture of selected nations. Students will be assessed in a variety of ways particularly: in class writings, papers, individual and group presentations and class participation. Since it is a seminar class, and large and small group discussions make up a large portion of the class time, active student participation is a priority.

CONTEMPORARY SOCIAL ISSUES: RACE, GENDER AND ETHNICITY ISSUES

## 5 credits - - Grade 12

Prerequisite: None
This class is offered to seniors only.
Fees will be collected for field trips

This is a one semester interdisciplinary, Social Studies elective course that will examine the changing demographics of American society and the consequences of the changing population. Students will study what influences and shapes racial, ethnic, gender, and cultural identity. In addition to the shaping of these identities, students will consider how each impacts society through the study of politics, art, literature, history, and film. Instruction and assessment will vary.

## STUDENT ASSISTANTSHIPS

| ATTENDANCE ASSISTANT | \#8303 |
| :--- | :--- |
| $\mathbf{5}$ credits - - Grade(s) 11, $\mathbf{1 2}$ |  |
| Prerequisite: Attendance Officer/Dean's Approval |  |
| Does not meet CSU/UC requirement |  |

This job is varied. It requires some phone work, typing, paperwork and collecting attendance forms from each classroom.

## COMPUTER LAB ASSISTANT <br> \#8318 <br> 5 credits - - Grade(s) 11, 12 <br> Prerequisite: Instructional Technology Coordinator's Approval <br> Does not meet CSU/UC requirement

The Computer Lab Assistant will be responsible for running the computer lab. This will include, but is not limited to, issuing laptop carts, control of software and equipment, handling and/or reporting problems, record keeping and enforcing the rules of the lab. Good attendance is mandatory.

| LIBRARY ASSISTANT |
| :--- |
| $\mathbf{5}$ credits -- Grade(s) 11, 12 |
| Prerequisite: Librarian's Approval |
| Does not meet CSU/UC requirement |

The Library Assistant must have the ability to work independently and perform basic library tasks. They must be responsible for regular attendance and take care of library materials.

## TEACHER'S ASSISTANT

| 5 credits - - Grade(s) 11, 12 |
| :--- |
| Prerequisite: Department Approval |
| Does not meet CSU/UC requirement |

Does not meet CSU/UC requirement

Each department uses teacher assistants in a variety of ways. Generally, a teacher assistant is involved in the printing and collating of papers for use in teacher's lessons. The students also assist the teachers with classroom activities. Candidates for this course are required to complete tasks with minimal assistance.

Teacher Assistants are used in the following areas:

| ASB | 8316 | Foreign Language | 8308 |
| :--- | :--- | :--- | :--- |
| Computer | 8318 | Social Studies | 8306 |
| Creative Arts | 8315 | Mathematics | 8314 |
| English | 8304 | Physical Education | 8310 |
| Religion | 8305 | Science | 8321 |


[^0]:    Completion of Community Service Learning Requirements - see page v for details.

[^1]:    * A typical sequence for most students for entrance into a competitive college or university would include a year each of biology, chemistry and physics.

