



# Course Catalog

2022-2023

Dear Students and Parents,

Welcome to the 2022-2023 NDB Course Catalog!

Each edition brings familiar favorites and introduces new options. I am pleased to be able to share with you this year's new additions. Please find the full descriptions of these new offerings in the catalog. Here is the preview list of new offerings:

- Being Notre Dame
- Exploring Computer Science
- Introduction to Biotechnology
- Introduction to Data Science
- Sports Management
  
- Concert Band - TriSchool (Serra)
- Concert Choir - TriSchool (Serra)

Wishing you all a wonderful experience requesting your courses for the 2022-2023 academic year!

Sincerely,

A handwritten signature in black ink, appearing to read "Jolanda Zuger Breazeale".

Jolanda Zuger Breazeale '86  
Interim Associate Head of School

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# Graduation Requirements

Students must take at least 60 credits per year (the equivalent of six classes per semester), to earn the 240 required credits for graduation. Exceptions can be made for academic purposes with the approval of the School Counselor, Department Chairperson, and the Associate Head of School for Curriculum and Instruction. Students may also register for a maximum of 70 credits, or up to 7 classes, in one semester at NDB.

## 240 Required Credits

Required credits are broken down as follows (in alphabetical order).

Please see department sections for specific requirements.

- **Becoming Notre Dame:** 5 required credits
- **Computer Science:** 10 required credits (beginning with the class of 2024)
- **Electives:** 30 required credits (20 required credits beginning with the class of 2024)
- **English:** 40 required credits (including English I, II, III and IV, or the AP equivalent)
- **Kinesiology:** 10 required credits (one year of Physical Education with Health, which may also be taken in the summer)
- **Mathematics:** 30 required credits (including Algebra II)
- **Science:** 30 required credits (including Biology and Chemistry)
- **Social Sciences:** 30 required credits (including Modern World History, U.S. History, and American Government and Economics)
- **Spiritual Life:** 35 required credits
- **Visual and Performing Arts:** 10 required credits
- **World Languages:** 20 required credits (two years of same language)

## Sample 4-Year Academic Plan

*Note: All courses listed below are 1 year in duration unless otherwise noted.*

Freshman	Sophomore
<ol style="list-style-type: none"><li>1. Becoming Notre Dame (fall semester) &amp; Spiritual Life (spring semester)</li><li>2. English I</li><li>3. Mathematics</li><li>4. Science</li><li>5. World Languages</li><li>6. Additional Required Course or Elective, including Computer Science Elective, Physical Education with Health, or Visual and Performing Arts Elective.</li><li>7. Additional Required Course or Elective, including Computer Science Elective, Physical Education with Health, or Visual and Performing Arts Elective. With prior approval, students may also take AP Computer Science Principles or AP Human Geography.</li></ol>	<ol style="list-style-type: none"><li>1. English II</li><li>2. Mathematics</li><li>3. Modern World History</li><li>4. Science</li><li>5. Spiritual Life</li><li>6. World Languages</li><li>7. Additional Required Course or Elective, including Computer Science Elective, Physical Education with Health, or Visual and Performing Arts Elective.</li></ol>
Junior	Senior
<ol style="list-style-type: none"><li>1. English III (or AP equivalent)</li><li>2. Mathematics</li><li>3. Science</li><li>4. Spiritual Life</li><li>5. U.S. History</li><li>6. Additional Required Course or Elective</li><li>7. Optional: Additional Required Course or Elective</li></ol>	<ol style="list-style-type: none"><li>1. English IV (or AP equivalent)</li><li>2. Spiritual Life</li><li>3. U.S. Government/Economics</li><li>4. Additional Required Course or Elective</li><li>5. Additional Required Course or Elective</li><li>6. Additional Required Course or Elective</li><li>7. Optional: Additional Required Course or Elective</li></ol>

## Community College Courses

Any Junior or Senior interested in enrolling in a community college course for enrichment must have a cumulative NDB GPA of 3.5 and obtain permission from the appropriate department chair, their School Counselor, and the Associate Head of School (AHOS) before enrolling in a course. The signature of the AHOS is required on the college course registration form, for authorization. Please note that a community college course may not be taken in lieu of a core course at Notre Dame, and will not contribute to the Notre Dame GPA.

## Advanced Placement (AP®) and Honors Courses

All AP and Honors courses offered at Notre Dame are weighted on the 5.0 scale for the Notre Dame GPA. However, please be aware that only the NDB courses marked with an asterisk\* in the descriptions below are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation. In addition, **the UC/CSU only recognizes these classes (which are marked with an asterisk below) on the 5.0 scale if they are taken in the student's sophomore year of high school or later.**

### AP Exam Dates and Fees

Students who take an AP class must also take the AP test in May, unless they have received authorization in writing from the Associate Head of School. The May exam is the culmination of a year's worth of study, and is the natural extension of taking an AP class. AP exams cost is \$95 per exam and it will be billed through Student Billing. Exams are ordered for students enrolled in an NDB AP course offering. Testing is not provided without enrollment in the associated NDB course.

### NDB Department Recommendations

Each department has developed its own criteria for the selection of students into their Advanced Placement and Honors level courses. Student recommendations are based on their performance in prerequisite classes, entry exams, and a holistic view of their schedule and interests.

### Typical Student Expectations for AP Classes:

- the necessary basic background knowledge for the course (where appropriate)
- the ability to:
  - stay well organized and balance multiple time challenges
  - work well under the pressure of deadlines

## Typical Student Expectations for AP Classes (cont.):

- the ability to:
  - prioritize time in accordance with academic needs
  - recognize when to ask for help, and be a self-advocate
  - put in at least one hour of homework daily per AP course
  - perform the required pre-class work (such as summer or break assignments)
  - pay the additional AP course fees (about \$90 for each exam) or apply for a fee waiver from NDB
  - **take the AP Exam in May**

## AP Enrollment Instructions

1. During the spring, AP teachers will conduct optional informational sessions for students who have requested their AP classes. At these meetings, students will have the opportunity to ask about the time commitment and other requirements for that AP class.
2. Students requesting 3 or more AP courses are required to complete the [\*\*NDB AP® Expectations Worksheet\*\*](#), as well as to discuss and sign off on it with their parents or guardians, and NDB Counselor. This document must be completed in full and **turned into the student's NDB Counselor by March 25, 2022**.
3. Requests to drop a future AP class before the end of the current school year will involve the student, parent, counselor, department chair, and Associate Head of School. **Any requests to drop a 2022-2023 AP class after May 27, 2022 may be denied.** The administration will make the final decision in all cases. AP classes are exempt from the Add/Drop policy due to the difficulty of scheduling higher level classes.
4. Please be sure to turn in the AP application on time. Due to College Board deadlines, failure to turn in the AP application on time could jeopardize admission to courses.
5. Finally, all students may find the [\*\*NDB AP® Expectations Worksheet\*\*](#) helpful in planning out their academic and extracurricular time commitments. You can find this document in the Appendices of this Catalog.

## **College Admission Requirements**

Please refer to department sections for college admission requirements. A full summary of UC/CSU admissions eligibility requirements and A-G subject areas are also available in the [Appendices](#) to this Course Catalog, and on <https://admission.universityofcalifornia.edu/admission-requirements/>

# English Department

- NDB Graduation Requirements: 4 consecutive years of college preparatory English courses, Levels I-IV, which include frequent and regular writing, and reading of classic and modern literature.
- UC/CSU Eligibility Requirements Area B (English): 4 years of UC-approved English courses listed below, with the exception of Creative Writing and Journalism, which are UC-approved Area G *electives*.
- Please also note that AP/Honors courses marked with an asterisk \* below are recognized on the 5.0 scale by the UC/CSU systems in their GPA eligibility calculation, if completed in grade 10 or later.

## Possible English course progression:

<b>Freshman</b>	English I English I Honors
<b>Sophomore</b>	English II English II Honors
<b>Junior</b>	English III AP English Language and Composition*
<b>Senior</b>	English IV AP English Literature and Composition*

## English Electives (note: English electives do not satisfy the four-year English requirement):

<b>All Grade Levels</b>	Journalism I
<b>Sophomore, Junior and Senior</b>	Creative Writing Journalism II/III

## English Course Descriptions

### English I (UC/CSU English)

Grade 9

1 Year

*Prerequisite:* None

EN100

Freshmen begin their high school experience by exploring the guiding question, “Who am I?” Through a study of texts selected from classic and contemporary literature, including mythology, novels, plays, poems, and short stories, they will identify and analyze universal themes of coming of age, experience, and identity.

Students begin building their toolkit of reading, writing, and listening/speaking skills through the identification of literary devices, vocabulary building, and the writing process, especially the formal academic essay. Through critical thinking, collaborative discussions, and projects/presentations, students develop their style and voice. (Students will submit various assignments to their online portfolio.)

### English I Honors (UC/CSU English)

Grade 9

1 Year

*Prerequisite:* Reading level and language skills at or above the tenth grade level. A writing sample is required and will be assessed by the course instructor and/or department chairperson.

EN150

Freshmen begin their high school experience by exploring the guiding question, “Who am I?” Through a study of selected texts from classic and contemporary literature, particularly mythology, novels, plays, poems, and short stories, they identify and analyze universal themes of coming of age, experience, and identity.

English I Honors is designed for students who demonstrate reading and writing skills above their grade level and an ability to handle an increased workload with less foundational instruction. In addition to the skills and texts from English I, they read several additional texts, work at a deeper and more complex level, and are evaluated more rigorously. (Students will submit various assignments to their online portfolio.)

## **English II (UC/CSU English)**

Grade 10

1 Year

*Prerequisite:* English I

EN200

Sophomores explore the guiding question, “Who am I in the world?” through a survey of world literature, particularly novels, plays, and short stories. They identify and analyze universal themes of identity and conflicts between traditional and contemporary morals and ethics.

Students continue building their toolkit and developing their reading, writing, and listening/speaking skills with literary devices, vocabulary building, and the writing process, focusing on analysis. Through critical thinking, collaborative discussions, and projects/presentations, students continue to develop their style and voice. (Students will submit various assignments to their online portfolio.)

## **English II: Honors (UC/CSU English)**

Grade 10

1 Year

*Prerequisite:* Completion of English I Honors with a grade of B and A- in essay writing from fall semester. Or completion of English I with a grade of A- from first semester and also an A- average in essay writing confirmed with teacher recommendation.

Prerequisite grades must be maintained throughout the second semester. The department will require a writing sample of all transfer students entering Notre Dame.

EN250

Sophomores explore the question, “Who am I in the world?” through an accelerated study of world literature, focusing on novels, plays, and short stories. They make connections between universal themes of identity and conflicts between traditional and contemporary values.

English II Honors is designed for students who demonstrate reading and writing skills above their grade level and an ability to handle an increased workload with less foundational instruction. In addition to the skills and texts from English II, they read several additional texts, work at a deeper and more complex level, and are evaluated more rigorously. (Students will submit various assignments to their online portfolio.)

### **English III (UC/CSU English)**

Grade 11

1 Year

*Prerequisite:* Completion of English II or English II Honors

EN300

Juniors explore the question, “Who am I as an American?” through a survey over two centuries of American literature, focusing on essays, novels, and plays. They identify and analyze themes of American identity and the American Dream from the voices of early colonists to diverse contemporary writers.

Students grow their English toolkit and develop their reading, writing, and listening/speaking skills through annotated close reading, vocabulary building, take-home and timed essay writing, and projects/presentations. Through critical thinking, collaborative discussions, and the writing process, students continue to develop their style and voice. (Students will submit various assignments to their online portfolio.)

The course is aligned with the U.S. History class to provide historical context for the development of the American literary voice and features a major presentation related to “The Great Gatsby” and another on contemporary American culture.

### **Advanced Placement English Language and Composition\* (UC/CSU English)**

Grade 11

1 Year

*Prerequisite:* Students continuing from English II Honors must have a B from first semester. Students coming from English II must have an A- from first semester and also an A- average in essay writing confirmed

by their teacher’s recommendation.

Prerequisite grades must be maintained throughout the second semester. The department will require a writing sample from all transfer students entering Notre Dame.

EN350

The AP English Language course studies the ancient art of rhetoric in preparation for the College Board’s Advanced Placement examination in May. The students learn the fundamentals of formal logic and the essential elements of rhetorical analysis through formal lecture and the exploration of multiple genres,

modes of discourse and media, including; speeches, non-fiction articles, painting, film, cartoons as well broad selection of American Literature.

The course follows the chronology of the AP US History to ensure that the historical context of the writing is studied to reveal the close interdependence of cultural, political and literary expression.

Instruction is essentially exploratory through Harkness and Socratic seminars, research projects, formal literary analysis, multiple choice close reading among many of the instructional styles utilized. The students are skilled in close reading, argument, critical literary analysis and writing by the end of the course.

### **English IV (UC/CSU English)**

Grade 12

1 Year

*Prerequisite:* Completion of English I/English I Honors, and English II / English II Honors, and English III/ AP Language and Composition

EN400

Seniors explore the question, “Who am I in the universe?” as they study a selection of classic and contemporary literature, focusing on essays, novels, and plays as well as making connections between universal themes in the literature that they have studied over the past four years.

Students continue to grow their toolkit and practice their reading, writing, and listening/speaking skills through annotated close reading, vocabulary building, take-home and timed essay writing, and projects/presentation. Through critical thinking, collaborative discussions, and the writing process, students continue to develop their style and voice. (Students will submit various assignments to their online portfolio.) The course also features the college admissions essay/personal statement and the college research paper.

### **Advanced Placement English Literature and Composition\* (UC/CSU English)**

Grade 12

1 Year

*Prerequisite:* Students continuing from Advanced Placement English Language and Composition must have a B from first semester. Students coming from English III must have an A- from first semester and also an A- average in essay writing confirmed by their teacher’s recommendation.

Prerequisite grades must be maintained throughout the second semester and verified by the course instructor or department chairperson. The department will require a writing sample of all transfer students entering Notre Dame.

## EN450

Seniors explore the question, “Who am I in the universe?” through an accelerated study of select classic and contemporary literature, focusing on novels, poetry, and plays, as well as analyzing how literary devices illustrate universal themes and making connections between these themes in the literature that they have studied over the past four years.

Students in this class are prepared at the freshmen collegiate level in terms of reading requirements, literary analysis, and weekly writing expectations. Using take-home and timed essay writing, multiple choice exams and practice sessions, close textual analysis and comparison, students work to build their understanding of universal themes, author and narrative voices, audience, and purpose of fiction texts. Students in this course should expect to read over 2,000 pages of text per semester and write 14-20 essays over the course of the year. (Students will submit various assignments to their online portfolio.)

The course features the college admissions essay/personal statement and the timed AP-style essay.

## **Creative Writing (UC/CSU College Preparatory Elective)**

Grades: 10, 11, 12

1 year

*Prerequisite:* 2.0 cumulative GPA, verified by course instructor or department chairperson.

## EN700

This course will provide a structured environment to produce and share poetry, short stories, one act plays, and personal reflections. Students will give and receive feedback within a group setting on writing projects, then submit work to be evaluated and commented upon by the instructor. Students will also read and discuss works of various genres.

**Note: This course does not satisfy the four-year English requirement**

## **Journalism I (UC/CSU College Preparatory Elective)**

Grades 9, 10, 11, 12

1 year

*Prerequisite:* 2.0 cumulative GPA, verified by course instructor or department chairperson.

## EN701

Applying their English and Visual Arts skills to the newsroom, student journalists study introductory journalism and produce Notre Dame High School’s award-winning school newspaper *The Catalyst*. They will study First Amendment rights, journalistic responsibilities, and free speech issues. They

will also write a range of different stories via reporting, writing, and editing/revising, and then design several layouts with photographs, infographics, and other visuals for their stories. They will also practice using various apps and software, including Adobe Creative Cloud, WordPress, and social media. As they grow their skills, they may be considered for a leadership role on the paper's Editorial Staff.

**Note: This course is open to freshmen through seniors and may be repeated several times. However, it does not replace the core English requirement.**

**Journalism II/III (UC/CSU College Preparatory Elective)**

Grades 9, 10, 11, 12

1 year

*Prerequisite:* Journalism I; 2.0 cumulative GPA, verified by course instructor or department chairperson.

EN703

Continuing to apply their English and Visual Arts skills to the newsroom, student journalists study a variety of issues in contemporary journalism and produce Notre Dame High School's award-winning school newspaper, "The Catalyst." They will study the shift from print to digital journalism and issues with credibility/integrity. They will continue to write a range of different stories; design several layouts; and practice using various apps and software. They may be considered for a leadership role as an editor on the paper's Editorial Staff.

**Note: This course is open to sophomores through seniors and maybe repeated several times. However, it does not replace the core English requirement.**

# Kinesiology Department

- NDB Graduation Requirements: 1 year of Physical Education I with Health.
- UC/CSU Eligibility Requirements: Area G (College Preparatory Elective)
- Foundations of Sports Medicine can be taken as an elective towards this requirement.

## Kinesiology Electives

<b>Sophomore, Junior, Senior</b>	Yoga I Yoga II Sports Management	1 semester 1 semester 1 Year
<b>Junior, Senior</b>	Foundations of Sports Medicine	1 year 1 year



## **Kinesiology Course Descriptions**

### **Foundations of Sports Medicine (UC/CSU College Preparatory Elective)**

Grades 11, 12

1 year

*Prerequisite:* 2 years of science including Biology with a minimum of a C.

Anatomy and/or Physiology recommended but not required

KS700

This course is designed to introduce human anatomy and physiology as it applies to athletic movement and injury, which lays the foundation for further study of Kinesiology. This is an introduction to the field of Sports Medicine and is designed for students who are interested in athletic training, physical therapy, exercise physiology, or other health care professions. Students will develop knowledge of anatomy, physiology, and anatomical terminology. This knowledge will be applied towards the current techniques in prevention, treatment and rehabilitation of athletic injuries. Specific topics include first aid/emergency care, concussions, and taping for preventative measures.

### **Physical Education I w/Health (NDB Required Course)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* None

KP100

This course is designed to offer students the skills and knowledge needed to lead a healthy lifestyle. A variety of fitness activities and sports will be introduced, complemented by instruction in health education. This will satisfy one semester of the P.E. requirement and also meets the requirements for the California State mandate for health education.

Note: To receive credit for any Physical Education course, the student must be physically able to complete a minimum of two-thirds (2/3) of the activities and components as prescribed within the curriculum. Classes missed due to illness, injury, or medical reason, must be verified by a note from the student's doctor. A student may not gain an athletic waiver for the

**Note: This class is required for all students regardless of athletic participation.**

## **Sports Management (Pending UC/CSU approval)**

Grades 10, 11, & 12

1 year

*Prerequisite: None*

KP300

The Sports Management course is offered to students interested in a variety of professions in sports that include jobs working in: athletic programs at the collegiate, high school and interscholastic levels; youth, recreational and professional sports organizations; sports marketing and advertising; radio and television broadcasting and events management. Upon completion of the course, students will gain a better understanding of the required knowledge and expertise involved in the administration, operations and management of sports organizations. This course will provide students experience and insight to continue further studies in the field of Kinesiology and other related disciplines.

**\*\*Internship/Service Hours:** Students can earn internship hours assisting the NDB athletic staff with operations of home competitions and tournaments to include on their resume.

## **Yoga I (NDB Elective)**

Grades 10, 11, 12

1 Semester

*Prerequisite: Physical Education I*

KP200

This course is designed to educate students at a beginner level, on the mind-body connection and practice of yoga. Students will practice the physical aspects of yoga, which includes strength, balance, and flexibility, as well as the mental aspects, which includes meditation and self-awareness. This course is designed for all ability levels.

## **Yoga II (NDB Elective)**

Grades 10, 11, 12

1 Semester

*Prerequisite: Yoga I*

KP201

This course is designed to educate students in intermediate level mind-body connection and practice of yoga. Students will practice the physical aspects of yoga, which includes strength, balance, and

flexibility, as well as the mental aspects, which includes meditation and self-awareness. This course is designed for students who have already completed Yoga I.

# Math Department

- NDB Graduation Requirements: 3 years of Mathematics, including Algebra II.
- UC/CSU Eligibility Requirements Area C (Mathematics): 3 years of Mathematics, including Geometry. (4 years recommended).
- AP/Honors: Courses marked with an asterisk \* are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation - when taken after freshman year.

Sample Course Flow			
Freshmen	Sophomores	Juniors	Seniors
Algebra I	Geometry Geometry Honors	Algebra II Algebra II Honors	Precalculus Statistics Introduction to Data Science
Geometry	Algebra II Algebra II Honors	Precalculus Statistics Introduction to Data Science	Calculus Precalculus AP Statistics*
Geometry Honors	Algebra II Honors	Precalculus Honors*	AP Calculus AB* AP Calculus BC* Calculus AP Statistics*
Algebra II Honors	Precalculus Honors*	AP Calculus AB* AP Calculus BC* AP Statistics*	AP Calculus BC* AP Statistics*

## Math Electives

<b>Mathematics</b>	Seniors: A fourth year of mathematics from an appropriate level.
<b>Computer Science</b>	Exploring Computer Science AP Computer Science Principles* Computer Science I AP Computer Science A*

## College Bound

Three years of college preparatory mathematics that includes passing Algebra II are required for graduation from Notre Dame High School, Belmont.

Three years of college preparatory math, including or integrating the topics covered in Elementary and Advanced Algebra and two- and three-dimensional Geometry are required for admission to the University of California System. Four years are recommended.

Three years of Mathematics that include Algebra I, Geometry, Algebra II, and/or another mathematics course are required for admission to California State Universities. Four years are recommended.

Three years are required at most private colleges and universities. The Notre Dame High School, Belmont Mathematics Department recommends that students take four years of math.





## **Math Course Descriptions**

### **Algebra I (UC/CSU Mathematics)**

Grade 9

1 Year

*Prerequisite:* Placement by the Mathematics Department.

MA100

Algebra I is designed to provide students with a foundation for all future mathematics courses.

Students will explore and investigate the fundamentals of algebraic problem-solving including the foundations of algebra, solving equations, solving inequalities, an introduction to functions, linear functions, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, quadratic functions and equations, radical expressions and equations, and data analysis and probability. Throughout the course, the student will apply the concepts to real-life situations.

### **Geometry (UC/CSU Mathematics)**

Grades 9, 10, 11

1 Year

*Prerequisite:* C- or better in Algebra I AND department approval.

MA200

Geometry is designed to provide students with the required concepts of Euclidean geometry including definitions, postulates and theorems. Areas of study include the tools and language of geometry, reasoning and proof, parallel and perpendicular lines, congruent triangles, relationships within triangles,

polygons and quadrilaterals, similarity, right triangles and trigonometry, transformations, area, surface area and volume, circles and probability. The properties of these figures are incorporated into an understanding and ability to construct and measure both plane figures and solids. The student will develop reasoning skills and the concept of proofs, through the study of definitions, postulates, and theorems, in addition to other related mathematical topics.

### **Geometry Honors (UC/CSU Mathematics)**

Grades 9, 10

1 Year

*Prerequisite:* A in Algebra I, A- or better test average (including the final exam), confirmed by department approval.

MA250

Geometry Honors is a rigorous course designed to give students a foundation in geometrical figures and their measurement. Practice begins with the component parts of geometrical figures - points, lines, and planes; continuing with the study of triangles, quadrilaterals, polygons, circles, and solids, while integrating algebra throughout the course. The properties of these figures are incorporated into an understanding and ability to construct and measure both plane figures and solids. The student will develop reasoning skills and the concept of proofs, through the study of definitions, postulates, and theorems, in addition to other related mathematical topics. Major topics include deductive and inductive reasoning, triangle relationships and congruence, right triangle trigonometry, similarity, areas of plane figures, and surface areas and volumes of solids.

### **Algebra II (UC/CSU Mathematics)**

Grades 10, 11, 12

1 Year

*Prerequisite:* C- or better in Geometry.

MA300

Algebra II is designed to build on algebraic and geometric concepts. Advanced algebra skills will be taught and reinforced featuring Algebra II foundations, function families, quadratic functions and complex numbers, polynomial expressions and equations, exponential and logarithmic functions, rational functions, and statistics. The course will emphasize problem-solving, reading, speaking, and writing about mathematics and real world applications.

## **Algebra II Honors (UC/CSU Mathematics)**

Grades 10, 11

1 Year

*Prerequisite:* B or better in Geometry Honors, B or better test average (including the final exam), confirmed by department approval.

MA350

Algebra II Honors is a rigorous mathematics course designed to build upon algebraic and geometric concepts. Advanced algebra skills will be taught and reinforced featuring Algebra II foundations, function families, quadratic functions and complex numbers, polynomial expressions and equations, exponential and logarithmic functions, rational functions, statistics, sequences and series, trigonometric functions and trigonometric identities. The course will emphasize problem-solving, reading, speaking, and writing about mathematics and real-world applications.

## **Precalculus (UC/CSU Mathematics)**

Grades 11, 12

1 Year

*Prerequisite:* B or better in Algebra II , or a B or better in Statistics confirmed by department approval.

MA400

Precalculus is designed to provide a comprehensive study of functions, which are the basis of calculus and other higher mathematics courses. The students will study the properties and graphs of trigonometric, polynomial, rational, inverse, exponential and logarithmic functions. Additional topics to be explored include inequalities, polar coordinates, complex numbers, conic sections, vectors, sequences and series. An emphasis will be placed on problem-solving, reading, speaking, and writing about mathematics and real-world applications.

## **Precalculus Honors\* (UC/CSU Mathematics)**

Grades 10, 11, 12

1 Year

*Prerequisite:* B or better in Algebra II Honors, B or better test average (including the final exam, confirmed by department approval.

## MA450

Precalculus Honors is a rigorous course designed to provide a comprehensive study of functions, which are the basis of calculus and other higher mathematics courses. The students will study the properties and graphs of trigonometric, polynomial, rational, inverse, exponential and logarithmic functions.

Additional topics to be explored include inequalities, polar coordinates, complex numbers, conic sections, matrices, vectors, sequences, series and limits. An emphasis will be placed on problem-solving, reading, speaking, and writing about mathematics and real-world applications.

## **Statistics (UC/CSU Mathematics)**

Grades 11, 12

1 Year

*Prerequisite:* C or better in Algebra II AND department approval.

## MA500

Statistics is a course designed to develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students will learn the basic principles of data analysis using the statistical package R. Students will also learn about Data Ethics and the fundamental issues of Data Privacy. Students will design, administer, and tabulate results in an end of semester project. Probability and simulations aid students in constructing models for chance phenomena. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students will develop effective statistical communication skills and will be required to prepare frequent written and oral analyses of real data.

## **Introduction To Data Science (Pending UC/CSU Mathematics approval)**

Grades 10, 11, 12

1 year

*Prerequisite:* C or better in Algebra II AND department approval

## MA710

This course is an introduction to the practice of data science: reasoning about the world with data. It will emphasize the use of statistics and computation as tools for creative work, as a means of telling stories with data. Its content will prepare students to “read” and think critically about existing data stories. ‘R’, the statistical programming language used by academics and industry, will be used to bring data to life. Through ‘R’, students will learn to compute with data to develop graphical and numerical summaries to both communicate findings and to generate further exploration. This is a project and inquiry-based class.

## **Advanced Placement Statistics\* (UC/CSU Mathematics)**

Grades 10, 11, 12

1 Year (Offered Block 5)

*Prerequisite:* B or better in two of the following: Algebra II Honors (or higher), English II Honors (or higher), Science Honors, AND department approval.

MA550

AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students cultivate their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions. All students must take the Advanced Placement Statistics examination in May.

## **Calculus (UC/CSU Mathematics)**

Grade 12

1 Year

*Prerequisite:* B or better in Precalculus AND department approval

MA600

This course is designed to introduce students to the concepts and practical applications of calculus. This includes emphasis on polynomial and rational functions, logarithmic and exponential functions, and linear systems. Students will investigate the concepts of limits and continuity, differentiation and its applications, antiderivatives, and the definite integral. The applications of integrals will be introduced. Students are expected to read and write the language of mathematics and use it in classroom discussions.

## **Advanced Placement Calculus AB\* (UC/CSU Mathematics)**

Grades 11, 12

1 Year

*Prerequisite:* B or better in Precalculus Honors, B or better test average (including the final exam), confirmed by department approval.

MA650

AP Calculus AB is an introductory college-level calculus course intended only for the most accomplished and motivated mathematics students. All students must take the Advanced Placement Calculus AB examination in May. The course begins with a comprehensive review of algebra,

trigonometry, and analytic geometry. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions.

### **Advanced Placement Calculus BC\* (UC/CSU Mathematics)**

Grades 11, 12

1 Year

*Prerequisite:* B or better in AP Calculus AB AND department approval.

MA652

AP Calculus BC is an introductory college-level calculus course intended only for the most accomplished and motivated mathematics students. The course includes all topics covered in the AP Calculus AB course and also presents intensive study of vectors, sequences and series, and advanced integration topics. All students must take the Advanced Placement Calculus BC examination in May. In order to cover all of the material necessary to succeed on the examination, the course has additional class time scheduled outside of the normal school day. Students cultivate their understanding of differential and integral calculus by engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions.

### **Exploring Computer Science (Pending UC/CSU approval)**

Grades 9, 10, 11, 12

1 year

*Prerequisite:* B or better in Algebra 1 AND department approval

MA740

Exploring Computer Science introduces students to the breadth of the field of computer science through and exploration of engaging and accessible topic. The goal of Exploring Computer Science is to develop in student the computation thinking practices of abstraction, algorithm development, creating artifacts, communicating and collaboration while building skills in specific in specific programming languages and design environment. The course presents computing problems in real- world scenarios. Allowing students to deepen the understanding of theoretical concepts while bringing computer science alive through real applications and connections. Rather than focusing the entire course on learning particular software tools or programming languages, the course is designed to focus the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of Exploring Computer Science is to develop in students the computational thinking practices of algorithm development, problem solving and programming within the context of problems that are relevant to the lives of today's students. Students will also be introduced to topics such as interface design, limits of computers and societal and ethical issues.

## **Advanced Placement Computer Science Principles (UC approved)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* B or better in Algebra I AND department approval OR concurrent placement in Geometry Honors AND **strong interest** in Computer Science

*MA750*

This is an introductory, college-level course that leads students through the details of the seven big ideas in Computer Science: Creativity, Abstraction, Data and Information, Algorithms, Programming, The Internet, and Global Impact. With these in mind, students learn the six computational practices that will build the foundation of their computational thinking and understanding of computer science principles: connecting computing, creating computational artifacts, analyzing problems and artifacts, abstracting, communicating, and collaborating. All students must take the Advanced Placement Computer Science Principles Examination in May.

## **Computer Science I (UC approved)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* B or better in Geometry AND department approval

*MA700*

This is an interactive course for students that teaches the foundations of computer science using the Python programming language. Topics to be studied include logical problem solving, an introduction to basic programming, numerical and string variables, lists, conditionals and booleans, loops and other iterative methods, functions combined with some advanced topics. Students will also learn about the history and social impact of computers, including contemporary topics such as data science and ethics and artificial intelligence.

## **Advanced Placement Computer Science A (UC approved)**

Grades 11, 12

1 Year

*Prerequisite:* B or better in Precalculus AND department approval

MA650

This is a college level course that introduces students to computer science through programming.

Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. All students are expected to take the Advanced Placement Computer Science A examination in May.



# Science Department

- NDB Graduation Requirements: 3 years of Science are required, including Biology and Chemistry
- UC/CSU Eligibility Requirements Area D (Science): 2 years of Science, including one year of a Life Science and one year of a Physical Science (3 years recommended).
- AP/Honors: Courses marked with an asterisk \* are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation.

Possible Sequences from course selection:			
Freshmen	Sophomores	Juniors	Juniors/Seniors
Physics 9/10	Biology Biology Honors	Living by Chemistry Chemistry Chemistry Honors*	<b>Electives</b> Physics AP Physics I* AP Chemistry* AP Biology* Forensic Science Environmental Science Design Engineering Introduction to Biotechnology
Biology (entrance based on recommendations, middle school test data and performance in placement test)	Chemistry Chemistry Honors*	Physics AP Physics I* AP Chemistry (2 <sup>nd</sup> Year Chemistry Course)* AP Biology (2 <sup>nd</sup> year Biology Course)*	

## Notes:

- Students are recommended for AP and Honors classes on the basis of grades, department recommendations and interest in the subject.
- After freshman year, students may be eligible to take two science courses concurrently. A recommendation from the science department is required.
- Students interested in pursuing a career in science or engineering in college are strongly encouraged to complete **Biology, Chemistry, and Physics** while in high school.
- Both Biology and Chemistry are required for graduation from NDB.

## College Bound

Two years of college-preparatory science, including or integrating topics that provide fundamental knowledge in two of these three subjects: biology, chemistry, or physics. Computer Science, Engineering, Applied Science courses can be used in area D as an additional science (i.e., third year and beyond).

### Other Science Department Notes

Every science class addresses the essential question “how does this science affect our daily lives and the world in which we live?” All students are required to keep a lab or field notebook. Students at every level will design their own investigation to answer a driving question relating to a topic of interest or an investigation. Lab skills, scientific method and inquiry skills are scaffolded from 9th grade on. Biotechnology is introduced in Biology classes and is incorporated throughout the program. Science classes prepare students for *interpretation, analysis, evaluation, reasoning, and problem-solving skills required in the natural sciences.*

Each course incorporates the Hallmarks of the Sisters of Notre Dame as students are *prepared for life beyond high school and to become responsible global citizens.*

The content of all science courses has been decided by following the state guidelines published by the California Department of Education, the Science College Board Standards for College Success (CBSCS) and the Next Generation Science Standards (NGSS). In addition, the content of AP courses is determined by the College Board.

All prerequisite grades must be maintained throughout second semester and verified by the course instructor or department chairperson.

## Science Course Descriptions

### **Physics 9/10 (UC/CSU Physical Science Lab)**

Grades 9, 10

1 Year

*Prerequisite:* None

SC100

This course seeks to equip students with a foundation of laboratory skills, study techniques, learning by inquiry, and problem-solving strategies that will prepare them for the successful completion of the three-year course sequence in science. The course is designed to serve as a bridge to more abstract disciplines of science: biology, chemistry, and AP and elective courses. Students will learn how to link their observations during lab work with conceptual ideas and to describe physical phenomena through both words and mathematics.

### **Biology (UC/CSU Life/Biological Science Lab)**

Grades 9 (contingent on recommendations, middle school test data and performance in placement test)

Grade 10

1 Year

*Prerequisite:*

Grade 9: Science Placement Test and concurrent enrollment or recommendation for Honors English I and Geometry Honors or above.

Grade 10: C or higher from Physics 9/10 Students earning less than a C should consider grade remediation or have department recommendation to progress

SC200

This course covers the basic biological concepts and principles including ecology, biochemistry, cells and cell processes, genetics, biotechnology, evolution, microorganisms and infection, and physiology. Students will use and develop their collaboration, creativity, critical thinking, and communication skills. Students will also develop a consistent work ethic including regular completion and review of class material. Material will be learned through various methods such as hands on activities, laboratory work, simulated computer games, project based learning, investigation, and design thinking. New technologies will be explored and utilized to enhance learning in the classroom.

## **Biology Honors (UC/CSU Life/Biological Science Lab)**

Grade 10

1 Year

**Prerequisites: Department recommendation (required). Recommended grades:** A from Physics 9/10; A from Algebra I, or A- from Geometry, or B from advanced Math courses. Meets or exceeds recommendations for Geometry Honors. **Performance on unit tests and final examinations will be considered.**

SC250

This course is a more rigorous, student-directed version of the biology program designed to engage in more depth and with more independence. Mature work ethic including regular assignment completion and review are key requirements for success in this course. Collaboration, creativity, critical thinking, citizenship, and communication skills will be developed. Students will develop these skills and content knowledge through direct instruction, case studies, project based learning, design thinking and participating in investigations. Comprehensive infusion of technology will enhance learning and provide opportunities to explore the tools required for work in STEAM careers.

## **Living by Chemistry (UC/CSU Physical Science Lab)**

Grades 11, 12

1 Year

**Prerequisite: Department recommendation required.** Completion of Biology; C minimum Algebra I; Completion of Geometry recommended.

SC325

This course covers the structure and composition of chemistry in addition to emphasizing laboratory experiences to strengthen problem-solving skills and teach basic lab techniques. The student is introduced to chemistry through the study of matter and energy and continues with elements and compounds and different types of reactions. The course will be less mathematically oriented than the general Chemistry course and is designed for the student who does not meet the prerequisites for Chemistry and who does not want to pursue a scientific course of study in college. Students will take a hands-on approach to learning Chemistry in our everyday world.

\*may be offered in alternate years

## **Chemistry (UC/CSU Physical Science Lab)**

Grades 10, 11, 12

1 Year

*Prerequisite: Department recommendation required* C+ in Biology or Biology Honors; C minimum  
Algebra I; C minimum Geometry

SC300

This course focuses on studying the structure and behavior of chemistry and its relevance to everyday life. Through readings, problem solving, demonstrations, small group work, and laboratory investigations, the student will achieve knowledge of the basic concepts and principles of chemistry. Topics for this course include forms of matter, atomic structure, chemical bonding and reactions, thermodynamics, and equilibrium.

## **Chemistry Honors (UC/CSU Physical Science Lab)**

Grades 10, 11, 12

1 Year

*Prerequisite: Department recommendation (required).*

**Recommended grades:** Physics 9/10 and/or Biology grades A- minimum; Meets or exceeds a recommendation for Algebra II. **Performance on unit tests and final examinations will be considered.**

SC350

This course is designed to help students understand the world around them by studying matter and its changes. Students will pursue some topics in greater depth and study others not included in the regular program. Topics studied include; Atoms, Molecules, and Ions; Stoichiometry; Atomic Structure and Bonding; Gasses, Liquids, and Solids; Properties of Solutions; Energy: Thermochemistry; Acids and Bases; and a basic introduction to fundamental Organic Chemistry. The lab component of the course allows students to apply the concepts learned to experimental situations. Students use scientific inquiry to develop an understanding of complex chemical concepts. Knowledge will be assessed through homework, practice problems, laboratory reports, discussion groups, and a comprehensive final exam. Students will use group activities and readings, problem-solving, demonstrations, and laboratory investigations to make connections to real-world applications of chemistry. Students wishing to take Honors Chemistry should have good collaborative, reasoning and critical thinking skills. This accelerated course covers chemistry topics in greater depth and the laboratory work will be more rigorous and quantitative.

## **Advanced Placement Physics I (UC/CSU Physical Lab Science)**

Grades 10, 11, 12

1 Year

*Prerequisite: Department recommendation (required). Recommended grades: A- in Biology/Chemistry, or B+ in Biology Honors/Chemistry Honors; Meets or exceeds a recommendation for pre-calculus. An aptitude test may be required if a student does not meet this math prerequisite.*

SC450

This course is an introductory college-level physics course that explores the Newtonian mechanics, including kinematics, dynamics, gravitation, energy, momentum, and rotation. No prior coursework in physics is necessary, but students are expected to have a strong foundation in algebra and trigonometry. With teacher approval, this class may be taken concurrently with Honors Chemistry. Students wishing to take AP Physics should have good reasoning and critical thinking skills and demonstrate a desire to pursue Physics at a higher level.

## **Advanced Placement Biology (UC/CSU Life/Biological Lab Science)**

Grades 11, 12

1 Year

*Prerequisite:*

**Department recommendation (required). Recommended grades** 2 years of department approved science with a B+ each year or B in honors courses (one must be Biology). B in previous year's Math course of Algebra II or higher Completion of/or concurrent enrollment in chemistry **Performance on unit tests and final examinations will be considered.**

SC500/SC501

This course is designed to be the equivalent of a first year college Introductory Biology course for those majoring in college science and as such involves a lab period. The course follows the College Board required topics and covers biochemistry, cells, genetics, evolution, taxonomy, plants, animals, ecology, and animal physiology with an emphasis on human anatomy and physiology. An extensive genetics and biotechnology unit will be included. Comprehensive infusion of technology to enhance learning and provide opportunities to explore tools required by STEAM careers will be integrated. Students will develop skills and content knowledge through project based learning and Design Thinking.

**Note: A mandatory summer assignment must be completed before the start of school. Students who transfer to NDB over the summer must contact the school to gain access to this assignment as soon as possible.**

## **Advanced Placement Chemistry (UC/CSU Physical Science Lab)**

11, 12

1 Year

**Prerequisite: Department recommendation (required). Recommended grades:** A- in Chemistry or B+ in Chemistry Honors B+ in previous year's Math course of Algebra II or higher. Meets or exceeds a recommendation for pre-calculus. **Performance on unit tests and final examinations will be considered.**

SC600/SC601

This course is designed to be the equivalent of a first-year college Introductory Chemistry course and as such involves a lab period. Topics covered and presented in considerable depth include the following: Atomic Structure and Properties; Molecular and Ionic Compound Structure and Properties; Intermolecular Forces and Properties; Chemical Reactions; Kinetics; Thermodynamics; Equilibrium; Acids and Bases; Applications of Thermodynamics. Real-world connections are emphasized and the course involves hands-on activities and college-level lab work. Given the strong emphasis placed on quantitative problem solving, this course is suitable only for students with strong math skills. Critical reasoning and application of knowledge skills are developed and honed. Students are well prepared for taking chemistry at college regardless of discipline or major. **Note: A mandatory summer assignment must be completed for the first day of class. Students who transfer to NDB over the summer must contact the school to gain access to this assignment as soon as possible.**

## **Environmental Science (UC/CSU Interdisciplinary Science Lab)**

Grades 10,11,12

1 Year

**Prerequisite: Department recommendation required.** 1 year of Biology, with a minimum of a C. Algebra I with a minimum of a C.

SC700

This course is designed to help students acquire a deeper understanding of Earth systems and environmental issues. Students will explore ecological problems and develop solutions through scientific investigation and projects. Students will learn why successful ecological conservation/restoration depends on a thorough understanding of scientific principles and active concern for the local and global community. This course is based on the principles of scientific inquiry, environmental awareness and environmental action.

## **Forensic Science (UC/CSU Interdisciplinary Science Lab)**

Grades 11, 12

1 year

*Prerequisite: Department recommendation required.* 1 year of Biology with a minimum of a 2 years of science including Biology with a minimum of a C; Completion of/or concurrent enrollment in a Chemistry class

SC702

This course is an inquiry-rich integrated science lab course that emphasizes critical thinking and problem solving through the use of real-world forensic science methodologies. Students will apply the foundations of biology, chemistry, and physics to solve age-appropriate mock criminal investigations. Topics covered will include crime scene analysis, physical/chemical analysis of various evidence types, microscopy, chromatography, hair/fiber/glass analysis, fingerprint comparison, document and handwriting analysis, firearms/ballistics, drugs/toxicology, entomology, blood, and DNA analysis. Guest speakers from all areas of Forensic Science and Criminal Justice are invited to speak with students on a regular basis.

## **Design and Engineering (UC/CSU Interdisciplinary Science Lab)**

Grades 11, 12

1 year

*Prerequisite: Department recommendation required.* 2 years of UC approved high school science.

SC705

This course is a laboratory science that explores the principles of engineering through the application of the design process. The course will involve research and analysis, teamwork, communication methods, global and human impacts, engineering standards, technical drawing, and technical documentation, all learned in the context of four main course areas: civil, product, electrical, software, and systems engineering. This course allows students to develop strategies to enable and direct their own learning. Used in combination with a teaming approach, students are challenged to continually hone their interpersonal skills, creative abilities and understanding of the design process, and particularly the importance of collaboration when working towards a scientific goal. The ultimate course goal is for students to demonstrate scientific knowledge and critical thinking through the synthesis of practical solutions to real-world problems.

## **Introduction to Biotechnology**

Grades 11, 12

1 year

**Prerequisite: Department recommendation required.** Completion Biology and Chemistry with a minimum of a C

SC710

Description: Introduction to Biotechnology is a laboratory and activity intensive course. The knowledge and skills developed in this course will provide students with a broad understanding of biotechnology and help them prepare for the workforce in the area of biotechnology. This course will build upon the scientific concepts and laboratory skills learned/ in the core science courses. Since knowledge is acquired through research, students will spend a significant amount of time generating and testing hypotheses, as well as practicing applications of concepts thereby developing a wide repertoire of biotechnology related laboratory skills.

Additionally, a career/ vocational education factor to this course will expose students to the business, regulatory, and ethical aspects of biotechnology to help them visualize career options in biotechnology. Most of the work in this course will be conducted in groups which will help students develop teamwork and interpersonal communication skills oriented towards workplace expectations, skills, responsibilities and professionalism.

# Social Sciences Department

- NDB Graduation Requirement: 3 years of Social Sciences
- UC/CSU Eligibility Requirements Area A (History/Social Sciences): 2 years of Social Sciences (including one year of world history and one year of US History). (AP Psychology fulfills the Area G requirement).
- AP/Honors: Courses marked with an asterisk \* are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation.

Required Course Flow:

<b>Sophomore</b>	Modern World History OR Modern World History Honors	1 year
<b>Junior</b>	U.S. History or AP U.S. History*	1 year
<b>Senior</b>	U.S. Government and Economics or AP U.S. Government and Politics *	1 semester 1 semester 1 year

\* This course fulfills the Economics graduation requirement

## Electives

<b>Freshman</b>	AP Human Geography (with approval) <i>note: no UC/CSU GPA increase calculated</i>	1 year
<b>Sophomore</b>	AP Human Geography (with approval)	1 year
<b>Junior or Senior</b>	AP Human Geography (with approval) Psychology AP Psychology*	1 year 1 semester 1 year

## **College Bound**

Two years of History/Social Science, including one year of World History, Cultures or Geography; and one year of U.S. History or one-half year of U.S. History *and* one-half year American Government or Civics are required for admission to the University of California System.

One year of U.S. History or one semester of U.S. History and one semester of Civics or American Government AND one year of Social Science are required for admission to California State Universities. Two years of history are required at most private colleges and universities.

## **Social Science Course Descriptions**

### **AP Human Geography (UC/CSU Social Science)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* Department approval required.

Reading level and language skills at or above 10th grade level. A writing sample is required and it will be assessed by the course instructor and /or department chair.

SS500

This course explores how humans have understood, used, and changed the surface of Earth. Students will use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use, including the following: Connecting geographic concepts and processes to real-life scenarios, understanding information shown in maps, tables, charts, graphs, infographics, images, and landscapes, seeing patterns and trends in data and in visual sources such as maps and drawing conclusions from them, and understanding spatial relationships using geographic scales.

## **Modern World History (UC/CSU Social Science)**

Grade 10

1 Year

*Prerequisite:* None

SS200 (This is a one-year NDB elective course.)

This sophomore course surveys the economic, political, and social institutions of modern Europe from the seventeenth century to the present day with additional focus on specific issues, major themes of history and emphasizes critical thinking, research and writing skills. The course will also examine the societies of selected non-western nations during the same time period as well as delving into some of the ancient historical causes of events. Students will write on themes used by historians to analyze history including: political change, economic development, growth of science and technology, influence of geography in shaping civilizations, and cultural development. Students are guided through the process of selecting a topic, finding sources, compiling a bibliography, taking notes, outlining from those notes, and finally writing research papers. Cooperative learning skills are reinforced, and literature, including the historical novel, is used to enhance student understanding of the eras studied. The spring semester will also include a more intense examination of primary source material, including literature, letters, and political documents to enhance student understanding of the eras studied and facilitate more practice in the craft of argumentative writing. Throughout the course, students periodically take deep dives back into the ancient history and culture which informs - and continues to influence - modern historical events.

## **Modern World History Honors (UC/CSU Social Science)**

Grade 10

1 Year

*Prerequisite:* Department recommendation with an A- in English I Honors or an A in English I in the first semester. A writing sample may be required.

SS250 (This is a one-year NDB elective course.)

This accelerated course helps accomplish progress in critical thinking, research, and writing skills. This course promotes an in-depth understanding of the economic, social, and political institutions of the modern world from the seventeenth century to the present day. Through the study of current events, relationships between the events of history, and circumstances of the present day will be highlighted. Research and writing skills will be taught with emphasis on the production of research papers in which the student poses and supports a hypothesis with facts drawn from independent research. Literature is incorporated to enhance understanding of the eras studied. Cooperative learning techniques are

reinforced, and public speaking skills are practiced as students produce a variety of presentations. Throughout the course, students periodically take deep dives back into the ancient history and culture which informs - and continues to influence - modern historical events.

### **United States History (UC/CSU Social Science)**

Grade 11

1 Year

*Prerequisite:* Completion of Modern World History/Modern World History Honors with a grade of C- or above.

SS300

This course is about the history of the American people and American politics, from the colonial period to contemporary times. The course places a heavy emphasis on argumentative writing, visual literacy, and historiographic thinking. Topics will explore the history of politics, social conflicts, and cultural changes in America throughout the decades. A strong historic perspective will be developed regarding the evolution of divisions within American politics, economically, and amongst society, all the while examining the various perspectives and their personal place in the American political, social and cultural experience. A research essay will be completed on the role of art and culture in social and political change in 20th century America. Additional assignments are discussions and debate skills, Socratic Seminars, visual analysis, and formal presentations.

### **Advanced Placement United States History\* (UC/CSU Social Science)**

Grade 11

1 year

*Prerequisite:* Grade of B+ or higher from Modern World History Honors OR grade of A- in Modern World History with teacher recommendation along with an A- in English II Honors or A in English II.

SS350

This course is an introduction to American history and culture from pre-Columbus near 1500 to the present. Students will study how historians develop interpretations of history and will become historians of US history as they form opinions and ideas about the past based on research and analysis. This class requires heavy reading, writing, and strong time management skills. Some additional weekend and after school study sessions are required.

## **United States Government (UC/CSU Social Science)**

Grade 12

1 Semester

*Prerequisite:* Completion of US History with a C- or above

SS400

How does the government work, and what effect does it have on our lives? This course looks at both the structures and politics that surround government at the national, state, and local levels. Current events are mixed with historical examples to establish a complete picture of the American political system. Students will come to understand all they need to know to be informed, consistent participants in the electoral process.

## **Economics (UC/CSU College Preparatory Elective)**

Grade 12

1 Semester

*Prerequisite:* Completion of US History with a C- or above

SS401

Supply and demand are only the beginning. This course covers the fundamentals of modern economics, including different economic systems and the mechanisms and measurements of prosperity.

Additionally, students go beyond the California State Standards to discuss personal financial literacy, so that they will establish a foundation of practical knowledge they will need beyond graduation, into adult life.

## **Advanced Placement United States Government and Politics\* (UC/CSU Social Science)**

Grade 12

1 Year

*Prerequisite:* Grade of B+ in Advanced Placement United States History or A- in United States History; Grade of B+ in Advanced Placement English III or A in English III. Additionally, a teacher recommendation is required.

SS450

This course is an introduction to the history and organization of the institutions of the U.S. Government. Emphasis is placed on understanding the basic values of American politics, how and to whose benefit the major political institutions operate, and what policy choices may be expected in the future. The fundamentals of economics will also be examined, the market economy, and integrated with the study of the government's role in setting economic policy. Students will examine Supreme Court cases and analyze the impact the rulings have on democracy, the Constitution, and the people.

### **Psychology (UC/CSU College Preparatory Elective)**

Grade 11, 12

1 Semester

*Prerequisite:* None

SS700

This course is designed to be an introductory course of the study of human behavior and will include an introduction to psychology, with a focus on human development, learning, motivation, and personality. Some basic concepts of psychology and a historical perspective on psychology as the study of individual behavior will be covered. Readings, film clips, and articles from scholarly journals will be required and assignments will include participation in demonstrations and simulations, presentations, cooperative learning activities, experiments, and a research project. Students will read about the contributions of one or more major scholars in the field, such as Sigmund Freud, Abraham Maslow, Ivan Pavlov, Carl Rogers, Carl Jung, and B.F. Skinner.

### **AP Psychology (UC/CSU College Preparatory Elective)**

Grades 11, 12

1 Year

*Prerequisite:* A in most recent Social Science course (Modern World History or U.S. History), or B or better in most recent Honors or AP Social Science course; A- in most recent English and Science Classes, or B or better in most recent Honors or AP Science course

SS750

This course is designed to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology, as well as learn about the ethics and methods psychologists use in their science and practice.

# Spiritual Life Department

The Spiritual Life Department at Notre Dame seeks to accompany each young woman on her personal faith journey. The Department seeks to serve the head, heart and hands of our students by combining our classroom curriculum with our ministry work. The Spiritual Life Department works closely with the Health and Wellness Program to ensure that the social, emotional and spiritual growth of each student is supported during her four years with us. Students of all faith backgrounds are welcome as we support each student while she engages with the content through the lens of her personal faith tradition.

Each year of Notre Dame's seven-semester program has a different emphasis that is supported by retreats and community service opportunities. The freshman year theme focuses on "loving yourself," the sophomore year theme focuses on "loving God," the junior year theme focuses on "loving your neighbor," and the senior year theme focuses on "loving the world."

- NDB Graduation Requirements: 7 semesters of Spiritual Life to meet graduation requirements.
- Some Spiritual Life courses can fulfill UC/CSU Eligibility Requirements Area G (College Preparatory Elective). Courses marked with a (†) signifies that the course fulfills Area G.

† These courses meet the A-G requirements for the UC/CSU system.

<b>Freshman</b>	Faith and Morality	1 semester
<b>Sophomore</b>	Hebrew Scriptures Living the Scriptures	1 semester 1 semester
<b>Junior</b>	Intro to Social Justice Social Justice	1 semester 1 semester
<b>Senior</b>	World Religions † Being Notre Dame	1 semester 1 semester

## Spiritual Life Course Descriptions

### Faith and Morality (NDB required course)

Grade 9

1 Semester (Spring)

*Prerequisite:* None

SL100

This course engages students in an exploration of discovering themselves in the context of their faith and spirituality, learning to care for the mind, body and spirit while doing so. Students study the nature of faith along with the core beliefs, theologies and practices of the Judeo-Christian traditions. This course is designed to assist students as spiritual seekers, both in their own journey and in understanding the journeys of others. Time is spent on journaling and personal reflection, allowing students to connect with the content as they form their own questions and ideas.

### Hebrew Scripture (NDB required course)

Grade 10

1 Semester (Fall)

*Prerequisite:* 1 semester of Spiritual Life

SL215

This course is a basic introduction to the Hebrew Scriptures (Old Testament) from a literary, historical, theological, and personal perspective. The course intends to: introduce students to the literary styles and techniques used throughout the Hebrew Scriptures and provide a historical context for books of the Old Testament so that students can understand why the book was written and the audience for whom it was written. This course content will help demonstrate how the Judeo-Christian Tradition is built upon the morals and values found in the Hebrew Scriptures and explore the Scriptures with a focus on the concepts of Covenant, the Chosen People, and the continuing Revelation of God. We will explore Hebrew Scripture personalities, with a focus on women, who have had an impact on salvation history. And strive to elicit in students interest in the various themes and how students can embrace the themes and live by them in their daily lives, whether they are Jewish, Christian, of another religion, or non-religious.

**Living the Scriptures [New Testament] (NDB required course)**

Grade 10

1 Semester (Spring)

*Prerequisite:* 2 semesters of Spiritual Life

SL210

Living the Scriptures presents the historical and literary development of the Hebrew Scriptures, New Testament and selected scriptures from other world religions. Special attention is given to the life of Jesus Christ, His teachings, healing miracles, and faith accounts of His death and resurrection.

Throughout the course, students explore a variety of types of prayer as an invitation to grow personally and in community with others. Through self-reflection and blogging, sacred scriptures are examined through a contemporary lens as well as how the morals and lessons may apply to students' lives.

**Social Justice (UC/CSU College Preparatory Elective & NDB required course)**

Grade 11

1 Semester (Fall)

*Prerequisite:* Completion of 3 semesters of Spiritual Life

SL325

One of the most central questions of faith traditions the world over is Who Is Our Neighbor and Who is Welcome at the Table? At this time in our history, we are called to closely examine the social issues of our time including racism, the immigrant and refugee experience, and violence toward and exclusion of minority and marginalized peoples. Through the lens of Liberation Theology, Catholic Social Teaching and Seminal Writings from Pope Francis and the US and Mexico Catholic Bishops, students will reflect on who is our neighbor and how we are called to live out a Gospel response, "welcoming all people to the table" as we come to a deeper understanding of the divisions we face as a nation and in our world. This course gives an overview of Catholic Teachings on Social Justice, including Liberation Theology, to provide a framework for understanding social justice issues that can be applied to social problems within society and then focuses on the question of "Who is My Neighbor?"

**Capstone Project: Hallmarks in Action**

Grade 11

1 Semester (Spring)

*Prerequisite:* 4 semesters of Spiritual Life

### SL301

During this semester, students bring design thinking to an original project through the lens of the Hallmarks. In the process, they reflect on their unique, personal vocation, with an eye to the Sisters of Notre Dame as role models of compassion, service and leadership. Each student reflects upon their own personal role models and combines their gifts, interests and community service into a project that addresses a need they feel passionately about.

### **World Religions (UC/CSU College Preparatory Elective & NDB required course)**

Grade 12

1 Semester (Fall 2022)

*Prerequisite:* Completion of 5 semesters of Spiritual Life

### SL426

This Spiritual Life course provides students with the opportunity to examine the religious beliefs of major world religions such as Hinduism, Buddhism, Judaism and Islam. 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 (e.g., art and architecture). Students are empowered to examine religion as an inseparable part of every culture, as well as promote peaceful coexistence through learning about multiple traditions.

### **Being Notre Dame (NDB required course)**

Grade 12

1 Semester (Spring 2023)

*Prerequisite:* Completion of 6 semesters of Spiritual Life

### SL435

In this final semester in Spiritual Life, students will gather the learnings that have come through Spiritual Life classes and their life experiences while they have been at NDB. They will have a chance to reflect on how they have become and want to continue to "BE Notre Dame" and live the Hallmarks in our world. Special topics in areas that teach "what you need to know for life" will also be covered during the semester and students will have opportunities for experiential learning

# Visual & Performing Arts Department

- NDB Graduation Requirements: 1 year Visual and Performing Arts
- UC/CSU Eligibility Requirements Area F (Visual and Performing Arts): Only one year is required.
- AP/Honors: Courses marked with an asterisk\* are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation.

<p>Note: All courses are 1 year in duration. See descriptions below for more information.</p> <p><b>Visual Arts Strand</b></p>	<p>Art I</p> <p>Art II</p> <p>Art III</p> <p>Art IV</p> <p>AP Studio Art* (2D, 3D, Drawing)</p> <p>Graphic Design</p> <p>Graphic Design II</p> <p>Graphic Design III</p> <p>Sculpture I</p> <p>Sculpture II</p> <p>Sculpture III</p> <p>Sculpture III Honors*</p> <p>Photography I</p> <p>Photography II</p> <p>Photography III</p> <p>Photography III Honors*</p> <p>Video Production (Tri-School course)</p>
<p><b>Performing Arts Strand</b></p>	<p>Musical Theatre</p> <p>Dance I</p> <p>Dance II</p> <p>Dance III</p> <p>Dance IV</p> <p>Dance V – In-Step Performance Company</p>
<p><b>Art</b></p>	<p>AP Art History* (Tri-School course)</p>

### **Other Notes:**

- Advanced Placement Art History, Advanced Placement Studio Art, Sculpture III Honors, and Photography III Honors are U.C. approved for honors credit.
- See Tri-School Courses below for additional Drama offerings.

### **College Bound**

- One year of visual and performing arts chosen from Dance, Drama/Theater, Music, or Visual Art is required for admission to the University of California System.
- One year of Art, Dance, Theater/Drama, or Music is required for admission to California State Universities.
- One year is required at most private colleges and universities

## **Visual and Performing Arts**

### **Art I (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* None

AA100

Art 1 serves as the foundations course for visual arts. In this course students will engage with art through a variety of processes and materials such as drawing, painting, printmaking, and design. Special emphasis is given to mastering the elements and principles of art. In addition, students will reflect on their own artistic practice through critical dialogue regarding the work of contemporary and historical artists and practices. No previous experience is required to join this course.

### **Art II (UC/CSU VPA)**

Grades 10, 11, 12

1 Year

*Prerequisite:* Art I or the equivalent

AA200

This course is a continuation of Art 1 in which students continue to expand their technical and conceptual artistic practice. At the beginning of the course greater emphasis will be given to observational drawing and rendering. As students develop their technical skills they will be asked to engage with contemporary art practices on a deeper level and will begin to situate their own work

within that dialogue. During the second half of the year students will also begin to work more collaboratively as they develop and implement their ideas.

### **Art III (UC/CSU VPA)**

Grades 11, 12

1 Year

*Prerequisite:* Art II or equivalent with department approval

AA300

Art III students will continue to develop their artistic practice but will be expected to begin developing ideas for their own projects. In this course there will be more space given for students to interpret and apply projects that are personally meaningful and significant to them. In the upper level art courses students will be asked to take greater risks in their practice and be able to explicitly communicate their artistic choices and how it relates to the conceptual basis for their work.

### **Art IV (UC/CSU VPA)**

Grades 11, 12

1 Year

*Prerequisite:* Art III or equivalent with department approval

AA400

The Art IV course is for the serious art student who is ready to take their practice to the next level. The course is intended to run majorly as a self-directed study in which the student develops their conceptual concerns through reflective inquiry and research. The culmination of the course should be a cohesive body of work the student is able to present and also defend their technical and conceptual considerations.

### **Advanced Placement Studio Art (2-D & 3-D Design, Drawing) (UC/CSU VPA)**

Grades 11, 12

1 Year

*Prerequisite:* A third-level VPA course is the prerequisite: Art III, Sculpture III, Photography III, or the equivalent, or successful completion of equivalent art courses at a local college or teacher approval.

AA500/AA501/AA502

This course is designed for highly motivated, skilled, and disciplined advanced art students. All work created during the year will be focused on the students' area of concentration. This course requires a major time commitment.

**Note: Course includes a portfolio that will be required to submit to the College Board as per AP instructions.**

**Advanced Placement Art History (UC/CSU VPA) (NDB Tri-School Offering, Block 2)**

Grades 10, 11, 12

1 year

*Prerequisite:* 3.3 GPA, English and/or Social Science teacher recommendation required for Grade 10 students

AA700

This course invites students to discover the diversity in and connections among forms of artistic expression throughout history and from around the globe. Students learn about how people have responded to and communicated their experiences through art by exploring creations in its historic and cultural contexts. This course welcomes students into the global art world as active participants, engaging with its forms and content as they research, discuss, read, and write about art, artists, art making responses to and interpretations of art. This course is recommended for motivated students who are self-directed learners. Students completing this course are well prepared to be successful when taking the exam in the Spring.



## **Graphic Design I (UC/CSU VPA)**

Grades 10, 11, 12

1 Year

*Prerequisite:* None

AG100

This course focuses on the principles of design and typography while using professional-grade Adobe design software to create digital drawings, logos, advertisements, magazine layouts, and more. Students will create a personal, professional website for assignments and projects, and complete a digital portfolio to showcase their work. Topics covered throughout the year will include Principles of Graphic Design, digital drawing, typography and text effects, print advertising, editing, and retouching. Students will have

knowledge of basic design principles, an understanding of the Adobe Suite, insight into the opportunities and challenges of a design career, and a portfolio of graphic design work.

## **Graphic Design II (UC/CSU VPA)**

Grades 11, 12

1 Year

*Prerequisite:* Graphic Design I

AG200

This course introduces more advanced design concepts and digital techniques. Students will continue to create advanced Photoshop and Illustrator graphics and continue with topics covered in Graphic Design I. Students will have excellent knowledge and understanding of the Adobe Suite and Adobe Lightroom, insight into the opportunities and challenges of a design career, and a portfolio of graphic design work. In addition to completing all required graphic challenges in this course successfully, students will complete and present their digital portfolio.

### **Graphic Design III: Advanced Graphic Design/Digital Art (pending UC approval)**

Grades 11, 12

1 year

Prerequisites: Graphic Design II

AG300

In this course, students will build upon the skills of Graphic Design I & II by expanding their experience and knowledge of the digital arts. The curriculum will include short lectures, demonstrations, exercises, videos, assignments, and class critiques. This course is designed to be a fun exploration of digital art while still engaging and challenging students to learn the advanced technical and artistic aspects of graphic design. Focus will be on brainstorming ideas for projects that have overarching themes and solid meanings. The principles of art of variety and unity will be solidified and expanded to keep each piece in a project unique, yet containing elements that identify them as part of the other pieces and unites it with the other pieces. Adobe Illustrator and InDesign will continue to be used on both the desktop and ipad. Mistakes and failures will be expected and welcomed as a learning tool. Each student will have their work shared and evaluated by their classmates to facilitate learning and be encouraged to enter their work in student contests.

### **Sculpture I (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 year

Prerequisite: None

AS100

This course focuses on creating sculptures and 3-dimensional designs using paper, wire, metal, clay, wood, glass, cloth, and found objects. Students will engage in multiple styles of learning while problem solving multi-dimensionally in a variety of media, each with its own challenges and historical/cultural context. Students will connect to the world through creative inquiry and investigation of materials, creating new and unique forms from personally determined meaning, awareness of the world, and intention.

### **Sculpture II**

Grades: 10, 11, 12

1 Year

Prerequisites: Sculpture I or equivalent with department approval

AS200

Sculpture II builds on and hones skills learned in Sculpture I while introducing new media, and more sophisticated art and thought processes. Sculpture II allows students to develop more individual directions in their 3D art experience.

Students build on knowledge and skills acquired in Sculpture I while continuing to create from different aspects of the self, accessing multiple styles of learning while problem solving multi-dimensionally in a variety of media, each with its own challenges and historical/cultural context. Students will connect to the world, past and present, through creative inquiry and investigation of materials, literally creating new and unique forms from personally determined meaning, awareness of the world, and intention.

### **Sculpture III (UC/CSU VPA)**

Grades 11,12

1 Year

*Prerequisite:* Sculpture II or equivalent with department approval

AS300

This course builds upon the development of portfolio-quality 3-dimensional artwork as a means of creative self-expression, and allows students to master the techniques necessary to create this work. Individual projects of depth and breadth will be created. Projects will utilize various media such as clay, installation art, carving, assemblage, etc., resulting in quality works of personal interest, pieces responding to culture, environment, artist-inspired work, and art genres. Work created in this course can be used in a student portfolio and in preparation for Honors Sculpture and beyond.

### **Sculpture III Honors (UC/CSU VPA)**

Grade 12

1 Year

*Prerequisite:* Sculpture II or III with department approval

AA350

This accelerated course emphasizes diverse perspectives, works towards developing each student's fullest potential, and is designed to provide more academic rigor. The course is designed for advanced students who are serious about sculpture and producing portfolio-quality work. Students will continue to develop their artistic skills and techniques by creating individual projects approved by the instructor, which reflect the students' special interests and artistic goals. Portfolios will be developed, critiqued, prepared and photographed for submission to art school. Additionally, there are requirements of

attending museum and gallery openings, experiencing art in public displays, and producing an exhibition of their own works.

### **Musical Theatre<sup>1</sup> (pending UC approval)**

Grades 9, 10, 11, 12

1 year

*Prerequisite:* Audition

AM400

The all-new, year-long **Musical Theatre** course has been designed to help high school students develop the “triple threat” skills they need for successful musical theatre performance, in singing, acting and dancing for the stage. There is also an emphasis on building the audition and theatre arts skills required to be successful in stage performance. After a student completes this course, they will have the skills required to:

- deliver a vocal audition for a musical theatre production
  
- deliver a monologue for a musical theatre production or stage-play
- perform choreography at a dance audition
- perform scene readings at an audition callback

### **Dance I (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* None

AD100

This course provides students with basic instruction in dance technique and proper body mechanics used in dance execution. Students gain a beginning knowledge of jazz, lyrical, ballet, contemporary, and hip hop styles of dance, as well as a basic awareness of popular and cultural influences in dance performance. The history, characteristics, and terminology specific to each style are also studied within the context of dance choreography and performance.

## **Dance II (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* Dance I

AD200

This course builds on the knowledge and skills acquired in Dance I. Students will refine their sense of style and technique, as their abilities continue to develop. At least one performance per semester will be required.

**Note: Basic split-sole jazz shoes or jazz sneakers are required at this level.**

## **Dance III (UC/CSU VPA)**

Grades 10, 11, 12

1 Year (May be repeated for credit)

*Prerequisite:* Dance II

AD300

This course will continue to expand and refine students' technique and performance skills as well as choreographing their own dance routines. More independent, creative work is stressed at this level. At least one performance per semester will be required.

**Note: Basic split-sole jazz shoes or jazz sneakers are required at this level.**

## **Dance IV (UC/CSU VPA)**

Grades 11, 12

1 Year

*Prerequisite:* 1 Year Dance III or are a member of INSTEP Performance Company

AD400

This course will continue to expand and refine students' technique and performance skills as well as choreographing their own dance routines. More independent, creative work is stressed at this level. Honors students operate as head choreographer for all performance pieces and must choreograph additional material for advanced students.

**Note: Basic split-sole jazz shoes or jazz sneakers are required at this level.**

## **Dance V: In-Step Performance Company (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* Must complete PE 1 credit before enrolling in the class. Membership and enrollment in the Dance V – In-Step Performance Company class is by audition only for Notre Dame students. Auditions are held at the end of Spring semester every year. Students who make In-Step Performance Company are not required to audition again.

AD500

This course combines body conditioning, stretching and strengthening, acrobatics, dance, and technical training for advanced performance. All In-Step Dance Company students will participate in the dance showcases and other school wide events. Training occurs during regular class time. Notre Dame students who make the In-Step Performance Company are also eligible (through an additional audition process) to partake in the Lyrical Dance Competition Team, and/or Pom Competition Dance Team.

**Attire Requirements: Dance footwear, undergarments, and dancewear appropriate for advanced performance.**

## **Photography I (UC/CSU VPA)**

Grades 10, 11, 12

1 Year

*Prerequisite:* None

AP100

This course focuses on photography as a medium of personal expression. Through a series of photographic and digital editing projects, as well as the study and critique of historical, professional, personal, and peer photos, student photographers will gain an increasingly sophisticated understanding of photography as an art form. Students learn image techniques and digital manipulation using Adobe Photoshop CC 2018 and Lightroom CC Classic 2018, which teaches how to archive, organize, and optimize their own photographs for print or web purposes, and to experience the capabilities that would be achieved in traditional darkroom work. Students will be encouraged to develop and pursue their own expressive goals.

**Note: Students must provide their own digital cameras.**

## **Photography II (UC/CSU VPA)**

Grades 11, 12

1 Year

*Prerequisite:* Photography I

AP200

This course builds on skills learned in Photography I and introduces more advanced photographic processes and concepts. Students continue the study of digital editing, as well as more in-depth critiques of historical, professional, personal, and peer photographs. Problem-solving and personal creative inquiry are the core of this class with an emphasis on individual expression. Students continue the study of techniques and digital manipulation using Adobe Photoshop CC 2018 and Lightroom CC Classic 2018. Students are offered opportunities to participate in competitions. The creation of personal blogs for ongoing posts and critiques culminates in a completed e-portfolio.

**Note: Students must provide their own digital cameras.**

## **Photography III (UC/CSU VPA)**

Grade 12

1 Year

*Prerequisite:* Photography II

AP300

This advanced course in Digital SLR photography will explore more demanding technical, artistic, and commercial aspects. The course will include on and off camera flash techniques, studio strobe usage, advanced digital camera operations and creative digital darkroom techniques with the use of Adobe Photoshop CC 2018 and Lightroom CC Classic 2018 software. Class time will include independent and cooperative personal work explorations. They will continue the exploration of the history of photography, developing their personal direction along the way. Students will create personal blogs for the ongoing posting of work and critiques, prepare both an e-portfolio and a physical body of work to exhibit at the completion of the course, and learn how to market their photography.

**Note: Students must provide their own digital cameras.**

### **Photography III Honors (UC/CSU VPA)**

Grade 12

1 Year

*Prerequisite:* Photography II with teacher approval

AP4350

This course is designed for those students who wish to expand their technical aspect and personal voice. Students will have the opportunity to investigate advanced photographic techniques, social documentary, proficiency with digital applications, and the history of photographic art history in order to create a body of work that embodies their individuality and moves them toward an independent course of thinking. Students will create personal blogs for the ongoing posting of work and critiques, prepare both an e-portfolio and a physical body of work to exhibit at the completion of the course, and learn how to market their photography. **Note: Students must provide their own digital cameras.**

### **Video Production (NDB Tri-School Offering, Block 2) (UC/CSU VPA)**

Grades 10, 11, 12

1 Year (May be repeated for credit)

*Prerequisite:* None

AV700

Students in Video Production I will learn and apply the basic artistic skills in cinematography (rule of thirds, panning, framing, lighting etc.) with post production skills using Adobe Premiere Pro. This entry level class will explore concepts such as storyboarding, composition, shot angles, point of view, transitions, and continuity. In class discussions will cover various aspects of digital video, which include multiple media formats, cameras, lenses, lighting, sound recording and editing to develop an understanding of film language and grammar. Students will complete several short, silent and sync sound videos, as well as several individual short personal, and group projects.

# World Languages Department

- NDB Graduation Requirements: 2 years in one World Language
- UC/CSU Eligibility Requirements Area E (Language): Two years are required. Three years is recommended.
- AP/Honors: Courses marked with an asterisk\* are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation.

<b>American Sign Language</b>	American Sign Language I American Sign Language II American Sign Language III American Sign Language III H* American Sign Language IV
<b>French</b>	French I French II French III French III Honors* French IV Advanced Placement French Language and Culture*
<b>Spanish</b>	Spanish I Spanish II Spanish III Spanish III Honors* Spanish IV Advanced Placement Spanish Language and Culture* Advanced Placement Spanish Literature and Culture*

# World Language Course Descriptions

## American Sign Language Overview

ASL is the 2nd most-studied world language in the USA! Did you know listeners pay more attention to nonverbal messages than your voice? (Albert Mehrabian, a well known psychologist, discovered that only seven percent of the meaning conveyed by typical utterance regarding our feelings and attitudes comes from the words we use, 38 percent from our voice, and 55 percent from our body language. When our body language conflicts with our words, listeners will typically pay more attention to our nonverbal message (Mehrabian, 1972)). Imagine what a difference it would make if you could improve your nonverbal communication skills by just a small percent! In ASL classes, you will get a full ASL immersion experience; Learn about the politics within the communities between hearing and Deaf communities; Exploration field trip to various of ASL events; Interact with Deaf Guest Speakers; Increase ASL and Deaf Culture awareness to the community; Real World Experiences though ASL; Opportunity to join ASL Honor Society; Opportunity to lead and participate in ASL Club.

## American Sign Language I (UC/CSU LOTE)

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* None

LA100

This course introduces the fundamentals of basics of American Sign Language (ASL). It is designed for students with no or minimal sign language skills to develop basic skills in use of ASL and knowledge of Deaf culture. Emphasis is upon acquisition of comprehension, production and interactional skills using basic grammatical features. ASL will be taught within contexts and related to general surroundings and everyday life experiences.

## American Sign Language II (UC/CSU LOTE)

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* C- in ASL I

LA200

This course is a continuation of the ASL I course and emphasizes development and refinement of comprehension, production, and interpersonal skills. Students will improve conversational skills in ASL

to a functional level for expressive and receptive use. Begin development of ASL storytelling through short stories and presentation skills. Expand knowledge on Deaf culture through readings from a number of Deaf and Hard-of-Hearing authors.

### **American Sign Language III (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* B- in ASL II and Teacher's recommendation

LA300

This course is a continuation of the ASL II course. It builds upon the foundational skills and knowledge introduced in ASL II, with an emphasis on expansion and refinement of comprehension, production and interactional skills. Students will improve their skills in ASL storytelling, as well as expand their vocabulary. Students will learn more complex grammatical features through narratives and dialogue.

### **American Sign Language III Honors (UC LOTE Approval Pending)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* A- in ASL II and Teacher's recommendation

LA350

This advanced course is designed for students who have completed ASL II and demonstrated intermediate ASL skills. Students will be engaged in more complex interactions as well as learning more complex grammatical features through narratives and dialogue. Students will be given the opportunity to join the ASL Honor Society. Emphasis is upon acquisition of advanced comprehension, production and interactional skills. (UC approval is pending).

### **American Sign Language IV (UC/CSU LOTE)**

Grades 10, 11, 12

1 Year

*Prerequisite:* A- in ASL III and Teacher's recommendation

LA400

This course is a continuation of ASL III. Further development and refinement of receptive and expressive skills, including fluency of signing, are expected. Advanced study of ASL grammar through ASL

narratives and literature is covered. Students will study in depth about the Deaf Community and Deaf Culture globally.

### **French Overview**

Many are attracted to the beauty of the French language and culture, but there are many personal, practical, and professional reasons for learning French. First of all, French is an international language and it will make you a citizen of the world. It is widely spoken and taught in all five continents. In fact, did you know that French is an official language of 29 countries and of many international organizations such as the UN, the European Union, the NATO, the International Olympic Committee, and the Red Cross? Since France is known for its remarkable history and culture of art, good food, fashion, and tourism, you will learn and experience French delicacies and learn about the great figures and events that make France such a fascinating place to visit (Versailles, Marie Curie, Stromae). Many American students are surprised to see how many French words they already know. Did you know that one third of French words are similar to English? There are many French words like “*fiancé*” and “*rendez-vous*” that come directly from French. It has been found that learning French will boost your SAT scores.. At Notre Dame, we offer a full five-level French program taught by native speakers. Courses include Honors and AP and many opportunities to join the French Honor Society. In addition, you can earn prizes in the yearly National French Contest, and lead and participate in our active Tri-School French Club where we celebrate French holidays with Mercy and Serra High Schools.

### **French I (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* None

LF100

The primary objective of this course is to make studying French accessible, enjoyable, and enriching for beginners. In an engaging and supportive climate, first year students will learn new sounds, sentences, and concepts that will open an awareness of thirty French-speaking nations worldwide. Gradually, students learn to understand, speak, read, and write in French as they participate in dynamically paced activities like role -playing, singing, games , and creative projects using tech tools and art.

## **French II (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* C- in French I and Teacher's recommendation

LF200

With French I as a base, the primary objective of this course is to accompany students through additional basics that will advance their ability to speak, understand, read, and write French. In an engaging and interactive class environment (see French I), students are gradually exposed to an expansion of previous vocabulary and grammar structures, including new tenses. Second year content is essential to boosting proficiency and for placement in French III.

## **French III (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* B- in French II and/or Teacher's recommendation

LF300

This course emphasizes the further development of comprehension, reading, writing, and speaking skills. Vocabulary becomes increasingly advanced, and grammar is reviewed and expanded. There is also an added emphasis on the development of writing skills through short compositions and essays. Students continue to explore cultural topics, with a special emphasis on Francophone Africa, and begin reading short selections by authors from different parts of the Francophone world.

## **French III Honors (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* A- in French II and/or Teacher's recommendation

LF350

This accelerated course is designed to continue the development of the student's speaking, listening, reading, and writing skills. In addition to the regular French III curriculum, there will be an emphasis on the development of writing skills through short compositions and essays throughout the year. Intensive grammar review/instruction and vocabulary enrichment will continue to be emphasized. Students will continue to explore cultural topics, with a special emphasis on Francophone Africa, and will read selections from a number of authors from different parts of the Francophone world. This

course is designed to prepare students for the Advanced Placement French Language and Culture course.

### **French IV (UC/CSU LOTE)**

Grades 10, 11, 12

1 Year

*Prerequisite:* B in French III or B- in French III Honors and Teacher's recommendation

LF400

This course enriches the student's knowledge of the French language by providing diverse opportunities for oral and written practice. Various topics drawn from poetry, plays, short stories, novels, and the recent press serve as stimuli for discussions, presentations, projects, and writings. Students are more formally introduced to French literary history by sampling major works from each literary period. Grammar and vocabulary are reviewed and expanded throughout the course.

### **Advanced Placement French Language and Culture (UC/CSU LOTE)**

Grades 11, 12

1 Year

*Prerequisite:* B+ in French IV; or B+ in French III Honors and Teacher's recommendation

LF500

This course encompasses aural and reading comprehension, grammar and composition, and oral expression. Students in Advanced Placement French Language and Culture will read and analyze literature and current press from French-speaking countries. Oral participation exclusively in the target language will be required.

### **Spanish Overview**

Our Spanish classes are dynamic and relevant to our lives in California. At NDB we strive to develop our students' skills in order for them to be able to interact with Spanish speakers outside the classroom environment. Given that as a state we have the largest Hispanic population in the country, our students have many opportunities to practice their language skills in our community. We believe in the intricate relationship between language and culture thus many hispanic cultures are explored at each level.

## **Spanish I (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* None

LS100

This course helps students to build a basic framework of the Spanish language, which will enable her to understand, speak, write, and read Spanish at a novice level. Students are also introduced to Spanish and Latin American cultures.

## **Spanish II (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* C- in Spanish I

LS200

This course builds on the foundational skills developed in Spanish I, to enhance speaking, reading, writing, and listening comprehension skills. Oral expression continues to be stressed, and Spanish is increasingly used as the dominant medium in class interactions. Continued work is done in vocabulary and in grammar, with a special emphasis on verb usage and review of past material. The study of Spanish and Latin American cultures is ongoing, and constitutes an integral part of language study.

## **Spanish III (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* B- in Spanish II and/or Teacher's recommendation

LS300

This course is designed to continue developing the student's speaking, listening, reading, and writing skills, with more focus on the development of oral and writing skills. Through brief oral presentations, short essays, intensive grammar review/instruction and vocabulary enrichment, the student continues to develop more sophisticated expression in the language. Students continue to explore cultural topics and begin reading short selections from a number of Spanish and Latin American authors.

### **Spanish III Honors (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* A- in Spanish II and Teacher's recommendation

LS350

This accelerated course is designed to continue the development of the student's speaking, listening, reading, and writing skills. In addition to the regular Spanish III curriculum, there will be an emphasis on the development of writing skills through compositions and short essays throughout the year.

Intensive grammar review/instruction and vocabulary enrichment will continue to be emphasized.

Students will continue to explore cultural topics and will read selections from a number of Spanish and Latin American authors. This course is designed to prepare students for the Advanced Placement Spanish Language and Culture course.

### **Spanish IV (UC/CSU LOTE)**

Grades 10, 11, 12

1 Year

*Prerequisite:* B in Spanish III or B- in Spanish III Honors and Teacher's recommendation

LS400

This course more formally introduces the literature of both Latin America and Spain. More intensive work is done in the study of these cultures. Students' knowledge of the Spanish language is enriched through diverse oral and written projects. Various topics drawn from poetry, plays, short stories, and the press serve as stimuli for discussions, presentations, projects, and writings. Grammar and vocabulary are reviewed and expanded throughout the course.

### **Advanced Placement Spanish Language and Culture (UC/CSU LOTE)**

Grades 10, 11, 12

1 Year

*Prerequisite:* B+ in Spanish III Honors; or B+ in Spanish IV. and Teacher's recommendation. All students require Department Chair approval.

LS500

This course encompasses aural/oral skills, reading comprehension, grammar, and composition. Students will read and analyze literature and current press from Spanish-speaking countries. Oral participation exclusively in the target language will be required. Additional meeting periods outside of class will occur at intervals throughout the year.

## **Advanced Placement Spanish Literature and Culture (UC/CSU LOTE)**

Grades 11, 12

1 Year

*Prerequisite:* B+ in Spanish III Honors; B+ in Spanish IV; B+ in AP Spanish Language and Culture and Teacher's recommendation

LS550

This course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes, thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g. art, film, articles, and literary criticism). Oral participation exclusively in the target language will be required.

## Other Courses and Programs

### **Becoming Notre Dame (Required NDB Course for Freshmen)**

Grade 9

1 Semester (fall)

ND105

*Becoming Notre Dame* was designed as a foundational class to help prepare incoming freshmen for their 4-year spiritual and learning journey at Notre Dame Belmont High School. In keeping with the mission and spirit of foundress St. Julie Billiart, it aims to “teach students what they need to know for life.” Students build community in small groups, along with their primary instructor, while also benefiting from seminar-style discussions with visiting alumnae, administrators and other guest speakers. The semester-long experience is structured around 6 primary units: Introduction to the Journey, Community Health and Wellness, Transformational Leadership, Brain Plasticity & Tools for Your Journey, Mind, Body & Soul Connections, Capstone Project and Presentations.

### **Teacher Assistant Program**

The Teacher Assistant Program (TA) will be available only to those students who are enrolled in six classes per semester. TAs will be enrolled in a Study Hall from which they may leave to work with the teacher or department, or provide peer tutoring for the teacher’s classes, for a partial or whole class period. A student TA will receive service hours per semester on her transcript when the teacher or department verifies her work and commitment to the program. Note: Serving as a Teacher Assistant does not complete the minimum credit requirement in either semester, and does not substitute for a regular course.

### **Student Directed Internship (NDB Elective)**

Grades 11, 12

1 Semester (can be taken more than once with approval)

*Prerequisite:* Minimum 3.5 GPA and on-track with graduation plan.

ND900

Students can choose to secure an internship for a semester in their junior or senior year. Upon completion of the requirements, they will be awarded credit for 2.5 units on their transcript. Students wishing to pursue this option must commit to a minimum of 40 hours during the semester at the internship and maintain a page on their Digital Portfolio that is updated weekly to include what their internship is focused on, how they are contributing to the mission of the company/organization, how

their internship is connected to their Passion Project/future career goals/area of interest that they wish to explore, and the Notre Dame Hallmarks. At the end of the semester, the student is also required to compose a final reflective post that summarizes the overall experience and what they learned during the semester. Enrollment in a Student Directed Internship requires approval of the student's counselor and the Associate Head of School for Curriculum and Instruction. Proof of the internship in the form of a letter on company letterhead from the direct supervisor along with a business card, must be submitted to the student's academic counselor within two weeks of the start of the semester in order to remain in the course. The Digital Portfolio must be shared with the Associate Head of School for Curriculum and Instruction, for review.

**Note: This course is Pass/Fail. Failure to meet the requirements of the internship will result in an “F” grade.**

# Tri-School Courses

Please note that families will be required to sign off on a Tri-School contract as part of their daughter's enrollment in an off-campus course. AP/Honors courses marked with an asterisk \* are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation - if taken in grade 10 or later.

## Junipero Serra High School

### **Virtual Enterprise (UC/CSU Area G Elective)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* None

TSB702

In this course, students set up and run a simulated business to prepare them for real-world business environments. Students begin by developing the nature of their business, its product and services. They learn entrepreneurship skills and link to a global business network, where they can work with other businesses set up in similar programs at other schools as trade/business partners. They learn how to develop a management structure and engage in the daily operations of running a business, using current business software, communications and the Internet for business transactions. While involved in the simulated business environment, students focus on career preparation standards such as oral and written communication skills, employment literacy/professional growth, personal finance topics, interpersonal skills, group dynamics, conflict resolution, along with creative and critical thinking, reasoning and problem-solving skills.

**Special Note:** This Tri-School course meets during second period.

### **Drama I: Acting for the Stage (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* Successful completion of Drama 1 OR by audition

TSA100 (Grades 10-12, Block 3)

TSA105 (Grade 9, Block 1)

This course builds on the foundations learned in Drama 1 and focuses on the practical application of acting methods and theories. Techniques include ensemble acting, movement, mask work, improvisation, vocal technique, and scene study. Students will complete in depth textual analysis and will learn about the evolution of acting techniques and their creators. This course will center on discerning objectives, obstacles, and actions when approaching a performance, as well as touch upon inner monologue, power dynamics, behavioral observation, and emotional truth.

### **Drama II: Acting for the Stage (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year (Offered Block 2)

*Prerequisite:* Successful completion of Drama 1 OR by audition

TSA200

This course builds on the foundations learned in Drama 1 and focuses on the practical application of acting methods and theories. Techniques include ensemble acting, movement, mask work, improvisation, vocal technique, and scene study. Students will complete in depth textual analysis and will learn about the evolution of acting techniques and their creators. This course will center on discerning objectives, obstacles, and actions when approaching a performance, as well as touch upon inner monologue, power dynamics, behavioral observation, and emotional truth.

### **Drama III: Advanced Acting and Production (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year

*Prerequisite:* Successful completion of Drama 1 OR by audition

TSA300

This advanced course focuses on each student's individual artistic growth as both an actor/performer and a director designer by alternating curriculum year to year.\*

### **Drama III: Advanced Acting and Production (cont.)**

#### **Example of year one:**

In the first semester, students will perform in depth scene studies that concentrate on 21st Century theater and classical Western Theatre (Shakespeare, Marlowe, Goethe, etc.) They will learn how to integrate elements of theatrical design (lighting, costume, scenery) with staging and theme to create artistically intriguing performances. In the second semester, they will learn how to approach a text from a production point of view, culminating in a public evening performance of a student directed, produced, and designed one-act play. Students will watch and critique plays outside of class once a semester.

**Example of year two:**

Scenes in the first semester will focus on World Theater (Non-Western) and American Musical Theatre with the aid of a live accompanist of recorded tracks. Students will focus on developing audition skills for both plays and musicals. In the second semester, they will learn how to approach a text from a production point of view, culminating in a public evening performance of a student directed, produced, and designed one-act play. Students will watch and critique plays outside of class once a semester.

**Drama IV: Advanced Acting and Performance (UC/CSU VPA pending)**

**Prerequisite:** Successful completion of Drama 3 (Meets on A Days)

TSA400

This advanced course focuses on each student's individual artistic growth as both an actor/performer and a director designer by alternating curriculum year to year.\*

**Example of year one:**

In the first semester, students will perform in depth scene studies that concentrate on 21st Century theater and classical Western Theatre (Shakespeare, Marlowe, Goethe, etc) They will learn how to integrate elements of theatrical design (lighting, costume, scenery) with staging and theme to create artistically intriguing performances. In the second semester, they will learn how to approach a text from a production point of view, culminating in a public evening performance of a student directed, produced, and designed one-act play. Students will watch and critique plays outside of class once a semester.

**Example of year two:**

Scenes in the first semester will focus on World Theater (Non-Western) and American Musical Theatre with the aid of a live accompanist of recorded tracks. Students will focus on developing audition skills for both plays and musicals. In the second semester, they will learn how to approach a text from a production point of view, culminating in a public evening performance of a student directed, produced, and designed one-act play. Students will watch and critique plays outside of class once a semester.

\*Curriculum is determined yearly based on enrollment, current and recent production seasons and may change to best fit the education of the students enrolled.

**Special Note: This Tri-school course meets during fourth period. This course meets concurrently with Drama 3.**

### **Concert Band (UC/SCU VPA approval pending)**

Grades 9,10,11,12

1 Year

Prerequisite: None

TSA705

This is a course for students wishing to learn the basics of a band instrument such as the flute, clarinet, saxophone, trumpet, trombone, baritone, tuba or percussion. This course is specifically designed to inspire students who have never played a band instrument to learn here at Serra. After a year of this band, students will be invited to join the Symphonic Band. Students will supply their own instruments (rent or buy) or will use a school instrument on occasion. Once you sign up for this class, you'll receive a notice of an Instrument Selection Day where students will be invited to try all the instruments to pick one that they like.

**Fees may apply:** Students will need to rent or purchase an instrument. Students will also need to buy a Serra performance polo (\$50).

**Special Note: This Tri-school course meets during third period.**

### **Concert Choir (UC/CSU VPA approval pending)**

Grades 9, 10, 11, 12

1 Year

Prerequisite: None

TSA500

A performance-based course for those interested in singing for learning and enjoyment. No experience necessary. Students prepare and perform appropriate choral literature at the highest possible level. In the process, students will learn proper and healthy singing techniques, musical terms, and choral concepts while developing a personal understanding of the details that contribute to choral excellence. Performances include festivals, concerts, and some school events. All performances are mandatory.

**Fees may apply:** Students will be required to purchase a Serra performance polo shirt. The Serra 2022-2023 academic year is also our Tour Year!! Travel expenses to participate in the Pearl Harbor Memorial Parade will be billed through the student's TADS account if you choose to participate and join us on tour! A Parent/Student informational meeting will be held in Spring 2022. Students may choose to purchase suggested apps for class but they are not required.

**Special Note: This Tri-school course meets during second period.**

### **Symphonic Band (UC/CSU VPA)**

Grades 9, 10, 11, 12

1 Year (Offered Block 1)

*Prerequisite:* Approval of the instructor

TSA700

This course is offered for music students with some experience in ensemble playing and at least intermediate playing ability on one or more instruments. Members of the Advanced Band form the nucleus of the Symphonic Band and Pep Band. Students must provide their own instruments (some exceptions). Performances (including football and basketball games, concerts, etc.) are mandatory.

**Special Note:** This Tri-school course meets during first period.

### **Jazz Ensemble (UC/CSU Area F VPA)**

Grades 11, 12

1 Year (Offered Block 0)

*Prerequisite:* Approval of the instructor

TSA720

This Tri-School performance-based course studies the elements found in Bebop, Swing, Blues, Funk, Cool, and Modern Jazz including the unique art form of improvisation. Festival and concert performances allow opportunities for small and large ensemble playing. All performances are mandatory. Students must take this course in addition to Symphonic Band unless they play guitar, bass, or piano.

**Note: This course meets Monday through Thursday during Zero block.**

### **Mandarin 1 (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year (Offered Block 2)

*Prerequisite:* None

TLM100

This course is a first year of Mandarin. Students will develop the basic skills in Mandarin Chinese, such as useful conversation for daily life. Students will also learn to read, write, speak, and understand basic Mandarin Chinese characters and pinyin. Students will be exposed to a variety of Mandarin-speaking cultures in Mainland China, Taiwan, Singapore, and more.

## **Mandarin 2 (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year (Offered Block 1)

*Prerequisite:* C- average in Mandarin 1

TLM200

This course is a second year of Mandarin. A continuation of Mandarin 1, this course maintains and develops oral competency, reading skills, writing skills, and cultural awareness of the historical issues and influence of Mandarin-speaking cultures.

## **Mandarin 3 (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year (Offered Block 3)

*Prerequisite:* C average in Mandarin 2

TLM300

This course is a third year of Mandarin that builds on the material and skills developed in the first two years of Mandarin. The course reinforces previous material as well as continues to expand in the areas of grammar, vocabulary, and conversation. Increased speaking of the target language with cultural accuracy is an important aspect of this course.

## **Mandarin 4 (UC/CSU LOTE)**

Grades 9, 10, 11, 12

1 Year (Offered Block 3)

*Prerequisite:* C average in Mandarin 3

TLM400

This course is a fourth year of Mandarin. Students will continue to develop the skills necessary to carry on extended conversations in Chinese, expressing their opinions on issues related to current events, Chinese society, politics, economics, education, and Chinese culture. Students will be able to produce and present their own viewpoints of events by using the Chinese language in both spoken and written form. The class will be conducted entirely in Mandarin with an emphasis on active student participation in the target language.

**AP Chinese Language and Culture (UC/CSU LOTE)**

Grades 10, 11, 12

1 Year (Offered Block 3)

*Prerequisite:* C average in Mandarin 3

TLM400

AP Chinese Language and Culture is equivalent to an intermediate-level college course in Chinese.

Students cultivate their understanding of Chinese language and culture by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges.

## **Mercy High School**

### **Anatomy and Physiology (UC/CSU Bio/Life Lab Science)**

Grades 11, 12

1 Year

*Prerequisites:* C average in English and prior science courses.

TSM700

This course includes a detailed study of many human body systems. Homeostatic balance, the relationship between structure and function, and the interrelationships between body systems are a focus throughout the course. This course is recommended for students interested in a health-related career, especially those students who plan to study medicine, nursing, physical therapy, and athletic training. Laboratory activities will include several microscopic analyses of tissue specimens as well as several dissections to accompany the subject matter.

### **Anatomy and Physiology Honors \*(UC/CSU Bio/Life Lab Science)**

Grades 11, 12

1 Year

*Prerequisite:* Students must have taken honors level science courses and maintained a B average in those classes.

TSM750

This rigorous college-preparatory course includes a detailed study of many human body systems. Homeostatic balance, the relationship between structure and function, and the interrelationships between body systems are a focus throughout the course. This course is recommended for students interested in a health-related career, especially those students who plan to study medicine, nursing, physical therapy, and athletic training. Standards are similar to those in the standard level of the course, but students are expected to have a deeper understanding with a higher level of sophistication. This course uses dissection as an instructional activity.

## APPENDICES

### College Admission Requirements

#### **University of California Admission Requirements**

**Note:** For the most current and complete information about comprehensive/holistic review, please refer to: <http://www.universityofcalifornia.edu/admissions/freshman/how-applications-reviewed/index.html>

The University of California evaluates all freshman applicants through a complete review of the qualifications a student presents when applying to one of the UC's undergraduate campuses. This is called comprehensive/holistic review. Comprehensive/holistic review is a process to ensure admission of highly qualified students to be considered on a broad variety of academic and personal qualifications that all students present on the application.

#### **Overview of the UC Admissions process**

##### **Eligibility**

Students can achieve Eligibility in the Statewide Context based on their high school grades in UC-required A-G courses (see A-G subject requirements) and their scores on standardized tests. To meet minimum admission requirements, you must complete 15 year-long high school courses with a letter grade of C or better — at least 11 of them prior to your last year of high school. Detailed information regarding UC requirements for incoming freshman can be found at [this link](#).

A second path, Eligibility in the Local Context (ELC). ELC grants UC eligibility to students in the top 9 percent of their junior class, based on grades in UC-required courses. The top 9 percent are identified as ELC. Another path to the UC is Admission by Examination Alone (see section on testing requirements for CSU and UC). Keep in mind, that competitive campuses and programs look for applicants who exceed the minimum requirements when they select their students.

##### **A-G Subject Requirements**

###### **A: History/Social Science - 2 years required.**

Two years of history/social science, including one year of World History, Cultures or Geography; and one year of U.S. History or one-half year of U.S. History and one-half year American Government or Civics.

**B: English -4 years required.**

Four years of college preparatory English that includes frequent and regular writing and reading of classic and modern literature. Not more than two semesters of ninth-grade English can be used to meet this requirement.

**C: Mathematics -3 years required, 4 years recommended.**

Three years of college preparatory mathematics that includes the topics covered in Elementary and Advanced Algebra and two- and three-dimensional Geometry. Geometry must be taken and cannot be omitted or validated by a higher-level math course. Approved Integrated Math courses may be used to fulfill part or all of this requirement, as may Math courses taken in the seventh and eighth grades that your high school accepts as equivalent to its own Math courses.

**D: Laboratory Science -2 years required, 3 years recommended.**

Two years of laboratory science providing fundamental knowledge in two of these three core disciplines: Biology (which includes anatomy, physiology, marine biology, aquatic biology, etc.), Chemistry, and Physics. The final two years of an approved three-year integrated science program may be used to fulfill this requirement. Not more than one year of ninth-grade laboratory science can be used to meet this requirement.

**E: Language Other than English -2 years required, 3 years recommended.**

Two years of the same language other than English. Courses should emphasize speaking and understanding and include instruction in grammar, vocabulary, reading, composition, and culture. Courses in language other than English taken in the seventh and eighth grade may be used to fulfill part of this requirement if your high school accepts them as equivalent to its own courses.

**F: Visual and Performing Arts (VPA) -1 year required.**

One year of visual and performing arts chosen from the following: dance, drama/theater, music, or visual arts.

**G: College Preparatory Electives -1 year required.**

One year (two semesters), in addition to those required in a-f above, chosen from the following areas: Visual and Performing Arts (non-introductory level courses), History, Social Science, English, Advanced Mathematics, Laboratory Science, and Language other than English (a third year in the Language used for the e requirement or two years of another Language).

## **Admissions under comprehensive/holistic review**

Applicants admitted under comprehensive review will continue to be high-achieving students, admitted from the currently defined UC-eligible pool that identifies the top 9 percent of the statewide graduating high school class based on traditional academic criteria. Also, the 14 criteria (listed below) are what campuses currently use to select students from the UC-eligible pool.

Freshman applicants to UC campuses will be evaluated on the basis of a single, comprehensive set of selection criteria, using multiple measures of achievement and promise, while considering the context in which each student has demonstrated academic accomplishment, according to the policy.

Comprehensive/holistic review means that students' records will be analyzed not only for their grades and test scores—important baseline indicators of academic potential—but also for additional evidence of such qualities as motivation, leadership, intellectual curiosity, and initiative. These qualities play an important role in student success in an academic environment as rigorous and challenging as that of the University of California, and they can be demonstrated in a variety of ways, through a variety of achievements and experience. Consideration of these factors has long been a part of the admission process at many of the nation's most selective universities.

### **Campus Selection Criteria**

Below are the 14 points of criteria that UC campuses may use to select a freshman class from the pool of UC-eligible students.

#### ***Academic criteria:***

1. High school grade point average in UC-required courses.
2. Standardized test scores.
3. Number of, content of, and performance in academic courses completed beyond the university's minimum eligibility requirements.
4. Number of, and performance in, AP and Honors courses.
5. Being identified as eligible in the local context (ELC) by ranking in the top 9 percent of the high school class, as determined by the university's academic criteria.
6. Quality of the senior year program, as measured by the type and number of academic courses in progress or planned.
7. Quality of academic performance relative to educational opportunities available in the applicant's school.

8. Outstanding performance in one or more academic subject areas.
9. Outstanding work in one or more special projects in any academic field.
10. Recent marked improvement in academic performance.

***Supplemental Criteria:***

11. Special talents, achievements, and awards in a particular field, or experiences that demonstrate unusual promise for leadership or ability to contribute to the intellectual vitality of the campus.
12. Completion of special projects that offer significant evidence of an applicant's special effort and determination or that may indicate special suitability to an academic program on a specific campus.
13. Academic accomplishments in light of an applicant's life experiences and special circumstances, such as disabilities, low family income, first generation to attend college, need to work, disadvantaged social or educational environment, difficult personal and family situations or circumstances, refugee status, or veteran status.
14. Location of the applicant's secondary school and residence, to provide for geographic diversity in the student population and to account for the wide variety of educational environments existing in California.

## **UC and CSU Examination Requirements**

A suggested pattern to fulfill the University of California (UC) and the California State University (CSU) standardized testing requirements for admission is for a student in her junior year to take the Scholastic Assessment Test (SAT): Reasoning Test or American College Test (ACT) in the spring.

For the class of 2022, the UC System has made the SAT and ACT with the Writing Test optional. However, the CSU System currently requires SAT or ACT tests. The CSU also “superscore” these tests, meaning that they will select the highest critical reading and the highest mathematics scores from all of the SAT tests a student has taken. The ACT composite score is selected from the ACT test. The CSU does not require the writing test for admission purposes.

Students are required to take the tests no later than December of their senior year. However, it is highly recommended for those who are applying to Cal Poly SLO in particular, to take them no later than November. Students are responsible to ensure that the testing agencies report their scores directly to the Admissions Office at each campus to which they apply.

Students who are planning to apply for admission to a campus and/or undergraduate program where enrollment demands are expected to be especially heavy are cautioned to take these tests no later than November and preferably in October of their senior year. Additional placement tests in Mathematics and English, if applicable, are given to students after they have been accepted into a California State University.

### **Admission by Examination Alone**

If you do not meet the Subject and Scholarship Requirements, you may be able to qualify for admission to the University of California by examination.

High scores on Advanced Placement tests often result in colleges granting students college credit in the field. It is recommended that able students take the Advanced Placement Examinations if enrolled in an AP course. (NDB requires that all AP students take the AP test in that subject).

## California State University

[https://www2.calstate.edu/apply/freshman/getting\\_into\\_the\\_csu/Pages/admission-requirements.aspx](https://www2.calstate.edu/apply/freshman/getting_into_the_csu/Pages/admission-requirements.aspx)

You will qualify for regular admission as a first-time freshman if you:

1. **are a high school graduate;**
2. **have a qualifiable eligibility index;**

The Eligibility Index Table shows the combination of test scores and averages required. A numerical index identifies the test scores required at each grade point average, and vice versa, to achieve statewide eligibility. You can calculate your eligibility index by using one of the formulas shown below. Grades from 10<sup>th</sup> and 11<sup>th</sup> grade CSU approved courses are used for GPA calculation. For CAL POLY San Luis Obispo, 9-11<sup>th</sup> grade GPA is used:

**(High School GPA x 800) PLUS (Highest reading and writing SAT score) PLUS math score**

*OR*

**(10 x ACT Composite score) PLUS (200 x high school grade point average, i.e. GPA)**

If you are a California high school graduate (or a resident of California for tuition purposes), then you need a minimum eligibility index of 2900 using the SAT I or 694 using the ACT.

3. **have completed courses with grades of C or better in the following courses:**

<b>English – 4 years*</b> Composition and Literature designated as college preparatory. *For applicants to Cal Poly SLO, 5 years are recommended.	<b>Mathematics – 3 years (4 years recommended)</b> Algebra I, Geometry, Algebra II, and/or another advanced mathematics course.
<b>Social Sciences – 2 years</b> One year of U.S. History or one semester of U.S. History and one semester of Civics or American Government AND one year of Social Science	<b>Laboratory Science – 2 years with Laboratory</b> One Biological Science and one Physical Science

**...have completed courses with grades of C or better in the following courses (cont.):**

**Language other than English – 2 years in the same language.** Subject to waiver for applicants demonstrating equivalent competence

**Visual and Performing Arts – 1 year**

Art, Dance, Theater/Drama, or Music.

**College Preparatory Electives – 1 year:** Any course that is beyond the minimum requirements and **not** listed above.

## **Private Four-Year Colleges and Universities**

A minimum GPA of 3.0 and an SAT score of at least 1000 (critical reading and math) are generally suggested, as well as the fulfillment of requirements similar to the UC's A-G requirements. However, again, this varies by college, and there is no minimum GPA or SAT test score for private colleges. Therefore, individual college catalogs or college websites should be consulted for current information.

## **Community Colleges**

Any high school graduate, or person over the age of 18, may be admitted to a community college. Students register for community college in the spring of their senior year. See local community college websites below:

CSM (College of San Mateo) website

[www.collegeofsanmateo.edu](http://www.collegeofsanmateo.edu)

Foothill College website

[www.foothill.edu](http://www.foothill.edu)

Canada College website

[www.canadacollege.edu](http://www.canadacollege.edu)

## **College Courses**

Students at Notre Dame High School Belmont have the opportunity to take courses at local California Community Colleges. Courses may be taken in any area. However, students may not take a required NDB core course outside of NDB.

Students who wish to take a college class at a community college must first discuss this with their NDB Counselor. The signature of the Associate Head of School for Curriculum and Instruction is also

required to authorize enrollment. Students are responsible to make arrangements for any placement tests and are responsible for meeting college registration deadlines.

Courses taken on the college level will not be factored into the student's NDB GPA. However, students can list any college courses taken in their college applications, which the colleges will consider, and subsequently add to the student's overall college GPA. Generally, the most important factors in applying to college are the four-year grade point average and the Scholastic Assessment Test (SAT) or the American College Test (ACT). It is highly advised to also research the college(s) of interest at their website on more specific information about their entrance requirements.

[NDB Advanced Placement Courses Expectations Worksheet](#)

## NDB Course Index

Note: Not all courses are UC approved. All AP and Honors courses offered at Notre Dame are weighted on the 5.0 scale for your Notre Dame GPA. However, be aware that only courses marked with an asterisk \* are recognized on the 5.0 scale by the UC/CSU in their GPA eligibility calculation  
- if the student takes the courses in grade 10 or later.

### English Department

- EN100 English I
- EN150 English I Honors
- EN200 English II
- EN250 English II Honors
- EN300 English III
- EN350 AP English Lang. & Comp.\*
- EN400 English IV
- EN450 AP English Lit. & Comp.\*
- EN700 Creative Writing
- EN701 Journalism I
- EN703 Journalism II/III

### Mathematics (cont.)

- MA400 Precalculus
- MA450 Precalculus Honors\*
- MA500 Statistics
- MA550 AP Statistics\*
- MA600 Calculus
- MA650 AP Calculus AB\*
- MA652 AP Calculus BC\*
- MA650 AP Computer Science A\*
- MA700 Computer Science I
- MA710 Introduction to Data Science
- MA740 Exploring Computer Science
- MA750 AP Computer Science Principles\*

### Kinesiology

- KS700 Foundations of Sports Medicine
- KP100 Physical Education I w/Health
- KP300 Sports Management
- KP200 Yoga I
- KP210 Yoga II

### Science

- SC100 Physics 9/10
- SC200 Biology
- SC250 Biology Honors
- SC300 Chemistry
- SC325 Living by Chemistry
- SC350 Chemistry Honors\*
- SC450 AP Physics I\*
- SC500 AP Biology\* / Lab
- SC600 AP Chemistry\* / Lab

### Mathematics

- MA100 Algebra I
- MA200 Geometry
- MA250 Geometry Honors
- MA300 Algebra II
- MA350 Algebra II Honors

### Science (cont.)

SC700 Environmental Science  
SC702. Forensic Science  
SC705 Design and Engineering  
SC710 Introduction to Biotechnology

### Social Sciences

SS500 AP Human Geography\*  
SS200. Modern World History  
SS250 Modern World History Honors  
SS300 U.S. History  
SS350 AP U.S. History\*  
SS400. U.S. Government  
SS401 Economics  
SS450 AP U.S. Govt. & Politics\*  
SS700 Psychology  
SS750 AP Psychology\*

### Spiritual Life

SL120 Faith & Morality  
SL215 Hebrew Scriptures  
SL200 Living the Scriptures  
SL325 Social Justice  
SL320 Capstone Project: Hallmarks in Action  
SL426 World Religions  
SL435 Being Notre Dame

### Visual and Performing Arts

AA100 Art I  
AA200 Art II  
AA300 Art III  
AA400 Art IV  
AA500 AP Studio Art: 2D Design\*  
AA501 AP Studio Art: 3D Design\*  
AA502 AP Studio Art: Drawing\*

### Visual and Performing Arts (cont.)

AA700 AP Art History\*  
AG100 Graphic Design I °  
AG200 Graphic Design II °  
AG300 Graphic Design III  
AS100 Sculpture I  
AS200 Sculpture II  
AS300 Sculpture III  
AS350 Sculpture III Honors \*  
AC550 Musical Theatre  
AD100 Dance I  
AD200 Dance II  
AD300 Dance III  
AD400 Dance IV  
AD501 Dance V: In-Step Company  
AP100 Photography I °  
AP200 Photography II °  
AP300 Photography III °  
AP350 Photography III Honors °\*  
AV700 Video Production °

### World Languages

LA100 American Sign Lang. I  
LA200 American Sign Lang. II  
LA300 American Sign Lang. III  
LA350 American Sign Lang. III Honors\*  
LA400 American Sign Lang. IV  
LF100 French I  
LF200 French II  
LF300 French III  
LF350 French III Honors\*  
LF400 French IV  
LF500 AP French Lang. & Culture\*  
LS100 Spanish I  
LS200 Spanish II

### **World Languages (cont.)**

- LS300 Spanish III
- LS350 Spanish III Honors\*
- LS400 Spanish IV
- LS500 AP Spanish Lang. & Culture\*
- LS550 AP Spanish Lit. & Culture \*

### **Other NDB Courses and Programs**

- ND105 Becoming Notre Dame
- IN900 Student Directed Internship
- Teaching Assistant Program
- Study Hall

### **Junípero Serra High School (cont.)**

- TSA500 Concert Choir
- TSA705 Concert Band
- TSB702 Virtual Enterprise
- TLM100 Mandarin 1
- TLM200 Mandarin II
- TLM300 Mandarin III
- TLM400 Mandarin IV
- TLM500 AP Chinese Lang. & Culture\*

### **Mercy High School, Burlingame**

- TSM700 Anatomy & Physiology
- TSM750 Anatomy & Physiology Honors\*

### ***Tri-School Courses***

#### **Junípero Serra High School**

- TSA720 Jazz Ensemble
- TSA710 Symphonic Band
- TS100 Drama I: Intro to Performance  
(Grades 10-12)
- TS105 Drama I: Intro to Performance  
(Grade 9)
- TS200 Drama II: Acting for the Stage
- TS300 Drama III: Advanced Acting & Production
- TS400 Drama IV: Advanced Acting & Performance