2019-2020

Notre Dame Academy

Course Descriptions

Grades 9-12

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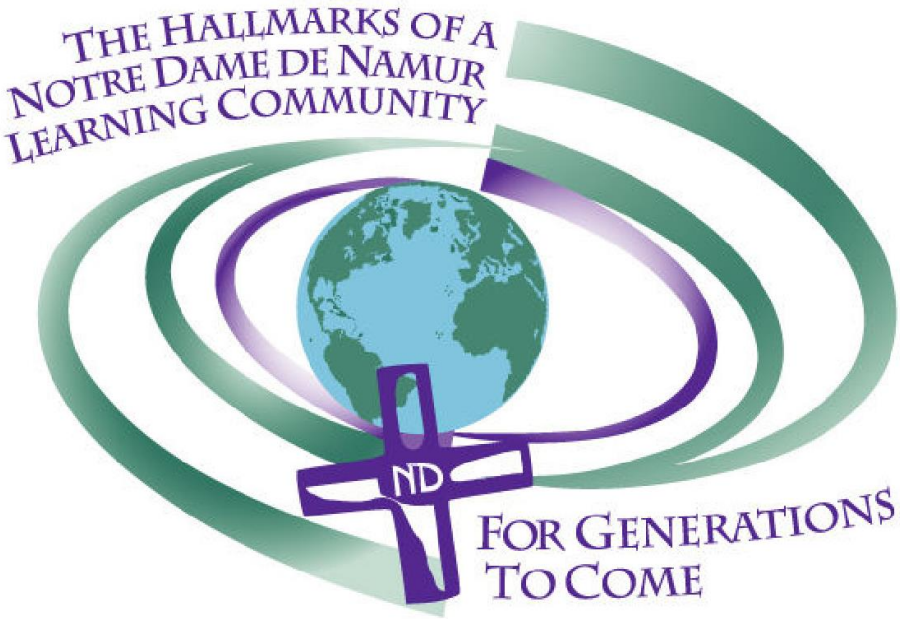
The information provided in these Course Descriptions is intended to guide students in making appropriate educational choices. Students and parents are encouraged to carefully read the descriptions, to confer with teachers and guidance counselors, and to evaluate past academic performance in determining course selections. Please refer to college websites for course requirements as many selective colleges require or strongly recommend four years of mathematics, three or four years of science, three or four years of a modern world language, and three or four years of history/social studies.



The Notre Dame de Namur Learning Community Hallmarks describe the essential characteristics, values, and activities of a Notre Dame learning community. The Notre Dame Hallmarks emerged in response to the question from both the Sisters of Notre Dame de Namur and their co-workers: "What makes our school a Notre Dame school?" The Sisters of Notre Dame de Namur, in collaboration with the learning communities, began a process to explore this question. The process gave birth to these "living statements", statements that will continue to develop over time and are relevant to the times, ones which inspire faithfulness to the spirituality and mission of the Sisters of Notre Dame de Namur for generations to come.

These Notre Dame Hallmarks are used through a reflection-action-reflection process, whereby each learning community, on a regular basis, metaphorically takes a look in the mirror and based on what it sees, makes choices for its continued development. Thus, the Hallmarks give values-based direction for decisions and activities so that the learning community continues to express the spirituality and mission of the Sisters of Notre Dame de Namur.

HALLMARK ONE:
We Proclaim By Our Lives Even More Than By Our Words That God Is Good

HALLMARK TWO:
We Honor The Dignity And Sacredness Of Each Person

HALLMARK THREE:
We Educate For And Act On Behalf Of Justice And Peace In The World community.

HALLMARK FOUR:
We Commit Ourselves To Community Service

HALLMARK FIVE:
We Embrace The Gift Of Diversity

HALLMARK SIX:
We Create Community Among Those With Whom We Work And With Those We Serve

HALLMARK SEVEN:
We Develop Holistic Learning Communities Which Educate For Life

COURSE REQUIREMENTS

All students must complete six full-credit courses successfully each year, as well as required partial-credit courses. All courses are college preparatory. Many courses are designated Honors or Advanced in course descriptions. AP courses are also available. Please be aware that Advanced and AP level placements are determined by criteria set forth by the specific department and require a teacher recommendation.

Grade 11 and 12 students may carry seven full-credit courses based on an individual meeting with the guidance department, the counselor's subsequent approval in writing, and departmental approval.

DIPLOMA REQUIREMENTS

Required Full-Credit Courses	
Course Discipline	Credits
Religious Studies	4
English	4
Mathematics	3
World Languages	2
Science	3
History/Social Studies	3
Required Partial-Credit Courses	
Physical Education/Wellness	Grades 9-12
Creative Arts	Grades 9, 10
Latin Studies I	Grade 9
Latin Studies II or Mandarin II	Grade 10
Health Education	Grade 10
Communication	Grade 11
Guidance Seminar	Grades 9-12
Required Non-Credit	
Senior Project	Grade 12

COURSE OF STUDY

Grade 9

- Religious Studies 1
- English 1
- Algebra 1 or 2 (Based on successful completion of Algebra 1 and demonstrated proficiency on NDA Placement Test)
- World History 2
- Biology 1
- French 1 or 2; Spanish 1 or 2, or Mandarin (Based on successful completion of first year of language and demonstrated proficiency on NDA Placement Test)
- Physical Education
- Latin Studies 1
- Creative Arts
- Freshman Seminar (one semester)

Grade 10

- Religious Studies 2
- English 2
- Geometry
- U.S. History 1
- Chemistry 1
- French or Spanish
- Physical Education
- Sophomore Seminar (one quarter)
- Mandarin 2 or Latin Studies 2
- Health Education
- Creative Arts

Grade 11

- Religious Studies 3 (including Love in Action)
- English 3: American Literature
- Algebra 2, or Pre-calculus
- U.S. History 2
- Anatomy and Physiology, or Bio II/Biotechnology, or Chemistry 2
- Elective
- Physical Education
- Junior Seminar (one quarter)
- Communication

Grade 12

- Religious Studies 4 (including Love in Action)
- English 4: World Literature
- Elective
- Elective
- Elective
- Elective

- Physical Education
- Senior Seminar (one quarter)
- Senior Project

RELIGIOUS STUDIES DEPARTMENT

The Religious Studies Department provides a comprehensive program which is faith-based and academic. The content and philosophy of the program can be found in Scripture and in the rich tradition of the Catholic Church. This program underscores the mission of the School and the learning styles and needs of the students. Through the courses, students are encouraged to develop and strengthen their faith. The teaching methodologies are varied and are continually reviewed to include new technologies, current scholarship, and cooperative learning activities.

The Love-in Action Community Service Program for juniors and seniors complements the religion curriculum by providing students with a tangible opportunity for community outreach. Our Religious Studies is further enhanced by the preparation of seasonal Liturgical celebrations as well as a yearly retreat experience.

Religion 1 (611):
Exploring Catholic Christian Traditions
Required/Full Credit/Grade 9
This course presents the Church from the beginning of the Pentecost Event through her history, teachings, and rich traditions to contemporary time. It focuses on the mission of the Church and the responsibilities of all baptized Christians. Some major questions to be answered include: “How do we grow in Christian faith?”, which will lead into issues of Christian morality; “Who are our ancestors in faith?”, which will focus upon Christian history; “How can the study of our historical roots foster in us a spirit of Christian hope?”, which will provide a strong background for the presentation of contemporary Catholic Social Teachings; and “What does it mean to be a Catholic today?” with a focus on Catholic teachings and the rich store of Catholic Tradition. Basics of Catholicism such as the Sacraments, 10 Commandments, traditional prayers, lives of the Saints, and major celebrations of the Church Liturgical Year will continue to be reinforced, as well as further exploration of the life of St.Julie and the Sisters of Notre Dame.

Religion 2 (621):
Growing in Christian Morality
Required/Full Credit/Grade 10
This course studies the principles of moral decision-making and explores some of today's complex moral issues. Students reflect on the thematic question: “What kind of person am I and what kind of person do I want to become?" There is a special focus on the moral virtues of wise judgment, justice, courage, wholeness, honesty, compassion, peacemaking, respect for persons, creation, and human life. The course concludes with preparation for participation in Notre Dame's Love-in-Action program.

Religion 3 (631):
Scripture Studies
Required/Full Credit/Grade 11
Through readings and critical analyses of the Hebrew and Christian Scriptures, students investigate the history of salvation from Genesis to the development of the early Church in Acts of the Apostles. This course explores the lasting contributions to faith and culture of the most popular and enduring characters of the Bible with a focus on the role of significant women active in the history of salvation.

Religion 4 (641):
World Religions
Required/Full Credit/Grade 12
This course presents the major religions of the world within the context of the human need for meaning. Students will become familiar with the origins, principle ethical tenets, religious practices, prayer forms, and cultural influences of the major traditions including Buddhism, Christianity, Confucianism, Hinduism, Islam, and Judaism. This course will assist the students to form a positive and respectful attitude as they compare and contrast the faith responses from the world community. The goal of this course is to develop a more tolerant and informed understanding of religion and religious issues.

Love-in-Action Community Service Program (Jr. 635, Sr. 645)
Required/Partial Credit/Grades 11, 12
Students give service at a site of their choice for approximately 120 hours over two years. Integrated into the religious course of studies, it includes journal reflections, participation in ministry, self-evaluation, and supervisor evaluation. This program prepares students to assume their role in the world as women of love and service.

ENGLISH DEPARTMENT

The English Department provides a comprehensive program that stems from the school's mission, represents the traditional literary canon but also highlights contemporary and progressive literature, and is consistent with the needs of students. During the students' four years of English, they read, discuss, and write about literature of increasing complexity and breadth, from genre units and focused writing as freshmen to universal emphasis and long research papers as seniors. The wide scope of material, encompassing over 3,000 years and cultures from around the world, allows students to consider all aspects of experience, history, trends, and techniques at an appropriate developmental pace. Students are encouraged to connect their personal, cultural, ethical, and religious insights to the texts that they read and share their diverse perspectives in the classroom setting. The program is also developmental in its approach to writing. The freshmen journal and compose paragraphs and essays; the sophomores focus on primary source analytical essays and the 5 paragraph form; juniors complete a literary research paper and mini-presentation; and seniors synthesize the multitude of skills they have acquired, completing 10 page analyses and publicly presenting a comprehensive research paper as

part of the Senior Project. The English program also maintains continuity in the teaching of grammar and usage, comprehensive in the earlier years, as well as MLA format.

English 1 (212):
Literature: Genres and Connections Honors
Required /Full Credit/Grade 9
Literature: Genres and Connections Honors stresses the development of basic skills in reading, writing, speaking, thinking, and studying. Literature selections introduce the student to the genres of epic, short story, memoir, dramatic tragedy, poetry, and the novel. Use of the Collections textbook and interactive features allows for an exploration of comparative pieces and creates connections through multimedia. Students develop writing skills through expository, descriptive, and narrative paragraphs and essays as well as daily journaling. Students also study vocabulary, grammar, usage, punctuation, sentence construction, and paragraph organization.

English 2 (221):
World Literature: Comparative Perspectives Advanced Honors
Required/Full Credit/Grade 10
This advanced course is a more academically challenging and demanding course than World Literature: Comparative Perspectives Honors. Students will increase their understanding and use of literary terminology to enhance critical analysis and discussion. Additional readings and writing assignments are also added to the curriculum.

English 2 (222):
World Literature: Comparative Perspectives Honors
Required/Full Credit/Grade 10
World Literature: Comparative Perspectives stresses the continued development of critical reading and expository writing skills introduced in grade 9, while building students' vocabulary and oral skills. The course is a thematic and comparative examination of world literature from or relating to various countries. Students gain an appreciation for multicultural literature by examining essays, fiction, and poetry, among other genres, and connect analysis to the topics and motifs being studied. Use of the Collections textbook and interactive features allows for an exploration of comparative pieces and creates connections through multimedia. The students further develop their writing skills by learning to create an effective 5 paragraph essay. Independent reading as well as individual and collaborative projects are also included in the curriculum.

English 3 (230):
American Literature with AP® Language and Composition:
Commonalities and Perceptions
Required/Full Credit/Grade 11
American Literature with AP Language and Composition is offered to highly motivated students who demonstrate a maturity in work ethic and in analysis of material and expression. The course examines the same subjects as American Literature Honors but is more academically demanding and requires additional readings, writing strategies, and

rhetorical approaches. The course also teaches in preparation for the English Language and Composition AP Exam.

English 3 (232):
American Literature: Commonalities and Perceptions Honors
Required/Full Credit/Grade 11
This course is a partially chronological and thematic study of the major writers and genres in American Literature. The novels, plays, poems, short stories, and nonfiction that the students read and discuss introduce them to diverse American subjects, ideas, and styles. Use of the Collections textbook and interactive features allows for an exploration of comparative pieces and creates connections through multimedia. The course requires students to read additional texts, demonstrate notable sophistication in their writing, and show proficiency in using databases and other library resources. The students further develop their research and writing skills by learning to compose a literary research paper and presentation. Independent reading as well as individual and collaborative projects are also included in the curriculum. The year culminates with a literary research paper and mini presentation within the classroom.

English 4 (243):
British Literature with AP® English Literature: Universal Traditions
Required/Full Credit/Grade 12
British Literature with AP English Literature is offered to highly motivated students who demonstrate a maturity in work ethic and in analysis of material and expression. The course examines the same subjects as British Literature Honors but is more academically demanding and aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. It also teaches in preparation for the English Literature AP Exam

English 4 (242):
Universal Traditions: British Literature and Beyond Honors
Required/Full Credit/Grade 12
This course is a comparative and thematic study of the major writers and genres in British and World Literature. It is comprehensive in its selections of genres, styles, representations, and subjects and it explores universal tropes and motifs. The course's comprehensive approach encourages students to discern the value of literary connections as well as individual analytical development. Use of the Collections textbook and interactive features allows for an exploration of comparative pieces and creates connections through multimedia. Students learn different movements of literary theory and how to apply them to analysis, as well as engage in literary criticism to develop depth in their analytical and critical approaches to writing. A variety of projects, individual and group, are assigned to assess the students' application of literary comprehension and interpretation. Students also create an interdisciplinary senior project with the Arts Department.

Women Writers Honors (245)
Elective/Full Credit/Honors/Grade 12
This senior level elective predominately explores creative writing practices. Students will read predominantly female authors along with representative texts of various genres (such as memoir, fiction, and poetry). Students will engage in critical and creative writing exercises in order to develop their craft, culminating in a portfolio. Students will also complete group projects on the history of women writers and individual projects focused on one specific female author. The dynamic of the course requires an open attitude and a willingness to workshop ideas; as such, students must engage in class participation regularly. A creative writing textbook with prompts and questions for self-exploration is used to help develop the writing craft and individual voices.

Senior Project (745)
Required/Grade 12
The Senior Project is a theme-based collaborative which connects literature and the arts through themes, culminating in a formal presentation during the third quarter.

HISTORY AND SOCIAL STUDIES DEPARTMENT

The History and Social Studies Department provides a comprehensive academic program that is consistent with the school's belief about teaching and learning, supports the mission of the school, and meets the needs of the students. In grades 9, 10, and 11 the students are required to take the courses of Modern World History, US History 1 and US History 2. In their senior year electives are offered such as Psychology, Sociology/Economics, and Twentieth Century History. The courses and curriculum are reviewed and adapted annually by the department members. The courses are designed to build on previous knowledge, and to develop proficiency in their understanding of historical concepts as well as their critical thinking, writing, and research skills. The developmental levels of the individual students are assessed annually for placement in the leveled courses so that they can achieve success in their studies. Teaching methodologies and the planning of programs are continually assessed to incorporate new technologies, textbook support, cooperative learning activities, library resources, and the strengths of the faculty

Modern World History (312)
Required/Full Credit/Grade 9
This course traces the chronological developments of world events from the Renaissance to the present. In addition to political history, topics include society and culture, and economic changes. Students will learn to use maps and graphs, analyze data, interpret primary sources, and develop critical thinking skills. Attention is given to reading comprehension, taking notes in class, preparing for and taking a test, and using electronic resources.

United States History I (323) Advanced Honors
Required/Full Credit/Grade 10
This course covers the same content described in United States History I Honors but in greater depth and with an emphasis on essay writing and critical thinking. Students in this course read a college survey textbook, as well as primary documents, and other secondary sources. It is expected that students in the course will take AP U.S. History.

United States History I (324) Honors
Required/Full Credit/Grade 10
This course traces the history of the United States from pre-contact through Reconstruction. Material is presented chronologically. Topics include politics, diplomacy, economics, social and cultural evolution, and intellectual influences. Critical thinking skills are stressed including drawing conclusions from statistics and graphs, analyzing primary sources, and synthesizing evidence from a variety of sources. Brief research projects and a major research paper are required.

AP® U.S. History (330)
Required/Full Credit/Grade 11
The AP U.S. History course focuses on the development of disciplinary practices and reasoning skills and an understanding of content organized around seven themes in American History: American and National Identity; Politics and Power; Work, Exchange, and Technology; Culture and Society; Migration and Settlement; Geography and the Environment; and America in the World. It is offered to students who have excelled in U.S. History 1. It is a rigorous course requiring the same expectations and demands of an introductory level college course. This course is designed to meet the standards of the current AP exam and students may take the AP exam.

United States History II (332) Honors
Required /Full Credit/Grade 11
This course traces the chronological development of the United States from the post-Reconstruction period into the 21st century. Focusing on the major political, social, and economic events as well as on the personalities and ideas that have shaped America, students acquire factual knowledge while learning to analyze data, use primary sources, and build critical thinking skills.

20th Century History (341)
Elective/Full Credit/Advanced Honors/Grade 12
This course explores significant developments and defining events in history during the twentieth century. A topical approach is used and issues chosen for consideration may vary from year to year. Students learn with primary sources, documentary materials, pictorial evidence, as well as current technology.

Psychology (346)
Elective/Full Credit/Honors/Grade 12
This course introduces students to psychology, the scientific study of behavior and mental processes. In this course, students will examine the following: an overview of the

history of psychology; the methods of research used in psychology; the basic principles of psychology; various approaches to the study of human behavior; the brain, body, behavior connection; sensation and perception; learning and cognitive processes; memory; thinking and learning styles; lifespan development; theories of personality development, moral development, cognitive development, social development, psychological disorders and types of therapy. With extra study, students may elect to take the Advanced Placement Psychology test at the completion of the course

Economics/Sociology (348)
Elective/Full Credit/Honors/Grade 12
The Economics/Sociology course is designed to give the students an introduction to the basic principles of Economics and Sociology. One semester will be dedicated to each topic of study.

- Economics is the study of how people and entities choose to use resources (information, time, money, and raw materials) to create useful products and services in a market environment. Topics addressed in the course are supply and demand, types of businesses, labor unions, money and banking, trade, and taxation.
- Sociology is the study of how people function in groups. Students will be exposed to such topics as culture, family life, the changing role of men and women, racial and ethnic relations, deviance and social control, and how societies reform and change over time. In addition to traditional methods, students will learn through research, observation, and experiment.

WORLD LANGUAGE DEPARTMENT

The goals of the NDA World Language Department in its French, Spanish, Mandarin, and Latin Studies programs are to teach our students to use and appreciate a language other than English and to value other cultures. With proficiency in the skills of reading, writing, and conversing in another language and with a solid knowledge of other cultures, our students will be better prepared to participate in the multilingual, interdependent communities of the twenty-first century. Although 2 years of French, Spanish, or Mandarin are required for graduation, we strongly recommend that students continue with their study of French, Spanish, or Mandarin in the junior and senior years.

French
All French courses are offered for full credit. Placement is by examination and departmental approval.

French 1 Honors (412)
Required/Full Credit/Grade 9
French 1 is an introductory course for students who have had little or no French or whose language skills need strengthening before they advance to French 2. In this class, basic grammatical structures, vocabulary, verb forms, and idiomatic expressions are introduced. Students develop basic communication skills in spoken and written French

through the use of interactive, communicative activities and through authentic materials appropriate for this level. Students are introduced to the varied cultures of French-speaking countries through readings and class discussions.

French 2 Advanced Honors (421)
Required/Full Credit/Grade 9 or 10
This course continues to focus on communication skills through the study of grammar, continued vocabulary acquisition, expanded conversations, and through controlled and original composition. Students continue to develop their speaking, listening, and reading skills and continue to expand their knowledge of the varied cultures of French-speaking countries. Students practice their language skills through interactive, communicative activities and through the use of authentic materials appropriate for this level.

French 2 Honors (422)
Required/Full Credit/Grade 9 or 10
This course continues to focus on communication skills through the study of grammar, continued vocabulary acquisition, expanded conversation, and through controlled and original composition. Students continue to develop their listening and speaking skills through interactive, communicative activities and through authentic materials appropriate for this level. Students also continue to expand their knowledge of the varied cultures of French-speaking countries.

French 3 Advanced Honors (431)
Elective/Full Credit/Grade 10 or 11
This course develops students' conversational, listening, and writing skills while focusing on the accurate formation and usage of complex grammatical structures and thematic vocabulary. Students practice French through interactive, communicative activities and through the use of authentic materials.

French 3 Honors (432)
Elective/Full Credit/Grade 10 or 11
In French 3, students develop their proficiency in French through correct formation of and practice with higher-level grammatical structures and vocabulary. Students practice their newly acquired forms through structured reading, speaking, listening, and writing activities. Students polish their language skills through interactive, communicative activities and through the use of authentic materials appropriate for this level. Concepts from French 1 and French 2 are reinforced.

French 4 Advanced Honors (441)
Elective/Full Credit/Grade 11 or 12
Students continue to develop listening, reading, speaking, and writing skills in French through the study of complex grammar and authentic French-language texts using an interactive, communicative approach. Within contemporary and meaningful thematic contexts, students revisit topics studied in previous French courses, master sophisticated grammatical structures, increase their vocabulary, and advance their cultural competency.

Students work with AP* French texts, and students interested in taking the AP exam also meet with the teacher outside of class time for additional preparation

French 4 Honors (442)
Elective/Full Credit/Grade 11 or 12
Students continue to develop listening, reading, speaking, and writing skills in French through more in-depth study of higher-level grammar and authentic French-language texts using an interactive, communicative approach. Within contemporary and meaningful thematic contexts, students revisit topics studied in previous French courses, master higher-level grammatical structures, increase their vocabulary, and advance their cultural competency.

French 5 Advanced Honors (451)
Elective/Full Credit/Grade 12
In this class, students continue to increase their proficiency and accuracy in the use of French. Students practice their speaking, listening, reading, and writing skills through the study of complex grammar and the use of authentic materials. Students polish their language skills through interactive, communicative activities. Students work with AP* French texts, and students interested in taking the AP exam also meet with the teacher outside of class time for additional preparation.

French 5 Honors (452)
Elective/Full Credit/Grade 12
In this class, students continue to increase their proficiency and accuracy in the use of French. Students practice their speaking, listening, reading, and writing skills through the study of higher-level grammar and the use of authentic materials. Students polish their language skills through interactive, communicative activities.

Spanish
All Spanish courses are offered for full credit. Placement is by examination and by departmental approval.
Spanish 1 Honors (414)
Required/Full Credit/Grade 9
Spanish 1 is an introductory course for students who have had little or no Spanish or whose language skills need strengthening before they advance to Spanish 2. In this class, basic grammatical structures, vocabulary, verb forms, and idiomatic expressions are introduced. Students develop basic communication skills in spoken and written Spanish through the use of interactive, communicative activities and through authentic materials appropriate for this level. Students are introduced to the varied cultures of Spanish-speaking countries through readings and class discussions.

Spanish 2 Advanced Honors (423)
Required/Full Credit/Grade 9 or 10
This course continues to focus on communication skills through the study of grammar, continued vocabulary acquisition, expanded conversations, and through controlled and original composition. Students continue to develop their speaking, listening, and reading

skills and continue to expand their knowledge of the varied cultures of Spanish-speaking countries. Students practice their language skills through interactive, communicative activities and through the use of authentic materials appropriate for this level.

Spanish 2 Honors (424)
Required/Full Credit/Grade 9 or 10
This course continues to focus on communication skills through the study of grammar, continued vocabulary acquisition, expanded conversations, and through controlled and original composition. Students continue to develop their listening and speaking skills through interactive, communicative activities and through authentic materials appropriate for this level. Students also continue to expand their knowledge of the varied cultures of Spanish-speaking countries.

Spanish 3 Advanced Honors (433)
Elective/Full Credit/Grade 10 or 11
This course develops students' conversational, listening, and writing skills while focusing on the accurate formation and usage of complex grammatical structures and thematic vocabulary. Students practice their language skills through interactive, communicative activities and through the use of authentic materials.

Spanish 3 Honors (434)
Elective/Full Credit/Grade 10 or 11
In this class, students develop their proficiency in Spanish through the correct formation of and practice with higher-level, grammatical structures and vocabulary. Students practice their newly acquired forms through structured reading, speaking, listening, and writing activities. Students polish their language skills through interactive, communicative activities and through the use of authentic materials appropriate for this level. Concepts from Spanish 1 and Spanish 2 are reinforced.

Spanish 4 Advanced Honors (443)
Elective/Full Credit/Grade 11 or 12
Students continue to develop listening, reading, speaking, and writing skills in Spanish through the study of complex grammar and authentic Spanish-language texts using an interactive, communicative approach. Within contemporary and meaningful thematic contexts, students revisit topics studied in previous Spanish courses, master sophisticated grammatical structures, increase their vocabulary, and advance their cultural competency. Students work with AP Spanish texts, and students interested in taking the AP exam also meet with the teacher outside of class time for additional preparation.

Spanish 4 Honors (444)
Elective/Full Credit/Grade 11 or 12
Students continue to develop listening, reading, speaking, and writing skills in Spanish through more in-depth study of higher-level grammar and authentic Spanish-language texts using an interactive, communicative approach. Within contemporary and meaningful thematic contexts, students revisit topics studied in previous Spanish courses,

master higher-level grammatical structures, increase their vocabulary, and advance their cultural competency.

Spanish 5 Advanced Honors (453)
Elective/Full Credit/Grade 12
In this class, students continue to increase their proficiency and accuracy in the use of Spanish. Students practice their speaking, listening, reading, and writing skills through the study of complex grammar and the use of authentic materials. Students polish their language skills through the use of interactive, communicative activities. Students work with AP Spanish texts, and students interested in taking the AP exam also meet with the teacher outside of class time for additional preparation.

Spanish 5 Honors (454)
Elective/Full Credit/Grade 12
In this class, students continue to increase their proficiency and accuracy in the use of Spanish. Students practice their speaking, listening, reading, and writing skills through the study of higher-level grammar and the use of authentic materials. Students polish their language skills through the use of interactive, communicative activities.

Mandarin Program and Mandarin Studies Program
The goals of the NDA World Language Department in its Mandarin program and its Mandarin Studies program are to help students to develop basic communication skills in listening and speaking on appropriate and practical topics. They will learn the fundamental structures of the language by engaging in brief conversations, directed dialogues, and a variety of oral activities. They will also learn to write some simple characters. In addition, they will explore many interesting aspects of Chinese culture and history.

Mandarin 1 Honors (437)
Required/Full Credit/Grade 9
The full credit Mandarin 1 class is an introductory course for student who wish to learn Chinese as a second language. The course objective is to help students develop basic communication skills in listening and speaking on appropriate and practical topics. Students will learn the fundamental structures of the language by engaging in brief conversations, directed dialogues, and a variety of oral activities. They will learn the phonetic system (tones and pinyin) and the structures of Chinese character strokes. They will also learn to write characters. In addition, students will explore many interesting aspects of Chinese culture and history.

Mandarin Studies 2 (438)
Required/Partial Credit/Grade 10
Mandarin 2 is a partial-credit course that is a continuation of Mandarin 1. Students will further their communication skills in listening and speaking on relevant topics such as

food, school, weather and time, etc. Understanding and awareness of the Chinese culture will continue. (Sophomores choose either Mandarin Studies 2 or Latin Studies 2)

Classical Language
The goals of the NDA World Language Department in its Latin Studies program are to develop the ability to translate and appreciate some classical Latin literature and maxims, to value the contributions of ancient Rome to contemporary culture in the areas of law, science, architecture, and literature, and to connect Latin grammar and vocabulary to that of modern Romance languages and to English.

Latin Studies 1 (419)
Required/Partial Credit/Grade 9
This course develops the ability to read and understand simple Latin. The study of Latin forms and syntax enhances the understanding of the structure of language while the study of Latin vocabulary expands English vocabulary through the study of roots and derivatives. Topics in classical mythology and Roman culture and history reinforce and amplify themes introduced in Grade 9 history, arts, and English courses.

Latin Studies 2 (429)
Required/Partial Credit/Grade 10
This course is a continuation of Latin Studies 1 with the addition of ancient maxims as well as some legal, literary and rhetorical Latin terms in use today. (Sophomores choose either Mandarin Studies 2 or Latin Studies 2)

MATHEMATICS DEPARTMENT

The Mathematics Department provides a comprehensive program of instruction that is designed to develop students' abilities to prepare them for college level mathematics courses. Incoming students are evaluated by several measures in order to properly place them in an appropriate course sequence. The department collaborates at the end of the year to determine when an individual student's academic growth requires a program change. The teaching in the discipline reflects and reinforces the mission of the school.

Algebra 2 (111)
Required/Full Credit/Advanced Honors/Grade 9
This course is offered to first-year students who have demonstrated an adequate level of mastery of Pre-algebra and Algebra 1 skills. The course begins with an accelerated review of prerequisite topics, and focuses primarily on graphing functions and solving quadratic equations. Logarithms, exponential functions, and complex numbers are also studied. Technology and real-world application problems are integrated into the curriculum. A graphing calculator (T1-84) is required.

Algebra 1 (112)
Required/Full Credit/Honors/Grade 9
This course consists of a comprehensive study of the fundamentals of Algebra. Included in the course are operations with signed numbers, solving equations in one variable, graphing and analysis of linear equations, introduction to functions, exploration of exponents and scientific notation, and solving systems of linear equations. Special emphasis is placed on problem solving and use of technology. A graphing calculator (T1-84) is required.

Geometry Advanced Honors (121)
Required/Full Credit/Grade 10
This accelerated course covers a complete geometry curriculum that emphasizes deductive reasoning and critical thinking. Students use what they learn about lines, triangles, polygons, and circles to solve numerical algebraic geometry problems. Writing geometric proofs is emphasized in this course. Computer applications are integrated into this program. A graphing calculator (TI-84) is required.

Geometry Honors (122)
Required/Full Credit/Grade 10
This course emphasizes the development of deductive reasoning and concise creative thinking. Students use what they learn about lines, triangles, polygons, and circles to solve numerical and algebraic geometry problems. The study of right triangle trigonometry and coordinate geometry is included in this course. Computer applications are integrated into this program. A graphing calculator (T1-84) is required.

Pre-Calculus (131)
Required/Full Credit/Advanced Honors/Grade 11
This course begins with a sophisticated algebraic study of all functions and their graphs. A thorough exploration of trigonometry comprises much of the second half of the year, including verifying identities. Also included are an introduction to logarithms, sequences and series, and the concept of limits. This course is intended for students interested in the study of calculus during senior year. A graphing calculator (T1-84) is required.

Algebra 2/Trigonometry (132)
Required/Full Credit/Honors Grade 11
This course covers linear and quadratic functions, inequalities, and polynomials. Topics introduced include analytic geometry, exponential and logarithmic functions, and triangle trigonometry. Special emphasis is placed on the use of technology. A graphing calculator (T1-84) is required.

AP® Calculus (141)
Elective/Full Credit/Grade 12
This course covers all topics outlined for Calculus AB in the AP course description. This course is designed to meet the standards of the current AP exam and students may take the AP exam. It is offered to students who have excelled in Pre-Calculus and includes topics on limits, differentiation, and integration. The course will explore the graphical,

numerical and symbolic approaches to problem solving. The use of a graphing calculator is mandatory, as is analysis without the calculator. It is an extremely rigorous course requiring the same expectations and demands of an introductory level college course. A summer assignment is a mandatory component of this course as well as completing weekly AP review packets.

Calculus (142)
Elective/Full Credit/Advanced Honors/Grade 12
This course is similar in content to AP Calculus, covering the same topics using the modeling approach and calculators. However, this course does not specifically prepare students to take the AP exam.

Pre-Calculus (143) Advanced Honors
Elective/Full Credit/Grade 12
This course prepares students for calculus. It covers probability, statistics, functions and their graphs, including trigonometric functions. A study of limits and an introduction to the derivative are offered. A graphing calculator (TI-84) is required.

Pre-Calculus (144) Honors
Elective/Full Credit/Grade 12
This course includes the study of probability, statistics, sequences, series, graphing of functions, and a basic introduction to calculus. A graphing calculator(TI-84) is required.

SCIENCE DEPARTMENT

The Science Department provides a comprehensive program that strives to make students aware of what is happening in their lives, and how these events relate to the various fields of science. The department prepares students to make responsible and appropriate intellectual, social, physical, emotional, and ethical choices for themselves, and within the community. The department's carefully constructed curriculum assures a continuous flow of information and learning as a student progresses through the program.

Biology 1 (521) Honors
Required/Full Credit/Grade 9
This is an introductory course to life science. Topics that are covered include the light microscope as an investigative tool, chemistry of life, the cell and cell processes, genes and heredity, theories of evolution, classification of living things, and selected human body systems. Teaching methods include laboratory activities, projects, computer simulations, traditional lecture, and group work.

Chemistry 1 (531) Advanced Honors
Required/Full Credit/Grade 10
This course is intended for the student who is able to handle an accelerated pace. It covers the same topics as Chemistry 1 "Honors" and places the same emphasis on

laboratory analysis; however, each topic is covered with greater depth and mathematical involvement. Research papers are an integral part of this course.

Chemistry 1 (532) Honors
Required/Full Credit/Grade 10
This is an introductory course that covers the major topics in chemistry: the atomic theory, formation and interaction of substances, acid/base concepts, and nuclear chemistry while stressing mathematical analysis. Laboratory sessions are conducted on a regular basis to help each student develop her analytical skills as well as to become more proficient in the use and handling of laboratory equipment. Students make use of the computer for problem solving and laboratory analysis. Research papers are an integral part of this course.

Anatomy and Physiology (541) Advanced Honors
Elective/Full Credit/Grade 11 and 12
Prerequisites: Biology 1 and Chemistry 1
This course specifically addresses the major systems of the human body while building upon some of the basic knowledge acquired in both Biology I and Chemistry I. Initially, topics in biochemistry, histology, and oncology will be covered, then the body systems will be studied in detail. Recent scientific advancements as they relate to the human body and how it functions will be explored, and bioethical issues will be discussed throughout the year. Laboratory experiments in physiology will expose students to techniques such as EKG, blood pressure, and EMG, while the cat dissection will allow for viewing and comparing anatomical structures as they are studied in humans. Participation in lab experiments will enable each student to develop her analytical skills while becoming more proficient in handling and caring for sophisticated laboratory equipment. This course incorporates the use of videos, video discs, the microscope, physiological/medical equipment and techniques, dissecting tools, computer programs, and Internet research. A summer assignment is an integral part of this course.

Biology 2/Biotechnology (546) Honors
Elective/Full Credit/Grade 11 and 12
Prerequisites: Biology 1 and Chemistry 1
This course stresses recent scientific advancements as they relate to the systems of the human body. The course builds upon the knowledge acquired in Biology I. Special attention is paid to the anatomical and physiological aspects of selected human systems, as well as to gene expression, cellular biology, and molecular biology. Introductions to biotechnology, virology, and bacteriology are also provided. Participation in laboratory experiments is an integral part of the course. Electronic viewing, virtual labs, microscopes, biotechnology equipment and techniques, computer programs, and internet research are incorporated into the course. Students will gain a deeper understanding of, and an appreciation for the functioning of the human body. They will also develop their analytical skills, enhance their laboratory safety procedures, and become more proficient in handling sophisticated laboratory equipment. With extra study, and teacher recommendation, students may prepare for the AP Biology exam.

Chemistry 2 (545) Advanced Honors
Elective/Full Credit/Grade 11 and 12
Prerequisites: Biology 1 and Chemistry 1
This is a college level course which provides students with a foundation for further advanced coursework in chemistry while preparing them for the option of taking the AP exam. Students will study advanced topics such as thermodynamics, equilibrium reactions, organic chemistry, and kinetics, while exploring topics covered in Chemistry I at a greater depth and with more mathematical involvement. Lab experiments, inquiry based investigations, and use of technology, enables students to explore and analyze concepts both individually and in cooperative settings.

Advanced Placement® Physics 1 (540)
Elective/Full Credit/Grade 12
AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sound. This course is designed to meet the standards of the current AP exam preparing students for the option of taking the AP exam.

Physics (543) Honors
Elective/Full Credit/Grade 12
This is an introductory course in physics with an emphasis on mathematics and laboratory investigations to deepen conceptual understanding of the laws of physics. Topics that are covered include Newton's Laws of Motion, kinematic equations, momentum, mechanical, light and sound energy, static and current electricity. Teaching methods include laboratory investigations, computer simulations, traditional lecture and group problem solving.

Environmental Science (544) Honors
Elective/Full Credit/Grade 12
The foundations of environmental science are introduced in this course. Students explore earth's biosphere, ecosystem services, renewable and nonrenewable energy resources, environmental policy, environmental health, biodiversity, and conservation ecology. These explorations are accomplished by examining case studies and through laboratory activities. Emphasis is placed on critical thinking skills, problem-solving techniques, and practical applications as students focus on finding sustainable solutions to environmental issues. Students also acquire an understanding of their impact upon the world's natural systems as they interact with these systems.

THE VISUAL AND PERFORMING ARTS DEPARTMENT

The Visual and Performing Arts Department has as its goals and objectives the use of the artist's skills and training process as tools for life. A few of these objectives found in all Arts courses include tapping the creativity in the individual, developing skills of concentration and focus, valuing risk-taking as well as learning the world through a variety of artistic media.

Creative Arts (914)
Required/Partial Credit/Grades 9, 10
Designed to introduce students to the visual and performing arts and to encourage students to experience these arts as participators, this course is team-taught by members of the various arts departments. Students are introduced to the masters of dance, painting, music, and drama while they themselves learn some basics in acting, dance and music performance, and explore pottery, printmaking, painting, drawing, and sculpture.

Visual Arts: Theory and Application (700)
Elective/Full Credit/Advanced Honors/Grades 11 and 12
This course is an introduction to the concepts and techniques of visual art with specific reference to the artists and issues of Classic Art through the twentieth century movements. Lectures, readings and studio classes examine the nature of images in relation to various themes. Students investigate the elements and principles of fine art and applied art as well as learn the basic methods and tools of art making. Field investigations include monthly gallery visits to the Worcester Art Museum, meetings with curators, and visits to artists' studios. Along with studying art elements and principles, students create finished art pieces as well as conduct artistic and personal research in an attempt to develop their personal artistic voices. This course inspires students to adapt the various mediums, styles and methods into their individual visual art projects. Student projects will consist of painting, drawing, sculpture, graphic arts and mixed media.

Music (707)
Chamber Chorale
Elective/Partial Credit/All Grades
This is a small vocal ensemble open to students by audition only. Concentration is on a cappella singing and learning to read music as a vocal ensemble. Music varies from classical to pop and jazz. This group performs at all music department concerts and at many functions in the community.

Fundamentals of Music Theory (739)
Elective/Full Credit/Grades 11, 12
This is a general music class with focus on understanding how music expresses ideas. The class covers basic fundamentals of western musical notation. A good portion of the class is devoted to following the historical musical progression of western civilization concentrating on the study of musical practices. Students learn the fundamentals of musical theory, notation, harmony, four-part writing, dictation, and sight singing. A portion of the class is devoted to a survey of musical form and analysis. There is also time given to jazz, rock, and other popular idioms.

Jazz Ensemble (706)
Elective/Partial Credit/All Grades
This ensemble is dedicated to the performance of the many forms of Jazz. It consists of 8 to 15 players – usually traditional jazz instruments (saxophones, trumpets, trombones & rhythm section) but could also include flute, clarinet, string players and other instruments. The group performs at all concerts and other community functions including jazz competitions.

Communication (236)
Required/Partial Credit/Honors/Grade 11
Communication develops student awareness of the art of communication. The first semester focuses on the development of clear and concise vocal communications while the second semester teaches the power of nonverbal communication through an introduction to American Sign Language and an awareness of body language.

Theater Performance (748)
Elective/Advanced Honors/Full Credit/Grades 11, 12
Using monologues, scenes, and plays from both the Classic and Contemporary theater the student will learn the art and the skill of "becoming another person", as well as becoming acquainted with the greatest of plays. Greek, Renaissance, Modern, and Contemporary scripts will provide the extraordinary tools toward understanding the power of the Art of Theater. Actor skills will be developed such as strong focus, acute observation abilities, the willingness to take a risk, and honing memorization skills and then appreciating the empowerment of working with memorized materials.

HEALTH EDUCATION

Health Education is designed to introduce students to holistic health. Throughout their sophomore year students' knowledge is enhanced in a variety of health topics. Students will become familiar with the concept of holistic health, accept the challenge to achieve their optimal level of health, gain an understanding of a series of healthy behaviors, and become CPR certified.

Health Education (925)
Required/Partial Credit/Grade 10
This course provides students with the skills needed to make good choices to live a healthy life. Students are educated about various preventable illnesses in physical, mental, and social health. They also explore a better understanding of nutrition, women's health, and mental health issues.

Women in Balance (642)
Required/Partial Credit/Grade 10
Utilizing the practice of yoga, this course will focus on the interconnectedness of mind, body, and soul in the creation of a more balanced life. Topics will include mindfulness, the biology of stress, and philosophies within yoga. We will explore the practical application of what we learn to navigating life as a young woman in today's world, as well as their connections to Christianity.

PHYSICAL EDUCATION DEPARTMENT

The Physical Education program is designed with an emphasis on incorporating physical activity into life routines for the release of energy, development of a positive attitude, and concern for maintaining a lifetime wellness regime. Students are expected to demonstrate responsible personal and social behavior that reflects good-sportsmanship.

Physical Education (901)
Required/Partial Credit/Grades 9, 10, 11, 12
Participation in physical education classes encourages students to appreciate and respect their bodies while teaching students sportsmanship, physical fitness, social interaction, cooperation, safety, and trust. Each student is encouraged to develop her own standards of achievement and take pride in her own effort. Activities include jogging, exercise walking, speedaway, ball games, aerobic exercising, Zumba, "Just Dance" Program, volleyball, tag games, pickleball, Ultimate Frisbee, Nautilus training, floor hockey, Disc Golf, and fitness challenge programs.

GUIDANCE DEPARTMENT

The NDA Guidance Department assists students by providing support in their transition to high school, academic counseling, career decision-making, and college planning. To supplement individual meetings with students, the department offers a formalized curriculum that consists of the following courses.

Freshman Seminar (913)
Required/Partial Credit/Grade 9
This class provides students with scheduled support time during their transition to high school. Students learn to thrive in classroom instruction of active/cooperative education and are empowered to self-advocate and become independent learners.

Sophomore Seminar (923)
Required/Partial Credit/Grade 10

During this class, sophomores explore the concept of work, both in relation to the students' personal goals and in the context of work as a vocation. Through various self-assessment tools and research, students explore areas of interest and ability.

Junior Seminar (933)
Required/Partial Credit/Grade 11
Juniors begin their college search during this class. They more thoroughly explore college entrance exam options available and plan their spring and fall testing. They research colleges and college majors through printed materials and computer programs and learn about the procedures and guidelines for the college application process. Students develop a list of colleges to review with their guidance counselor.

Senior Seminar (943)
Required/Partial Credit/Grade 12
Students continue the college application process during this class with special emphasis on understanding the admissions process, completing applications, writing college essays, and interviewing. Detailed instruction is provided to students for online application submission.

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