

Notre Dame Academy

Curriculum Guide 2013–2014

The information provided in this Curriculum Guide is designed to acquaint students and parents with the various courses offered at Notre Dame Academy. It is very important that the student works with her academic counselor to plan a program of studies that balances her abilities and interests while meeting the requirements for graduation. This guide is published annually and is subject to change.

GENERAL INFORMATION

Twenty-six credits are required for graduation from Notre Dame Academy. Completion of this curriculum meets or exceeds the Pre-College Curriculum required by the Commonwealth of Kentucky for admission to public universities.

Religion4	credits
English4	credits
Mathematics (*Please see the note below.)	credits
Science	credits
History and Social Studies $3\frac{1}{2}$	credits
World Language	credits
Fine Arts1	credit
Technology And Communication ¹ / ₂	credit
Health	credit
Physical Education ¹ / ₂	credit
Electives $3-3\frac{1}{2}$	credits

(*The state mathematics requirement for the Pre-College Curriculum requires Algebra 1, Algebra 2, and Geometry or higher level mathematics courses in their place and that "Mathematics shall be taken each year of high school.")

Electives offered are determined by student interest. Some of the courses in this guide may not be taught in a given year because of insufficient enrollment.

Courses are offered on three levels of difficulty: college preparatory, honors, and advanced placement/college. Academic departments recommend a course level for the required classes that in their professional judgment are appropriate for each student. Students are encouraged to select elective courses according to their ability and interest.

College preparatory level courses provide a solid educational foundation for higher education. The majority of students study at this level. These classes are identified in this curriculum guide as "level 3" and indicated by course numbers ending in 3. (Please note: Notre Dame Academy does not offer "level 1" or "level 2" general courses. Course numbers ending in 0, 1, or 2 are reserved for administrative use on transcripts to indicate various courses not included in GPA calculations such as transfer students who have earned credit through pass/fail courses.)

Honors level courses involve higher academic standards and a greater workload than college preparatory courses. These classes are identified in this curriculum guide as "level 4" and indicated by course numbers ending in 4.

Advanced Placement (AP) or college level courses provide the opportunity to earn college credit while remaining enrolled in high school. These courses are for students who excel academically. Students must be invited by the respective department through an application process to be enrolled in these courses. Notre Dame Academy currently offers AP courses in: English Language, English Literature, Calculus, Physics, Biology, French, Latin, Spanish, European History, and U.S. History. The AP Physics and European History courses may be taken for dual credit as part of Thomas More College's Gemini program. A College Chemistry course also is offered in conjunction with Thomas More College. These classes are identified in this curriculum guide as "level 5" and indicated by course numbers ending in 5.

ASSESSMENT OF ACADEMIC PROGRESS

Teachers at Notre Dame Academy use a variety of methods in assessing a student's academic progress. Students should note carefully the explanation the teacher gives of the method by which the grade in that particular class will be calculated and are strongly encouraged to record all their grades in their planners. The student's progress is reported to the parents online through the PowerSchool application linked from our Current Parents and Current Students tabs on Notre Dame's web page. Parents and students are encouraged to check regularly both their grade and attendance information available via PowerSchool as it is continually being updated. Printed quarterly report cards also are sent home. The final grade for a course is the average of the quarter grades and appears under the heading "F1" on report cards and PowerSchool pages. A final grade average percentage of 70 is required to earn credit for a class at Notre Dame Academy.

GRADE POINT AVERAGES (GPA)

The Notre Dame Academy Grade Point Average

Colleges and universities consider GPA when evaluating the admission and scholarship applications of students. Notre Dame Academy's academic records include both a yearly and a cumulative GPA calculation that is based on a four-point scale. Extra weight is added in the GPA calculations for students who take either level 4 (honors classes) or level 5 (AP/college classes). The GPA points that are the basis of these calculations are assigned to the current/final average grade ranges according to the scales that follow:

NDA GPA Points Scale for Level 3

0111100000	
95-100%	4.00
93 - 94%	3.67
90 - 92%	3.33
87 - 89%	3.00
85 - 86%	2.67
82 - 84%	2.33
79 - 81%	2.00
77 - 78%	1.67
75 - 76%	1.33
72 - 74%	1.00
70 - 71%	0.67
< 70%	0.00

NDA GPA Points Scale for Level 5

95-100%	5.00
93 - 94%	4.67
90 - 92%	4.33
87 - 89%	4.00
85 - 86%	3.67
82 - 84%	3.33
79 - 81%	3.00
77 - 78%	2.67
75 - 76%	2.33
72 - 74%	2.00
70 - 71%	1.67
< 70%	0.00

NDA GPA Points Scale for Level 4

95-100%	4.50
93 - 94%	4.17
90 - 92%	3.83
87 - 89%	3.50
85 - 86%	3.17
82 - 84%	2.83
79 - 81%	2.50
77 - 78%	2.17
75 - 76%	1.83
72 - 74%	1.50
70 - 71%	1.17
< 70%	0.00

The KEES Grade Point Average

The Kentucky Educational Excellence Scholarship (KEES) program awards scholarships in varying amounts based in large part on a student's GPA. The KEES program requires that participating schools use a four-point scale for the GPA, but does make an exception to allow schools to give added weight in the calculation for Advanced Placement (AP) classes. The KEES regulations require that for a course to receive this added weight it must be a registered AP class. Note, therefore, that students who have taken honors and/or college level classes will have a lower KEES GPA reported than the Notre Dame Academy GPA. The KEES GPA is reported to the state program officials at the end of the school year and will appear on the fourth quarter report card.

KEES GPA Points Scale for Level 3, 4 and non-AP level 5 Courses	KEES GPA Points Scale for AP Courses
$\begin{array}{l} 95-100\% \dots 4.00\\ 93-94\% \dots 3.67\\ 90-92\% \dots 3.33\\ 87-89\% \dots 3.00\\ 85-86\% \dots 2.67\\ 82-84\% \dots 2.33\\ 79-81\% \dots 2.00\\ 77-78\% \dots 1.67\\ 75-76\% \dots 1.33\\ 72-74\% \dots 1.00\\ 70-71\% \dots 0.67\\ <70\% \dots 0.00\\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Both the NDA and the KEES GPA grade calculations are obtained by multiplying the GPA points for each class times the Potential Credit for each class as shown on the report card. The sum of those answers is then divided by the sum of the potential credits.

POLICIES FOR TRANSFER STUDENTS

Notre Dame Academy does not discriminate on the basis of race, color, or ethnic origin. Notre Dame Academy's mission and philosophy are intended to aid parents in providing a Catholic education for their daughters. The primary considerations for transfer admission to Notre Dame Academy are the prospective student's academic ability as measured by standardized test scores and current high school academic record. Space availability may also be a consideration.

Notre Dame Academy will honor any high school credits a student has received if it appears on a transcript from another high school. Home school credits will be issued only if credit appears on a high school transcript.

Transfers occurring during the school year may have the current year's grades from their previous school included with grades earned at Notre Dame Academy, if practical, to determine course averages. Courses that cannot be continued at NDA will be evaluated by the counselors to determine if any credit can be awarded.

A student may not repeat a course in which credit has already been issued unless she chooses to forfeit that credit. If a course is repeated, the grade earned at NDA will be the grade that appears on the transcript.

Grades that are transferred from another school will be converted to the NDA grade and GPA scales. Students will only receive honors or AP credit if the course is clearly indicated as such on their transcript. International Baccalaureate (IB) courses will receive honors credit. Credits earned through remedial summer school will not be included in the GPA.

Situations that are not covered by these policies will be evaluated on an individual basis.

WEIGHTED SCHOLASTIC MARK AND ACADEMIC HONORS

Notre Dame Academy uses the academic levels of the different courses as a way of encouraging students to match their God given intellectual talents with appropriate course content. A weighted scholastic mark that reflects the degree of difficulty of the course is used in determining various academic honors at Notre Dame Academy rather than the quarter percentage grade or GPA. This rewards students who challenge themselves by taking more difficult classes. Level 5 courses carry a weighted scholastic mark that is a multiple of 1.1 times the quarter percentage grades of 70 or above. Level 4 courses carry a weighted scholastic mark that is a multiple of 1.05 times the quarter percentage grades of 70 or above. Level 3 courses carry a weighted scholastic mark equal to the quarter percentage grade.

First Honors: Students who have no incomplete grades and an average weighted scholastic mark for all their classes in a given quarter of a 95 or above and no weighted scholastic mark below a 93 are awarded first honors for that quarter.

Second Honors: Students who have no incomplete grades and an average weighted scholastic mark for all their classes in a given quarter of an 87 or above and no weighted scholastic mark below an 85 are awarded second honors for that quarter.

Grade Level Scholarships: Each year four grade level scholarships are awarded to students in the current freshmen, sophomore, and junior classes for the subsequent year. The two students in each of those grade levels with the highest overall average weighted scholastic marks automatically qualify for two of those scholarships. The remaining two scholarships at each grade level are awarded based on a faculty vote from among those students who meet the qualifications and apply.

National Honor Society (NHS): Juniors and seniors who have demonstrated outstanding academic leadership, character, and service at Notre Dame Academy and the community may be invited to become members of the National Honor Society with the privilege of wearing the gold cord symbolizing that honor at graduation. The overall average weighted scholastic mark is a very important criterion in determining membership in the National Honor Society.

Valedictorian and Salutatorian: Although Notre Dame Academy does not publish a class rank for its students, it does recognize the top two graduating seniors as measured by their overall average weighted scholastic marks as the valedictorian and salutatorian of their class. The valedictorian is invited to speak at graduation and the salutatorian at the Baccalaureate Mass.

OVERVIEW OF COURSE OFFERINGS BY YEAR

Freshmen

Freshmen are first year students who apply and are accepted for high school courses. Notre Dame Academy may accept a student younger than 9th grade age after consultation with her parent/guardian(s) and her elementary school teachers. Because students enter Notre Dame Academy from many different grade schools, each with their own unique academic programs, placement in freshmen classes is made based on a number of factors. These include: entrance test scores, other standardized tests taken during grade school, recommendations made by the student's grade school teachers, and interviews with the student and her parent/guardian(s). Students placed in the Algebra 2-Honors or Language 2-Honors classes must have department approval and have passed a qualifying test given in the spring prior to beginning their freshmen year in the fall. Students who completed the NDA/CCH Algebra 1 Grade 8-Honors course with a minimum grade of 82 may enroll in Algebra 2-Honors as freshmen.

The normal course load for freshmen is seven credits.

Course Religion	CREDITS	<i>Course</i> Mathematics	CREDITS
Catholocism	1	Algebra 1 or	1
Business and Technolo Technology And Co		Algebra 2-Honors	
English English 1-Honors (l English 1 (level 3)	1	Science Physical Science or IPS-Concepts of Physics-H or IPS- Concepts of Physics (I	fonors (level 4)
History And Social Stu World Geography	1 dies $\frac{1}{2}$	Health	
Language or Excel (All Language 1 con Language 2 courses honors level 4)	urses are level 3.	Physical Education Before School El Fine Arts Band	ectives
French 1, French 2- Latin 1, Latin 2-Hor Spanish 1, Spanish	nors or	Science Science Research-Honors	¹ / ₂
Or Excel		Summer Elect	ives
		COURSE Fine Arts	CREDITS
		Studio Art	¹ / ₂

SOPHOMORES

Sophomores are students who have earned from seven to fourteen credits.

The normal course load for sophomores is seven credits.

COURSE	Credits	Course	Credits
Religion	1	Science	
Scriptures		Biology Fundamentals or Chemistry-Honors (level 4) or Chemistry (level 3)	
Fine Arts	1		
Art 1, Fine Arts Appreciation,		Half Cred	it Electives
Theatre or		Course	Credits
Chorus		Fine Arts	CREDITS
			1/
English	1	Choral Ensemble	
English 2-Honors (level 4) or	r	Guidance	
English 2 (level 3)		Academic Strategies	5 ¹ / ₂
History and Social Studies	1	Elements of Writing	
World Civilizations-Honors			urses may be required
World Civilizations (level 3)		for some students.)	
			1 Fl
Language			ool Electives
(Typically students choose the l	0 0	Fine Arts	1 /
that continues from their freshn		Band	
study. All Language 1 courses a		(Sophomores who co	
Language 2 and 3 courses are o	offered at	freshmen and who si	
either level 4 or level 3)		sophomores will hav	
French 1, French 2, French 3	oor	arts requirement. The	
Latin 1, Latin 2, Latin 3 or Spanish 1, Spanish 2, Spanis	h 3	•	, Theatre or Fine Arts
Spanish 1, Spanish 2, Spanis	11 5	Appreciation during they may consult wit	
Mathematics	1		osing either a junior
Geometry-Honors (level 4) or	1	elective or a study h	0
Geometry (level 3)		creenve or a study m	<i>u</i> 11.)
(The Mathematics department t	vpically will	Science	
invite some students who showe		Science Research-H	1/2
exceptional ability in Algebra 1	to take two	Science Research-II	011015
mathematics courses their soph		Cu ma ma an	Electives
Students who do so take Geome	•		_
and Algebra 2 level 4 and postp	oone their	COURSE	Credits
Arts credit until a later year.)		Fine Arts	
		Music Theory-Hono	
		Studio Art	¹ / ₂

JUNIORS

Juniors are students who have earned from fourteen to twenty credits.

The normal course load for juniors is six credits due to the time required for the junior service program.

• Required—Five Credits¹•

¹ Three credits of science are required for graduation. One of the science credits must be a lab science; credits must include both life science and physical science. The majority of students choose to complete those requirements in the junior year. However, the third science credit could be postponed until the senior year to allow more flexibility in the junior year for choosing electives. Students considering postponing their science credits must consult with their academic counselor. Choosing extra electives as a junior may limit a student's options to schedule their electives as a senior.

COURSE Religion Church History-Honors (leve Church History (level 3)		COURSECREDITSMathematics1Algebra 2-Honors (level 4) or1Algebra 2 (level 3) orPrecalculus-Honors (level 4)
English AP English Language (upon American Literature-Honors American Literature (level 3)	invitation) or (level 4) or	Science
History and Social Studies AP U.S. History (upon invita U.S. History-Honors (level 4 U.S. History (level 3)	tion) or	College Chemistry (upon invitation) or Conceptual Chemistry or AP Physics B (upon invitation) or Physics-Honors or Conceptual Physics

• Elective—One Credit •

One Credit Electives

Course	Credits	Course	CREDITS
Fine Arts		Language	1
Art 1 Art 2 or Art 3	1	(Choose one. All L	anguage 1 courses are
Advanced Theatre-Honors	1	level 3. Language 2 either level 4 or lev	2, 3, and 4 are offered at vel 3.)
Business and Technology Accounting 1 Publications 1		Latin 1, Latin 2, La	, French 3, French 4 or atin 3, Latin 4 or 2, Spanish 3, Spanish 4

JUNIORS (CONTINUED)

Half Credit Electives

<i>Course</i> Fine Arts	CREDITS
Choral Ensemble	1/2
Business and Technology Computer Graphics	¹ / ₂
Guidance Academic Strategies Elements of Writing	
Religion Social Justice	¹ / ₂

Before School Electives

Course	C REDITS
Fine Arts	
Band (level 3) or	
Band-Honors (level 4)	¹ / ₂
Science	
Science Research-Honors	¹ / ₂

Summer Electives

COURSE CREDITS Fine Arts

Music Theory-Honors	¹ / ₂
Studio Art	

SENIORS

Seniors are students who have earned twenty or more credits.

The normal course load for seniors is six credits. All seniors are required to take a minimum of five credits. • Required—Three And A Half or Four Credits •

Course Co	C REDITS	COURSE Mathematics	CREDITS
English	1	AP Calculus AB (upon invit	/
AP English Literature (upon i	invitation)	Precalculus (level 4 or 3) or	1
or Dividual d	1.4	Math Topics 1 or	¹ / ₂
British Literature-Honors (lev British Literature (level 3) History and Social Studies	,	Math Topics 2 or Probability And Statistics	¹ / ₂
AP European History (upon i		(level 4 or 3)	¹ / ₂
or		or	
Human Geography (level 4 or (Seniors may also fulfill their Hi Social Studies requirement by ch of the half-credit History and So electives listed below.)	istory and hoosing two	Accounting 1 or 2	1

• Electives—Two or Two And A Half Credits •

One Credit Electives

Course	CREDITS	Course	C REDITS
Fine Arts			
Art 1, 2, 3 or AP Studio	Art (upon	Language	1
invitation)	1	AP French (upon	invitation),
Chorus (upon audition)1		French 2, 3, 4 (level 4 or 3) or	
Fine Arts Appreciation1		AP Latin (upon invitation),	
Theatre	1	Latin 2, 3, 4 (Level 4 or 3) or	
Advanced Theatre-Hono	eatre-Honors		invitation),
		Spanish 2, 3, 4 (le	vel 4 or 3)
Business and Technology		Science	
Accounting 1 or 2	1	AP Biology (upon	invitation) or
Publications 1 or 2	1	Biology (level 4 o	r 3)1
History and Social Studies		AP Physics B (up	on invitation) or
Psychology	1	Physics (level 4) of	or
		Conceptual Physic	cs 1
		College Chemistry	y (upon invitation) or

Seniors

(CONTINUED)

Half Credit Electives

Course	CREDITS
Arts	
Choral Ensemble	¹ / ₂
Textiles	¹ / ₂
Business and Technology	
Computer Graphics	¹ / ₂
Guidance	
Academic Strategies	¹ / ₂
Elements of Writing	¹ / ₂
Research Writing	¹ / ₂
History and Social Studies	
Economics (Level 4 or 3)	¹ / ₂
Current Issues (Level 4 or 3).	1/2
Government (Level 4 or 3)	¹ / ₂
Women in America (Level 4	or 3) $\frac{1}{2}$
Social Concerns	¹ / ₂

Course	CREDITS
Religion	
Peer Ministry	¹ / ₂
Social Justice	¹ / ₂
Science	
Marine Biology	¹ / ₂
Personal Fitness	¹ / ₂
Zoology	1/2

Before School Electives

Arts	
Band (level 4 or 3)	2/2
Science	
Science Research-Honors	$\frac{1}{2}$

Summer Electives

Course	CREDITS
Fine Arts	
Music Theory-Honors	¹ / ₂
Studio Art	¹ / ₂

COURSE OFFERINGS BY DEPARTMENT

The core program required of each student and the electives offered on the various grade levels are listed below. It is recommended that a student become familiar with all the courses offered and plan her course of study based on her area of interest after high school. Also, she should familiarize herself with college requirements in the field of her choice. Students should seriously consider their course selections. Student course selections may not be changed after May 5th as class offerings and staffing decisions will have been made. Once a student begins a class she is expected to complete it.

Occasionally courses in this *Curriculum Guide* are accompanied by two different course numbers. These numbers exist for scheduling purposes. The courses in each of these cases are taught on the same level with comparable content regardless of which particular course number is assigned to the student.

FINE ARTS DEPARTMENT

(One credit in Fine Arts is required.)

Department Learner Goals:

Students will:

- Recognize that all talents are gifts from God and should be shared with the greater community
- Work on individual and group projects pertaining to the various fine arts disciplines
- Serve the community through performances and exhibitions
- Adhere to the NDA standard of excellence in their artistic pursuits
- Learn to appreciate artistic expressions of peoples from different time periods and cultures
- Develop an appreciation of the Arts and Humanities in order to foster a lifelong love of learning and an awareness of the value of self-expression.

2613 FINE ARTS APPRECIATION.....Grade 10, 11, 12..... Level 3—1 Credit

Prerequisite: None

This course introduces students to visual, theatrical and musical art genres and utilizes content to promote an appreciation of the fine arts. The exploration of these areas includes theory, performance and history. Upon completion of this course, students will be able to understand and use basic theoretical concepts/vocabulary, be knowledgeable of the significant contributions of various artists and have a basic understanding of artistic movements in music, theater and the visual arts. Appreciation of the history and development of fine art forms as a demonstration of a culture's dynamic is correlated to the various sections.

(Art)

The Art program offers a variety of courses designed to develop the creativity of the student through training in the basic skills, and in experiencing the use of a variety of art media. Various artists, styles and cultures will be studied.

2603 ART 1	Grades 10, 11, 12	Level 3—1 Credit
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Prerequisite: None

This course aims to free the student from inhibitions, to develop a capacity for understanding and then respond through creative expression that includes drawing, painting, sculpture and mixed media. The comparative study of Art History is the general background for this study. Basic technical skills and art theory will be introduced as a foundation on this level. Students collect their artwork to begin a portfolio.

3613 ART 2Grades 11, 12Level 3—1 Credit

Prerequisite: Successful completion of Art 1

This course aims to further develop the capacity for understanding conceptual art through creative problem solving and development of personal interests. Advanced projects in drawing, design and sculpture challenge students to experiment in two-dimensional and three-dimensional work in a variety of media and subjects. Topics may include, but are not limited to printmaking, painting, pastel drawings and sculpture. Students are required to keep a sketchbook and maintain a portfolio.

3643 STUDIO ART.....Grades 9, 10, 11, 12 ... Level 3—¹/₂ Credit Prerequisite: Successful completion of Art 1 and/or department approval.

This course is offered only in the summer provided there is sufficient enrollment. The course aims to build on development gained from Art 1, and start building a portfolio. Students will be introduced to new media, work on creating concepts, and start building a portfolio. Students may take this course multiple times.

4603 ART 3Grade 12.....Level 3—1 Credit Prerequisite: Successful completion of Art 2

In this course the students will continue to work in a variety of media that include exploration of new techniques and greater demonstration of skills. Topics may include, but are not limited to, previous studies such as watercolor, acrylic, and sculpture. Emphasis will be placed on contemporary approaches to self-expression in developing an independent and personal style. Students will be challenged at a higher level of evaluation. Sketchbooks will exhibit both observation and reflection entries. A portfolio of work representing the three years of art is required for students pursuing a career in an art field.

4635 AP STUDIO ART.....Grade 12....Level 5—1 Credit

Prerequisite: Successful completion of Art 2 or Art 1 and Studio Art and/or the invitation from the department.

This class is for serious art students planning on continuing their art education in college. Students will work to create a portfolio displaying between twenty-four to twenty-nine pieces of the student's best work. Students' portfolios are required to meet the AP Studio Art Standards. Portfolios will include 3 sections, Breadth, Concentration, and Quality. In the Breadth section, students display 12 pieces that show the range of their talents. In the Concentration, students display their ability to create 12 pieces based upon one concept and should show how well the student can communicate their concept in visual form. In the Quality section, students submit 5 pieces of their best work to be juried by the AP Board.

Prerequisite: None

This class introduces students to the history, design and aesthetics of clothing, home decor and accessories. Each student will be required to learn the specific techniques of machine and hand sewing including the production of several sewn items. All couture seams will be demonstrated, taught and completed by the students. They will use color theory to design and purchase their fabric for various projects. Quilting techniques will be included and the Log Cabin pattern is the class signature project. Students will also learn about elements of the fashion design industry and the production of clothing.

4733 COMPUTER GRAPHICSGrades 11, 12Level 3—¹/₂ Credit

Prerequisite: Information Technology–Speech

Computer Graphics is offered jointly by the Business-Technology and Arts departments as an introduction to the Adobe Photoshop® and Adobe Illustrator® applications, the professional standards for editing digital images and for digital drawing. Students refine their skills in using a scanner and digital camera and edit images or create original work to demonstrate the skills they learn. Examples of projects include: applying filters to images, designing a Christmas card, and creating digital animation. Students learn advanced techniques for adding text to graphics and the proper preparation of images for print or web publication. Although open to any student, those interested in the Art and Publications courses or who are considering graphic design as a career are especially encouraged to take the class.

(Music)

Music is a creative expression that enriches one's life and is an essential ingredient in the curriculum of any liberal arts program. Every student should have the opportunity to study music, participate in choral singing, and share her instrumental talents with others in the orchestra.

3683 CHORAL ENSEMBLEGrades 10, 11, 12Level 3—¹/₂ Credit

Prerequisite: Department approval

Students will sing in harmony and receive vocal technique instruction, sight singing instruction and basic music theory instruction. Attendance at dress rehearsals and performances is required. Students will perform at various school functions and concerts that may be outside the normal hours of the school day. This class will work in tandem with the after school Audition Chorus. Students may take this course multiple times.

4604 MUSIC THEORY-HONORSGrades 10, 11, 12 Level 4—¹/₂ Credit

Prerequisite: Department approval and ability to read music

This course is offered only in the summer provided there is sufficient enrollment. This honors course is designed for students who have music performance and/or composition as a possible long-term life goal. A particular emphasis will be placed on the development of playing guitar and keyboard. Music theory is the language that will allow you to communicate with other musicians in your adult life. This course, based on freshman year music theory in college, will include: the understanding of diatonic harmonic progressions, the understanding of all diatonic modes and scales, the detailed analysis of music selections (including Roman numerals and chord symbols), the increased proficiency of sight singing and listening skills, conducting exercises, and the transposition of music. All of these skills will lead toward the goal of understanding the mathematics behind the music. Student skills in composition and improvisation will greatly be increased through the study of music theory.

4673 CHORUSGrades 9, 10, 11, 12Level 3—1 Credit

Prerequisite: Department approval

Students will sing in harmony and receive vocal technique instruction, sight singing instruction and basic music theory instruction. Attendance at dress rehearsals and performances is required. Students will perform at various school functions and concerts that may be outside the normal hours of the school day. Students may take this course multiple times.

4683 BAND.....Grades 9, 10, 11, 12 ... Level 3—¹/₂ Credit

Prerequisite: Proficiency on an instrument and ability to read music

Band/Orchestra is offered as a class before school. Students will gain experience in technique on their instrument and blending musically in an ensemble. The orchestra will perform at various school functions and concerts throughout the year. Attendance at rehearsals and performances is required. Rehearsals will be held before school approximately three days per week. Some rehearsals and performances will be outside the normal hours of the school day. Consult the band director for more information on schedule details. Students may take this course multiple times.

Prerequisite: Proficiency on an instrument and ability to read music, one credit of 4683 Band, and department approval

This course follows the same course summary as 4683 Band. In addition honors students will be required to complete assignments relating to various topics in music theory and music history. Besides history and theory topics, honors students will be held to a higher standard with regard to music performance and music performance tests. Honors Band students will be required to keep rehearsal logs and private instruction will be recommended. Students may take this course multiple times.

(Theatre Arts)

4614 ADVANCED THEATRE HONORS......Grades 11, 12Level 4—1 Credit

Prerequisite: Department approval upon completion of Theatre (4643) or Department approval of alternative training and experience in theater.

This course is for the advanced theatre student who is interested in theater beyond high school and will focus on those skills needed to pursue theatre or theater applications in collegiate, community or professional arena. Students enrolled in this course may choose to specialize in performance or tech or a combination of the two according to their interests. Performance students will focus on audition prep, building a monologue or singing repertoire, improving dance skills, advanced scene study and acting techniques, as well as performance experiences. Tech students will focus on the process of casting, dramaturgy and directing, technical design (lights, sound, costume or set design), stage management and execution in real show conditions. For our culminating project, all students will create a professional portfolio including examples of their work throughout the year, audition or technical design repertoire, professional resume and headshot for use in college entrance auditions/interviews or theatre experience.

4643 THEATREGrades 10, 11, 12Level 3—1 Credit

Prerequisite: None

This course will provide the students with exposure to and understanding of theatre/ drama with a heavy emphasis on performance. Areas that will be taught involve: auditioning, acting, character development, stage movement, blocking, professional standards for performance, rehearsal (format and protocol), stage make-up, costuming, and stage crew. Students will learn the various aspects of stage production including set construction, lighting, sound, props and costuming. Each student will gain hands-on experience by working on and managing the crews for the yearly shows. Each student will need to actively participate on a crew on at least one production. Grading will be determined by written tests including some material regarding performance history and actual production work. This class will involve some time outside of the normal school day.

BUSINESS-TECHNOLOGY DEPARTMENT

(A half credit in Information Technology And Communication is required)

Notre Dame's technology courses are designed to prepare students to use various technology skills as life long learners. The required freshman class introduces the students to the basic hardware and software available to them at Notre Dame Academy so that they can obtain its maximum benefits. The use of technology has become increasingly integrated into the curriculum at Notre Dame and students have many opportunities to use what they learn in the technology program in other classes. The junior and senior technology and business electives are designed to be pre-professional training providing a solid foundation for college classes and exposure to those fields as possible career choices. Throughout the technology and business program, students study the moral and ethical choices facing our society in the proper and safe use of technology at home, school and when working in the business world.

Department Learner Goals:

Students will:

- Be introduced to the library resources and to the safe use of the Internet
- Learn how to research and cite references
- Become aware of current problems and issues in business and industry and examine and evaluate possible solutions
- Develop a wide range of business presentation skills
- Show a strong understanding of personal finance issues
- Demonstrate a wide understanding of basic financial literacy terminology
- Develop resume writing and interviewing skills.

1733 TECHNOLOGY AND -.....Grade 9.....Level 3—¹/2 Credit COMMUNICATION

Prerequisite: None

Technology And Communication is a required course for freshmen. The main goal of this course is to teach effective verbal, written, and visual communication skills utilizing technology. Students are introduced to the Google platform and the various technology resources available at Notre Dame Academy. Students are taught how to use library and technology resources to conduct research. The course covers keyboarding skills, databases, Microsoft Word® and Excel®. These skills are used to create word processing and spreadsheet solutions to use in their other courses. Instruction includes in the creation of multimedia presentations using programs to supplement the creation of student presentations. Presentation skills are a major component of Technology And Communication, utilizing Microsoft PowerPoint® and Apple's iMovie® and opensource applications such as Prezi and Glogster. Students learn to use technology to support collaboration and to demonstrate learning.

3703 ACCOUNTING 1Grades 11, 12Level 3—1 Credit

Prerequisite: Information Technology–Speech, Algebra 1

Accounting 1 provides an introduction to the principles and methods of accounting. It emphasizes an understanding of the underlying basic procedures to set up and operate a small business accounting system by teaching the skills necessary for the handling of the financial records of a small business. Accounting 1 introduces the student to automated data processing and its applications to accounting. Students also learn the necessary skills for the preparation of a personal federal tax return as well as other personal finance skills. Accounting 1 is offered jointly by both the Mathematics and the Business-Technology departments. The business math skills included in this course fulfill the Kentucky pre-college curriculum requirement for a fourth year mathematics class when taken by a senior.

3793 PUBLICATIONS 1Grades 11, 12Level 3—1 Credit

Prerequisite: Information Technology-Speech

The purpose of this elective course is to provide formal journalism and other publications training while producing various printed communications for Notre Dame Academy. This laboratory course is built on the use of InDesign®, Photoshop® and on-line yearbook software in the publication process. Since variations of writing style are fundamental to publishing, above-average writing skills are valuable. This course will be responsible for producing the information currently published in the NDA newspaper, The Gavel; the yearbook, Tapestry; the Senior Prayer Book and the senior "farewell" issue.

4704 ACCOUNTING 2-HONORSGrade 12....Level 4—1 Credit

Prerequisite: Accounting 1, Algebra 2

Accounting 2-Honors is a computer-based class and teaches students advanced accounting principles and business vocabulary. It aims to develop more training in corporate accounting procedures. Content of the course provides in-depth study of complicated accounting problems through mathematical analysis. The course prepares students to enter the business world or prepare for a major in business in college. Accounting 2-Honors is offered jointly by both the Mathematics and the Business-Technology departments. The business math skills included in this course fulfill the Kentucky pre-college curriculum requirement for a fourth year mathematics class when taken by a senior.

4733 COMPUTER GRAPHICSGrades 11, 12Level $3-\frac{1}{2}$ Credit

Prerequisite: Information Technology-Speech

Computer Graphics is offered jointly by the Business-Technology and Arts departments as an introduction to the Adobe Photoshop® and Adobe Illustrator® applications, the professional standards for editing digital images and for digital drawing. Students refine their skills in using a scanner and digital camera and edit images or create original work to demonstrate the skills they learn. Examples of projects include: applying filters to images, designing a Christmas card, and creating digital animation. Students learn advanced techniques for adding text to graphics and the proper preparation of images for print or web publication. Although open to any student, those interested in the Art and Publications courses or who are considering graphic design as a career are especially encouraged to take the class.

4794 PUBLICATIONS 2-HONORSGrade 12....Level 4—1 Credit

Prerequisite: Publications 1

As second-year members of the Publications class, students participate in the regular production of school periodicals as a specific mode of written expression that demonstrates an advanced knowledge of the software and sense of responsibility as spokeswomen for Notre Dame Academy. The course emphasizes cooperative learning and collaborative effort, including the ability to plan and carry out the regular publication of a newspaper and yearbook. Decision-making and working toward a common goal following the total writing process from brainstorming through drafting, editing and revising, to actual publication are vital elements at this level. Publications 2 students assume leadership positions as they help initiate first year students into the publication process.

ENGLISH DEPARTMENT

(Four credits of English are required.)

The English Department offers an extensive program to help students become proficient in the use of the English language. The texts and themes chosen give the students an opportunity to share a variety of human experiences, develop their outlook and cultural standards, and help their appreciation of literature and perhaps contribute to it by their own writing. Considerable emphasis is placed on the development of English language skills, including grammar, usage, vocabulary, composition and research. Essays, based on various modes of discourse, poems, plays and short stories are part of the writing process and genre studied. Particular emphasis is placed on critical thinking skills as they apply to problem solving and taking standardized tests. All English courses are values-based, helping student readers to recognize and empathize with the human condition as encountered in literature.

Department Learner Goals:

Students will:

- Practice tolerance by participating in a values-based curriculum as an opportunity for spiritual growth, responsibleleadership and community service.
- Practice the process of writing, particularly formal essay writing. They will participate in small group activities and learn to manage class workload and meet deadlines as they work toward a common goal.
- Demonstrate the ability to find relevance between events in literature and current events.
- Learn the modes of discourse and demonstrate awareness of both purpose and intended audience. In addition, they will demonstrate mastery of outlining skills.
- Student proficiency in the use of media resources will include conscientious use of the internet for research, understanding of what constitutes plagiarism as enhanced by the use of Turnitin.com. and how to evaluate resources, effective and appropriate use of Power Point as a presentation tool, and word processing skills as applied to the writing process.
- Demonstrate awareness of social, cultural, religious, ethnic and economic issues by studying British, women's, world, and American literature and their respective canons.
- Foster their own lifelong love of learning and awareness of the value of self-expression through creative writing, the study of poetry and film, integration of the other arts with literature, grammar, vocabulary development, completion of summer reading assignments, and cross-curricular topic discussions.
- Employ critical thinking skills as well as reflect on and evaluate information in order to achieve a healthy balance in their personal lives. Journaling and writing to prompts, attending cultural events and outreach activities will nurture lifelong readership.

1104 ENGLISH 1-HONORSGrade 9....Level 4—1 Credit

Prerequisite: Completion of the assigned summer readings

This course follows the course summary for 1113,1123 English 1, with additional emphasis upon reading, class discussion and writing.

1113, 1123 ENGLISH 1.....Grade 9....Level 3—1 Credit

Prerequisite: Completion of the assigned summer readings

This course focuses on the various literary genres, using an anthology, with a corresponding study of the vocabulary pertinent to selections read. The literature is supplemented with writing, including paragraph practice, two essays per quarter, and creative responses to literature. Annually selected supplementary readings are required. Reading comprehension, class discussion skills and college-preparatory composition comprise the balance of coursework.

2104 ENGLISH 2-HONORSGrade 10.....Level 4—1 Credit

Prerequisite: Completion of the assigned summer readings, English 1 with above average scores

The sophomore level 4 English 2 course is for the student with above average reading and writing skills. It serves as a preparatory class for those who will take level 4 English or AP English in the junior and senior years. Students will study a variety of texts with a multicultural focus. Modern literature will be emphasized in this course. A mini research project is a critical part of the course work, and students also complete a poetry project following an intensive study of diverse poets and styles. Composition skills, critical analysis and grammar review with a focus on syntax and usage are incorporated into the course, as are oral presentations and small group projects. Teacher recommendation as well as a proficiency test are required for students moving from Freshman College Prep English to Sophomore Honors.

2113, 2123 ENGLISH 2.....Grade 10....Level 3—1 Credit

Prerequisite: Completion of the assigned summer readings, English 1

Students in this class take a multicultural approach to literature that offers them the opportunity to examine ethnically diverse selections from the canon of world literature. Students also read several supplementary pieces. Composition skills are reinforced and practiced throughout the year as the two-essay-per-quarter requirement is met.

3105 AP ENGLISH LANGUAGE-.....Grade 11.....Level 5—1 Credit AMERICAN LANGUAGE AND COMPOSITION

Prerequisite: Completion of the assigned summer readings, English 2 level 4, self-nomination with sophomore English teacher's signature and parent signature.

The junior Advanced Placement course is for the student with above-average reading and writing skills. The course includes a concentration on advanced composition with emphasis on theme writing that focuses on language analysis of rhetorical devices and the modes of discourse. Practice tests and essay writing practice as preparation for the National Board college-credit test continue through the year. The course includes a survey of American literature using an anthology and supplemental classic writers from the canon. Two research projects complete the year's work, one in conjunction with the United States Peace Essay competition and the other using a college text with critical essays. Testing to accrue college credit is optional but strongly encouraged.

3114 AMERICAN LITERATURE-HONORS Grade 11...... Level 4—1 Credit

Prerequisite: Completion of the assigned summer readings, English 2 with above average scores

This course follows the course summary for 3123 American Literature, with additional emphasis upon reading, class discussion and writing. Critical thinking and advanced analysis of literature are stressed in this course.

3123 AMERICAN LITERATURE.....Grade 11....Level 3—1 Credit

Prerequisite: Completion of the assigned summer readings, English 2

This survey of American literature traces its development from the Native Americans to present time. Students use an anthology and outside readings for an understanding of American literary traditions. The student sharpens reading and writing skills to prepare her for advanced study and writes two full-length essays per quarter.

4105 AP ENGLISH LITERATURE -Grade 12.....Level 5—1 Credit BRITISH LITERATURE AND COMPOSITION

Prerequisite: Completion of the assigned summer readings, AP American Literature or level 4 American Literature and invitation by the English department

The senior Advanced Placement course is for the student with above average reading and writing skills generally expected in introductory college courses in composition and literature. Students will study selections from British and Western literature in the context of their origins. Each unit profiles the literary and cultural aspects of particular eras, ranging from early Greek to modern times. Both the anthology and supplementary texts are used. Research is a critical part of the course work, as is style analysis, focused discussion and regular timed in-class essay writing. The Advanced Placement Test in Literature and Composition for college credits is optional but strongly encouraged.

4114 BRITISH LITERATURE-HONORS.....Grade 12.....Level 4—1 Credit

Prerequisite: Completion of the assigned summer readings, American Literature with above average scores

This course follows the course summary for 4123 British Literature, with additional emphasis upon reading, class discussion and writing. Critical thinking and advanced analysis of style and structure of literature are stressed in this course.

4123 BRITISH LITERATUREGrade 12.....Level 3—1 Credit

Prerequisite: Completion of the assigned summer readings, American Literature

The four quarters present a survey of the major writers of British literature from the Anglo-Saxon period up to and including the twenty-first century as part of a comprehensive list of writers studied. Chaucer, Shakespeare, Milton, Pope, Shaw, Eliot, and Joyce are some of the contributors to the canon of British literary heritage. The wealth of literary genius that formed and developed British and American English is approached in relationship to contemporary times. Selected classics are integrated into each quarter's coursework. Since this course offers the traditional literary survey background for college-bound students, it includes critical analysis, essay writing, outside reading, and research skills. Two essays are required per quarter including a full-length research paper.

GUIDANCE DEPARTMENT

(Credit requirement varies depending on placement.)

The Guidance Department exists to provide academic, social, physical, emotional and vocational support to all students. The department collaborates with faculty and parents to address student needs and adolescent issues. Several opportunities for career exploration are provided over the four years. A Mentor Program is available to students who require additional support in any academic area. A resource teacher assists students with special academic needs.

Department Learner Goals:

Students will:

- Be able to learn effective study skills and various methods to assist the student in being organized and prepared for various high school courses
- Explore test-taking strategies to help the student excel when taking an essay, multiple choice or short answer tests
- Have lessons taught primarily in the English and Math courses reinforced and possible preteaching may occur to ensure that the student is able to effectively learn the material
- Be taught to write a five(5)-paragraph essay using various topics and research methods.
- Expand their vocabulary and increase their reading comprehension
- Be empowed to take greater ownership of her education and seek out resources within the school and community.

1813 EXCEL.....Grade 9....Level 3—1 Credit

Prerequisite: None

This course is offered to entering freshmen who have been selected to postpone their study of a foreign language in order to establish the skills needed to succeed in a college preparatory curriculum. The focus of the course is to strengthen skills in the areas of English, Reading and Mathematics. A strong emphasis will be placed on learning styles, applying critical reading strategies, and learning problem-solving skills.

2813 ACADEMIC STRATEGIES.....Grades 10, 11, 12 Level 3—¹/₂ Credit

Prerequisite: Department approval.

This first semester course is designed for students who may need extra help to have a successful start to the school year. Topics of the course include: time management, test taking preparation and strategies, study techniques, critical thinking in literature, vocabulary expansion, grammar review, and reading comprehension. Enrollment in this course will result in the postponement of a first year of a language or a fine arts credit for sophomores. Some students may be required to take this course upon recommendation of the Guidance department. Juniors and seniors may take the course for elective credit.

2823 ELEMENTS OF WRITINGGrades 10, 11, 12 Level 3—¹/₂ Credit

Prerequisite: Academic Strategies or department approval

This second semester course provides instruction in organizing and drafting a five-paragraph paper, editing papers, efficient and effective use of information resources, and writing research papers. Required projects include the writing of several five-paragraph papers and two longer term papers. Enrollment in this course is designed to be paired with Academic Strategies for sophomores. Some students may be required to take this course upon recommendation of the Guidance department. The prerequisite of Academic Strategies is waived for juniors or seniors taking the course for elective credit with department approval.

4833 RESEARCH WRITING.....Grade 12....Level $3-\frac{1}{2}$ Credit

Prerequisite: Elements of Writing or department approval

This course builds upon the skills of the Elements of Writing. Empahsis is placed upon the development of a research thesis, in-depth research using a variety of media, note taking, documentation of resources, and the organization and writing necessary to complete a research paper.

HISTORY-SOCIAL STUDIES DEPARTMENT

(Three credits of history and social studies are required)

The purpose of the Social Studies program is to afford the student a working knowledge of the story of the world in which she lives. This working knowledge will provide the student with the facts and the skills necessary for using these facts. One of the major aims of the program is to develop the student's understanding of her Christian responsibility to the world.

Department Learner Goals:

Students will:

- Demonstrate an ability to read and interpret maps, as well as demonstrate knowledge of the five themes of geography
- Demonstrate knowledge of the key facts, terms, and concepts of the Social Sciences.
- Students will demonstrate an ability to analyze a variety of materials, including charts, graphs, primary sources, and works of art and literature
- Demonstrate an ability to relate the past to current issues
- Be exposed to the concepts of good citizenship and demonstrate a knowledge of the foundations of American government
- Demonstrate an appreciation for the contributions made by diverse religious, ethnic, and racial groups
- Demonstrate an understanding and appreciation for gender roles
- Demonstrate an ability to use digital technology in connection with the Social Sciences.
- Demonstrate proficiency in writing skills required for the Social Sciences.

1533 WORLD GEOGRAPHY Grade 9 Level $3-\frac{1}{2}$ Credit

Prerequisites: None

This course is designed to give freshmen a basic geographic overview of the world and serve as a foundation course for all other social studies offerings. The course will study political geography, landforms, and climate zones, and give the student a basic understanding of the world in which we live so that she can apply this geographic understanding as she continues her studies of world and American history.

2514 WORLD CIVILIZATIONS-HONORS..... Grade 10......Level 4—1 Credit

Prerequisites: History-Social Studies department recommendation

Level 4 World History is a survey course that stresses analysis of history that will enable students to grasp the broader implication of motives and deeds that they study in the story of humankind. This course demands more writing to demonstrate understanding and use of social studies skills. Students will be required to read and analyze a wide variety of primary sources. Knowledge of geography as it affects human activity is also developed.

2523 WORLD CIVILIZATIONSGrade 10....Level 3—1 Credit

Prerequisites: None

This course is a general survey of world history emphasizing an understanding of the forces that have shaped its major personalities and events. While priority is given to western history, non-western cultures are studied as time permits. The course stresses organizing information, drawing conclusions, evaluating ideas, and geography skills.

Prerequisite: World Civilizations, History-Social Studies department recommendation.

This course focuses on the key events/characters that have shaped American History and relies heavily on student document analysis and evaluation of historical events. The ability to write organized essays and papers is stressed. The students are expected to take the AP Exam at the conclusion of the course.

3514 U.S. HISTORY-HONORS......Grade 11.....Level 4—1 Credit

Prerequisite: World Civilizations, History-Social Studies department recommendation.

In addition to all aspects of level 3 U.S. History, this class includes outside reading throughout the year and an emphasis on essay writing, especially on tests.

Prerequisite: World Civilizations

The course is divided into Pre-Civil War and Post-Civil War. The goal of the course is to give the student an understanding of the developments of the political, social, economic and diplomatic aspects in United States history and an appreciation of our heritage as citizens. Analytical and map skills along with some historical research and interpretation are emphasized.

4505 AP EUROPEAN HISTORY......Grade 12.....Level 5—1 Credit

Prerequisite: History-Social Studies department recommendation

This course covers European history from the Renaissance to the present. Students will be expected to demonstrate an in-depth knowledge of European political, economic, intellectual, and social history. Critical thinking and the ability to write organized essays will be emphasized. Students are either encouraged to take the AP Exam or enroll for dual credit through Thomas More College's Gemini Program.

4514 CURRENT ISSUES-HONORS......Grade 12....Level $4-\frac{1}{2}$ Credit

Prerequisite: U.S. or AP U.S. History

This course follows the same curriculum as Level 3 Global Issues (4523). In addition the honors level will involve research projects directed by the teacher.

Prerequisite: U.S. or AP U.S. History

This course will focus on the current state of world affairs. The class involves an intensive study of the major geographic/cultural regions of the modern world, with an emphasis on the current problems and potential developments there. Topics will often be focused on events developing in the news. Discussion and debate of current international political and economic issues will be included.

4533 HUMAN GEOGRAPHYGrade 12....Level 3—1 Credit

Prerequisite: U.S. or AP U.S. History

This course focuses on the interaction between human beings and their environment. Topics include population growth and distribution, the influence of geography on human culture and politics, land use, and pollution.

4534 HUMAN GEOGRAPHY-HONORS.....Grade 12....Level 4—1 Credit

Prerequisite: U.S. or AP U.S. History

This course follows the same curriculum as Level 3 Human Geography (4533). In addition the honors level will involve research projects directed by the teacher.

4543 PSYCHOLOGYGrade 12....Level 3—1 Credit

Prerequisite: None

This course is a survey of the many facets of Psychology. Included is the study of child, adolescent, and adult development, as well as the study of the brain, learning, memory, personality, motivation and emotion, sleep and dreams, sensation and perception. The course also covers the latest research involved in mental disorders and treatments. The scientific method is briefly covered as it relates to research within the field. Interactive computer programs, professional speakers and a field trip supplement the content of the course.

4553 SOCIAL CONCERNS......Grade 12....Level $3-\frac{1}{2}$ Credit

Prerequisite: None

Social Concerns is offered jointly by the History-Social Studies and Religion departments. The course offers a half credit for community action and involvement. Students are required to do 90 hours of service throughout the year at an agency that serves people in need or with a family that has special needs. During the weekly seminar, students process their service experience, research issues of social concern, explore ways to effect systemic change, listen to guest speakers, learn Christian leadership skills, and build community.

Prerequisite: U.S. or AP U.S. History

This course involves the study of the U.S. government. The functions of federal, state, and local government, as well as the separation of powers, will be emphasized. Discussion and debate of current political issues will be included. There will also be comparative studies of alternative government systems. During presidential election years, the class will organize a mock presidential election.

4564 GOVERNMENT-HONORSGrade 12....Level $4-\frac{1}{2}$ Credit

Prerequisite: U.S. or AP U.S. History

This course follows the same curriculum as Level 3 Government (4563). In addition the honors level will involve research projects directed by the teacher.

Prerequisite: U.S. or AP U.S. History

This course will focus on the study of basic economic principles and theories, along with their practical applications in the real world. The roles of the individual, business, and government in the economic system will be discussed. Discussion and debate of current economic issues will be included.

4574 ECONOMICS-HONORSGrade 12....Level $4-\frac{1}{2}$ Credit

Prerequisite: U.S. or AP U.S. History

This course follows the same curriculum as Level 3 Economics (4573). In addition the honors level will involve research projects directed by the teacher.

4583 WOMEN IN AMERICAGrade 12.....Level $3-\frac{1}{2}$ Credit

Prerequisite: U.S. or AP U.S. History

This course will move through the chronology of American history to examine the broad themes that have shaped women's lives, as well as how women have impacted American Society. Women's history from the Civil War to the present will be the focus of the class. While tracing larger trends and identifying common experiences, we will also pay close attention to the specific experiences of individual women in order to shed light on social, economic and ethnic differences among them. We will examine a wide array of written and visual primary sources.

4584 WOMEN IN AMERICA-HONORSGrade 12.....Level 4—¹/₂ Credit

Prerequisite: U.S. or AP U.S. History

This course follows the same curriculum as Level 3 Women in America (4583). In addition the honors level will involve research projects and supplemental readings directed by the teacher.

MATHEMATICS DEPARTMENT

(Three and one-half or four credits of mathematics are required including Algebra 1, Algebra 2, and Geometry or higher-level mathematics courses in their place. In addition a mathematics course shall be taken each year of high school.)

Mathematics is a tool used to develop logical and creative thinking. The mathematics curriculum is designed to achieve a proper balance between theory and application through practice and problem solving. The math department offers courses that utilize a variety of teaching methods to develop each student's mathematical potential. Students use a TI-83 Plus Graphing Calculator in all mathematics courses.

Department Learner Goals:

Students will:

- Develop a positive attitude towards mathematics by making mathematical processes meaningful
- Develop a degree of self-confidence and self-direction in mathematics
- Develop an ability to reason logically
- Develop a competency in reading mathematical material
- Express mathematical reasoning clearly when sharing answers with a small group or the class
- Present mathematical concepts in a creative and meaningful way through research and analysis
- Gain information from and to critique graphs, charts, statistics, and other data
- Develop an appreciation of the structure of mathematics, its contribution in the development of civilization, and the importance of mathematics in the world today
- To develop a solid background for further mathematical, scientific, and technical training.

1223, 1233 ALGEBRA 1.....Grade 9....Level 3—1 Credit

Prerequisite: None

This course is designed to provide students with a strong foundation in basic algebraic concepts, skills, and applications. Instruction in number theory, graphs, mathematical sentences, polynomials, and linear equations with one or two variables will be included. This course is required unless a student is exempted by acceptable performance on a comprehensive test or a student has already earned an Algebra 1 credit from a high school transcript. Eighth grade algebra does not necessarily exempt a student.

2204 GEOMETRY-HONORSGrade 10....Level 4—1 Credit

Prerequisite: Algebra 1 or Freshman Algebra 2 and department approval

This course follows the same curriculum as the Level 3 Geometry but has a heavier emphasis on proofs and critical thinking. Students will explore topics at a faster pace and study more abstract concepts than in the Level 3 course. Geometry is required of all students.

Prerequisite: Algebra 1

This course includes the study of plane and solid geometry. Its purpose is to provide students with an understanding of geometric figures in the plane and in space, and to develop a deductive method of thinking through the use of proofs. The course provides opportunities for original and creative thinking by the students. Geometry is required of all students.

3214, 3234 ALGEBRA 2-HONORSGrades 9, 10, 11, 12 Level 4—1 Credit

Prerequisite: Algebra 1 or Freshman Algebra 2 and department approval

This course follows the same curriculum as the Level 3 Algebra 2 but is suggested for the student who has an outstanding understanding of mathematics and the ability to work at a faster pace. Topics will be covered more in depth in this course than the Level 3 course. Students at this level should have an interest in studying mathematics beyond the requirements of Algebra 1, Geometry, and Algebra 2. This course is also offered to freshmen who have completed a full year of high school Algebra in eighth grade and meet the prerequisites above. Students invited to take Algebra 2 as freshmen should have an interest in the field of mathematics and plan to study four years of math, including AP Calculus their senior year. Sophomores who elect to double up also take this course. Algebra 2 is required of all students.

3253 ALGEBRA 2Grades 11, 12 Level 3—1 Credit

Prerequisite: Algebra 1

This course is an extension of Algebra 1 and includes topics such as polynomials, algebraic functions, probability, exponents and radicals, simultaneous equations, graphs of a variety of functions and relations, and analytic geometry. Algebra 2 is required of all students.

3703 ACCOUNTING 1Grades 11, 12Level 3—1 Credit

Prerequisite: Information Technology–Speech, Algebra 1

Accounting 1 provides an introduction to the principles and methods of accounting. It emphasizes an understanding of the underlying basic procedures to set up and operate a small business accounting system by teaching the skills necessary for the handling of the financial records of a small business. Accounting 1 introduces the student to automated data processing and its applications to accounting. Students also learn the necessary skills for the preparation of a personal federal tax return as well as other personal finance skills. Accounting 1 is offered jointly by both the Mathematics and the Business-Technology departments. The business math skills included in this course fulfill the Kentucky pre-college curriculum requirement for a fourth year mathematics class when taken by a senior.

4205 AP CALCULUS AB.....Grade 12....Level 5—1 Credit

Prerequisite: Level 4 Precalculus and department approval

This course is a first semester college Calculus course and includes preparation for the AP test. Topics studied include: analytic geometry, differential and integral calculus of algebraic and transcendental functions and geometric and physical applications. Upon successful completion of the AP test, students may receive college credit.

4214 PRECALCULUS-HONORS......Grades 11, 12....Level 4—1 Credit

Prerequisite: Geometry and Algebra 2 and department approval

This course follows the same curriculum as the Level 3 Precalculus but is suggested for the student who has an outstanding understanding of mathematics and the ability to work at a faster pace. Topics will be covered in more depth than the Level 3 course. Upon successful completion, seniors at this level should be well prepared for Calculus at the college level. This course is offered to juniors who took Algebra 2 as freshmen or doubled up in their sophomore year. Juniors should be prepared to take AP Calculus their senior year and possibly receive college credit.

4223 PRECALCULUSGrade 12....Level 3—1 Credit

Prerequisite: Geometry and Algebra 2 and department approval

This course builds on the concepts learned in Algebra 2. It is designed for those who have had relative success in mathematics up to this level and who have an interest in mathematics. There is a strong emphasis on many types of functions and on trigonometric concepts. Students taking this course will have a study of Trigonometry. Other topics may include conics, sequences and series, logarithms, matrices and determinants, complex numbers and polar coordinates.

4233 MATH TOPICS 1.....Grade 12....Level 3—¹/₂ Credit

Prerequisite: Algebra 2

This first semester course provides for the maintenance and improvement of previously acquired college preparatory mathematical skills. Algebraic and geometric skills will be reviewed to aid in preparation for the ACT/SAT tests. There will be other math topics studied that may include an introduction to Trigonometry. This course is not designed for students who are taking, or have already taken, Precalculus.

4243 MATH TOPICS 2.....Grade 12....Level 3—¹/₂ Credit

Prerequisite: Algebra 2

This second semester course deals with Consumer Mathematics. Students will learn about personal decision making, income, investment, spending and using credit, and money management. Other topics may include trigonometry, sequences and series, probability, and statistics. This course is offered independent of Math Topics 1 and is not designed for students who are taking, or have already taken, Precalculus.

4253 PROBABILITY AND STATISTICS.....Grade 12....Level 3—¹/₂ Credit

Prerequisite: Algebra 2

This elective course is intended to provide a fundamental background in statistical topics for any student who will be engaged in any of the following: math, natural sciences, education, social studies, psychology, or business. Topics include: probability, basic statistics, distributions, sampling, estimation, applications and projects. A statistical calculator is required.
4254 PROBABILITY AND STATISTICS-Grade 12.....Level 4—¹/₂ Credit HONORS

Prerequisite: Algebra 2

This elective course follows the same curriculum as the Level 3, 4253 Probability and Statistics. Topics will be covered in more depth than the Level 3 course for students taking the it at the honors Level 4.

4704 ACCOUNTING 2-HONORSGrade 12....Level 4—1 Credit

Prerequisite: Accounting 1, Algebra 2

Accounting 2-Honors is a computer-based class and teaches students advanced accounting principles and business vocabulary. It aims to develop more training in corporate accounting procedures. Content of the course provides in-depth study of complicated accounting problems through mathematical analysis. The course prepares students to enter the business world or prepare for a major in business in college. Accounting 2-Honors is offered jointly by both the Mathematics and the Business-Technology departments. The business math skills included in this course fulfill the Kentucky pre-college curriculum requirement for a fourth year mathematics class when taken by a senior.

RELIGION DEPARTMENT

(Four credits of religion are required including Catholicism, Scriptures, Church History, and Morality.)

The Religion Department of Notre Dame Academy assists young women in the development of their faith and in forming small Christian communities beginning in their freshman year. Students are encouraged to view Faith as a gift from God that must be nourished and lived out according to the Gospel values inherent in the Catholic Tradition.

Not only are students taught Catholic doctrine and the eternal truth found in Sacred Scripture and Tradition, but also they are encouraged to use critical thinking skills regarding their spiritual development and the formation of a moral conscience. A positive relationship with God and with others is accomplished through opportunities for involvement in their school, community and the world, through service opportunities for those in need, provided by Campus Ministry.

Department Learner Goals:

Students will:

- Develop an understanding of the Church's role in Salvation History through a comprehensive study of Catholic Doctrine, Scriptures, Church History and Morality
- Develop an understanding that Christ's mission and salvation history continues in the divinely instituted Church which is guided by the Holy Spirit
- Engage in theological reflection and faith sharing
- Integrate technology to enhance learning and to provide the tools necessary for a variety of learning styles and accommodations.

1003 CATHOLICISM......Grade 9Level 3—1 Credit

Prerequisite: None

INTRODUCTION TO CATHOLICISM

This course is an introduction to the Catholic Faith. It provides students with basic concepts including The Trinity, prayer, and the hierarchy of the Church as well as the role of the laity within the structure of the Church. An introduction to the Old & New Testament allows students to have a general Biblical background in preparation for their work on the sophomore level. An in-depth study of the Seven Sacraments and the Ten Commandments is provided. The material in this course enables students to build on previously learned concepts but also gives those who have not had such a background, an opportunity to learn about the Catholic tradition.

CHRISTIAN SERVICE FOR FRESHMEN

The freshmen are introduced to service as an integral part of the Christian life through two organized service days, one in the fall and one in the spring.

RETREAT PROGRAM FOR FRESHMEN

The religion department plans a retreat experience for freshmen. The emphasis of the retreat is growth in spirituality by deepening relationships with God, others and self. This retreat takes place during the school day. Each freshman is required to participate in this program.

2003 Scriptures	Grade 10	Level 3—1 Credit
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Prerequisite: None

UNDERSTANDING THE SCRIPTURES

This course introduces students to the Sacred Scriptures and lays the foundation for continued studies in Church History and Our Moral Life in Christ. Students will study the writings of the Old and New Testaments and be given academic tools to properly understand them in keeping with the Magisterium of the Church. A particular emphasis is placed on studying the Old Testament in the light of Christ's fulfillment in the New Testament and the ongoing Covenant that God has established with humanity

CHRISTIAN SERVICE FOR SOPHOMORES

Sophomores continue their service by doing four hours of service in any three of the four quarters of the school year. This service is done in non-profit agencies and institutions in the area.

RETREAT PROGRAM FOR SOPHOMORES

The religion department plans a retreat experience for sophomores. The emphasis of the retreat is community building, growth in trust and communication, balanced living and holistic health. This retreat takes place during the school day. Each sophomore is required to participate in this program.

3003 CHURCH HISTORY......Grade 11.....Level 3—1 Credit

Prerequisite: None

The History of the Church

This course explores the comprehensive history of the Catholic Church-instituted by Christ, by focusing on the major events in the Church's history through the present day. It encourages students to understand the Church in its historical context and explains the role that the Church has had in the shaping of history. Students will understand how our shared history has shaped who we are as Church today.

CHRISTIAN SERVICE FOR JUNIORS

Each week the junior student is given the opportunity to work in the community giving her time and talent to the needs of those around her. The service program extends throughout the school year. On Tuesdays or Thursdays, from October through May, each junior gives service for two hours per week in the local area at agencies that serve people in need.

RETREAT PROGRAM FOR JUNIORS

The religion department in cooperation with the junior class plans a retreat experience for juniors. The emphasis of the retreat is growth in one's life with God and others. The retreat is held on a school day after regular school hours. Each junior is required to participate in this program. (Juniors are excused from classes on the following school day).

3004 CHURCH HISTORY-HONORSGrade 11....Level 4—1 Credit

Prerequisite: None

The History of the Church

This course follows the same curriculum as level 3 Church History (3003). The honors level class will require more writing and research projects as well as exploring Catholic Social Teaching through the many documents of the church.

CHRISTIAN SERVICE FOR JUNIORS

Each week the junior student is given the opportunity to work in the community giving her time and talent to the needs of those around her. The service program extends throughout the school year. Honors students are required to complete 1.5 hours of service weekly at an approved service agency after school hours.

RETREAT PROGRAM FOR JUNIORS

The religion department in cooperation with the junior class plans a retreat experience for juniors. The emphasis of the retreat is growth in one's life with God and others. The retreat is held on a school day after regular school hours. Each junior is required to participate in this program. (Juniors are excused from classes on the following school day).

4003 MORALITY	Grade 12	Level 3—1 Credit
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Prerequisite: None

OUR MORAL LIFE IN CHRIST

This course presents the principles and foundations of Catholic Moral Theology. Students will study moral and ethical issues in the light of the Gospel of Jesus Christ as taught by the Magisterium of the Church. In additions, they will identify and understand moral issues that impact their lives as young women in the 21st century.

CHRISTIAN SERVICE FOR SENIORS

All seniors are required to complete twenty- four hours of service during the senior year. Students are expected to research and implement a service project under the supervision of the Outreach Coordinator. Seniors who elect to take Social Concerns (4553) to continue their Christian service meet this requirement through the course.

RETREAT PROGRAM FOR SENIORS

The school participates in the Christian Awakening Retreat program. The emphasis of this retreat is: coming to know one's self and God more deeply; examining relationships with others; coming to a deeper knowledge of Jesus Christ and deepening one's relationship with him; and, reflecting on how to put faith into action. Each senior is required to make a spiritual retreat weekend. Seniors sign up for one of the retreat weekends sponsored by Notre Dame at the beginning of the school year. **4023 PEER MINISTRY**.....Grade 12.....Level $3-\frac{1}{2}$ Credit

Prerequisite: None

This elective course is designed to look at and put into practice peer ministry skills. Throughout the course students will look at the lives of prominent leaders throughout history. Students will learn what different leadership roles and skills are needed to lead within the church by planning, preparing and implementing the school liturgies and prayer services throughout the school year, along side the Campus Minister. Their final project will be working to serve the students and faculty at NDA by hosting the Women's Awareness Day in the spring.

4033 SOCIAL JUSTICEGrades 11, 12 Level 3—¹/₂ Credit

Prerequisite: None

Social Justice focuses on the social doctrine of the Catholic Church. Topics include: justice, prejudice, poverty, hunger, homelessness, simple living, nonviolence, consistent ethic of life, and the environment. Students learn that as Christians they are called to a life of justice and service.

4553 SOCIAL CONCERNSGra	de 12	Level $3 - \frac{1}{2}$ Credit
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Prerequisite: None

Social Concerns is offered jointly by the History-Social Studies and Religion departments. The course offers a half credit for community action and involvement. Students are required to do 90 hours of service throughout the year at an agency that serves people in need or with a family that has special needs. During the weekly seminar, students process their service experience, research issues of social concern, explore ways to effect systemic change, listen to guest speakers, learn Christian leadership skills, and build community.

SCIENCE DEPARTMENT

(Three credits of science are required including one physical science and one life science and one of which must be a lab science. In addition one-half credit of Health and one-half credit of Physical Education are required.)

Science is a major part of modern culture. It is important not only in its factual content, but also in its method and philosophy. Since it has become enmeshed in our social institutions, our students need to be scientifically literate, develop a sense of inquiry, and appreciative of the natural world.

Department Learner Goals:

Students will:

- Use the scientific method to develop careful observation, critical thinking, and problem solving skills
- Develop scientific literacy to be an informed citizen
- Appreciate the inter- relatedness of physical and biological systems
- Incorporate both scientific knowledge and technology into daily life
- Understand the science that underlies the ethical issues of our day
- Value the beauty of the natural environment and responsibly use its resources.

Prerequisite: None.

This course is designed to lead students to an understanding of the structure of the atom through laboratory investigation. Strong math skills, especially in algebra, and analytical reasoning are required for this course. Content of the second semester includes almost all major topics of a typical full year physics course. Computers are used frequently for scientific inquiry, reporting and analyzing data. This course represents the first two semesters in a four semester introductory sequence into the physical and life sciences.

1313 IPS-PHYSICS CONCEPTS.....Grade 9....Level 3—1 Credit

Prerequisite: None

This course is designed to lead students to an understanding of the structure of the atom through laboratory investigation. In the second semester the basic concepts of physics are introduced. Math skills at the level of first year algebra and analytical reasoning skills are needed to master the content of the course. Computers are used frequently for scientific inquiry, reporting and analyzing data. This course represents the first two semesters in a four semester introductory sequence into the physical and life sciences.

1323 PHYSICAL SCIENCEGrade 9....Level 3—1 Credit

Prerequisite: None

This course is designed to give freshmen a fundamental understanding of some of the basic principles of chemistry, to help freshmen develop laboratory skills, to practice lab safety, and to write formal lab reports. No prior knowledge is presumed. Skills in basic math as used in science, computer and I-pad applications, graphing calculator use, and lab techniques are taught and practiced during this course. Students are also taught how to report and analyze data.

2304 CHEMISTRY-HONORSGrade 10....Level 4—1 Credit

Prerequisites: Introductory Physical Science-Physics Concepts

This advanced-level chemistry course explores the classes of matter, atomic structure, the periodic table, chemical formulas and equations, the mole concept, energy relations and basic organic chemistry during the first 3 quarters of the school year. The molecular and cellular aspects of introductory biology occupy the remaining quarter. Topics included are: cell structure, origin of life, classification, chemical basis of life. Approximately one half of the class time is devoted to lab work. Dissection is not included. Students will be expected to master course material not always presented in class, work independently in the lab, and draw connections and conclusionsacross chapters. This course fulfills the college admission requirement for one year of high school chemistry.

2313 CHEMISTRYGrade 10.....Level 3—1 Credit

Prerequisite: Introductory Physical Science-Physics Concepts

The first three quarters are devoted to introductory chemistry. Classes of matter, atomic structure, periodic table, formulas and equations, the mole concept, energy relations and basic organic chemistry are among the topics covered. The molecular and cellular aspects of introductory biology occupy the remaining quarter. Topics included are: cell structure, origin of life, classification, chemical basis of life. Approximately one half of the class time is devoted to lab work. Dissection is not included. This course fulfills thecollege admission requirement for one year of high school chemistry.

2323 BIOLOGY FUNDAMENTALS.....Grade 10....Level 3—1 Credit

Prerequisite: 1323 Physical Science

This course introduces students to the study of living things. The course begins with the interrelationships among living things, evolution and then progresses through a phylogenetic study of major kingdoms. The course also includes the basic structures and functions of cells and focuses on genetics. Lab work, including dissections, plays an important role in the course.

3305 AP BIOLOGY......Grades 11, 12Level 5—1 Credit

Prerequisites: 2313 or 2304 Chemistry

This advanced biology course includes content suggested for the Advancement Placement Exam in biology. The course emphasizes genetics and heredity, evolution, the anatomy and physiology of individual organisms and the interrelationships among various taxonomic groups. Content is studied in the context of major themes in biology such as continuity and change, science as a process and the relationship of structure to function. An inquiry based approach requires significant laboratory experience including dissection and student directed research. Students are expected to master a significant amount of material not presented in class, perform open labs, and prepare quarterly book reports. The course is designed to prepare students for the AP test usually taken in mid May and assignments and tests are on a more challenging level than other biology sections.

3314 BIOLOGY-HONORSGrades 11, 12Level 4—1 Credit

Prerequisites: 2313 or 2304 Chemistry

This biology course is a study of genetics, evolution and the plant and animal kingdoms. Emphasis is on heredity, especially human heredity, in the first semester. In the second semester, the anatomy and physiology of individual organisms and the interrelationships among members of various groups are treated. Laboratory experience, including dissections, forms an integral part of the subject matter. Successful completion of the course will require consistent reading of text, frequent lab reports, and frequent written assignments and outside readings.

3323 BIOLOGY.....Grades 11, 12.....Level 3—1 Credit

Prerequisites: 2313 or 2304 Chemistry

This biology course is a study of genetics, evolution and the plant and animal kingdoms. Emphasis is on heredity, especially human heredity, in the first semester. In the second semester, the anatomy and physiology of individual organisms and the interrelationships among various groups are treated. Laboratory experience, including dissections, forms an integral part of the subject matter.

3333 CONCEPTUAL CHEMISTRY.....Grades 11, 12Level 3—1 Credit

Prerequisites: 1323 Physical Science and 2323 Biology Fundamentals

This course is designed to provide a basic introduction to the major concepts of chemistry. It continues where the Introductory Physical Science course left off. Topics covered include: atomic structure, formulas and equations, moles, periodic table, energy relations, classes of matter. This course fulfills the college admission requirement for one year of high school chemistry.

4314 HUMAN ANATOMYGrade 12....Level 4—1 Credit AND PHYSIOLOGY HONORS

Prerequisite: Completion of 3 science credits including biology and chemistry

This course follows the same curriculum as 4313 Human Anatomy and Physiology. Students in this level 4 honors course will be expected to demonstrate a greater depth of understanding and analysis on the assignments, projects and tests as well as complete supplemental reading as directed by the teacher.

4313 HUMAN ANATOMYGrade 12....Level 3—1 Credit AND PHYSIOLOGY

Prerequisite: Completion of 3 science credits including chemistry

This course is designed to give students an understanding of the anatomy and physiology of the organ systems and their relationship to one another. This course is directed from the chemical and cellular levels to the whole organism. Health issues are addressed pertaining to each system. Dissection of a cat and various organs is required. This course will be of interest to those considering a career in a health-related field.

4323 ENVIRONMENTAL SCIENCE......Grade 12....Level 3—1 Credit

Prerequisites: Completion of 2 science credits

This course is appropriate for students not necessarily planning a science-oriented career, but interested in learning more about environmental issues. Topics include: brief overviews of other sciences that contribute to an understanding of ecology, cycles in nature, basic ecological principles, adapting to the environment, ecosystems and biomes, preservation of earth's resources, pollution, energy sources, the population explosion, and managing earth for future generations. Students will be expected to participate in the development and maintenance of the campus rain garden and constructed wetlands as a course requirement.

4344 SCIENCE RESEARCH-HONORS Grades 9, 10, 11, 12 Level $4-\frac{1}{2}$ Credit

Prerequisites: Approval of department application

This course focuses on conducting an individual research project. During the first three quarters, first-time enrollees will meet for instruction once a week before the traditional school day begins. All students meet formally with their teacher twice each quarter. The major work is completing and presenting original research in the areas of mathematics, natural science, engineering or behavioral science. A minimum of 36 hours each quarter is to be logged. The student will present her work during at least two science expositions in the second semester. This elective course does not fulfill the three science credits required for graduation. (Students may take this course multiple times.) Students will complete an application and be selected by the Science Department; acceptance is also based on the number of available slots. Students may take this course multiple times.

4353 ZOOLOGYGrade 12.....Level 3—¹/₂ Credit

Prerequisite: Completion of one year of high school biology

This course is a phylogenetic study of the major groups of animals. Students study the anatomical and physiological differences among those major groups and will be able to recognize representatives of each group. This course includes several dissections and lab tests.

Prerequisite: Completion of one year of high school biology

This course covers the physical and biological features of the ocean realm. Areas under study include marine physical geography, oceanography and a phylogenetic survey of marine plankton, plants, invertebrates and vertebrates. Numerous lab activities are conducted. There will also be an opportunity to participate in optional field trips.

4365 COLLEGE CHEMISTRYGrades 11, 12Level 5—1 Credit

Prerequisites: GPA 3.2 or better and successful completion of 2313 or 2304 Chemistry

Co-requisite: CHE 112/114 General Chemistry Laboratory I & II at Thomas More College

This is a college chemistry course (CHE 111/113 General Chemistry I/II). Successful completion of this course and the accompanying laboratory requirement results in 8 college credits from Thomas More College (TMC). The 1st semester covers a concise overview of basic principles of atomic theory, gas laws, the mole concept, stoichiometry, periodicity, and the study of chemical equilibrium and oxidation-reduction principles. Principles of thermodynamics and kinetics as applied to chemical systems are studied in the 2nd semester. Redox equilibria, electrochemistry, and the rates and mechanism of chemical reactions will also be stressed. This class is conducted as a traditional college lecture with demonstrations and media presentations. Students must be capable of reading lecture materials prior to class and independently preparing for tests and exams. The course grade will be determined by scores on tests, quizzes, and the final exam. The laboratory portion of the course (CHE 112/114) will be conducted at TMC. Students register for this course with at the college. A 3 hour lab class is required 1 afternoon or evening a week.

Students interested in taking this course must have an application approved by the school. Applications are available in the Chemistry lab (Room 210).

4375 AP PHYSICS B.....Grades 11, 12Level 5—³/₄ Credit

Prerequisites: 1313 or 1304 IPS–Physics Concepts, math to the level of Precalculus (may be taken concurrently)

Co-requisite: 4375L AP PHYSICS B LAB Grades 11, 12 Level $5-\frac{1}{4}$ Credit

This advanced course in physics puts considerable emphasis on the place of physics in the history of ideas. Topics covered include mechanics, wave motion and electromagnetism, and atomic and nuclear physics. This course requires added lab work and 1 to 2 lab reports weekly. Most homework is submitted via the internet. Formulating physics in mathematical terms and problem-solving are emphasized. Students who wish may enroll for the course as a dual credit with Thomas More. Because of this arrangement, the lecture and laboratory parts of the course appear as two separate courses on the report card. An extensive description of the course has been approved by the College Board.

4384 PHYSICS-HONORS......Grades 11, 12Level 4—³/₄ Credit

Prerequisites: 1313 or 1304 IPS–Physics Concepts, math to the level of Precalculus (may be taken concurrently)

Co-requisite: 4375L AP PHYSICS B LAB Grades 11, 12 Level $4-\frac{1}{4}$ Credit

This advanced course in physics puts considerable emphasis on the place of physics in the history of ideas. Topics covered include mechanics, astronomy, wave motion and electromagnetism, and atomic and nuclear physics. This course requires added lab work and 1 to 2 lab reports weekly. Most homework is submitted via the internet. The lab portion of the course is AP level, and the lecture portion is similar to AP Physics B but requires less mathematics. Because of the dual credit possibility for AP with Thomas More College, the laboratory and lecture portions appear as separate courses on the report card.

4393 CONCEPTUAL PHYSICS.....Grades 11, 12Level 3—1 Credit

Prerequisites: Completion of 2 science credits

This is a basic introduction to physics that differs from the traditional course in the absence of emphasis on algebraic problem solving. Physics is treated conceptually, with emphasis on stating physics concepts in English rather than mathematically. Where equations are used, they are employed as guides to thinking. The goal is to comprehend physics concepts rather than emphasize computation. About half of the class time is devoted to laboratory activities. Students who have already taken Physics [including IPS–Physics Concepts (1313 or 1304)] may not sign up for this course.

(Health and Physical Education)

1363, 1373 HEALTHGrade 9.....Level 3—¹/₂ Credit

Prerequisites: None

This course is designed primarily to give students a basic understanding of the systems of the human body and the effects of alcohol and drugs on the body. This course is also directed to help students understand the limitations placed on the body and the general maintenance and care of the body, including stress management. Students will gain a general appreciation for all health-related careers and receive CPR and First Aid certification.

1383, 1393 PHYSICAL EDUCATIONGrade 9.....Level 3—¹/₂ Credit

Prerequisites: None

Physical education provides students with the knowledge, skills, and attitudes to acquire physical fitness, physical skills, and leisure skills necessary to maintain healthful and satisfying lifestyles throughout their lives. The class is designed to provide students with lifetime fitness activities in which they can participate at any age. The semester course includes the following units of instruction: tennis, golf, aerobics, weight training, dance, pickle ball, and badminton.

4333 PERSONAL FITNESS Grade 12 Level $3-\frac{1}{2}$ Credit

Prerequisites: 1383 or 1393 Physical Education

This course is designed to give students the opportunity to learn strength training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive strength training and cardiovascular exercise. Students will learn the basic fundamentals of aerobic exercise and strength training exercise as well as overall fitness training and conditioning. The course includes both lecture and activity sessions, with the majority of classes being activity. The students will participate in pre and post fitness assessment. The students will be empowered to make wise choices, meet new challenges and develop positive behaviors and habits that will encourage a healthy lifestyle.

WORLD LANGUAGES DEPARTMENT

(Two credits of the same world language are required.)

The study of a world language helps the student acquire a knowledge and appreciation of other people, their manner of communication and their culture. As our world shrinks through telecommunication advancements and society becomes more mobile, the tolerance and appreciation for other peoples become necessary social tools. Furthermore, studying other cultures becomes a stepping-stone to broader global awareness. The cognitive skills acquired in foreign language study equip the student for other academic learning. The general knowledge learned is a necessary foundation for liberal arts study. Notre Dame offers language study in French, Latin, and Spanish. All students are required to take two years of the language of their choice, and are encouraged to pursue the third and fourth years as well.

Department Learner Goals:

Following the national standards established by the American Council on the Teaching of Foreign Languages, the world language classes aim to help the student so that students will:

- Communicate in a language other than English
- Gain knowledge and understanding of other cultures
- Connect with other disciplines and viewpoints
- Explore the nature of language, through the comparison of languages and cultures
- Participate in multicultural communities, using language within and beyond the school setting, and for personal enrichment and enjoyment.

(French)

(French) 1413 FRENCH 1.....Grades 9, 10, 11, 12Level 3—1 Credit

Prerequisite: None

This course introduces the student to the fundamentals of listening, speaking, reading, and writing French. The emphasis is on vocabulary acquisition, correct pronunciation, and basic grammar principles. An introduction to the contemporary French-speaking world and its culture is included.

2404 FRENCH 2-HONORSGrades 9, 10, 11, 12Level 4—1 Credit

Prerequisite: Average of 90% in French 1 and department recommendation

This course is similar to French 2, level 3, in content and goals. However, level 4 students are expected to manipulate the language more independently in all skill areas. Quizzes and tests are more challenging.

2413 FRENCH 2Grades 9, 10, 11, 12Level 3—1 Credit

Prerequisite: French 1

This course is a continuation of the first year course. It provides a review of basic concepts, ongoing development of vocabulary, and language skills. More emphasis is placed on the structure of the language in writing. Further exploration of French culture is pursued.

3404 FRENCH 3-HONORSGrades 10, 11, 12 Level 4—1 Credit

Prerequisite: Average of 90% in French 2 and department recommendation

This course is similar to French 3, level 3, in content and goals. However, level 4 students are expected to manipulate the language more independently in all skill areas. Quizzes and tests are more challenging.

3413 FRENCH 3.....Grades 10, 11, 12 Level 3—1 Credit

Prerequisite: Average of 80% in French 2 and department recommendation

This course enhances the basic knowledge acquired in French 1 and 2 with continued study of vocabulary, grammar, and culture. The emphasis is on the development of skills, especially in speaking and writing.

Prerequisite: Average of 90% in French 3 and department recommendation

Typically, AP French students meet with the 4414 French 4 class, but they are required to do additional assignments to prepare for the AP test. Considerable outside time and practice are required for this course.

4414 FRENCH 4-HONORSGrades 11, 12Level 4—1 Credit

Prerequisite: Average of 85% in French 3 and department recommendation

This course attempts to refine the student's overall knowledge of the French language and culture. Through thematic units based on literary and contemporary reading selections, students will work to expand vocabulary and to develop enhanced skill in writing and conversation.

(Latin)

1463 LATIN 1.....Grades 9, 10, 11, 12....Level 3—1 Credit

Prerequisite: None

The main objectives of Latin 1 are to acquaint the students with the culture and language of the classical Romans. The students learn to read and translate Latin, to express themselves in written Latin and in a limited degree in oral Latin. Latin vocabulary, grammatical structures, derivatives and idioms are emphasized. Latin classical mythology is also included.

2464 LATIN **2-HONORS**Grades 9, 10, 11, 12Level 4—1 Credit

Prerequisite: Average of 90% in Latin 1 and department recommendation

This course is similar to 2473 Latin 2 in content and goals. However, level 4 students are expected to manipulate the language more independently in all skill areas. Quizzes and tests, as well as some routine assignments, are more challenging.

2473 LATIN **2**.....Grades 9, 10, 11, 12 Level 3—1 Credit

Prerequisite: Latin 1

The second year Latin student pursues the classical culture in greater detail. At the same time Latin grammar, vocabulary, derivatives and idioms are studied further.

3464 LATIN **3-HONORS**Grades 10, 11, 12Level 4—1 Credit

Prerequisite: Average of 90% in Latin 2 and department recommendation.

This course has the same course summary as 3483 Latin 3; however, more independent learning and greater manipulation of the language is expected. Tests and projects are more challenging.

3483 LATIN **3**Grades 10, 11, 12Level 4—1 Credit

Prerequisite: Average of 85% in Latin 2

This course includes more advanced Latin syntax and grammar. The students will be further acquainted with the history and culture of classical Rome. Selected excerpts of Vergil's *Aeneid* and Caesar's *Gallic Wars* are studied. Idioms and derivatives continue to be recognized.

4465 AP LATIN: VERGIL.....Grades 11, 12Level 5—1 Credit Prerequisite: Average of 90% in Latin 3 and department recommendation

This course follows guidelines from the College Entrance Examination Board for the Advanced Placement courses. Additional outside time and practice is required for students preparing for the AP test.

4474 LATIN 4-HONORSGrades 11, 12Level 4—1 Credit

Prerequisite: Average of 85% in Latin 3 and department recommendation

This course includes more advanced Latin syntax and grammar. The students will be further acquainted with the history and culture of classical Rome. Selected excerpts of Vergil's *Aeneid* and Caesar's *Gallic Wars* are studied. Idioms and derivatives continue to be recognized.

(Spanish)

1433 SPANISH 1Grades 9, 10, 11, 12Level 3—1 Credit

Prerequisite: None

This course emphasizes the acquisition of the basic skills of grammar and vocabulary. Students also practice pronouncing, reading, writing and listening to Spanish. Cultural material, read in Spanish, provides a framework for the language.

2424 SPANISH 2-HONORS.....Grades 9, 10, 11, 12Level 4—1 Credit

Prerequisite: Average of 93% in Spanish 1 and department recommendation.

This course is a thorough review as well as a development of the skills learned in Spanish 1. The students will learn additional grammar and vocabulary. Level 4 is taught at a faster pace and students are required to speak, read, and write more extensively in Spanish. Students taking this course should plan to study Spanish for four years and possibly take the AP class their fourth year.

2433 SPANISH 2Grades 9, 10, 11, 12 Level 3—1 Credit

Prerequisite: Spanish 1

This course is a thorough review as well as a development of the skills learned in Spanish 1. The students will learn additional grammar and vocabulary.

3424 SPANISH 3-HONORS.....Grades 10, 11, 12Level 4—1 Credit

Prerequisite: Average of 93% in Spanish 2 and department recommendation

This course is designed as preparation for the student who plans to take the Spanish 4 honors class or Spanish AP. This class requires a more independent review of grammar as class time is used for discussion of readings and cultural materials. Class discussions are conducted in Spanish.

3433 SPANISH 3Grades 10, 11, 12 Level 3—1 Credit

Prerequisite: Average of 80% in Spanish 2 and department recommendation

This course bridges the gap between the skill development programs of Spanish 1 and II and the advanced study of Spanish 4 by providing a realistically balanced program. Grammar review and culture are sensibly blended to appeal to students. Class will be conducted in Spanish and English. Students taking this course should plan to study Spanish for four years.

4425 AP SPANISH LANGUAGE.....Grades 11, 12Level 5—1 Credit

Prerequisite: Spanish 3, Level 4 and department recommendation

This course, conducted almost exclusively in Spanish, is an extension of the 4434 Spanish 4, level 4. Considerable outside time and practice are required for students in this course. The students often acquire fluency as a result of the practice and experience. Students are encouraged to take the AP Exam.

4434 SPANISH 4-HONORS.....Grades 11, 12Level 4—1 Credit

Prerequisite: Average of 93% in Spanish 3 and department recommendation.

This course, conducted almost exclusively in Spanish, offers practice in conversation, vocabulary development, and quick grammar review. Students read a variety of culturally relevant material encompassing numerous genres and thematic units. The course aims at developing a facility with the language so that real communication can take place.

LONG RANGE CURRICULUM PLANNING SHEETS

FRESHMEN COURSES (NORMALLY 7 CREDITS)

Use these sheets to help in planning your course of studies for future years. Course numbers in these lists ending in a "3" are college preparatory level classes. Course numbers ending in a "4" indicate honors level. Honors courses are also indicated by the course name. Courses are one credit unless otherwise indicated

Religion

1003 Catholicism

English 1104 English 1-Honors 1113, 1123 English 1

Mathematics 1223, 1233 Algebra 1 3234 Algebra 2-Honors

Science

1304 IPS-Physics Concepts -Honors1313 IPS-Physics Concepts1323 Physical Science

Health And Physical Education

1363, 1373 Health ($^{1}/_{2}$ credit) 1383, 1393 Physical Education ($^{1}/_{2}$ credit)

World Languages

1413 French 1
2404 French 2-Honors
2413 French 2
1463 Latin 1
2464 Latin 2-Honors
2473 Latin 2
1433 Spanish 1
2424 Spanish 2-Honors
2433 Spanish 2

History And Social Studies 1533 World Geography (¹/₂ credit)

Business & Technology 1733 Technology And Communication (¹/2 credit)

Guidance 1813 Excel

Before School Electives

4344 Science Research-Honors ($^{1}/_{2}$ credit)

4683 Band-Orchestra ($^{1}/_{2}$ credit)

Summer Elective

3643 Studio Art ($^{1}/_{2}$ credit)

Sophomore Courses (Normally 7 credits)

Use these sheets to help in planning your course of studies for future years. Course numbers in these lists ending in a "3" are college preparatory level classes. Course numbers ending in a "4" indicate honors level courses. Honors courses are also indicated by the course name. Courses are one credit unless otherwise indicated

Religion 2003 Scriptures

English 2104 English 2-Honors 2113, 2123 English 2

Mathematics 2204 Geometry-Honors 2213, 2223 Geometry

Science 2304 Chemistry-Honors 2313 Chemistry 2323 Biology Fundamentals

World Languages

1413 French 1
2404 French 2-Honors
2413 French 2
3404 French 3-Honors
3413 French 3
1463 Latin 1
2464 Latin 2-Honors
2473 Latin 2
3464 Latin 3-Honors
3483 Latin 3
1433 Spanish 1
2424 Spanish 2-Honors
2433 Spanish 2
3424 Spanish 3-Honors
3433 Spanish 3

History And Social Studies

2514 World Civilizations-Honors 2523 World Civilizations

Arts 2603 Art 1 2613 Fine Arts Appreciation 3683 Choral Ensemble (¹/₂ credit) 4643 Theatre 4673 Chorus

Guidance 2813 Academic Strategies (¹/2 credit) 2823 Elements Of Writing (¹/2 credit)

Before School Electives

4344 Science Research-Honors ($\frac{1}{2}$ credit) 4683 Band ($\frac{1}{2}$ credit)

Summer Electives

3643 Studio Art (¹/2 credit) 4604 Music Theory-Honors (¹/2 credit)

JUNIOR COURSES (NORMALLY 6 CREDITS)

Use these sheets to help in planning your course of studies for future years. Course numbers in these lists ending in a "3" are college preparatory level classes. Course numbers ending in a "4" indicate honors level courses and those ending "5" are used for college credit (e.g. AP) courses. Honors and AP courses are also indicated by the course name. Courses are one credit unless otherwise indicated

Religion

3004 Church History-Honors 3003 Church History 4033 Social Justice (¹/2 credit)

English

3105 AP English Language3114 American Literature-Honors3123 American Literature

Mathematics

3234 Algebra 2-Honors3253 Algebra 24214 Precalculus-Honors

Science

3305 AP Biology
3314 Biology-Honors
3323 Biology
3333 Conceptual Chemistry
4365 College Chemistry
4375 AP Physics B (³/₄ credit)
4375L AP Physics B Lab (¹/₄ credit)
4384 Physics-Honors (³/₄ credit)
4393 Conceptual Physics

World Languages

1413 French 1
2404 French 2-Honors
2413 French 2
3404 French 3-Honors
3413 French 3
4405 AP French Language
4414 French 4-Honors
1463 Latin 1
2464 Latin 2-Honors
2473 Latin 2
3464 Latin 3-Honors
3483 Latin 3
4465 AP Latin: Vergil
4474 Latin 4-Honors

World Languages (continued)

1433 Spanish 1
2424 Spanish 2-Honors
2433 Spanish 2
3424 Spanish 3-Honors
3433 Spanish 3
4425 AP Spanish Language
4434 Spanish 4-Honors

History And Social Studies

3505 AP US History 3514 US History-Honors 3523 US History

Arts

2603 Art 1 3613 Art 2 3683 Choral Ensemble (¹/₂ credit) 4603 Art 3 4614 Advanced Theatre-Honors 4643 Theatre 4673 Chorus

Business & Technology

3703 Accounting 1
3793 Publications 1
4733 Computer Graphics (¹/₂ credit)

Guidance

2813 Academic Strategies ($^{1}/_{2}$ credit) 2823 Elements Of Writing ($^{1}/_{2}$ credit)

Before School Electives

4344 Science Research-Honors ($^{1}/_{2}$ credit) 4683 Band- ($^{1}/_{2}$ credit) 4694 Band-Honors ($^{1}/_{2}$ credit)

Summer Electives 3643 Studio Art ($^{1}/_{2}$ credit)

4604 Music Theory-Honors ($^{1}/_{2}$ credit)

SENIOR COURSES (NORMALLY 6 CREDITS)

Use these sheets to help in planning your course of studies for future years. Course numbers in these lists ending in a "3" are college preparatory level classes. Course numbers ending in a "4" indicate honors level courses and those ending "5" are used for college credit (e.g. AP) courses. Honors and AP courses are also indicated by the course name. Courses are one credit unless otherwise indicated

Religion

4003 Morality 4023 Peer Ministry (¹/2 credit) 4033 Social Justice (¹/2 credit)

English

4105 AP English Literature 4114 British Literature-Honors 4123 British Literature

Mathematics

3234 Algebra 2-Honors
3253 Algebra 2
3703 Accounting 1
4205 AP Calculus AB
4214 Precalculus-Honors
4223 Precalculus
4233 Math Topics 1 (¹/₂ credit)
4243 Math Topics 2 (¹/₂ credit)
4253 Probability And Statistics (¹/₂ credit)
4254 Probability And Statistics-Honors (¹/₂ credit)
4704 Accounting 2-Honors

Science

3305 AP Biology 3314 Biology-Honors 3323 Biology 3333 Conceptual Chemistry 4313 Human Anatomy And Physiology 4314 Human Anatomy And Physiology-Honors 4323 Environmental Science 4333 Personal Fitness ($\frac{1}{2}$ credit) 4353 Zoology ($\frac{1}{2}$ credit) 4363 Marine Biology ($\frac{1}{2}$ credit) 4365 College Chemistry 4375 AP Physics B (³/₄ credit) 4375L AP Physics B Lab (¹/₄ credit) 4384 Physics-Honors (³/₄ credit) 4393 Conceptual Physics

World Languages

1413 French 1 2404 French 2-Honors 2413 French 2 3404 French 3-Honors 3413 French 3 4405 AP French Language 4414 French 4-Honors 1463 Latin 1 2464 Latin 2-Honors 2473 Latin 2 3464 Latin 3-Honors 3483 Latin 3 4465 AP Latin: Vergil 4474 Latin 4-Honors 1433 Spanish 1 2424 Spanish 2-Honors 2433 Spanish 2 3424 Spanish 3-Honors 3433 Spanish 3 4425 AP Spanish Language 4434 Spanish 4-Honors

History & Social Studies

4505 AP European History
4514 Current Issues-Honors (¹/₂ credit)
4523 Current Issues (¹/₂ credit)
4533 Human Geography
4534 Human Geography-Honors
4543 Psychology
4553 Social Concerns (¹/₂ credit)
4563 Government (¹/₂ credit)
4564 Government-Honors (¹/₂ credit)
4573 Economics (¹/₂ credit)
4574 Economics-Honors (¹/₂ credit)
4583 Women In America (¹/₂ credit)
4584 Women In America-Honors (¹/₂ credit)

Arts

2603 Art 1 2613 Fine Arts Appreciation 3613 Art 2 3683 Choral Ensemble (¹/₂ credit) 4603 Art 3 4614 Advanced Theatre-Honors 4635 AP Studio Art 4643 Theatre 4663 Textiles (¹/₂ credit) 4673 Chorus

Business & Technology

3703 Accounting 1
3793 Publications 1
4704 Accounting 2-Honors
4733 Computer Graphics (¹/₂ credit)
4794 Publications 2-Honors

Guidance

2813 Academic Strategies ($^{1}/_{2}$ credit) 2823 Elements Of Writing ($^{1}/_{2}$ credit) 4833 Research Writing ($^{1}/_{2}$ credit)

Before School Electives

4344 Science Research-Honors ($^{1}/_{2}$ credit) 4683 Band ($^{1}/_{2}$ credit) 4694 Band-Honors ($^{1}/_{2}$ credit)

Summer Electives

3643 Studio Art (¹/2 credit) 4604 Music Theory-Honors (¹/2 credit)