

## Ursuline Academy of Dallas Course Compendium 2022-2023

The course descriptions in this booklet are intended to provide you with pertinent information concerning content, length, prerequisite(s), and credit value for each course.

Ursuline Academy of Dallas reserves the right to withdraw a course offering due to insufficient enrollment or unexpected staff changes.

Founded in 1874, Ursuline Academy of Dallas is an independent Catholic college preparatory school for young women sponsored by the Ursuline Sisters. The mission of Ursuline Academy is the total development of the individual student through spiritual formation, intellectual growth, service to others, and building of community. Ursuline Academy educates young women for leadership in a global society.

This compendium provides curriculum information for the 2022-2023 school year. It is designed to assist students, parents, counselors, advisors, the Dean of Academics, and the Registrar in selecting courses best suited to meet the needs of each student.

# Students will consult with their advisors and counselors concerning curriculum choices and requirements.

Student registration is a critical function at Ursuline Academy of Dallas. Based upon the registration data, courses are scheduled, and teachers are employed for the next year. <u>Course requests made at the time of registration are considered permanent for the academic year. All requested changes must be submitted via email to the Registrar at celias@ursulinedallas.org.</u>

On occasion, due to unusual conditions, changing a student's schedule is justifiable (see below).

#### A change is considered justifiable if:

1. An instructor and/or a Personal Counselor have determined that a student was scheduled for a course

in which she has inadequate background.

- 2. The student was scheduled for a course for which she has not completed the required prerequisites.
- 3. The student was recommended for a specific course but was not scheduled into that course.
- 4. The student was scheduled for a course for which she has already received credit.
- 5. The student has special circumstances and the change is approved by the Dean of Academics.

## **GRADUATION REQUIREMENTS**

To earn a diploma from Ursuline Academy, a student must meet the following requirements:

- Obtain the last six credits from Ursuline Academy while enrolled as a full-time student
- Earn passing grades in all courses or remediate failures
- Fulfill all community service requirements
- Be enrolled in a minimum of six courses in a given semester
- Complete the **required graduation requirements**:

Class	Theology	English	Math	Social Studies	Science	World Lang	Electives	PE	Fine Arts	Comp Science	Speech /Life Skills	Total
2023	4	4	3	4	3	3	1	1	1	1	1	26

• Social Studies requirements: 4 credits - Early World History, Modern World History, United States History, Macroeconomics, and Government

• Science requirements: 3 credits - Physics, Chemistry, and Biology beginning in Freshman year

- World Language requirements: The same language for 3 consecutive years or through level 3 beginning in Freshman year.
- Life Skills requirement is 0.5 credit junior year.

Class	Theology	English	Math	Social Studies	Science	World Lang	Electives	PE	Fine Arts	Comp Science	Life Skills	Total
2024												
2025	4	4	3	3	3	3	2	1	1	1	1	26
2026												

• Social Studies requirements: 3 credits - World History, Government, United States History, and Macroeconomics

• Science requirements: 3 credits - Physics, Chemistry, and Biology beginning in Freshman year

• World Language requirements: 3 consecutive years or through level 3 beginning in Freshman year

• Life Skills requirement: 0.5 credit in Freshman and Junior or Senior year

All students who complete the graduation requirements at Ursuline think critically and are prepared for college coursework. Our honors/AP classes are for students who truly love the subject matter and appreciate the way the subject matter sheds light on connections to the world. Honors classes require more than just "keeping up with a faster pace;" they demand active participation with the subject matter and content. For a particular academic discipline, if a student wrestles with and wonders about the relationship between the content and the world around her, if she wants to dive deep and submerge herself in complexity, and if she appreciates the spotlight that the particular subject matter sheds on humans and humanity, then the honors/AP class is for her. An honors student is expected to focus mostly on new material, receive and apply instruction more quickly to novel situations, be self-driven, timely with assignments, and relish and seek out challenges.

Ursuline Academy of Dallas does not give credit for any middle school course or high school course taken during the middle school years for incoming Freshman students. When applicable, students may place into an advanced class (i.e. World Language) but will not receive credit for the class taken during middle school. They are still subject to the graduation requirements set forth by Ursuline Academy of Dallas.

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## **Computer Science**

The Computer Science Department offers a variety of courses in which students learn to organize ideas, develop algorithms, and employ problem-solving techniques. Students will apply these skills, in combination with their creativity, to produce solutions that will affect positive change in a technological world.

**3621 Programming I:** (Sophomore-Senior) This core semester course provides students with an introduction to critical thinking and problem solving through programming. Python is quickly becoming the go-to language for universities as well as the most widely used programming language in industry. This course introduces fundamental programming concepts such as data types, variables, function design and control flow with an emphasis on graphics. Best programming practices are emphasized as students design, code, debug, and test algorithms to solve real-world applications.

1 semester

1/2 credit

1/2 credit

**3622 Programming II:** (Sophomore-Senior) This course builds on the Computer Programming I course and introduces more advanced Python programming concepts such as math functions, random numbers, looping constructs and lists. Students learn how to read, modify, design, debug, and test algorithms that solve problems.

**Prerequisite:** Programming I 1 semester

**3665 Introduction to Robotics:** (Sophomore-Senior) This semester long course integrates the fundamentals of robot design, engineering, electronics, and programming. The class will cover construction techniques, various locomotion systems, basic electronics, programming, and sensor-based control systems. Students will gain hands-on experience as they design their robots and participate in engineering challenges. *1 semester* //*2 credit* 

**3666 Applied Robotics:** (Sophomore-Senior) This project-based course will apply the concepts learned in Introduction to Robotics. Students will select a project to accomplish specific goals outlined at the beginning of the semester. This course may be repeated for credit

Prerequisite: Introduction to Robotics

1 semester <sup>1</sup>/<sub>2</sub> credit

**3637 Engineering Design Innovation:** (Junior-Senior) Students learn how engineers create, design, and test technologies and devices of the 21st Century using math, science, computer science, and creative skills. Students learn multiple problem-solving strategies including Design Thinking, the 6 Ds, and the Engineering Design Process to solve real-world problems, build prototypes, and test their solutions. Students learn through classroom discussions and hands-on design projects. Students spend 80% of instructional time conducting engineering field and fabrication activities. The activities include mechanical engineering (robotics and rockets), civil engineering (drafting, architecture, and construction), systems and logistics, computer engineering (digital logic design, programming, and 3D printed structures), and biomedical engineering.

#### Prerequisite: Physics I

Corequisite: Algebra II

Note: Juniors receive one Computer Science credit. Seniors receive one Science elective credit or Computer Science credit.

2 semesters

**3628 AP Computer Science A:** (Sophomore-Senior) This year-long course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Prerequisite: Departmental Approval and completion of Algebra II

Corequisite: Algebra II/Precalculus Honors

2 semesters

1 credit

**3641 AP Computer Science Principles:** (Sophomore-Senior) This year-long course is compatible with the curriculum specified by College Board and offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

Prerequisite: Departmental Approval

2 semesters

1 credit

**3660 Computer Science Advanced Topics Honors:** (Junior-Senior) Building on the foundations of AP Computer Science A, this advanced course will provide students the opportunity to study the analysis and design of fundamental data structures. Students will program using the Python language and its data structure libraries to explore lists, tuples, dictionaries, strings, sets and frozen sets. In addition, students will implement solutions related to artificial intelligence, data analysis, sorting algorithms, and database applications.

Prerequisites: AP Computer Science A and Department Approval

2 semesters

## English

The English Department cultivates lifelong readers and creative, independent thinkers, preparing students to engage empathetically and meaningfully in their communities, prompting them to seek and analyze information, develop their own opinions, and skillfully convey their perspectives to others—both verbally and in writing. An Ursuline English graduate reflects on media, her own learning, and her relationship to culture and the human experience.

**5131 English I:** (Freshman) This course is designed to help students learn the fundamentals of effective writing, emphasizing reading and discussion to develop not only content for writing but also personal voice. Thematically the course will consider the hero's journey as a metaphor for self-discovery and coming of age. Students will practice paragraph writing by developing a main idea, using supporting examples accompanied by critical commentary. This process will lead to the development of full-length essays through process and timed writing. In addition, this course is designed to introduce the students to the UA library resources, both print and online, by having students produce an annotated bibliography that follows MLA formatting. Ongoing study of grammar and vocabulary accompanies each reading and writing assignment *2 semesters 1 credit* 

**5111 English I Honors:** (Freshman) This course is designed to help students master the principles of sophisticated writing and in-depth literary analysis. Students will read, discuss, and analyze texts in a variety of genres. Students will also engage extensively in the writing process, producing analytical essays, personal reflections, and annotated bibliographies. Thematically the course will consider the hero's journey as a metaphor for self-discovery and coming of age. In addition, this course is designed to introduce students to the UA library resources, both print and online. Ongoing instruction will be provided in both grammar and vocabulary.

Prerequisite: Departmental Approval

2 semesters

1 credit

**5232 English II:** (Sophomore) This course, The Female Voice, will explore common themes concerning female authors and protagonists representing a wide range of diverse cultural backgrounds in order to offer students many perspectives on the female voice. The course narrows the freshman year's journey theme into that of women's journey towards identity. To develop analytical skills, sophomores incorporate literary analysis and literary terminology into multi-paragraph essays examining themes related to women. By applying the skills learned through analysis and the study of grammar usage, the students scrutinize their essays for content and style through the writing and revisions process. Furthermore, the students write a documented essay dealing with women's experiences to incorporate their developing research skills into an essay. **Prerequisite:** English I

2 semesters

1 credit

**5212 English II Honors:** (Sophomore) This course, The Female Voice, will explore common themes concerning female authors and protagonists representing a wide range of diverse cultural backgrounds in order to offer students many perspectives on the female voice. The course narrows the freshman year's journey theme into that of women's journey towards identity, exploring more difficult works than English II. Students for this course have demonstrated confidence in analysis, writing, and reading skills. Working at an accelerated pace, honors students will be expected to craft multi-paragraph literary analyses each semester. Using writing as a process through which students can articulate their ideas more clearly, they will also gain experience in revising and editing their own work as well as the work of others. These students will be encouraged to read beyond the curriculum through independent reading and research.

**Prerequisites:** English I Honors or English I and Departmental Approval 2 semesters 1 credit

5338 English III: American Voices: (Junior) In the 1760s, Hector St. John de Crèvecouer, a French immigrant and naturalized New York citizen, famously posed the question: "What then is the American, this new (wo)man?" This course will explore answers to this question, considering how the complex category "American" has been both imagined and challenged in a diverse range of American voices and genres. We will actively explore such themes as identity, individualism, the American dream, and tensions between inclusion and exclusion to determine what defines Americans, American literature, and the American experience. Students will be expected to write a documented essay and will also hone their writing skills in a variety of areas: literary analysis, the argumentative essay, and the personal essay. Greater emphasis on complex, thesis-driven essays, as well as on long-term reading assignments, will further prepare them for college-level work. Class discussions, various forms of writing, and creative projects will provide students an opportunity to think and respond critically and analytically. Potential thematic threads for this course could include: Constructed Communities, American Style and Rhetoric, the American Dream, and Public Conversation.

Prerequisite: English II

2 semesters

1 credit

5302 AP English Language and Composition: (Junior-Senior) This is a college-level course which combines extensive instruction and practice of writing with the study of American fiction and non-fiction. The readings serve as a springboard to discussion and analysis of American thought and voice, as well as provide illustrative models for the student's ongoing understanding of language and its use. Students will write in different modes (including expository, analytical, argumentative, and personal) for a variety of purposes and audiences. Students will develop an understanding of writing and language while striving to develop a lucid, individualized writing style. The course prepares students for the AP Language and Composition College Board exam.

Prerequisites: English II Honors or English II and Departmental Approval 1 credit

2 semesters

5440 English IV: Foodie Lit: The Natural World and the Community of Food: (Senior) This portfoliobased course will explore how literature addresses humans' relationship with the natural world, and how our stewardship and investment in our environment is related to our cultivation of food and community. The class will begin with a study of eco-literature and discuss themes related to humanity and empathy, perspective, voice, and using language to both describe and advocate for nature. During the second semester, the class will explore international and local issues regarding food cultivation and preparation, including themes such as the ethics of food cultivation, community, culture, creativity, and storytelling. Students will be makers of writing, gardens, and recipes in this course, with special focus on a research essay of choice on contemporary topics in the environment and food, literary analysis of contemporary environmental literature, as well as texts such as food blogs, podcasts, news and features, and travel writing.

2 semesters

1 credit

5445 English IV: Gods Behaving Badly: Greek Myths and Their Modern Retellings: (Senior) "Gods Behaving Badly" will explore the influence of Greek mythology on modern literature. Students will begin the year by clarifying the definition and purpose of myth. Then, they will study myths in which Greek gods wreaked havoc on the lives of mortals and will examine modern retellings of such tales. These modern interpretations will cover a range of genres: poetry, drama, fiction, music, art, and film. Throughout the course, students will get the chance to: 1) create their own versions of Greek myths; 2) research the connection between myths and societal values; 3) utilize literary criticisms to analyze media; and 4) compile a writing portfolio. 1 credit 2 semesters

5450 English IV: Reading in the Dark: An Exploration of the Gothic, Horror, Mystery and Suspense: (Senior) From vampires and ghosts to jewel thieves and murderers, readers have been entranced with mystery and the morbid since the 18th century. In this course, students will explore core themes found in Gothic literature and many of the genres that evolved from its foundation in order to better understand the human fascination with fear and the grotesque. Additional genres will include mystery, horror, thriller and suspense. The class will also investigate the impact these works have had on modern culture and artistic expression in other mediums. By the end of the course, the students will gain an appreciation for the complex nature of dark fiction and what it reveals about the existential questions that plague humanity.

2 semesters 1 credit **5405 AP English Literature and Composition: Literature Explores Human Experience:** (Senior) Telling stories is pretty much the oldest human activity. We have always needed stories of all sorts to process our experiences and understand what it means to be human. Directly or indirectly, realistically or fantastically, humans use stories to consider all the huge experiences, wonderful, traumatic, or damaging, that they encounter. From war to love, this course will explore the big experiences and questions that any individual person can undergo. **Prerequisite:** English III Honors or AP English Language and Composition or English III and Departmental

Approval 2 semesters

1 credit

**5410 AP English Literature and Composition: Schrodinger's Cat and Other Concerns in Writing:** (Senior) There is a tired cliché that describes reading as an act of transportation. We escape through reading, are transported to other worlds, other places, other planes. We see new perspectives, hear new stories of ourselves, of being human. Stories about going down life's rabbit holes and the strange topsy-turvy mirrored realities that can only exist in fiction. But these transportations are also invitations for the reader to get carried away and lost in a thought; invitations to explore the way(s) the world means and the way we mean within it. This course will take up this invitation and explore stories about getting lost (and getting found), stories about language, time, dimension, ghosts and monsters, and all the in-betweens. Students will be required to read complex works of literature including some philosophy and mixed-medium works and will complete a variety of assignments that include written essays, creative essays, fiction and non-fiction, self-selected reading lists (to name a few). Accordingly, students will need strong reading, writing, and critical thinking practices and the self-discipline fitting of an AP student.

**Prerequisites:** English III Honors or AP English Language and Composition or English III and Departmental Approval

2 semesters 1 credit

**5654 Creative Writing I:** (Sophomore-Senior) This elective course provides a forum for students seeking an opportunity for written self-expression and an opportunity to develop skills to enhance the power and clarity of that expression. The course will focus on two specific areas of creative writing: poetry and short fiction. Much of the class will employ a workshop format in which activities include modeling, class discussion, and peer review. Essential to the success of the class is the willingness of students to submit their work to the critical response of their peers, as well as their ability to evaluate candidly the work of those same peers. *1 semester*  $\frac{1}{2}$  credit

**5655 Creative Writing II:** (Sophomore-Senior) This elective course will act as the next step forward in the development of students' creative writing skills. This will be a writing intensive class with extensive use of workshop and peer review. Throughout the semester, each student will create multiple poems and short stories generated by prompts based on form, style, subject and in class exercises. Revision will also be covered and utilized as a part of the student's final writing portfolio.

Prerequisite: Creative Writing I

1 semester

1/2 credit

**5667 Act, Advocate, Question, Challenge: U.S. Protest Culture:** (Sophomore-Senior) In Civil Disobedience, Henry David Thoreau asserts that "unjust laws exist," encouraging us to "let [our lives] be a counter-friction to stop the machine." His text asks us: how do we confront injustice? Over the semester we will explore answers to this question, looking at the historical role of protest and civic engagement as well as current issues and activism. If you have ever felt frustrated by what is going on in the world, felt like you do not have a voice, and want to have an impact, then this course will provide space for you to intellectually engage with these concerns. Guided by those who have stood up and paved the way before us, we will culminate the semester with a project on an issue of a student's choosing on how to move forward today.

1 semester <sup>1</sup>/<sub>2</sub> credit Social Studies or <sup>1</sup>/<sub>2</sub> English credit

**5711 Journalism:** (Freshman-Junior) This elective course is designed to increase students' understanding of the communication process within the context of journalistic writing and page design. Students will develop research and documentation skills while applying their ability to conduct interviews to obtain information and to verify facts. They will also learn to discern credible sources and to recognize the positive and negative effects of digital media and interactive journalism. In addition to writing skills, students will develop page layouts incorporating design elements in page production using computer software packages including InDesign, Photoshop 7.0, Illustrator 7.0, and Adobe CS, version 6. This journalism course also focuses on the impact of the Internet on the news, studying and contributing to newspapers online, and investigating other forms of modern media from podcasts to blogs.

2 semesters

1 credit

**5721 Newspaper Journalism:** (Sophomore-Senior) This elective course is a laboratory class for journalism students to design and produce a publication that serves the school community. Students will build interview skills to gather information and use direct quotes from participants to report the news. Using Adobe InDesign publishing software, students will apply their design skills to the page production process. In addition to the computer and writing skills used, students will study and practice components of photojournalism, business management, and advertising to complete the project. The class is also responsible for the school's online newspaper and its constant updating with stories, pictures, and videos. This course may be repeated for credit. **Prerequisite:** Journalism I or Instructor Approval

2 semesters 1 credit

**5731 Yearbook Journalism:** (Sophomore-Senior) Throughout this elective laboratory course, students will apply the basic skills of design and copy writing learned in Journalism I as they pertain to this type of publication. The magazine format and graphic design require good photograph editing and cropping skills to create designs that are visually appealing and effective. This class may be repeated for credit.

Prerequisites: Journalism I and Instructor Approval

2 semesters

## **Integrated Studies**

#### Life Skills

The Life Skills courses cultivate students who focus not only on academics but also on resiliency, grit, and communication skills. We want our students to embody Serviam, exemplify integrity, and engage with others ethically, critically, and empathetically.

**9005 Freshman Seminar: Life Skills:** (Freshman) This class equips students with a strong foundation of lifelong social, mental, and practical competencies. Students gain knowledge and skills to prepare them for any of their future life paths once they leave Ursuline. The class includes guest speakers and the wisdom and expertise from a variety of Ursuline teachers. Students demonstrate mastery of topics with a hands-on activity and class projects. At the freshman level, topics may include media use, organization and study skills, interpersonal communication, and life balance

**Note:** Life Skills is required for the Class of 2026. *1 semester* <sup>1/2</sup> credit

**9010** Upperclassman Seminar: Life Skills: (Junior-Senior) This class equips students with a strong foundation of lifelong social, mental, and practical competencies. Students gain knowledge and skills to prepare them for any of their future life paths once they leave Ursuline. The class includes guest speakers and the wisdom and expertise from a variety of Ursuline teachers. Students demonstrate mastery of topics with a hands-on activity and class projects. At the upperclassman level, topics may include personal finance, digital leadership, self-defense, defining personal values, life hacks, and resolving conflict.

**Note:** The Upperclassmen Life Skills class is required for the Classes of 2023-2026. Beginning with the Class of 2024, this course may be taken in either junior or senior year.

1 semester <sup>1</sup>/<sub>2</sub> credit

#### Service Learning

The mission of St. Angela Merici emphasizes the importance of service to others as a lived reality. This department fosters this lived reality by giving students the opportunity to serve their community through service learning experiences.

**9000 Service Learning Experience**: (Junior-Senior) Students will explore purpose, passion, and action in the community through a service-learning partnership with a non-profit organization. Through the development of students' unique personal skills, creative interests, and academic endeavors, students will drive a service experience of their passion, building a solid partnership with a non-profit agency the student has sought out to serve. Students will be active service leaders, investigating a service experience and community partner, preparing and implementing this service experience, and eventually demonstrating their work to community supporters. Using technology programs that allow for flexibility outside the classroom, the blended-learning format of this class will provide a foundation for communication with professionals across the Dallas metroplex and Teacher Service Mentors from Ursuline Academy of Dallas. Furthermore, students will fulfill all their Serviam requirements for the year throughout this course. This course may be repeated once for credit. This class may be taken for a Pass/Fail option.

2 semesters 1 credit

9001 Understanding Poverty in Dallas: (Sophomore-Senior) Students will confront the realities of poverty and change in the Dallas community and our responses to it. This course will provide information about how poverty arose in Dallas, and students will explore the uneven playing field that exists in our city, cultural and contextual prejudices, economic and educational inequalities. Students will be working with the current librarians for research-based resources; partnering with knowledgeable tour-guides; develop a relationship with speakers who can attest to the history of the area; site visits to partnering with non-profits to understand their mission and how they are bettering Dallas through their work; understanding the importance of a deep connection to our city and local cultures; and participating in active, service-project elements during and after the visit to further the mission of the non-profit. Through a combination of reading, journaling, volunteerism, simulation, speakers, and discussion, the practical dilemmas surrounding poverty in Dallas will be explored. Furthermore, semester service hour requirements will be fulfilled. 1 semester

1/2 credit

#### **STEM Research**

9015 STEM Independent Research: (Junior-Senior) Young women learn best through experiential learning, collaboration and authenticate tasks that engage the uniqueness of the individual. This class is designed for students who are passionate about STEM and want to explore a particular topic of STEM or solve a STEMrelated problem that is beyond the standard classroom. Students, as an individual or a small group (maximum 4), propose a topic/problem with a timeline of milestones to be met and then develop a project, research paper, product, etc. over the course of the school year. Students also work with a mentor/expert in the field to help guide them and their research. Students make a presentation to the class and the community about their research and findings at the end of the year. This course may be repeated once for credit.

Prerequisites: Algebra II, Chemistry, one credit of Computer Science and Application Approval

Corequisite: Biology for Juniors

2 semesters

#### **Mathematics**

The Mathematics Department strives to develop students' mathematical analysis and critical thinking skills so that they can confidently pursue their goals and explore diverse fields of interests. In tandem with developing a strong mathematical foundation is the hope that students will come to value the beauty of mathematics in nature along with the purity of mathematical analysis, so they can provide unbiased context and validation to the challenges they will face in the world.

Note: Any student interested in double tracking needs to contact the Math Department Chair for the approval process.

**3130** Algebra I: (Freshmen) Linear and non-linear functions are studied through the lens of multiple representations: mathematical symbols, geometric drawings/graphs, and verbal and written words. Students will solve problems by applying mathematical principles to algebraic equations including rational numbers and will build upon this algebraic foundation to solve increasingly complex problems. Technology is introduced as a tool to analyze problems and study the art of transformations. *2 semesters 1 credit* 

**3211 Geometry:** (Freshman-Sophomore) Students will investigate geometric structure, congruency, similarity, and measurement utilizing coordinate geometry to reinforce algebraic connections and understanding. Solutions will include both geometric and algebraic representations. Proper use of mathematical language and technology is emphasized.

Prerequisite: Algebra I2 semesters1 credit

**3212 Geometry Honors:** (Freshman-Sophomore) This course includes a more in-depth examination of the Geometry course content. Students will provide an extension to each unit culminating in a portfolio of individual work that extends concepts with additional analysis, more complex applications, and/or creation of real-life problem solutions. For example, students may develop proofs to more complex relationships, extend geometric patterns to the Fibonacci Sequence or Pascal's Triangle, use circle properties to delve into the creation of an orthocenter, and much more. Critical thinking and analysis are emphasized through this independent work.

Prerequisite: Departmental Approval2 semesters1 credit

**3333** Algebra II: (Sophomore-Junior) This course continues development of the student's ability to recognize, represent and solve problems involving functions and equations, emphasizing relationships between algebra and geometry. With modeling and use of technology playing key roles, students explore functions (including linear, quadratic, exponential, rational, and logarithmic), data analysis, systems of equations and inequalities, introduction to probability and statistics, and sequences and series.

**Prerequisite**: Geometry 2 semesters

1 credit

**3334 Algebra II Honors:** (Sophomore-Junior) This course encompasses all aspects of the Algebra II course and provides an opportunity for students to delve deeply into the concepts with an application perspective. Integral to the program is an emphasis on mathematical processes that underlie the content: computation in problem-solving contexts, language and communications, connections within and outside mathematics, reasoning, justification and proof, and applications and modeling.

Prerequisites: Geometry Honors or Geometry and Departmental Approval

2 semesters

**3335** Algebra II/Precalculus Honors: (Sophomore-Junior) This fast-paced, advanced honors course is designed for the student who embraces mathematical challenges and enjoys working hard problems. It combines concepts from two courses, Algebra II and Pre-Calculus, and it prepares students to take advantage of the Academy's AP Calculus and Multi-Variable course offerings. The course focuses on providing a complete analysis of piecewise, polynomial, rational, exponential, logarithmic, and trigonometric functions. Matrices, sequences and series, probability, trigonometric identities, and analytical trig are major units of study. Students are expected to interpret mathematical solutions using symbolic and verbal representations. Independent and collaborative work techniques are utilized.

**Prerequisites:** Geometry Honors and Departmental Approval 2 semesters 1 credit

**3614 Precalculus:** (Junior-Senior) This course examines the concepts of composite, exponential, logarithmic, and trigonometric functions. Laws associated with each class of function are explored, as well as applications of these laws. Topics also include the Law of Sines and Cosines and conic sections. The concepts necessary for preparing for calculus are examined including limits. Importance is placed on graphing techniques as a precursor to Calculus.

Prerequisite: Algebra II2 semesters1 credit

**3615 Precalculus Honors:** (Sophomore-Senior) This course examines the concepts of composite, exponential, logarithmic, trigonometric, parametric, and polar functions. Laws associated with each class of function are explored, as well as applications of these laws. Topics also include the Law of Sines and Cosines, conic sections, vectors, and complex numbers. Limits as a foundation for calculus are explored and developed. Emphasis is placed on providing both algebraic and graphical representations to fully demonstrate and solve problems with appropriate use of technology.

Prerequisites: Algebra II Honors or Algebra II and Departmental Approval 2 semesters 1 credit

**3616 Personal Finance:** (Junior-Senior) This course explores practical applications of mathematical modeling: investing, attaining credit, planning for retirement, budgeting, and savings. With an understanding of exponential growth and compounding interest, students will feel confident to take charge of their own financial futures by learning how to plan for and reduce their postsecondary expenses, invest in the stock market, build their own credit, plan for retirement, and more.

Prerequisite: Algebra II 1 semester 1/2 credit

**3432 Statistics:** (Senior) This introductory course emphasizes work with data and statistical ideas. The areas covered include data analysis with graphical and numerical examination of distributions and relationships, producing data using random sampling and randomized comparative experiments, and sampling distributions and probability. There is also a study of statistical inference starting with an introduction to confidence levels, significance tests, and errors, extending into inference for distribution and proportions. Importance is placed on active learning in the development of statistical thinking and understanding of data concepts. Technology is integrated throughout the course, with instruction using the statistics feature of the graphing calculator. **Prerequisite:** Algebra II

2 semesters

**3404 AP Statistics:** (Junior-Senior) This elective course is an in-depth study of the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students examine broad conceptual themes: exploratory analysis of data, with use of graphical and numerical techniques to study patterns and departures from patterns; planning a study with emphasis on data collection, modeling, and validity of conjectures obtained; probability, the tool used for describing distributions of data in modeling; statistical inferences starting with confidence levels, significance tests and errors, and then investigating inference for distributions and proportions, followed by more advanced topics in inference. Technology is integrated throughout the course with instructions utilizing the statistics features of the graphing calculator as well as statistical software. Independent projects will be required. Strong verbal ability is recommended. The course prepares students for the AP Statistics College Board exam.

 Prerequisite: Concurrently with Algebra II/Precalculus Honors or higher-level course

 2 semesters
 1 credit

**3401 Calculus**: (Junior-Senior) Students will investigate elementary calculus including differentiation and integration with algebraic, graphical, and verbal representations. Students will be able to identify maxima and minima of functions by analyzing the first and second derivatives. Business and economic models are utilized to demonstrate profit, loss, and consumer/producer surplus. Use of graphing calculators and application software are emphasized.

**Prerequisite:** Precalculus, Precalculus Honors, or Algebra II/Precalculus Honors 2 semesters 1 credit

**3403 AP Calculus AB:** (Junior-Senior) This course presents a multi-representational approach to the concepts of elementary calculus. Functional behavior is examined from a local and global perspective. The derivative is explored in terms of rate of change and local linear approximations. In the area of integral calculus, the topics explored include antiderivatives, techniques of integration, the definite integral and applications. The relationship between the derivative and the definite integral is explored through the fundamental Theorem of Calculus. The definite integral is explored both as a Riemann sum and as a net accumulation of a rate of change. Each of these topics is examined from a numeric, algebraic, graphic, and verbal perspective. The connections among these representations are also emphasized. The course prepares students for the AP Calculus AB College Board exam.

Prerequisites: Algebra II/Precalculus Honors, or Precalculus Honors, or Precalculus and DepartmentalApproval 2 semesters1 credit

**3402 AP Calculus BC:** (Junior-Senior) This course presents a multi-representational approach to the concepts of elementary calculus. Functional behavior is examined from a local and global perspective. The derivative is explored in terms of rate of change and local linear approximations. In the area of integral calculus, the topics explored include antiderivative, techniques of integration, the definite integral and applications. The relationship between the derivative and the definite integral is explored through the fundamental Theorem of Calculus. The definite integral is explored both as a Riemann sum and as a net accumulation of a rate of change. Sequence and series topic deals with tests for convergence and power series. Additional topics include the study of vectors and parametric and polar functions in context of differentiation and integration. Each of these topics is examined from a numerical, algebraic, graphical, and verbal perspective. The connections among these representations are also emphasized. The course prepares students for the AP Calculus BC College Board exam.

**Prerequisites:** AP Calculus AB, or Algebra II/Precalculus Honors or Calculus and Departmental Approval 2 semesters 1 credit

**3405 Multivariable Calculus Honors:** (Senior) This course is for students who are accomplished in mathematics and have a desire to delve deeply into advanced mathematics. It includes the study of vectors and analytic geometry in 3-space. Functions of several variables; partial and directional derivatives; extrema; double and triple integrals and applications; cylindrical and spherical coordinates.

Prerequisites: AP Calculus BC

\*Depending on enrollment this course might be offered online only. 2 semesters 1 credit

### **Performing Arts**

The mission of the Performing Arts Department is to foster the use of music, dance, and theatre as vehicles for creating, performing, responding, and connecting to the bigger world.

**2701 Freshman Choir:** (Freshman) Prior experience in a choral ensemble or previous musical instruction is desired but is not a prerequisite for enrollment. A student audition is also not required. The musical literature studied ranges from Renaissance to contemporary. Major performances will be presented each semester. Students are instructed in basic music reading and theory, and history and literature. Opportunities also exist for solo, ensemble, honor choir, and liturgical performance. *2 semesters 1 credit* 

**2708 Concert Choir:** (Sophomore-Senior) This is a performance class. Prior experience in a choral ensemble or previous musical instruction is desired but not a prerequisite. A student audition is also not required. The musical literature studied ranges from Renaissance to contemporary, and major performances are presented each semester. Students are instructed in basic music reading, theory, history, and literature. Opportunities also exist for solo, ensemble, honor choir, and liturgical performance. This course may be repeated for credit. *2 semesters 1 credit* 

**2710/2711 Band:** (Freshman-Senior) This is a performance class open to wind and percussion instrumentalists. Prior experience is desired but not required for admission to the class. Beginning students will be recommended for private study outside of the class when necessary. Band functions as a marching organization during part of the fall semester and as a concert ensemble for the remainder of the year. Students enrolled in the class prior to the beginning of the school year will be informed of summer band activities. Opportunities exist for solo, ensemble, honor band/orchestra, and jazz band performance. Class is held at Jesuit College Prep from 7:00-8:30 a.m. daily; students travel to Ursuline for the remainder of the school day. Band students must take both courses 2710 and 2711. In course 2710, the student can receive ½ credit Physical Education or ½ elective credit once PE requirements are met. In course 2711, the student can receive ½ credit Fine Arts or ½ elective credit once Fine Arts requirements are met. This course may be repeated for credit. *2 semesters 1 credit* 

2712 Color Guard: (Freshman-Senior) Please see listing in Physical Education.

**2713 String Ensemble**: (Freshman-Senior) This is a performance class of orchestral string instrumentalists. Prior experience is desired but not required for enrollment. Beginning students will be recommended for private study outside of the class when necessary. The class develops individual playing skills through the study and performance of a range of music literature. Performances are scheduled throughout the year and the string ensembles from Ursuline Academy and Jesuit College Prep periodically combine for rehearsals and performances. Aspects of music theory and history are presented in the study of specific compositions. Piano students are encouraged to enroll for the course as student accompanists. Opportunities exist for solo, ensemble, and honor orchestra performances. This course may be repeated for credit.

**2702 Orchestra:** (Freshman-Senior) This is a performance class of orchestral string instrumentalists from Ursuline Academy, Jesuit College Prep and Cistercian Prep. Prior experience is desired but not required; beginning students will be recommended for private study outside of the class when necessary. The ensemble develops individual playing skills and musical understanding through the study of literature ranging from Early Baroque to contemporary styles. Aspects of music theory and history are presented in the study of specific compositions. Piano students are encouraged to enroll for the course as student accompanists and members of the keyboard/percussion section. Concerts are scheduled throughout the year and opportunities also exist for solo and ensemble performances and honor orchestra auditions. The Orchestra meets on Tuesday and Thursday mornings from 7:00 – 8:00 am at Ursuline Academy with credit awarded in the spring semester. Students will receive  $\frac{1}{2}$  Fine Arts credit or may choose the Pass/Fail option if all Fine Arts requirements and electives have been met. This course may be repeated for credit. 2 *semesters* 

**2714 AP Music Theory:** (Sophomore-Senior) This course provides a sequential study of the elements of music including melody, harmony, texture, structure, and timbre through ear training, sight singing, and score analysis. Students will learn and demonstrate basic music theory concepts, both written and aural, including melodic and rhythmic notation, chord progression and harmonization of melody. This course is designed for only those sophomore-senior students who have previous musical training and experience. It does not provide the opportunity for creative expression.

 Prerequisite: Instructor Approval

 2 semesters
 1 credit

**2709 Jazz Choir I:** (Freshman-Senior) This after school performance class is designed for students desiring specific knowledge and performance experience in jazz and contemporary music styles. Emphasis will be placed upon the history, literature, and vocal performance of twentieth century American jazz and related popular music. Students will develop a working knowledge of jazz style and technique, rehearse and perform literature in two, three, and four parts, both accompanied and unaccompanied, explore jazz improvisation, and study the history and representatives of the genre. The students will present public performances throughout the year. Class meets after school on Tuesday and Thursday during the year with elective credit awarded in the spring. This course cannot be used to meet the Fine Arts requirement. This course may be repeated for credit. **Prerequisite:** Participation by audition only

1 semester

<sup>1</sup>/<sub>2</sub> credit

#### Production

**2743 Light and Sound Design:** (Junior-Senior) "Every child is an artist. The problem is how to remain an artist once they grow up." --Pablo Picasso. This class will cover the basic principles of light and sound design. Students will have hands on experience with stage lighting, recording, and editing techniques. They will have the opportunity to create and communicate their ideas through their own designs. Students are encouraged to participate in a UA production outside of class. Parent approval is required to work with various shop tools under supervision. This course may be repeated one time for credit. *1 semester*  $\frac{1}{2}$  credit

**2745 Set Design:** (Junior-Senior) "The world always seems brighter when you've just made something that wasn't there before." --Neil Gaiman. Set Design is the art of creating a complete environment in which a theatrical work can exist. Students will touch on the artistic elements of design. They will be exposed to how lights, sound, set, math, science, history, and visual arts collaborate to create a theatrical event. They will have hands on experience with set construction and scene painting techniques. Each student will present their own design at the end of the semester. Students are encouraged to participate in a UA production outside of class. Parent approval is required to work with various shop tools under supervision. This course may be repeated one time for credit.

1 semester

1/2 credit

**2761 Stage Makeup and Design:** (Freshman-Senior) This is an introductory course that studies the theory and practice of make-up design and its application for stage. Students will explore basic makeup principles, make-up through the ages, fantasy makeup design, and the creation of some basic special effects. Students will be applying make-up to themselves for majority of the classes. Students are encouraged to be a part of the makeup crew during the Ursuline main stage production. This course may be repeated one time for credit. *1 semester*  $\frac{1}{2}$  credit

**2762 Introduction to Costuming:** (Freshman-Senior) All of us put thought into what we wear and how we wear it. Just like in real life, costume design and construction also require a lot of thought and are vital when it comes to creating successful theatre, film and TV productions. This class gives you a peek at how the process works, allowing you to play around with some design ideas and concepts of your own. The class will also give you some basic sewing skills, which you will use to create your own personal project. Students are highly encouraged to work on the costume crew for the Ursuline productions. This course may be repeated once for credit.

1 semester

¹∕₂ credit

**2790 Stagecraft 101: You Built That?:** (Freshman-Senior) Who doesn't want to learn how to use power tools? Imagine the awe your friends and family will show when you present them with your latest creation. Although stagecraft is exclusive to the theatrical world, the skills needed go well beyond the imaginary fourth wall. This class is designed to give our students the confidence to design and build. Learning how to safely use woodworking tools, the students will craft their own projects throughout the semester. They will also help with the build of our productions, giving them a chance to use their skills on a larger scale in a collaborative project. All students enrolled in this class must have parental permission to use power tools and must agree to use all safety procedures and protocols. Students will be encouraged to work on the UA Productions outside of class. This course may be repeated once for credit.

**2739** Advanced Theatre Production: (Senior) This year-long course is designed for advanced students with previous theatre experience. Students will have opportunities to enrich understanding, and experiment with application of knowledge as they explore all aspects of theatre production, as well as explore some theatre history and literature. The cornerstone or culmination of this course will be a student driven production. Students will take responsibility for all production elements; play choice, directing, design, construction and other areas of participation necessary for a successful artistic collaboration. Students participating in this course must be available for a significant time commitment outside of class for meetings, rehearsals, and production work. Parent approval required to work with various shop tools under supervision. This class may be taken for a Pass/Fail option.

Prerequisite: Department Chair Approval Required 2 semesters 1 credit

#### Performance

**2732 Fundamentals of Acting:** (Freshman-Senior) This is a one-semester class designed to develop basic acting skills. Students will explore the fundamentals of acting through voice and body work, script and character analysis, and appreciation of various theories on the craft of acting.

**Prerequisite:** A semester of a theatre class or Instructor Approval 1 semester 1/2 credit

**2733 Playwriting, Do Not Be Silenced:** (Sophomore–Senior) If you have a love of theater and a love of words, try writing a play! It's one of the best and most powerful ways to find your voice and tell your story. The main focus is on writing our own creative pieces, but we will also be studying plays to learn techniques and structure. Come explore the wonderful world of the playwright! Resist – do not be silenced! *1 semester*  2740 Musical Theatre: (Freshman-Senior) This semester-long performance course gives the student a crash course in musical theatre. The student will be exposed simultaneously to dance, acting, and vocal training. They will learn how the three elements come together to create a production. At the end of the semester, there will be a showcase for family and friends. This course may be repeated once for credit. 1 semester 1/2 credit

2765 Improvisation: (Freshman-Senior) Fun and games? Creative and critical thinking? Improvisation is an accepted teaching and learning strategy applied to academic, scientific, and professional settings to improve communication skills, foster creative and critical thinking, and increase confident responses to unexpected challenges. Students will explore a variety of exercises and activities to develop creativity, confidence, and cooperation. Online, printed and multimedia resources will be incorporated in the exploration of the history, theory, and application of improvisation. This course may be repeated once for credit. 1 semester 1/2 credit

2770 Decoding Shakespeare: (Sophomore-Senior) With universal themes, beautiful language, and iconic characters, Shakespeare has remained popular for hundreds of years. In this course we will work on interpreting and performing Shakespeare. We will look at his work from the lens of a performer, a designer, a critical thinker, and a cultural historian. Let's get on our feet and learn how to work with "The Bard". 1 semester 1/2 credit

2775 "All The World's A Stage": (Sophomore-Senior) This class will explore key styles and genres of dramatic literature and important texts in the development of theatre. We will look at key moments in the history of Western theater and drama, focused on dramatic texts and their social and cultural contexts. This theatre class is designed for those with an interest in theater and is not performance based. This class is indispensable for the student wanting to pursue theatre in college.

1 semester

1/2 credit

2785 Interpersonal Communication: (Freshman-Sophomore) Interpersonal Communication is the process by which people exchange information, feelings, and meaning through verbal and non-verbal messages: it is face-to-face communication. This skill is one that many companies and corporations feel is missing in our current work force. This one-semester course is designed to enhance the student's ability to express their thoughts and feelings with greater ease, clarity, efficacy, and confidence. Class content includes the essential elements of communication, verbal and non-verbal, as well as the application of these elements for use in presentations. 1/2 credit

1 semester

2795 The Creative Process: (Freshman-Sophomore) Did you know it took Lin-Manuel Miranda 7 years to write "Hamilton". That's right! It takes time for inspiration to evolve into something concrete. This class will explore the creative process, using a variety of exercises designed to get your imagination going. While those interested in theatre will benefit from this thought-provoking class, others will excel as well. From self-exploration to critical thinking and problem solving, the creative process can guide you in how to be an innovative thinker. A revolutionary in whatever field you choose.

1 semester

<sup>1</sup>/<sub>2</sub> credit

**2780 Beginning to Intermediate Tap:** (Freshman–Senior) Tap is one of the oldest dance forms in this country. Students are taught rhythms, timing, and leg/foot coordination done to various types of music. We explore all types of tap from standard basics like "Singing in the Rain" to funky rhythm tap as seen in "Bring In Da Noise." This class is open to all grade levels and can be taken as either Fine Arts or Physical Education graduation requirement.

1 semester

1/2 Fine Arts credit or 1/2 PE credit

2719/2720 Dance: (Freshman-Senior) During this year-long course, students will be taught proper conditioning as well as correct dance movements and performance poise. Theory and practice will be combined to introduce the students to the principles and techniques of performing ballet, lyrical, musical theater, hip hop, jazz styles, and basic stage movement. In addition, the students will develop a working knowledge of dance vocabulary necessary for performance both as an individual and as a member of a dance company. Part of the discipline of dance includes appropriate rehearsal and performance wear which makes an enforced dress code essential for dance class. Appearance is important; students are expected to wear clean clothes to class to contribute to the pre-professional atmosphere. Dancers must provide their own shoes. Dancers will perform in 1-2 dance recitals each school year. The student must commit to these performances at the beginning of the year. Class attendance and promptitude are crucial for the class and part of the student's grade. This is a zero-hour class that meets at 7:00 - 8:15a.m. on A Days. Some outside rehearsal time may be necessary. Dance students must take both courses 2719 and 2720. In course 2719, the student can receive <sup>1</sup>/<sub>2</sub> credit Physical Education or <sup>1</sup>/<sub>2</sub> elective credit once PE requirements are met. In course 2720, the student can receive 1/2 credit Fine Arts or 1/2 elective credit once Fine Arts requirements are met. This course may be repeated for credit. 2 semesters 1 credit

**2725/2726 Advance Dance:** (Freshman-Senior) This class is designed for those students with previous dance training. During this year-long course, students will be taught proper conditioning as well as correct dance movements and performance poise. Theory and practice will be combined to introduce the students to the principles and techniques of performing ballet, lyrical, musical theater, hip hop, jazz styles, and basic stage movement. In addition, the students will develop a working knowledge of dance vocabulary necessary for performance both as an individual and as a member of a dance company. Part of the discipline of dance includes appropriate rehearsal and performance wear which makes an enforced dress code essential for dance class. Appearance is important; students are expected to wear clean clothes to class to contribute to the preprofessional atmosphere. Dancers must provide their own shoes. Dancers will perform in 1-2 dance recitals each school year. The student must commit to these performances at the beginning of the year. Class attendance and promptitude are crucial for the class and part of the student's grade. This is a zero-hour class that meets at 7:00 - 8:15 a.m. on B Days. Some outside rehearsal time may be necessary. Dance students must take both courses 2725 and 2726. In course 2726, the student can receive ½ credit Physical Education or ½ elective credit once PE requirements are met. This course may be repeated for credit.

 Prerequisite: Students must audition for placement in this class.

 2 semesters
 1 credit

**2750 Theatre Production:** (Freshman-Senior) This after school class provides students an elective credit for participating in the Ursuline main stage productions. Participation is by audition or application only. The class gives practical hands-on experiences in acting, singing, dancing, and technical theatre through the rehearsal and public performance of plays and/or musicals. This opportunity for exploration, development, and synthesis of the elements of theatre is open to all grade levels. All attendance rules of the Academy apply even though the class meets after regular school hours. Each student is expected to participate fully. A one-half graded elective credit per semester may be earned after a student completes 80 cumulative hours of satisfactory work in rehearsals and performance. This course cannot be used to meet the Fine Arts requirement but may be repeated for elective credit. This class may be taken with a Pass/Fail option.

**Prerequisite:** Participation by audition only 1 semester <sup>1/2</sup> credit

8705 Rangerettes Drill Team: (Freshman-Senior) Please see listing in Athletics

## **Physical Education**

The Physical Education department at Ursuline Academy cultivates students who value the power of self-care and the recognition of the connection between the body and mind. The mental benefits and stress-relieving qualities of exercise prompt students to make physical activity a part of their daily routine, resulting in the conditions and opportunities to increase learning. An Ursuline Physical Education graduate understands the importance of gaining the awareness, knowledge, and skills essential for a healthy life.

**Note:** All students must complete <sup>1</sup>/<sub>2</sub> credit of Wellness and <sup>1</sup>/<sub>2</sub> credit in one of the following: a PE course listed for credit below, Band, Color Guard, Dance, Rangerettes, Cheer, or participate on one of the Athletic Sport teams offered by Ursuline Academy.

**8132 Wellness:** (Freshman-Sophomore) This course is designed to guide students throughout the many dimensions of Wellness (spiritual, physical, mental, emotional, occupational, and social) and provide an atmosphere to discuss and learn about how to live a healthy and stress-free life. Students will develop skills needed to maintain an active lifestyle, learn the importance of nutrition, and discover how to find a healthy balance of all facets of Wellness. Students will also engage in building essential skills needed to maintain optimal health while developing ways to promote healthy lifestyles in our diverse society.

**8230 HIIT:30:** (Freshman-Senior) This high intensity workout really gets the feel-good endorphins flowing! This course is a HIIT (High Intensity Interval Training) style workout course. For a duration of 30 minutes, students will work up a sweat while actively learning technique and proper etiquette in a group exercise class. Students will work on improving muscular strength, flexibility, and endurance through a combination of weights, bands, and body-weight circuit-style exercises. This course does fulfill the physical education credit requirement. *1 semester* 1/2 credit

**8235 Sports Medicine:** (Sophomore-Senior) This course provides an overview of the various fields of sports medicine and basic musculoskeletal anatomy. Students will learn about the evaluation, prevention and rehabilitation of sports injuries. Students will learn how to use training equipment and materials and learn up to date procedures for athletic training. Students will gain an understanding of current issues and events within the sport, athletic training, and medical community. This course will also provide students with the opportunity to shadow a medical professional. This course does not fulfill the physical education credit requirement. **Prerequisite:** Wellness

1 semester <sup>1</sup>/<sub>2</sub> credit

**8245 Spinning 101:** (Freshman-Senior) Students will explore working their heart, lungs, muscles, and mind together in this fitness journey that applies real training principles of bicycle racing, in a non-competitive environment. In class, the students will participate in cycling and discover how the intensity of the workout is influenced by cadence, resistance of the bike's wheel and the student's body position on the bike. Typical workouts will include warm-up, steady up-tempo cadences, sprints, climbs, and cool-downs. This is a multi-level class and requires no outside cycling experience. This course does fulfill the physical education credit requirement.

1 semester

¹∕₂ credit

**8246 FLEX: Fun, Lifetime Exercise:** (Freshman-Senior) You'll have so much fun you'll forget you're exercising! This course emphasizes health-related fitness and an appreciation for teamwork and fair play through various team sports, games, and fitness activities. Designed to introduce students to a wide variety of exercise routines, students will participate in aerobic fitness, yoga, weight training, core, and games such as Spikeball, Pickleball, Crossnet, and more! Activities are designed with the beginner in mind, so this class is open to students at any fitness/skill level. This course does fulfill the physical education credit requirement. *1 semester* 

**8250 Mindfulness and Stress Management:** (Sophomore-Senior) This course will teach students to evaluate stress triggers and how to handle them appropriately. Students will learn the basics of Mindfulness, Meditation, and Yoga as an active stress relief. The class will also learn and discuss other daily habits that influence stress such as sleep, nutrition, time management, and social media. Students will explore multiple stress management techniques and determine the ones that best fit their needs. Students will practice mindfulness, breathing exercises, or yoga for a portion of each class period as a way for students to de-stress and refocus. This course does not fulfill the physical education credit requirement.

**Prerequisite:** Wellness *1 semester* 

1/2 credit

**8240 Yoga:** (Freshman-Senior) Yoga teaches basic postures and breathing exercises that derive from ancient India. Students are encouraged to develop a greater body-mind alliance. The combination of relaxation, general body toning, flexibility, and meditation gives the student an awareness of their enhanced human potential. Concepts of yoga philosophy are discussed, which provides the basis for the practice of these techniques. There is no prerequisite for this course. This course does fulfill the physical education credit requirement.

1 semester

½ credit

**8255 Beginning to Intermediate Tap:** (Freshman–Senior) Tap is one of the oldest dance forms in this country. Students are taught rhythms, timing, and leg/foot coordination done to various types of music. We teach all types of tap from standard basics like "Singing in the Rain" to funky rhythm tap as seen in "Bring In Da Noise." This class is open to all grade levels and can be taken as either Fine Arts or Physical Education graduation requirement. *1 semester* <sup>1/2</sup> *Fine Arts credit or* <sup>1/2</sup> *PE credit* 

2710/2711 Band: See Performing Arts for description.

**2712 Color Guard:** (Freshman-Senior) This is a one-semester course working in cooperation with the Band class. Students are selected through an audition process held in May of the previous year. Class is held at Jesuit College Prep from 7:00-8:30 a.m. daily in the fall semester. Students travel to Ursuline for the remainder of the school day. After school practices may be scheduled throughout the semester. If the student intends to continue in Concert Band for the spring semester, she needs to sign up for Band. The student will receive <sup>1</sup>/<sub>2</sub> credit Physical Education the first year taken or can receive <sup>1</sup>/<sub>2</sub> elective credit once PE requirements have been met. **Prerequisite:** Participation by audition only

1 semester Fall <sup>1</sup>/<sub>2</sub> credit

2719/2720 Dance: See Performing Arts for description.

2725/2726 Advanced Dance: See Performing Arts for description.

#### Athletics

All athletic credits will be Pass/Fail. For the courses listed below, students can only receive a ½ credit of PE. Participation in additional seasons may be repeated for elective credit. A student cannot receive more than ½ credits per semester for Athletics. Students receiving PE credit for Athletics are required to follow the policies and procedures stated in the UA Student Handbook, as well as the rules and regulations stated in the UA Athletic Paperwork.

**Note:** Fall Sports which include Cross Country, Volleyball and Rangerettes will receive participation credit at the end of the Fall semester. Winter sports which include Basketball, Bowling, Soccer, Swim and Spring sports which include Crew, Golf, Lacrosse, Softball, Tennis, Track and Field, Jesuit Cheer and Cistercian Cheer will receive participation credit at the end of the Spring semester. Participation in additional athletic seasons may be repeated for elective credit. Beginning the 2022-2023 school year, managers will also receive P.E. credit.

**Fall Sports:** (Freshman-Senior) In order to receive PE credit, the student-athletes must actively participate from the starting date of try-outs/practices to the last day of practice/competition. Student-athletes must meet requirements and criteria of the program regarding absences, competition, and uniform/equipment collection in order to receive credit. Fall sports include Cross-Country and Volleyball.

**Prerequisites:** Athletic Director and Coach Approval 1 semester 1/2 credit

**Spring Sports:** (Freshman-Senior) In order to receive PE credit, student-athletes must actively participate from the starting date of try-outs/practices to the last day of practice/competition. Student-athletes must meet requirements and criteria of the program regarding absences, competition, and uniform/equipment collection in order to receive credit. Spring sports include Soccer, Basketball, Bowling, Swimming, Softball, Track and field Tennis, Golf, Crew, and Lacrosse.

**Prerequisites:** Athletic Director and Coach Approval 1 semester 1/2 credit

**8705 Rangerettes Drill Team:** (Freshman-Senior) In order to receive PE credit, the student must actively participate from the starting date of try-outs/practices to the last required practice/event during the fall semester. Rangerette students must meet requirements and criteria of the program including but not limited to absences, performances, uniform/equipment collection and/or financial commitments in order to receive credit. The student will receive Pass/Fail designations at the end of the fall semester.

**Prerequisites:** Athletic Director and Coach Approval 1 semester 1/2 credit

**8710 Cheer:** (Freshman-Senior) In order to receive PE credit, the student must actively participate from the starting date of try-outs/practices to the last day of practice/competition in the spring. Activities meeting this condition are: Cistercian Cheer, and Jesuit Cheer. Students must meet requirements and criteria of the program regarding absences, performances and competitions in order to receive credit. The student will receive Pass/Fail designations at the end of the spring semester.

**Prerequisites:** Athletic Director and Coach Approval 1 semester 1/2 credit

#### Science

The Science Department offers interactive, relevant, and rigorous curricula that both challenge and engage students in the process of science. The curricula are designed to pique the student's natural curiosity about science, train her to use scientific equipment, and encourage her to ask meaningful questions about scientific events occurring throughout the world, as well as in her daily life. Inquiry based science laboratory work encourages conceptual learning and development of problem-solving skills in each discipline. The ultimate goal of this department is to develop the individual student's critical thinking skills, to enable her to become a scientifically literate citizen who embraces the challenges of working in a global society.

**4108 General Physics:** (Freshman) General Physics is designed to introduce students to scientific inquiry through an exploration of the physical laws that govern nature. Students will develop problem-solving skills as they conduct experiments to describe interactions in the world around them. The course will focus on development of graphical skills, application of mathematical concepts to analyze relationships, and understanding scientific processes. This course is only open to students concurrently enrolled in Algebra I. **Corequisite:** Algebra I

2 semesters

1 credit

**4109 Physics I:** (Freshman) This course is designed to introduce students to scientific inquiry through the study of mechanics. Students will develop problem-solving skills as they build graphical and mathematical models from their laboratory results. These models will then be used to explain and describe the world we live in. The emphasis of the course will be on linear motion, forces, energy, mechanical waves, momentum, projectile motion, and circular motion. Students will also develop laboratory skills using the scientific method and oral and written presentation of laboratory investigations. *2 semesters 1 credit* 

**4110 Physics I Honors:** (Freshman) This course is designed to introduce students to scientific inquiry through the study of mechanics. Students will develop problem solving skills as they build graphical and mathematical models from their laboratory results to explain the world they live in. Students are expected to have a solid understanding of basic Algebra I concepts as the models developed will be applied to complex situations. The emphasis of the course will be on linear motion, forces, energy, and mechanical waves, as well as laboratory skills, the scientific method, and oral and written presentation of laboratory investigations.

 Prerequisite: Departmental Approval

 2 semesters
 1 credit

**4221 Chemistry I:** (Sophomore) This course is designed to provide a basic knowledge of chemistry. Topics studied include matter, energy, and the SI system of measurement, the periodic table, molecular structure, chemical bonding, nomenclature, chemical equations, stoichiometry, equilibrium and modeling the atom. Appropriate laboratory investigations accompany course units. Written laboratory reports and quarter reports are assigned throughout the year.

Prerequisite: General Physics or Physics I 2 semesters 1 credit

**4223 Chemistry I Honors:** (Sophomore) This is an introductory laboratory course in chemistry. Emphasis will be placed on the particle nature of matter, with special focus towards the role of energy in chemistry. Students will learn to analyze data and hone critical thinking skills rather than memorize a wide breadth of knowledge. Honors laboratory exercises emphasize great care in observation and measurement, the preparation of data tables and their interpretation. The Honors course requires special projects with written reports. **Prerequisites:** Physics I Honors or Physics I with Departmental Approval *2 semesters 1 credit* 

**4328 Biology I:** (Junior) This is an inquiry-based course that introduces students to the world of living things. The students will explore basic life processes at the molecular, cellular, systemic, organismal, and ecological levels of organization within the biosphere. Concepts from physics and chemistry will be integrated into the curriculum to better understand how organisms work at the cellular level. Interdependence and interactions within the environment will be examined and natural phenomena, such as energy and homeostasis, will be observed. The nature of science and how to correctly implement the scientific method will be emphasized regularly during inquiry-based labs.

Prerequisite: Chemistry I

2 semesters

1 credit

4329 Biology I Honors: (Junior) This is an inquiry-based course that will emphasize how living organisms work at the molecular and cellular levels. This class will build upon the models developed in physics and chemistry to better explain how a cell, energy, genetics, and homeostasis work within organisms. Interdependence of living things will be emphasized, and natural scientific phenomena will be observed and tested. Inquiry-based labs will be used to help students better understand how organisms operate, change, and interact in the complex biosphere over both the short and long term.

Prerequisites: Chemistry I Honors or Chemistry I with Departmental Approval 1 credit 2 semesters

4211 Environmental Science: (Senior) This is a laboratory science course that introduces the student to the fundamental concepts and terminology of environmental science. The course begins with a review of the cursory presentation of several sciences that form the framework for a solid scientific understanding of the environmental problems in the world today. These include biology, ecology, chemistry, demography, and philosophy. Students are encouraged to discover and understand the interconnectedness of all the earth's systems and the impact that each system has on the others. Students will perform controlled experiments, field studies and modeling in order to better understand the dynamics affecting the environment. Each student is expected to develop her own environmental perspective based on what she has learned in the course.

Prerequisites: Physics I, Chemistry I, and Biology I 1 credit

2 semesters

4411 Anatomy and Physiology: (Senior) This course is designed to be a fast-paced class for seniors who are interested in health-related carriers, such as medicine, nursing, physical therapy, or athletic training. The goal of the course is to prepare students with necessary skills and knowledge to be successful in their future anatomy and biology classes in college. The environment in the class provides opportunities for analyzation of data through experiments, observation of tissues, construction of models, identification of interrelationships among body systems, and exploration of relationships between structure and function in the human body.

Prerequisites: Physics I, Chemistry I, and Biology I 2 semesters 1 credit

**4415 Engineering Design Innovation:** (Senior) Students learn how engineers create, design, and test the technologies and devices of the 21st Century using math, science, computer science and creative skills. Students learn multiple problem-solving strategies including Design Thinking, the 6 D's, and the Engineering Design Process. They use these ways of thinking to solve real-world problems, build prototypes, and test their solutions. Students learn from both regular classroom instruction and from hands-on design projects. Students spend 80% of instructional time conducting engineering field and laboratory activities. The activities include mechanical engineering (robotics, ballistic devices and drones), civil engineering (drafting, architecture and construction), systems and logistics, computer engineering (digital logic design, coding, and 3D printed structures) and biomedical engineering. Juniors receive one computer science elective credit. Seniors receive one computer science elective credit.

**Prerequisites:** Physics I, Chemistry I, and Biology I 2 semesters 1 credit

**4432 Human Anatomy Honors:** (Senior) This course examines the relationships between structure and function of the integumentary, skeletal, muscular, nervous, endocrine, sensory, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems of the human body. Cat dissection and other laboratory experiments are performed, along with computer simulations of various physiological processes. There will be an emphasis on conditions of medical significance throughout the course.

**Prerequisites:** Physics I, Chemistry I, Biology I and Departmental Approval 2 semesters 1 credit

**4335 Physics II Honors:** (Junior-Senior) This course is a continuation of Physics I and Physics I Honors and will complete the set of topics required for the SAT subject test in physics. The course is appropriate for students who have an interest in the physical sciences and may be considering a STEM or related degree in college. Topics studied will be fluids, thermodynamics, electricity, magnetism, waves, ray and particle models of light, quantum and nuclear physics, with a strong emphasis on laboratory investigation. Successful completion of Physics II Honors will provide a good foundation for students who plan to enroll in advanced college physics courses. **Prerequisites:** Physics I Honors or Physics I with Departmental Approval

2 semesters

1 credit

1 credit

**4533 AP Physics C: Mechanics:** (Senior) This is a college-level Physics course restricted to mechanics, including kinematics and dynamics in one and two dimensions, energy, momentum, universal gravitation, rotation of rigid bodies, and simple harmonic motion. Its mathematical treatment requires Calculus, and it is equivalent to college level courses in calculus-based physics, the entry level course for those majoring in most STEM fields. Solving complex problems will be the norm in this course. Laboratory work involves equipment familiarity, experimental design and analysis of results in graphical, mathematical and conceptual formats. The course prepares students for the AP Physics C College Board examination.

Prerequisites: Physics I Honors or Physics I with Departmental Approval

Corequisite: Calculus Honors, AP Calculus AB, or AP Calculus BC

2 semesters

**4436 AP Chemistry**: (Junior-Senior) This college-level course follows a stated curriculum submitted by the College Board for Advanced Placement. The course centers around six "big ideas" which include the structure of matter, bonding and intermolecular forces, chemical reactions, kinetics, thermodynamics, and chemical equilibrium. Students will develop a deep understanding of these big ideas through the application of seven science practices which are reinforced through a minimum of 16 hands-on lab investigations. Several of these lab investigations will be inquiry- based with guidance. The course is taken with the idea in mind that students will take the AP Exam to receive college credit equivalent to the general chemistry course usually taken during the first year of college.

Prerequisites: Chemistry I Honors or Chemistry I with Departmental Approval 2 semesters 1 credit

**4511 AP Biology:** (Senior) This college-level Biology course follows a stated curriculum developed by the College Board for Advanced Placement to provide students with the conceptual framework, factual knowledge, and analytical skills needed to understand and critically evaluate the unifying principles and rapidly changing issues of a biological science. Four overarching ideas, or themes, provide the main organizing structure of the course. These themes are evolution, cellular processes, genetics and information transfer, and ecology. Approximately 25 percent of instructional time is dedicated to laboratory investigations, including inquiry-based, student-directed labs. The reading load reflects that of a college level course, including a college approved textbook. Major research projects and case studies will be included. Students are expected to be independent learners concerning prerequisite material, and a summer project may be assigned to fulfill this requirement.

Prerequisites: Physics I, Chemistry I, Biology I and Departmental Approval

2 semesters

1 credit

**4611 Medical Microbiology and Immunology Honors:** (Senior) This lab science course focuses on the classification, cell structure, metabolism, and historical concepts of microorganisms, including bacteria, viruses, fungi, and protists. Methods of transmission and prevention and treatment of diseases caused by pathogenic organisms will be studied. Laboratory methods will include experimentation with pure cultures of microorganisms, staining techniques, culturing of bacterial stocks, antibiotic sensitivity testing, and diagnostic techniques including serological testing. This survey course also focuses on the study of the vertebrae immune system. Topics covered include general properties and development of specific and nonspecific types of immunity, the immune system in health and disease, antibody and antigen interactions, hypersensitivity, inflammation, immunodeficiency diseases, autoimmunity, transplantation immunology, and vaccines. Laboratory activities will reinforce concepts and principles presented.

**Prerequisites:** Physics I, Chemistry I, Biology I and Departmental Approval 2 semesters 1 credit

**4900 Forensic Science:** (Junior-Senior) This course offers the opportunity to investigate how science plays a vital role in the justice system and to explore exciting, real-world applications of concepts students learned in physics, chemistry, and biology. The class is designed to offer a mastery of forensic science and a firm understanding of techniques used in modern forensic labs. The students will also participate in a simulated work experience in which each student will be "hired" onto a criminal investigation team that will solve crimes through evidence collection/analysis and investigative problem solving. Students will begin learning the foundational skills in a "training academy" after which they will earn their Special Investigator badge. As Special Investigators for the Ursuline Academy Criminal Investigation Bureau, they will be assigned cases that they will process and analyze from the initial scene through the presentation of evidence in court. Other simulated work experiences will include professional development in the form of workshops and guest speakers, and professional goals and reflection.

**Prerequisites:** Physics I, Chemistry I 2 semesters

1 credit

**4903** Forensic Science Honors: (Junior-Senior) This course offers the opportunity to investigate how science plays a vital role in the justice system and to explore exciting, real-world applications of concepts students learned in physics, chemistry, and biology. The class is designed to offer a mastery of forensic science and a firm understanding of techniques used in modern forensic labs. The students will also participate in a simulated work experience in which each student will be "hired" onto a criminal investigation team that will solve crimes through evidence collection/analysis and investigative problem solving. Students will begin learning the foundational skills in a "training academy" after which they will earn their Special Investigator badge. As Special Investigators for the Ursuline Academy Criminal Investigation Bureau, they will be assigned cases that they will process and analyze from the initial scene through the presentation of evidence in court. Other simulated work experiences will include professional development in the form of workshops and guest speakers, and professional goals and reflection. The Honors path offers a deeper dive into forensic methods and investigative techniques based on authentic problem solving and critical thinking.

**Prerequisites:** Physics I, Chemistry I, and Departmental Approval 2 semesters 1 credit

### **Social Studies**

The Social Studies Department seeks to create independent thinkers and lifelong learners who will use the tools provided by a social studies curriculum to engage empathetically and ethically with the global community.

**6130 World History:** (Freshman) This course examines the interaction and exchange of ideas and culture from ancient river valley civilizations to the modern world. Students explore the influence of politics, art, religion, technology, and geography in the shaping of civilization. Using a wide range of source materials and technological applications, students will develop essential skills that will build the foundation for future studies in history and the social sciences.

2 semesters

1 credit

1/2 credit

**6425 United States Government**: (Sophomore) This course introduces students to the basic structures and functions of government in the United States. Attention is paid particularly to Constitutional principles, the legislative process, cultural factors influencing government, the role of the United States in world affairs, and the cultivation of civil discourse. Students will analyze primary documents, strengthen their writing skills, discuss various philosophies of government, explore issues affecting local politics, and cultivate critical reading, thinking, and debating skills. American Government focuses on the time period from the Declaration of the Independence to the present day.

Prerequisite: World History

1 semester

**6430 United States Government Honors**: (Sophomore) This course explores the ways in which government works and the underlying philosophical ideas that shape contemporary institutions. By focusing on both the national and state levels, students will examine the structure and powers of government, the principles of the United States Constitution, and conflicting views about the purpose and meaning of government itself. In this writing-intensive course, students will analyze and discuss primary sources, research the historical context of political decision making, and sharpen their skill in argumentation. By engaging with a wide range of source material, students will cultivate a respect for divergent points of view and engage in civil discourse. Instructors incorporate materials from the classical world, the Enlightenment, and American history in order to better understand what their government does and why.

**Prerequisites**: World History and Department Approval 1 semester 1/2 credit

**6333 United States History:** (Junior) This course is a survey of significant American events from the Age of Colonization to the late 20th century. Emphasis is placed on the economic, political and cultural events that contributed to the formation of an American society that reflects pluralism. The rise to power of the United States is traced as well as its acceptance of global responsibility.

Prerequisite: World History and United States Government or United States Government Honors beginning with the Class of 2024

2 semesters

1 credit

**6303 AP United States History:** (Junior) This course is a survey of significant American events and themes from Pre-Columbian America to present. Emphasis is placed on concepts, connections, and historical thinking skills outlined by the College Board. The seven themes are: identity, work, exchange, and technology, peopling, politics and power, America in the world, environment and geography, ideas, beliefs and culture. The course will follow how these themes have formed, changed and guided the history of America. In doing so, students will continue to develop the ability to think like a historian specifically honing: chronological reasoning, comparison and contextualization, crafting historical arguments, and historical interpretation and synthesis. This course is designed to fulfill state requirements for high school graduation, while preparing the student for the AP U.S. History College Board Exam. In addition, the study of U.S. history provides the student with a better understanding of American's role in an interconnected world.

**Prerequisites:** World History, United States Government or United States Government Honors beginning with the Class of 2024 and Departmental Approval

2 semesters 1 credit

**6434 Government:** (Senior) This course introduces students to the fundamentals of American government and politics, particularly the major institutions and processes. It also aims to develop students' skills and abilities in analyzing and evaluating issues and public policies in American politics as well as the role of the United States on the world stage.

**Prerequisite:** United States History *1 semester* 

1/2 credit

**6435 Macroeconomics:** (Senior) This course is the study of American society and the free enterprise system. Emphasis is placed upon how society uses its limited resources and produces, distributes and, consumes goods, and services in order to satisfy the unlimited wants of its members. General principles of economics are presented including theory of supply and demand, money and banking, and monetary and fiscal policies. **Prerequisite:** United States History

1 semester

¹∕₂ credit

**6404 AP United States Government and Politics:** (Senior) This course is an intensive study of the formal and informal structures of the United States government and the processes of the American political system. Students will analyze the framework of government (the legislative, judicial, and executive branches), with an emphasis on policy-making and implementation. This course facilitates the preparation for the AP Government College Board Exam.

**Prerequisites:** AP United States History or United States History and Departmental Approval 1 semester 1/2 credit

**6405 AP Macroeconomics:** (Senior) This course gives students a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places particular emphasis on the study of national income and price determination and also develops students' familiarity with economic performance measures, economic growth and international economics. This course prepares students to take the AP Macroeconomics College Board Exam.

**Prerequisites:** AP United States History or United States History and Departmental Approval 1 semester 1/2 credit

**6401 AP European History:** (Sophomore-Senior) Plague. Religious warfare. Revolution. Artistic innovation. Students will practice research and presentation skills as we investigate significant individuals, events, and developments in European History from the late Middle Ages through the present day. Students will read extensively from primary and secondary sources, practice evaluating historical arguments, making historical comparisons, and contextualizing events. In addition, students will analyze and contextualize works of art. This course will prepare students to take the AP European History Exam in May.

Prerequisite: Departmental Approval

2 semesters

1 credit

**6406 AP Human Geography**: (Sophomore-Senior) Is overpopulation a real problem? Who owns the ocean? When opening a new shop, should your business be next to your competition, or across town? These are some of the many questions students will tackle in this course as we study what's where, why it's there, and why it matters. This course utilizes interdisciplinary case studies drawn from all world regions and helps students to develop skills in approaching problems geographically, using maps and spatial technologies, thinking critically about texts and graphic images, and developing research skills. This interactive, hands-on class is perfect for any student who is interested in gaining a deeper understanding of global issues and the world in which they live. Students will also be prepared to take the AP Human Geography test.

Prerequisite: Departmental Approval2 semesters1 credit

6603 AP Psychology: (Junior-Senior) This course is designed to examine the principles of human behavior, the challenges of human experience, and the universal aspects of our diverse global society. Additional topics considered include heredity and environment, motivation and emotions, cognition and language, social psychology, abnormal psychology, and intelligence. The course is also designed to prepare the student to take the AP Psychology Exam administered by the College Board each May. The study of Psychology offers useful insight into the behavior and mental processes of oneself and others. The study of the behavior of the individual correlates directly with the Ursuline core value, "respect for the uniqueness of the individual," and the global nature of human culture and is an investment in the lifelong process of education. The course also examines how research is done in the social sciences and connects in a myriad of ways to other disciplines students are studying. The numerous class discussions that take place prompt the student to analyze and interpret a broad range of source materials so that they can craft original arguments and present them in a variety of formats including, but not limited to, written and oral argumentation. These discussions also help the student to listen thoughtfully and critically to divergent viewpoints so that they may engage in civil discourse. And because this course emphasizes how cultural norms affect perceptions and choices of behavior, it also correlates directly with the Social Studies Department philosophy to engage empathetically and ethically with the global community.

Prerequisite: Departmental Approval2 semesters1 credit

**6637 AP Comparative Government and Politics:** (Senior) AP Comparative Government and Politics will use a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. This class will examine these governments in the context of the 21<sup>st</sup> century. Due to the current nature of the course, this is a social science rather than history course. Students cultivate their understanding of comparative government and politics through analysis and research of data and text-based sources as they explore topics like power and authority, legitimacy and stability, democratization, internal and external forces, and methods of political analysis.

Prerequisite: United States Government or AP United States Government 1 semester <sup>1/2</sup> credit

**6655 Inside Nazi Germany:** (Sophomore-Senior) Inside Nazi Germany will focus on the central question of whether Nazism is a uniquely German experience or a potential danger to any highly developed society. This course will examine reasons for Hitler's rise to power, the nature and purposes of his dictatorship, the move toward war, and the genocide of racial 'undesirables.' Focus will be given to a series of central ideas and questions: Moving from the horrors and depravity of the First World War to an attempt at German democracy under the Weimar Republic, we will investigate the roots of German Nazism. Once the Nazis secured power, we will study the role of all aspects of German society under Nazi control. In looking at 'ordinary Germans,' the course will examine how the Nazi government lead a highly advanced nation into a destructive war and ultimately genocide. Throughout the course, students will hone their research and writing skills, increase their critical thinking skills, and use the lessons of Nazi Germany to connect students to the global implications of genocide. Adapted from Dr. Donald Niewyk.

1 semester

¹∕₂ credit

**6665** Introduction to Philosophy: (Sophomore-Senior) This course will introduce students to the history of philosophy, as well as work toward applying philosophic practices toward complex issues. Introduction to Philosophy will also familiarize students with texts from Western and Eastern philosophers, and philosophical traditional topics such as ethics, human nature, and theory of knowledge. Through the study of philosophy, students will work toward analyzing texts and ideas more critically, as well as apply reason and logic toward the challenging problems of today. Introduction to Philosophy will rely heavily on the reading and analysis of philosophical texts, in addition to exploring philosophical issues through oral discussions and written assignments.

1 semester

**6675** Act, Advocate, Question, Challenge: US Protest Culture: (Sophomore-Senior) In Civil Disobedience, Henry David Thoreau asserts that "unjust laws exist," encouraging us to "let [our lives] be a counter-friction to stop the machine." His text asks us: how do we confront injustice? Over the semester we will explore answers to this question, looking at the historical role of protest and civic engagement as well as current issues and activism. If you have ever felt frustrated by what is going on in the world, felt like you do not have a voice, and want to have an impact, then this course will provide space for you to intellectually engage with these concerns. Guided by those who have stood up and paved the way before us, we will culminate the semester with a project on an issue of a student's choosing on how to move forward today.

1 semester <sup>1</sup>/<sub>2</sub> credit Social Studies or <sup>1</sup>/<sub>2</sub> credit English

**6680 Shark Tank 101: Intro to Entrepreneurship & Business**: (Sophomore-Senior) Based on UT-Austin's Introduction to Business course, this class will introduce students to the topics covered in college-level business classes. Students begin the class by choosing an entrepreneurial business idea (either profit or non-profit), then learn step-by-step how to create a business plan based on six key areas – management, product development, finance, marketing, operations, and human resources. Projects include original consumer research, industry analysis, brand mapping, ad and logo creation, SWOT analysis, profit and loss projections, and supply chain management. The course ends with a "Shark Tank" presentation to business entrepreneurs from the Dallas community. Real-world case studies, talks by industry professionals and current UT McCombs business students, original research, student presentations, and rigorous evaluations will prepare students for success beyond the classroom.

**6683 U.S. Women's History:** (Sophomore-Senior) This course will provide an introduction to U.S. history centering on the experiences of women. From the colonial era to the present, students will examine turning points in American history and the key role women have played, and continue to play, in shaping the nation. The course will begin with early indigenous and enslaved accounts of life in North America, and continue by revisiting major events through women's eyes. By the end of the term, students will be able to discuss how we might reperiodize U.S. history when placing women at the center of the narrative. This course will include readings from a range of primary and secondary sources, as well as original research.

**6685 History of the Vietnam War**: (Sophomore-Senior) This course provides students the opportunity to acquire an understanding of the chronological development of the Vietnam War by examining the political, economic, social, religious, military and cultural events that led to the war, with a particular focus on the United States involvement in Vietnam from 1945 to 1975. Topics include, but are not limited to, an understanding of geographic/historic and time/space relationships, an analysis of the United States military effort and makeup in the war, an evaluation of the role of the United States home front, and interpretations of media, film and literature during and after the war. This will be done through a series of guest speakers, films, class discussions, music and readings of declassified materials. This course must be looked at in terms of decisions, decision-makers, how decisions were reached, the impact of those decisions on the society of the United States and student will research how the Vietnam War continues to drive policy decisions today.

**6690 Contagion and Catastrophe: How Disease Shaped Human History**: (Sophomore-Senior) Disease is constantly reshaping the world around us. Throughout human history viruses, parasites, and bacteria have restructured political systems, economies, and societies. Smallpox paved the way for the European conquest of the Americas. Influenza killed more people than did World War I. Covid-19 has fundamentally changed life at Ursuline. This course charts the ways disease has affected how humans have lived, worked, and interacted from the ancient world into the twenty-first century. Students will hone their research and presentation skills as we chart the rise and fall of civilizations, examine scientific theories and medical advances, and contextualize the threat disease poses to our modern globalized society. Research ideas could include topics as wide as the origins of vaccine research, the connection mosquitoes and colonization, government responses to HIV/AIDS. The possibilities are almost limitless.

1 semester

6695 Global Terrorism in the Twenty-first Century: (Sophomore-Senior) The course introduces the student to domestic and international terrorism in the contemporary world and the strategic challenges it poses for global and U.S. security. Among some of the key issues researched and analyzed are terrorism's causes, terrorist ideology, types of terror groups and their strategic goals and practices. This course will focus on terrorism with roots of origin in the US, Latin America, Western Europe, Eurasia, and the Middle East. The course analyzes regional terrorist groups and examines the development of U.S. and international counter terror policy. This course will look at terrorism in all forms, cyber, violent, etc. It concludes by examining how different states have responded to terror organizations and how successful these strategies have been.

**6700 Rock 'n' Roll, Jazz, and the Symphonic Music: A History of Music and its Influence on Modern Society:** (Sophomore-Senior) This course will focus on the history of music from the symphonic masterpieces, through the Age of Jazz, and concluding with Western popular music (Rock 'n' Roll and Pop). By listening to musical examples, students will examine how music has shaped the political, cultural, and social conditions of the people and state. Additionally, students will develop a working vocabulary of musical terms, as well as knowledge of the different musical eras and their styles. A strong focus for the course will require students to examine music samples and develop critical analyses toward their impact on cultures throughout history through oral discussions and written assignments 1 semester 1/2 credit

**6705** The French Revolution and Reign of Terror: Class Revolution, Guillotines, and the Origins of Nationalism: (Sophomore-Senior) This course will examine the French Revolution on a more intense level. Students will be immersed in the growing divide within the state, as well as the individuals and ideals that would stimulate the process toward a democratic state. The French Revolution will be also explored through a cultural historical lens by analyzing art, music, and philosophy in order to understand the cultural and social changes of eighteenth-century Europe. Additionally, the impact of the French Revolution will be studied on a more global level – from resulting international conflicts to the beginnings of nationalism. This course will rely heavily on the examination of historical sources (both primary and secondary) from multiple disciplines, as well as oral discussions and written analyses.

1 semester

## Theology

The Theology Department shapes the atmosphere, structure, and spiritual culture of Ursuline Academy of Dallas so that it fosters the spiritual development and intentional discipleship of our students. Transmitting the Christian faith means to create in every place and time the conditions for a personal encounter of individuals with Jesus. As Pope Benedict XVI stated, "Being Christian is not the result of an ethical choice or a lofty idea, but the encounter with an event, a person, which gives life a new horizon and a decisive direction." As teachers, we will walk with Christ in our ministry, both spiritually and academically, in order to inspire and engage each student's faith journey.

**7132 Revelation and Scripture:** (Freshman) During the fall semester, students will delve into the Old Testament and see it come to life as they experience God's Word in a personalized manner and discover Biblical inspiration and theological truths. Particular attention will be given to the overall scope of salvation history, divine authorship of Scripture, and God's unfailing relationship with His people which bridges the gap between the Old and New Covenants, leading up to the Christmas story. During the spring semester, students will journey throughout the New Testament, experiencing the living Word of God in the person of Jesus Christ. As the living Word of God and the second person of the Blessed Trinity, Jesus brings new meaning to the exploration of the Gospels. Themes covered include Jesus' infancy, ministry, miracles, parables, crucifixion, resurrection, and how the world has been forever changed.

2 semesters

1 credit

1 credit

**7232 Jesus, Salvation, and the Church:** (Sophomore) In the fall semester, students will reflect upon some of the most crucial questions about the Christian faith: How does what happened in the garden of Eden affect the world we live in today? Why did those events require the death and resurrection of the Son of God? How does Jesus' earthly life 2,000 years ago serve as a model for us today? In the spring semester, students will examine how the early Christians discerned how to continue Jesus' mission through his Church, and how it continues to be guided by the Holy Spirit today. They will also learn about Sts. Angela and Ursula, the foundress and patroness of the Ursulines.

**Prerequisite:** Freshman Theology 2 semesters

**7337 Sacraments and Morality:** (Junior) In the fall, this course guides students to better understand how Jesus is personally and visibly present in the actions of the sacraments. Students discover how the sacraments fulfill our human need for physical manifestations of the spiritual. The course ultimately aims at instilling the value of sacraments as tools to help us on our journey to heaven and as personal experiences of Christ's grace. During the spring semester, this course aims at directing students to virtue as a path to true and lasting happiness. It challenges students to ask hard and honest questions concerning their actions and moral choices as young disciples living in the 21st century. At the end of this course, students should better understand the moral reasoning of the Church's teachings and how it applies to their own lives.

Prerequisite: Sophomore Theology

2 semesters

1 credit

**7336 Morality: Life in Christ:** (Junior) This course aims at directing students to virtue as a path to true and lasting happiness. It challenges students to ask hard and honest questions concerning their actions and moral choices as young disciples living in the 21st century. At the end of this course, students should better understand the moral reasoning of the Church's teachings and how it applies to their own lives.

Prerequisite: Sacraments in the Summer

**Note:** Sacraments and Morality are required to fulfill Theology requirements for Junior year *1 semester* <sup>1/2</sup> credit

All Seniors are required to select two of the following:

**7440 Catholic Social Justice:** (Senior) Formerly known as Living as a Disciple, this course prepares students for living in a just manner beyond graduation. The Christian understanding reveals that God desires a world in which all facets of life are guided by justice and charity. Jesus has called upon us to build his kingdom on earth. The Church, therefore, has been faithful to fostering a just and peaceful world. This course, integrating the learning of the past three years, uses the Gospels and Catholic Social Teaching to help students appreciate the richness of the Church's social mission. Topics to be addressed include the dignity of the human person, poverty, rights and responsibilities of family, workers and community, solidarity and ecology.

 Prerequisite: Junior Theology

 1 semester
 1/2 credit

**7442 Ecumenical and Interreligious Issues:** (Senior) The purpose of this course is to acquaint students with the different major world religions and various Christian faith traditions. By engaging in a detailed study of the sacred writings and works of several world religions in addition to various Christian denominations, the course will introduce students to diverse traditions, doctrines, cultures, and histories. Additionally, students will be exposed to the way these faith communities share similar beliefs with the Catholic Church. The course will also help students identify what common threads join humanity together in its search to understand God. Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the course will help students to recognize the ways in which important spiritual truths can also be found in the varied Christian faith traditions as well as in the major world religions. This course is also intended to help them recognize the ways in which other systems of belief and practice differ from the Catholic faith.

**Prerequisite:** Junior Theology *1 semester* 

½ credit

7444 Sacred Scripture: (Senior) The purpose of this course is to develop an appreciation and understanding of the principles for interpreting Sacred Scripture. As a survey course, specific sections of the Old and New Testament will be presented in order to create an overview of the importance of Scripture study and its relationship to our faith life. The Old Testament will have an emphasis on the Pentateuch, historical books, prophets, and wisdom literature. The New Testament will focus on a survey of the gospels and the letters of Paul. The course is designed to project a sense of unity between the Old and New Testament. The students will benefit from this course by learning about the history of salvation as it relates to our present-day faith experiences with our loving, merciful God.

Prerequisite: Junior Theology

1 semester

1/2 credit

**7450 Church History:** (Senior) Discover the epic 2000-year history of the Church, a history you are writing today. Throughout this course, students will encounter famous, infamous, and ordinary Catholics who have impacted the faith. Students will analyze Christianity's relationship with Judaism and Islam, examine evidence for belief in Christ, and explore the life and radical witness of Christians throughout the centuries. Opportunities are provided for students to directly interact with vowed and ordained religious, have a firsthand encounter with Eastern rite Christianity, evaluate the Church's changing understanding of its relationship with State, address old and current controversies, study the theology of sacred art and architecture, and learn from everyday people whose lives and grace have carried over into our lives today. This is the family history of the Catholic Church, a Church both human and divine, and a story which begs the question, "What will your contribution be?" **Prerequisite:** Junior Theology

1 semester

7455 Vocation: Discernment and the Heart's Desire: (Senior) God calls every person to love and serve in many ways: How is he calling you? In this course, students will develop an understanding of what "vocation" means in the Catholic tradition, including the universal call to holiness and the universal vocation of love. The course will also provide students with the time and tools to reflect upon their personal spiritual profile, the various models of spirituality in the Church, and methods of prayerfully discerning God's call. Through their developing spiritual insights and deeper self-knowledge, students will examine ways of following God's will in their lives and what it means to live in service to others.

Prerequisite: Junior Theology 1 semester

1/2 credit

7531 Peer Ministry and Liturgy: (Junior-Senior) In this year-long course, students will receive formation to cultivate and integrate their faith in daily life. Through the witness of their lives, peer ministers will be servant leaders, accompanying peers along the journey of faith, planning and serving in liturgies and prayer services, and deepening their own relationships with God. The course will include class discussions, planning sessions, some assigned readings, and an occasional written reflection. Grades are determined on a Pass/Fail basis and will be included on the transcript.

Note: This course cannot be taken in place of Junior or Senior-level required Theology courses. Students may take this course in addition to their other Theology classes.

Prerequisites: Application and Interview

2 semesters

### **Visual Arts**

The Visual Arts Department is committed to empowering students in the development of their own unique artistic voice. In addition, we encourage student agency in the visual arts to instill confidence in using the visual language of art in a diverse and changing world.

**2538 Studio Art I: Drawing, Painting, and Design Foundations:** (Freshman-Senior) In this class, students develop an understanding of the elements of art: line, shape, color, value, form, texture, and space, as the fundamental building blocks for creating a work of art. Students focus on applying the elements of art in a wide variety of artistic challenges by engaging in sketchbook activities and creating works of art. These creative exercises support a working knowledge of each element and allow students to explore a variety of mediums and art forms including drawing, painting, and collage. Students complete the class with a portfolio of approximately four to five works of art. This hands-on art class is designed to benefit the beginning art student as well as challenge the advanced student. Completion of this class prepares students with a foundation of skill and vocabulary to proceed into any upper-level art class.

**2539 Studio Art II: Drawing:** (Freshman-Senior) In this class, students develop skills in drawing from direct observation while exploring a variety of media including graphite, charcoal, chalk pastel, and colored pencil. Students continue to build their art vocabulary as they design artworks incorporating the elements of art learned in Studio Art I, and the principles of design: balance, contrast, emphasis, movement, pattern and unity. Students demonstrate personal artistic voice through drawing exercises including still-life drawing, portraiture, and mixed media abstraction. Students complete the class with a portfolio of approximately three finished works demonstrating purposeful connections among the form, content, and subject of their work. Class critiques, discussions, and analysis historical artists and art movements enrich students' vocabulary and understanding of drawing. Completion of this class prepares students with the skills and confidence needed for taking Studio Art III: Painting.

**Prerequisite:** Studio Art I 1 semester

**2541 Studio Art III: Painting:** (Sophomore-Senior) In this class, students explore a variety of painting mediums including watercolor, acrylic, and oil paint. Students engage in research and experimentation through sketchbook assignments to develop their own artistic voice. Students create individual project proposals pursuing their own concepts and ideas while demonstrating an understanding of formal concerns and exploring various approaches to painting from realism to abstraction. Students investigate both historical and contemporary artists and art movements as they continue to build on skills developed in Studio Art I and II to create a strong portfolio of artwork. Students completing this course develop the experience and technical skills necessary to succeed in Studio Art IV: Mixed Media Painting.

Prerequisite: Studio Art II

1 semester

¹∕₂ credit

1/2 credit

**2542 Studio Art IV: Mixed Media Painting:** (Sophomore-Senior) In the first quarter of this class, students learn advanced painting techniques and non-traditional mixed media painting processes. Students develop skills in using Adobe Photoshop as a method for generating ideas and developing sources of inspiration for their paintings. In the second quarter of this class, students focus on developing a body of three works of art with a centralized concept while focusing on developing a personal artistic style and voice. Various stylistic approaches may be explored from realism to abstraction along with a study of historical and contemporary artists and art movements associated with painting. Students completing this course develop the experience and technical skills necessary to prepare for AP Studio Art.

Prerequisite: Studio Art III

1 semester
AP Studio Art: (Senior) This class is designed for highly motivated students who are committed to developing a college level portfolio of artwork. Advanced Placement Studio Art requires significantly more time than the other art classes to develop a portfolio of 15 artworks. Therefore, the program is intended for the invested and committed art student. Students will engage in investigation for their sustained investigation in the summer prior to taking the course. Students write an artist statement and create a personal website and digital art portfolio as part of the course. The course reflects two College Board portfolio requirements: 1) Sustained Investigation: 15 digital images that include works of art and design and process documentation 2) Selected Works: Five actual works that best demonstrate the student's understanding of and engagement with design

A digital slide portfolio (15 images of the student's work) and five original pieces are submitted to the College Board for evaluation.

Students in AP Studio Art will select one of the following portfolios during the first quarter of the school year: 2603 AP Studio Art: 2-D Art and Design

#### 2604 AP Studio Art: 3-D Art and Design

2605 AP Studio Art: Drawing

**Prerequisites:** The equivalent of two credits of art and Departmental Application Approval 2 semesters 1 credit

**2549** Fused Glass: (Junior-Senior) In this class, students explore the ancient art form of fused glass. Students learn the proper process involved in stacking, or layering thin sheets of colored glass, to create their own artistic designs as they develop patterns or simple images. Students may choose to incorporate glass frits and liquid glass to enhance their designs. The stacked glass design is then fused by placing it inside an electric kiln and heating it until the design is fused into one piece. With this process, students may choose to create non-functional works of art or functional plates, bowls, and tiles. Students also learn to make glass beads using a propane torch and glass rods and then experiment with incorporating the beads into jewelry. Students will investigate the historical context and origin of this art form and discover how various cultures have embraced and defined the art of fused glass. *1 semester*  $\frac{1}{2}$  credit

**2575 Book Arts and Papermaking:** (Junior-Senior) In this class, students explore the art and craft of making books with handmade paper. Artistic applications of handmade paper will be explored in various ways including constructing both utilitarian and artistic books, creating a unique watermark, and using handmade paper as a sculptural method by designing lightweight, sculptural installations. Students learn about papermaking throughout history and how this ancient technique can be applied to modern day art forms. Students also learn about the elements of art and the principals of design with a special emphasis on color and unity. *1 semester*  $\frac{1/2 \ credit}$ 

**2583 Screen Printing**: (Freshman-Senior) In this hands-on studio art class, students learn the process of screen printing. Students learn how to squeegee ink through stencils to create beautiful works of art in multiples. The use of color, among other elements of design, is a hallmark of this process. Both hand-drawn and photographic imagery are used as sources for creating these prints as students exercise creativity and broaden their art portfolio. Through demonstrations, lectures, and hands-on assignments, students learn tools, techniques, and vocabulary associated with screen printing, and the rich history of this process.

**2584 Relief and Engraving**: (Freshman-Senior) In this hands-on studio art class, students learn two methods of printmaking — relief and engraving. Students learn how to carve a block and engrave a plate as they use a printing press to transform their own creative designs, drawings, and photographs into beautiful works of art, in multiple. The use of line, shape, and value, among other elements of design, are hallmarks of this process. Through demonstrations, lectures, and hands-on assignments, students learn tools, techniques, and vocabulary associated with printmaking as they exercise creativity and broaden their portfolio. Students also learn about the contemporary use of relief and engraving, and its rich history.

**2550 Ceramic Basics I:** (Freshman-Senior) In this introductory class in the art of clay, students learn basic hand-building techniques in both additive and subtractive processes using the coil, pinch, and slab method of constructing to create a variety of functional and nonfunctional sculptures, objects, and vessels. Students are also introduced to the potter's wheel and learn techniques for throwing an assortment of functional and sculptural forms. Through demonstrations and hands-on assignments, students explore various methods of glazing and firing their work while learning the history of this ancient art form.

**2551 Ceramic Basics II:** (Freshman-Senior) In this class, students build and refine the throwing and handbuilding skills learned in Ceramics I. Through demonstrations and hands-on assignments, students experiment with various methods of glazing and firing their work as they continue their study the historical development of ceramics.

 Prerequisite: Ceramic Basics I

 1 semester
 ½ credit

**2552 Ceramics III:** (Sophomore-Senior) In this class, students will build upon the basic skills learned in Ceramic Basics I and II. Students continue to construct more complex slab-building projects, further develop their skills in throwing on the potter's wheel, and experiment with making small glaze test batches. Students may also experiment with Raku firing. Students glaze and fire their work and continue their study of the historical development of ceramics.

 Prerequisite: Ceramic Basics II

 1 semester
 ½ credit

**2553 Ceramics IV:** (Junior-Senior) Students in this class continue to refine their skills on the potter's wheel with the creation of more complicated forms that can be combined with hand-building techniques using the extruder and slab roller. Through self-directed projects, students develop a body of work that expresses their own artistic voice and style. Students study contemporary trends in ceramics while also learning to develop simple glaze calculations on the computer, assist in the loading and firing of the work, explore the Raku firing process at a more advanced level, and participate in art exhibitions.

1/2 credit

**Prerequisite:** Ceramics III 1 semester

**2560 Digital Photography I:** (Freshman-Senior) In this class, students learn to exercise creativity through the medium of digital photography. Through lectures, demonstrations, assignments, and critiques, students learn to create dynamic photo compositions and learn how to use the manual functions of the camera including aperture, shutter speed, and ISO to create photographic works of art. Students also learn how to edit photos in Adobe Photoshop and apply this tool for self-expression. Through exploration and investigation, students discover photography's rich heritage and contemporary practices. Students are required to provide their own digital camera with manual shutter and aperture control. These cameras typically cost \$350-\$500. If a student is unable to provide their own camera, a limited number of cameras are available upon request. Camera loans are conditional, and students and parents sign an equipment responsibility agreement.

**2562 Digital Photography II:** (Freshman-Senior) In this class, students continue to develop their skills in digital photography while expanding their understanding of editing photos with Adobe Photoshop for self-expression. Through lectures, demonstrations, assignments, and critiques, students learn to apply the elements of art and principles of design to their work. By exploring the narrative qualities of photographic imagery, students develop and express their own artistic voice. This class will focus on the element of value and the principle of contrast as light is considered as an important component for illuminating a subject, creating a mood, or telling a story. Students are required to provide their own digital camera with manual shutter and aperture control. If a student is unable to provide their own camera, a limited number of cameras are available upon request. Camera loans are conditional, and students and parents sign an equipment responsibility agreement.

**Prerequisite:** Digital Photography I 1 semester

½ credit

**2567 Digital Photography III:** (Sophomore-Senior) In this class, students build upon the knowledge and skills learned in Digital Photo I & II while exploring advanced photographic techniques and equipment in a variety of shooting situations. Students work to develop and express their own personal artistic vision and style through a variety of assignments such as night photography and product photography. Students continue developing their technical skills in Adobe Photoshop for self-expression and participate in competitive photo exhibitions. Students are required to provide their own digital camera with manual exposure control. If a student is unable to provide their own camera, a limited number of cameras are available upon request. Camera loans are conditional and require students and parents sign an equipment responsibility agreement.

Prerequisites: Digital Photography I and II

1 semester

½ credit

**2568 Digital Photography IV:** (Sophomore-Senior) In this class, students build upon the knowledge and skills learned in Digital Photo I, II, & III while exploring advanced photographic techniques and equipment in a variety of shooting situations. Students work to develop and express their own personal artistic vision and style through a variety of assignments such as studio portraiture and independent endeavors. Students also continue to develop technical skills in Adobe Photoshop and participate in competitive photo exhibitions. Students are required to provide their own digital camera with manual exposure control. If a student is unable to provide their own camera, a limited number of cameras are available upon request. Camera loans are conditional and require students and parents sign an equipment responsibility agreement.

**Prerequisites:** Digital Photography I, II and III 1 semester <sup>1</sup>/<sub>2</sub> credit

**2570 Film Making I**: (Freshman-Senior) In this year-long class, students learn the basics of moviemaking by producing, directing, shooting, and editing their own short film. Students begin by developing an individual story concept, planning the project from concept to screenplay, scheduling and shooting the script on HD video, and learning to edit the visual story using a professional level non-linear editing program. In addition to learning how to edit footage in Adobe Premiere Pro software, students learn camera operation, lighting for movies, and sound recording techniques using the school's video equipment. Various story genres are explored including scripted movies, documentaries, music videos, and more. Video cameras and film making equipment are loaned to students for the purposes of this class. Use of Ursuline equipment requires students and parents sign an equipment responsibility agreement.

2 semesters

1 credit

**2572 Film Making II**: (Sophomore-Senior) In this year-long class, students who have successfully completed Film Making I may continue their film making studies in an independent study format with the goal of producing a collected body of their film work or "reel". Advanced film techniques in shooting, lighting, and editing are explored as well as special effects in Adobe After Effects software. This is a self-directed and project- based film production class for the motivated student who is interested in producing independent films or planning to study film further in college. Video cameras and film making equipment are loaned to students for the purposes of this class. Use of Ursuline equipment requires students and parents sign an equipment responsibility agreement. **Prerequisites:** Film Making l and Instructor Approval

2 semesters

## World Languages

The World Languages Department is strongly committed to preparing students to engage and thrive in a multicultural world. Students acquire not only communicative proficiency in the language of study but also knowledge, understanding, appreciation, and acceptance of other cultures.

Note: Any student interested in double tracking needs to contact the World Language Department Chair for the approval process.

### Arabic

**1011 Arabic I:** This course is an introduction to Modern Standard Arabic (MSA), a modernized version of the Literary Arabic. Students are introduced to spoken Arabic from the Middle East. The class will give students an overview of Arabic language and culture, its alphabet and numbering system. Pronunciation and basic grammatical structures will be covered. This course will develop the necessary skills to acquire spoken and written communication skills at the Novice-Low proficiency level as defined by the American Council for Teachers of Foreign Languages. It will also cover culture and traditions in order to familiarize students with the history and foundation of spoken Arabic. No previous study of Arabic is required. *2 semesters 1 credit* 

**1012 Arabic II:** This course continues to build on the language skills learned in Arabic I. Students are introduced to the technical aspect of the language (grammar). The course is designed to build and develop a stronger understanding of the Arabic language and its culture. It will further enhance the student's ability to communicate in Arabic in the written and spoken forms. Students are expected to be at a Novice-Mid proficiency level as defined by the American Council for Teachers of Foreign Languages. This course will work on improving the student's confidence in reading and interpreting Arabic text and communicating with others.

**Prerequisite:** Arabic 1 2 semesters

1 credit

1 credit

**1013 Arabic III:** This third-year course will continue expanding vocabulary, adding more grammatical structures, and exploring the Arabic culture and heritage. It will further strengthen overall language proficiency and cultural knowledge through more advanced vocabulary and structures. Students will develop presentational skills in compositions and presentations of social issues. This course addresses all four communication skills: reading, speaking, listening, and writing. Arabic III will enhance the student's ability to communicate in Arabic at a Novice- Mid level of performance or higher as defined by the American Council for Teachers of Foreign Languages.

**Prerequisite:** Arabic II 2 semesters

**1015 Arabic III Honors:** This course will expand vocabulary, grammatical structures and authentic sources, including Arabic language poetry, short stories, movies, and websites to achieve a higher level of proficiency in the four modes of communication. Students are working towards the goal of reaching a Novice-high level of proficiency or higher, as defined by the American Council for Teachers of Foreign Languages. In this course, students write both formally and creatively in Arabic. Students may also anticipate a variety of short presentations, students will be trained on their typing skills while listening to Arabic content.

**Prerequisites:** Arabic II and Departmental Approval 2 semesters 1 credit

**1014 Arabic IV:** This fourth-year course is taught to develop a Novice-high level of proficiency or higher as defined by the American Council for Teachers of Foreign Languages. Using authentic sources such as newspapers, movies, and internet, students learn more complex structures and vocabulary to achieve proficiency in the listening, speaking, reading, and writing language skills. Students will learn Arabic history, geography, traditions and aspects of modern life to develop a deeper understanding of Arabic language and culture. Students are given the opportunity to use all the skills learned in the previous levels through authentic projects (events, service, scrapbooks).

**Prerequisite**: Arabic III 2 semesters

**1016 Arabic IV Honors:** In this course students are working towards the Intermediate-low level of proficiency, as defined by the American Council for Teachers of Foreign Languages. Using authentic sources from Arabic language television, newspapers, movies, and websites, students learn advanced vocabulary and grammatical structures needed to achieve a higher level of proficiency in the listening, speaking, reading, and writing language skills. A variety of topics on Arabic traditions, and aspects of modern life will be addressed. This project based course also focuses on developing informal speaking and writing skills necessary to write emails, read short stories and advertisements.

**Prerequisites:** Arabic III Honors or Departmental Approval 2 semesters 1 credit

### Chinese

**1111 Mandarin Chinese I:** This introductory course is designed to develop students' basic Modern Standard Mandarin Chinese proficiency in the four modalities of language learning: listening, speaking, reading, and writing. Vocabulary, pronunciation rules (pin yin), basic grammar structures and Hanzi characters (simplified and traditional) will be introduced to develop these skills. Students not only begin to use the computer to type Chinese characters, but they also learn how to write Chinese Hanzi characters by hand. In the second semester, students will do some Extensive Reading according to their personal interests and their teacher's suggestion. This course also provides an overview of the Chinese language and culture aimed at developing students' appreciation of the Chinese culture and people. Upon successful completion of this course, students will be at a Novice-Low level of proficiency as defined by the American Council for Teachers of Foreign Languages. No previous background in Chinese is required.

2 semesters 1 credit

**1211 Mandarin Chinese II:** This course continues to build on the listening, speaking, reading, and writing language skills learned in Chinese I. Grammatical constructions will be reinforced, and new structures will be introduced. While many of the linguistic tasks will be like those of first-year Chinese, the language level required will be more advanced at a Novice-Mid level of proficiency, as defined by the American Council for Teachers of Foreign Languages. In this course students' Chinese typing speed and accuracy will be trained. Students will do some Extensive Reading according to their personal interests and their teacher's suggestion. By the end of this second year, students will be able to communicate basic needs in a Chinese-speaking community and read and/or write simple paragraphs.

Prerequisite: Mandarin Chinese I2 semesters1 credit

**1212 Mandarin Chinese II Honors:** This course introduces new grammatical concepts and keeps building on the thematic vocabulary units introduced in level I. It continues to build on the language skills learned in Chinese I in order to advance to a Novice-High level of proficiency, as defined by the American Council for Teachers of Foreign Languages. In this course, students will continue to train on their Chinese typing speed and accuracy. While this course will help students advance in the three communication modes, it focuses more on the presentational mode of communication. Students are expected to move at a fast pace and work with authentic materials to make the cultural connections as they work more on integrated performance assessments. Students will also do some Extensive Reading according to their personal interests and their teacher's suggestion. Students are required to complete special projects.

Prerequisites: Mandarin Chinese I and Departmental Approval 2 semesters 1 credit

**1311 Mandarin Chinese III:** This course is designed to improve the development of the listening, speaking, reading and writing skills. The main objective of the course is to provide students with enough vocabulary and grammatical structures so that they can communicate in the target language. The focus is to strengthen the overall language proficiency and cultural knowledge to advance to a Novice-High level of performance, as defined by the American Council for Teachers of Foreign Languages. Students will not only be trained on their typing skills while listening to Chinese content but they will also do some extensive reading according to their personal interests and their teacher's suggestion. Students are required to complete special projects.

**Prerequisite:** Mandarin Chinese II 2 semesters

1 credit

**1312 Mandarin Chinese III Honors:** This course is mainly project based and will continue expanding vocabulary, more grammatical structures and some authentic sources, such as Chinese story books, movies, and websites. Students are expected to communicate using Chinese most of the time and accomplish the goal of reaching an Intermediate-Low level of proficiency, as defined by the American Council for Teachers of Foreign Languages. In this course, students write both formally and creatively in Chinese. Students may also anticipate a variety of short presentations, selected standard based exams throughout the course. Students will be trained on their typing skills while listening to Chinese content. Students will do some Extensive Reading according to their personal interests, reading level and their teacher's suggestion.

Prerequisites: Mandarin Chinese II Honors or Departmental Approval 2 semesters 1 credit

**1410 Mandarin Chinese IV:** This project-based fourth-year course is taught to develop an Intermediate-Low level of proficiency as defined by the American Council for Teachers of Foreign Languages. Using authentic sources such as songs, art, pictures, comic books, movies, and internet material, students learn more complex structures and vocabulary to increase their proficiency in the listening, speaking, reading, and writing language skills. Students learn more about Chinese modern life thus developing a better understanding of the culture of China. Students are given the opportunity to use and revisit all the previously learned vocabulary and structures through authentic projects (events, service, scrapbooks). Students will do some Extensive Reading according to their personal interests, reading level and their teacher's suggestion.

Prerequisite: Chinese III

2 semesters

1 credit

**1411 Mandarin Chinese IV Honors:** In this mainly project-based course students are working towards the Intermediate-Mid level of proficiency, as defined by the American Council for Teachers of Foreign Languages. Using authentic sources from Chinese television, newspapers, movies, and websites, students learn advanced vocabulary and grammatical structures needed to achieve a higher level of proficiency in the listening, speaking, reading, and writing language skills. A variety of topics on Chinese history, geography, literature, traditions, and aspects of modern life will be addressed. This course also focuses on developing informal speaking and writing skills necessary to write emails and application letters, read short stories and advertisements, and exchange currency. Students will do some Extensive Reading according to their personal interests, reading level and their teacher's suggestion. With extra intensive language practice, some students may choose to take the AP Chinese Language and Culture test.

Prerequisites: Mandarin Chinese III Honors or Departmental Approval 2 semesters 1 credit

## French

**1121 French I:** This course introduces students to the French language and culture while developing the communication skills of listening, speaking, reading, and writing. Communication, acquisition of vocabulary, and basic structures are emphasized. French-speaking cultures around the world and their traditions are introduced. Students are working towards Novice-Low proficiency as defined by the American Council for Teachers of Foreign Languages. Participation in the annual National French Contest is required. *2 semesters 1 credit* 

**1222 French II:** This course develops interpretive, interpersonal, and presentational communication in the French language within the context of exploring francophone cultures. It builds on the listening, speaking, reading and writing language skills learned in French I while developing the structures needed for communication. Students work with authentic materials to make cultural connections. Much of the class is conducted in French and students are expected to communicate in French. Students are working towards Novice-Mid proficiency as defined by the American Council for Teachers of Foreign Languages. Participation in the annual National French Contest is recommended.

**Prerequisite:** French I 2 semesters

1 credit

**1221 French II Honors:** This course develops interpretive, interpersonal, and presentational communication in the French language within the context of exploring francophone cultures. It builds on the listening, speaking, reading, and writing language skills learned in French I while developing the structures needed for communication. Students work with authentic materials to make cultural connections. Most of the class is conducted in French and students are expected to communicate in French. Students are working towards Novice-High level of proficiency as defined by the American Council for Teachers of Foreign Languages. Participation in the annual National French Contest is required.

**Prerequisites:** French I and Departmental Approval 2 semesters 1 credit

**1323 French III:** This course further develops interpretive, interpersonal and presentational communication in the French language within the context of exploring contemporary issues in francophone cultures. It continues to build on the listening, speaking, reading and writing language skills learned in French II while building proficiency with grammatical structures needed for communication. Students work with authentic materials to make cultural connections. The class is conducted in French and students are expected to communicate in French, working towards Novice-High level of proficiency as defined by the American Council for Teachers of Foreign Languages. Participation in the annual National French Content is recommended. **Prerequisite:** French II

2 semesters

1 credit

**1322** French III Honors: This course further develops interpretive, interpersonal and presentational communication in the French language within the context of exploring contemporary issues in francophone cultures. It continues to build on the listening, speaking, reading and writing language skills learned in French II Honors while building proficiency with the grammatical structures needed for communication. Students work with authentic materials to make cultural connections. The course is conducted in French and students are expected to communicate in French, working toward an Intermediate-Low level of proficiency as defined by the American Council for Teachers of Foreign Languages. Particular emphasis is placed on preparation for the AP World Language and Culture courses. Participation in the annual National French Contest is required. Prerequisites: French II Honors or Departmental Approval 2 semesters 1 credit

**1424 French IV:** This course continues developing the skills needed to communicate effectively in French. Students will listen to, watch, read, discuss and critique authentic print, audio, and visual communications from across the francophone world. Through daily engagement in cultural content, students gain confidence and competence in interpersonal communication. Students execute projects designed to display their improving communication skills and understanding of cultural topics covered in the course. Students are working towards Intermediate-Low proficiency as defined by the American Council for Teachers of Foreign Languages.

**Prerequisite:** French III 2 semesters

**1426 AP French Language and Culture:** This college-level honors course emphasizes the use of French for active communication. Within the context of the six AP Themes, students will work to understand, analyze, and synthesize authentic print, audio, and visual communications from across the francophone world, and engage in interpersonal and presentational written and oral communications on these themes. This fast-paced course includes extensive practice in the organization and execution of writing, and proficiency and fluency in speaking. Students execute projects designed to display their communication skills and understanding of cultural topics covered in the course. Students will also learn strategies and practice skills in preparation for the AP French Language and Culture exam. The course is conducted in French and students are expected to communicate in French, working towards an Intermediate-Mid level of proficiency or above as defined by the American Council for Teachers of Foreign Languages. Students are encouraged to take the AP exam and are required to participate in the National French Contest.

**Prerequisites:** French III Honors or Departmental Approval 2 semesters 1 credit

#### Spanish

**1161 Spanish I:** This introductory course is for non-heritage and non-native speakers. It introduces students to the Spanish language and culture while developing the communication skills of listening, speaking, writing, and reading. Interpersonal communication, acquisition of vocabulary and mastery of basic grammar concepts are emphasized. This course is conducted mainly in Spanish. Students are working towards Novice-Low level of proficiency or above as defined by the American Council for Teachers of Foreign Languages. During the second semester, students take part in the annual National Spanish Exam. This course is a level one introductory course for students with no previous background; for all other students with Spanish background, a placement test is required.

2 semesters

1 credit

**1165 Spanish I Honors:** Designed for students with some experience at the Novice level of Spanish proficiency, this class is a fast-paced review of the basic skills of language: listening, speaking, writing, and reading. This course is designed for highly motivated students who are interested in pursuing the Honors sequence. The class is conducted mainly in Spanish. Review and broadening of vocabulary and the mastery of basic grammar structures are emphasized. Students are working towards Novice-Mid proficiency level or above as defined by the American Council for Teachers of Foreign Languages. During the second semester, students take part in the annual National Spanish Exam. This course is for non-native speakers; all heritage Spanish speakers must take the placement test in the spring.

 Prerequisite: Departmental Approval

 2 semesters
 1 credit

**1262 Spanish II:** This course continues to build the four language skills learned in Spanish I. Students continue developing the communication skills of listening, speaking, writing and reading at the Novice-Mid proficiency level or above as defined by the American Council for Teachers of Foreign Languages. The class is mostly conducted in Spanish and students are expected to communicate using the target language. Practice of language skills through interpersonal communicative activities will be conducted on a variety of topics with emphasis on the Spanish-speaking countries and cultures.

**Prerequisite:** Spanish I 2 semesters

1 credit

1 credit

**1261 Spanish II Honors:** This course introduces major and new grammatical structures of the language including the 3 verb moods: indicative, imperative and subjunctive. Students work on integrated performance assessments to develop their communication skills. Authentic and culturally driven materials are used. While the course will help students to advance in their communication skills, this class focuses particularly on interpersonal communication. The class is conducted mostly in Spanish and students are expected to communicate using the target language. Students are working towards Novice-High level of proficiency or above as defined by the American Council for Teachers of Foreign Languages. Participation in the annual National Spanish Examination and/or special projects is required.

Prerequisites: Spanish I Honors or Spanish I and Departmental Approval

2 semesters

**1363 Spanish III:** This course is designed to improve the development of the listening, speaking, reading and writing skills. The main objective of the course is to provide students with enough pertinent vocabulary and grammatical structures so that they can communicate in the interpretive, interpretional, and presentational modes. The focus is to strengthen the overall language proficiency and cultural knowledge to advance to an Intermediate-Low level of proficiency or above as defined by the American Council for Teachers of Foreign Languages. The class is conducted mostly in Spanish and students are expected to communicate using the target language.

**Prerequisite:** Spanish II 2 semesters

1 credit

**1361 Spanish III Honors:** This course continues to develop the listening, speaking, reading, and writing skills in the Spanish language. It focuses on communication strategies based on the AP World Languages thematic areas: families and communities, science and technology, beauty and aesthetics, contemporary life, global challenges, and personal and public identities. By the end of the year, students should be able to communicate with fluency, using new vocabulary and grammatical structures at an Intermediate-mid level of proficiency or above as defined by the American Council for Teachers of Foreign Languages. The class is conducted in Spanish and students are expected to communicate in the target language. Emphasis is placed in the history, art, culture and geography of Latin America and Spain. Students are introduced to the major artists and authors of the Hispanic world. Participation in the annual National Spanish Examination and/or special projects is required. **Prerequisites:** Spanish II Honors or Spanish II and Departmental Approval

2 semesters

1 credit

**1464 Spanish IV:** This course is designed to continue improving the development of listening, speaking, reading and writing skills, with a conversational focus. The program aims to foster active participation of the students in the language and develop proficiency in communication. Students apply all grammar concepts previously learned that are essential to communicate effectively in every day real-life situations, and to discuss current events. The main objective of this course is to provide students with enough practice so that they can communicate in the three modes: presentational, interpresonal and interpretive. Spanish IV will prepare the students for the SAT subject Spanish test. The class is conducted in Spanish and students are expected to communicate using the target language. Students are working towards Intermediate-Mid proficiency or above as defined by the American Council for Teachers of Foreign Languages.

**Prerequisite:** Spanish III 2 semesters

1 credit

**1466 AP Spanish Language and Culture:** This honors course is equivalent to a college course in advanced Spanish composition and conversation. Several integrated performance assessments will be completed throughout the school year. The AP Spanish class emphasizes the use of Spanish for active communication; it encompasses aural/oral skills, reading comprehension, grammar, and composition. The course is structured around the six AP themes which are presented through authentic materials from the Spanish and Latin American world. Students are working towards Intermediate-High proficiency or above as defined by the American Council for Teachers of Foreign Languages. Students are encouraged to take the AP exam and will be required to take the annual National Spanish Exam.

**Prerequisites:** Spanish III Honors and Departmental Approval 2 semesters 1 credit

**1566/1566OLSG AP Spanish Literature and Culture:** \* This course is designed to provide students with a learning experience equivalent to that of an introductory college course in Spanish literature. It introduces the Peninsular Spanish, Latin American, and U.S. Hispanic literature. The class provides ample opportunities to further develop the student's proficiencies across a full range of language skills. It gives special attention to critical reading and analytical writing and encourages students to reflect on the many voices and cultures of Spanish literature. Emphasis is placed on the study of literature through global, historical and contemporary cultural contexts. Students are encouraged to make interdisciplinary connections and explore linguistic and cultural comparisons. The course aims to help students to read with critical, historical and literary sensitivity. It exposes students to the methods of literary analysis, critical interpretation and evaluation. Students are working towards Advanced level of proficiency as defined by the American Council for Teachers of Foreign Languages. **Prerequisites:** AP Spanish Language and Culture and Departmental Approval

\*Depending on enrollment this course might be offered only online 2 semesters 1 credit

**1568 Spanish V: Conversation and Culture**: This conversational and cultural course provides an opportunity to acquire intermediate fluency in spoken Spanish with emphasis on natural, colloquial usage. Spanish Conversation is designed to develop a high level of proficiency in spoken Spanish. Language functions are practiced in the context of practical everyday situations and film studies. This communicative approach to language learning emphasizes conversational activities, vocabulary development and functional skills in reading, speaking, and listening, along with a brief review of Spanish grammar and a sense of Hispanic culture. **Prerequisites:** Spanish IV, AP Spanish Language and Culture, or AP Spanish Literature and Culture *1/2 credit* 

# **Online Courses**

Online courses require a great deal of self-motivation, discipline, and time management. Students who enroll in an online course will have a One Schoolhouse instructor, not an Ursuline instructor. A designated Ursuline administrator acts as the liaison with the One Schoolhouse and shadows the progress of the students taking online courses. The Ursuline administrator monitors tests and periodically checks in with the students. The online course credit and grade will be reflected on the Ursuline transcript and included in the Ursuline GPA.

Students taking One Schoolhouse classes follow the calendar and due dates of One Schoolhouse. First semester is September through December, and second semester is mid-January through the end of April. Students are assigned a period during the school day to work on this class, but due dates of assignments are on set days usually Tuesday and Friday.

There is an extended winter break but no Fall, Thanksgiving, Winter, Spring or Easter break. One Schoolhouse gives quarter grades.

#### Fall Semester 2022

- Fall Semester Classes Start September 12, 2022
- Quarter 1 Ends November 4, 2022
- Mid-Semester Report Published November 11, 2022
- Quarter 2 Ends and Final Day to Complete Semester December 16, 2022
- Semester I Report Published December 23, 2022

#### Spring Semester 2023

- Classes Resume January 17, 2023
- Quarter 3 Ends March 10, 2023
- Mid-Semester Report Published March 17, 2023
- Quarter 4 Ends and Final Day to Complete Semester April 28, 2023
- Semester II Report Published May 5, 2023

There is no senior exemption with One Schoolhouse. Failures follow Ursuline Academic policies.

There is no additional charge for these classes. Parents may receive an email showing the amount charged for the class, but this is not a bill. Ursuline pays for all charges. There is a charge for dropping a class after the first week of class. The fee for dropping a full credit class is \$1,715 and a half credit charge is \$1,035.

## **Computer Science**

**3667OLSG Advanced Computer Science: Game Design Fall Co-ed:** (Junior-Senior) Computer scientists are creatives, problem-solvers, puzzlers... and tech junkies. The fundamental purpose of programming is to solve a real-world problem, and if done well, the design is elegant, useful, usable. Moreover, if done well, then it is addictively fun. So how does that happen? At the intersection of art and science sits game design, a field of computer science that draws on graphic design, programming, math, and psychology to create the experiences we enjoy so much in video games, virtual reality apps, and all kinds of digital media. This class introduces students to the tools of a game designer: from coding in html5 to probability and optimization, students build on their prior computer science experiences to apply programming and design skills in this challenging and creative interdisciplinary field.

**Prerequisite:** Prior programming experience required *Fall semester* 1/2 credit

**3668OLSG Advanced Computer Science: Game Design Yearlong Co-ed:** (Junior-Senior) Computer scientists are creatives, problem-solvers, puzzlers... and tech junkies. The fundamental purpose of programming is to solve a real-world problem, and if done well, the design is elegant, useful, usable. Moreover, if done really well, then it is addictively fun. So how does that happen? At the intersection of art and science sits game design, a field of computer science that draws on graphic design, programming, math, and psychology to create the experiences we enjoy so much in video games, virtual reality apps, and all kinds of digital media. This class introduces students to the tools of a game designer: from coding in html5 to probability and optimization, students build on their prior computer science experiences to apply programming and design skills in this challenging and creative interdisciplinary field.

In Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry, authentic and iterative research, critical analysis, and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design, or research project on a topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students have gained academic maturity and expanded their ability to engage in a diverse and changing world. They are able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they have created and tested something useful of their own design or are able to defend a position based on their own research.

Prerequisite: Prior programming experience required 2 semesters 1 credit

**3653OLSG Artificial Intelligence Fall Co-ed:** (Sophomore-Senior) From virtual personal assistants like Siri and Alexa to autonomous vehicles that navigate and drive themselves, Artificial Intelligence (AI) is embedded in all kinds of technology and makes everyday objects act in human-like ways. Beginning with AI's foundation in data science, this course explores the world of AI, its key technologies, and the concerns guiding its use. Students model machine learning algorithms using block-based and Python programming languages, and design intelligent agents to solve real-world problems. Topics include natural language processing, image processing, deep neural networks, data science life cycle, computation thinking, and predictive analytics. Students leave this course having gained an understanding of how AI can help us make better decisions and build "smarter" technology.

Fall semester

½ credit

**3654OLSG Artificial Intelligence Yearlong Co-ed:** (Sophomore-Senior) From virtual personal assistants like Siri and Alexa to autonomous vehicles that navigate and drive themselves, Artificial Intelligence (AI) is embedded in all kinds of technology and makes everyday objects act in human-like ways. Beginning with AI's foundation in data science, this course explores the world of AI, its key technologies, and the concerns guiding its use. Students model machine learning algorithms using block-based and Python programming languages, and design intelligent agents to solve real-world problems. Topics include natural language processing, image processing, deep neural networks, data science life cycle, computation thinking, and predictive analytics. Students leave this course having gained an understanding of how AI can help us make better decisions and build "smarter" technology.

Students wishing to pursue an artificial intelligence project may enroll in the course for the full year. For students continuing into Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry; authentic and iterative research; critical analysis; and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design, or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

2 semesters

1 credit

## Mathematics

**3337OLSG Linear Algebra:** (Junior-Senior) Through applications to a wide variety of practical problems, students learn how to think about vectors, the spaces in which vectors live, and linear mappings between those spaces. They develop powerful new ways of thinking mathematically, and gain application skills for fields in which multiple variables interact in ways that can be modeled by systems of linear equations. This yearlong course covers a typical one-semester college linear algebra curriculum, including matrix algebra, vector spaces, eigenvalues and eigenvectors, and applications to differential equations. Linear algebra is a required and very useful subject in college for many science and engineering majors, and it can be studied either before or after multivariable calculus. It's a great fit for the student who has completed AP Calculus AB or BC, who is passionate about a challenge to think in new ways, and who wants to see math applied to the real world.

**Prerequisites:** AP Calculus AB or BC

2 semesters

**3677OLSG Multivariable Calculus and Differential Equations:** (Junior-Senior) This yearlong course covers a typical college-level Calculus III curriculum, including vectors and vector-valued functions, curves and surfaces in space, partial derivatives and gradients, multiple integration, and line and surface integrals. In the course's final unit, students learn how to identify and solve various kinds of differential equations, including exact first-order equations, second-order homogeneous and nonhomogeneous linear equations, partial differential equations, and applications to various scientific fields. Built on a foundation of sophisticated problem solving, the course also features discussions and exploratory activities that will help students develop their advanced math skills in collaborative and creative ways.

**Prerequisite:** AP Calculus BC

2 semesters

1 credit

#### Science

**4942OLSG Anatomy and Kinesiology Fall Co-ed:** (Senior) How does exercise change the body? How do muscles get bigger? How do bones repair themselves? What's the best breakfast to eat before an athletic event? Why? In this course, we will examine the body through an exercise lens. We will study the cardiovascular system and the changes that occur through exercising. We will learn about the endocrine system and research how performance enhancing substances interact with the endocrine system, for better or worse. We will study the skeletal system, muscular system, tendons and ligaments, and metabolism and nutrition. Throughout the course, you will engage in research, readings, discussion, projects, and presentations. The class will culminate with a presentation where you will research a question of your choosing in a peer-reviewed science journal. You will analyze the information and convey your conclusions to the class in an accessible way, speaking in your own words.

**Prerequisite:** Biology 1 Fall semester

1/2 credit

**4943OLSG Anatomy and Kinesiology Yearlong Co-ed:** (Senior) How does exercise change the body? How do muscles get bigger? How do bones repair themselves? What's the best breakfast to eat before an athletic event? Why? In this course, we will examine the body through an exercise lens. We will study the cardiovascular system and the changes that occur through exercising. We will learn about the endocrine system and research how performance enhancing substances interact with the endocrine system, for better or worse. We will study the skeletal system, muscular system, tendons and ligaments, and metabolism and nutrition. Throughout the course, you will engage in research, readings, discussion, projects, and presentations. The class will culminate with a presentation where you will research a question of your choosing in a peer-reviewed science journal. You will analyze the information and convey your conclusions to the class in an accessible way, speaking in your own words.

Students wishing to pursue an anatomy and kinesiology project may enroll in the course for the full year. For students continuing into Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry; authentic and iterative research; critical analysis; and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design, or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

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- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their

ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

**Prerequisite:** Biology 1 2 semesters

1 credit

**4922OLSG AP Environmental Science:** (Junior-Senior) AP Environmental Science provides students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for preventing and/or resolving them. Students make real-world connections between the topics introduced in class and those in their own "backyard." They participate in ethical discussions and collaborative projects designed to probe how different cultures and social structures affect the environment, and to explore potential solutions to today's environmental issues. Students engage authentically and creatively with their classmates through a variety of discussions, activities, labs, and projects to investigate the real-world problems that face our environment today. They study our environment and work collaboratively to understand our role in it. Students taking this course are well prepared for the AP Environmental Science Exam in May.

**Prerequisites:** Algebra I and one-year of high school laboratory Science 2 semesters 1 credit

**4934OLSG AP Physics I** (Junior-Senior) AP Physics I is an algebra-trigonometry based introductory college level physics course. The course is based on first semester introductory college physics and is designed for students planning to enter life science or pre-med programs in college. The goal of the course is to develop an understanding of physics through inquiry-based investigations. Students explore principles of Newtonian mechanics, work, energy, power, waves, sound and simple circuits. Additional supplemental topics are covered that build understanding of the primary College Board curriculum. Developing the ability to reason qualitatively and quantitatively is a principal focus. Those skills are developed through the use of modeling, graphing, diagramming, unit analysis, symbolic algebra and data analysis. Laboratory exercises are used to enhance the investigation of each topic. This course is intended to prepare students for the College Board AP Physics I Exam in May.

**Prerequisite:** Algebra II 2 semesters

**4323OLSG AP Physics II:** (Junior-Senior) AP Physics II is an algebra-based introductory college-level physics course. The course is based on second-semester introductory college physics and is designed for students who are interested in an upper-level science course or planning to enter life science or pre-med programs in college. The goal of the course is to develop an understanding of physics through inquiry-based investigations. Students explore principles of fluid mechanics, thermodynamics, electricity and magnetism, and atomic and nuclear physics. Additional supplemental topics are covered that build understanding of the primary College Board curriculum. Developing the ability to reason qualitatively and quantitatively is a principal focus. Those skills are developed using modeling, graphing, diagramming, unit analysis, symbolic algebra, and data analysis. Laboratory exercises are used to enhance the investigation of each topic. This course is intended to prepare students for the AP Physics II Exam in May.

 Prerequisites:
 Physics and completion or concurrent enrollment in Precalculus

 2 semesters
 1 credit

**4926OLSG Astronomy Co-ed Fall Semester:** (Sophomore-Senior) The objective of this course is to familiarize students with the basics of astronomy, with particular emphasis on the role of astronomy in their everyday lives. Students will study the planets of our solar system, the sun and other stars, and galaxies and the universe. The course seeks to foster students' innate curiosity in the unknown final frontier of space as humans boldly go forth in exploration. Students' culminating projects will analyze the current state of space exploration, both manned and unmanned endeavors, as well as the search for life outside of our planet. By the end of this course, students will have an orientation for observing the night sky and a framework for understanding that which is beyond what we can see from our own speck of the universe.

**Prerequisite**: One-year of high school Science Fall semester 1/2 credit

**4925OLSG Astronomy Co-ed Yearlong:** (Sophomore-Senior) The objective of this course is to familiarize students with the basics of astronomy, with particular emphasis on the role of astronomy in their everyday lives. Students will study the planets of our solar system, the sun and other stars, and galaxies and the universe. The course seeks to foster students' innate curiosity in the unknown final frontier of space as humans boldly go forth in exploration. Students' culminating projects will analyze the current state of space exploration, both manned and unmanned endeavors, as well as the search for life outside of our planet. By the end of this course, students will have an orientation for observing the night sky and a framework for understanding that which is beyond what we can see from our own speck of the universe.

In Semester 2, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry, authentic and iterative research, critical analysis, and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

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- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

Prerequisite: One-year of high school Science 2 semesters 1 credit

**4914OLSG Engineering Co-ed Fall Semester:** (Sophomore-Senior) Engineers create things. They are the designers of the modern world. The works they create drive society forward. This course will introduce students to many engineering disciplines including civil, architectural, mechanical, electrical, aerospace, computer, chemical and biomedical engineering. Students will learn the engineering design process used by practicing engineers, create engineering drawings, conduct a variety of hands-on projects, and consider the ethical issues within the field of engineering. Students will develop an array of specific skills by applying the engineering design process to a specific problem, demonstrating originality and resourcefulness in their work, reflecting critically to improve creative efforts in problem solving, and viewing success as a cyclical process.

Prerequisite: One-year high school Science

1 semester

1/2 credit

**4910OLSG Engineering Co-ed Yearlong:** (Sophomore-Senior) Engineers create things. They are the designers of the modern world. The works they create drive society forward. This course will introduce students to many engineering disciplines including civil, architectural, mechanical, electrical, aerospace, computer, chemical and biomedical engineering. Students will learn the engineering design process used by practicing engineers, create engineering drawings, conduct a variety of hands-on projects, and consider the ethical issues within the field of engineering. Students will develop an array of specific skills by applying the engineering design process to a specific problem, demonstrating originality and resourcefulness in their work, reflecting critically to improve creative efforts in problem solving, and viewing success as a cyclical process.

In Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry, authentic and iterative research, critical analysis, and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
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Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

Prerequisite: One-year high school Science 2 semesters 1 credit

**4900OLSG Forensic Science:** (Sophomore-Senior) Forensic Science examines the application of science to the criminal and civil laws enforced by the criminal justice system. Students explore the science of criminology by using a combination of science disciplines. As students learn to differentiate between actual techniques and some of those portrayed on popular television shows, they evaluate current procedures used by real crime labs to understand some of the limitations of the law, police and forensic science. Students examine scientific techniques behind the analysis of physical and eyewitness evidence, toxicology, DNA fingerprinting, fire and explosives, bones, handwriting and document analysis, and other relevant pieces of evidence. Throughout the course, students investigate simulated crime and accident scenes, collect and analyze evidence and develop observation skills and deductive reasoning.

 Prerequisite:
 One-year high school Science

 2 semesters
 1 credit

**4915OLSG Marine Science Co-ed:** (Sophomore-Senior) Marine Science introduces students to oceanography through a review of earth science concepts, an investigation of physical and chemical ocean systems, the exploration of marine organisms and ecology, and the role of climate change in both marine and global systems. Students read and dissect scientific literature; integrate their knowledge of marine ecological systems into practical applications of science; and bridge connections between science, society and political interests. Perhaps most importantly, students foster critical thinking skills and a keen understanding of the scientific process necessary to become well-informed and scientifically aware citizens, whether students' futures directly involve marine science or not. Students learn through virtual and at-home laboratory exercises, scientific literature analysis, reading and video assignments, and research using online journals and current oceanographic data. This work is largely collaborative as students engage with the teacher and with their classmates on projects and labs. There is a significant emphasis on the application of creativity and innovation in dealing with environmental challenges.

Prerequisite: One-year high school Science 2 semesters 1 credit

**4918OLSG Neuroscience**: (Sophomore-Senior) In this project-based course, students learn the structure of the brain and how the brain senses, thinks, behaves and creates memories for learning and language. They explore brain diseases, disorders, imaging techniques and treatments, as well as how the environment impacts the brain. Armed with this solid foundation in neuroscience, students spend the second semester learning to think like doctors. Students engage in group and individual research projects and seminar-style problem solving which helps develop the ability to find answers to questions that may not be addressed specifically in the course. They review actual cases in the neuroscience field and follow the doctrine of ethical analysis with patients. Students are guided through a self-designed, long-term research project. This course is designed for students who are considering college majors in a medical or health related field. By the end of the course students will have a basic knowledge of Neuroscience.

Prerequisite: One-year high school Science 2 semesters 1 credit

## Social Studies

**6905OLSG AP Macroeconomics:** (Junior-Senior) AP Macroeconomics introduces students to major economic issues such as basic market analysis, the causes of the cycle of economic growth and recession, the problems of inflation and unemployment, the causes and consequences of federal budget deficits, and the causes and effects of international trade imbalances and currency fluctuations. Students analyze the impact of fiscal and monetary policies as well as the debates surrounding the implementation of each. This course involves extensive reading, problem-solving exercises, online discussions, and researching and writing about contemporary macroeconomic issues. Multiple modalities are employed for content presentation so as to encourage personalization and assessment evaluates each student's ability to utilize skill sets related to economic decision making. Strong reading, algebra and analytical skills are necessary for success in the course, as is strong motivation. AP Macroeconomics develops informed, thoughtful and globally-minded students, and thoroughly prepares students to take the AP exam in the spring. AP Macroeconomics is recommended for juniors and seniors. **Prerequisite:** Algebra II

2 semesters

**6905OLSG AP Microeconomics:** (Junior-Senior) AP Microeconomics gives students an understanding of how economic decisions are made by individuals, firms, and organizational structures. The course emphasizes the nature and function of product markets, how prices determine an economy's allocation of goods and services, and how factors of production are allocated throughout the production process. Market structure, natural resource markets and the role of government are included. Students analyze societal issues through the lens of economic reasoning, develop critical thinking skills through the understanding and analysis of fundamental economic concepts, and increase their ability to analyze information and draw conclusions from a wide variety of real-world and hypothetical situations. Students complete collaborative assignments, group discussions, problem sets, quizzes and tests. The curriculum is developed to prepare students for the AP Microeconomics examination in May and is recommended for juniors and seniors with strong mathematical reasoning skills and an interest in economics, finance, business, or government policy.

**Prerequisite:** Algebra II 2 semesters

1 credit

**6906OLSG AP US United States Government and Politics & AP Comparative Government and Politics:** (Sophomore-Senior) AP US Government and Politics & AP Comparative Government and Politics is a yearlong course that provides students with an in-depth understanding of the American government as well as various political systems around the world. The fall focuses on American government, including how different agencies within the government interact, and how these agencies and their policies affect the daily lives of Americans. The spring covers AP Comparative Government and Politics, which is an introduction to the methodology of comparative politics, and an in-depth look at six different states: Iran, Nigeria, China, Russia, Mexico and Great Britain. Students will understand what factors contributed to the development of the American political system, and the structure of the U.S. government and American political process. They will also recognize major comparative political concepts and how to apply them. Finally, students will be able to compare political institutions and processes from across the world, and form sound conclusions based on those comparisons. This course prepares students for both AP exams in the spring.

Prerequisite: One-year high school Social Studies 2 semesters 1 credit

**6890OLSG AP World History: Modern Co-ed:** (Sophomore-Senior) AP World History is designed to be the equivalent of a two-semester introductory college modern world history course. In this course, students investigate, discuss, and analyze significant events, individuals, developments, and processes from approximately c. 1200 CE to the present. Students cultivate the skills used by historians when they analyze historical sources, make connections and comparisons, and craft historical arguments. The course is designed around six themes: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. By the end of this course, students will be able to explain the complex challenges of today through the lens of historical events, have improved their analytical and evaluative writing skills, and have gained the necessary skills for success on the AP exam in May.

Prerequisite: One-year high school Social Studies

2 semesters

**6941OLSG Asian American Identity in the United States Fall Co-ed:** (Sophomore-Senior) What does it mean to be "Asian American?" What challenges have Asian Americans encountered in their journey for self-definition and visibility in America's Black-white binary—a racial paradigm that has existed for centuries? This course examines the complex diversity and lived experiences of the Asian American community. Using historical text, literature, and media, students examine the evolution of Asian American identity with particular attention to how it has been influenced by concepts of war and empire, race, assimilation, citizenship, appropriation, and the US Civil Rights Movement. A key focus of this course is the agency that Asian Americans have exhibited in constructing who they are and who they want to be across ethno-nationality, class, gender, religion, language, and age. Students explore topics of their choosing that focus on specific Asian and Pacific Islander communities (e.g. Chinese, Filipino, Japanese, Korean, Indian, Samoan, and Vietnamese, etc.) and/or issues of personhood; the model minority stereotype; multiracial Asian Americans; intergenerational dynamics in the Asian immigrant family; immigrant youth, identity, and organizing; Asian feminism; and #StopAsianHate. This course offers students an interdisciplinary understanding of Asian American identity as a dynamic process, redefining historical notions of race.

Prerequisite: One-year high school Social Studies 1 semester 1/2 credit

**6942OLSG Asian American Identity in the United States Yearlong Co-ed:** (Sophomore-Senior) What does it mean to be "Asian American?" What challenges have Asian Americans encountered in their journey for self-definition and visibility in America's Black-white binary—a racial paradigm that has existed for centuries? This course examines the complex diversity and lived experiences of the Asian American community. Using historical text, literature, and media, students examine the evolution of Asian American identity with particular attention to how it has been influenced by concepts of war and empire, race, assimilation, citizenship, appropriation, and the US Civil Rights Movement. A key focus of this course is the agency that Asian Americans have exhibited in constructing who they are and who they want to be across ethno-nationality, class, gender, religion, language, and age. Students explore topics of their choosing that focus on specific Asian and Pacific Islander communities (e.g. Chinese, Filipino, Japanese, Korean, Indian, Samoan, and Vietnamese, etc.) and/or issues of personhood; the model minority stereotype; multiracial Asian Americans; intergenerational dynamics in the Asian immigrant family; immigrant youth, identity, and organizing; Asian feminism; and #StopAsianHate. This course offers students an interdisciplinary understanding of Asian American identity as a dynamic process, redefining historical notions of race.

For students continuing into Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry; authentic and iterative research; critical analysis; and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design, or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

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Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

 Prerequisite:
 One-year high school Social Studies

 2 semesters
 1 credit

**6937OLSG Black Identity in the United States Fall Co-ed:** (Sophomore-Senior) How have people of African descent defined themselves in the United States? How does the evolution of their identities over time provide us with insights into past and current social and political movements? This course takes an interdisciplinary approach to the study of Black identity drawing on examples from the humanities, social sciences, and the arts. Students explore the ways Black identity has been shaped by cultural continuities from Africa and the African Diaspora, systems of oppression, and the struggle for freedom, full citizenship, and democratic participation in the United States. Critical race theory forms the foundation for understanding Black identity as an alternative source of power and critique to anti-black racism. Students examine identity through the lens of cultural, social, and political movements such as #BlackLivesMatter, Black at, Afrofuturism, Hip-Hop and Youth Identity, Black Feminism, and the Civil Rights Movement. This course helps students build their awareness of how cultural identity is developed and its relationship to social change and activism.

**Prerequisite:** One-year high school Social Studies Fall semester ½ credit

**6938OLSG Black Identity in the United States Yearlong Co-ed:** (Sophomore-Senior) How have people of African descent defined themselves in the United States? How does the evolution of their identities over time provide us with insights into past and current social and political movements? This course takes an interdisciplinary approach to the study of Black identity drawing on examples from the humanities, social sciences, and the arts. Students explore the ways Black identity has been shaped by cultural continuities from Africa and the African Diaspora, systems of oppression, and the struggle for freedom, full citizenship, and democratic participation in the United States. Critical race theory forms the foundation for understanding Black identity as an alternative source of power and critique to anti-black racism. Students examine identity through the lens of cultural, social, and political movements such as #BlackLivesMatter, Black at, Afrofuturism, Hip-Hop and Youth Identity, Black Feminism, and the Civil Rights Movement. This course helps students build their awareness of how cultural identity is developed and its relationship to social change and activism.

Students wishing to pursue a Black Identity project may enroll in the course for the full year. For students continuing into Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry; authentic and iterative research; critical analysis; and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design, or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

 Prerequisite:
 One-year high school Social Studies

 2 semesters
 1 credit

**6925OLSG Business and Economics Co-ed Fall:** (Junior-Senior) Business and Economics students gain fluency in foundational economic principles and explore business planning, development, and management. Students study the fundamentals of microeconomics, including supply and demand, incentives, pricing and production, followed by macroeconomic concepts such as economic indexes, The Federal Reserve and financial markets, as well as trade agreements and globalization. This is an ideal survey course for students considering a college degree in economics, business or management. Students will have a working foundation to analyze current events in the corporate world and the international economy.

Prerequisite: Algebra II

1 semester

½ credit

**6926OLSG Business and Economics Co-ed Yearlong:** (Junior-Senior) Business and Economics students gain fluency in foundational economic principles and explore business planning, development and management. Students study the fundamentals of microeconomics, including supply and demand, incentives, pricing and production, followed by macroeconomic concepts such as economic indexes, The Federal Reserve and financial markets, as well as trade agreements and globalization. This is an ideal survey course for students considering a college degree in economics, business or management. Students will have a working foundation to analyze current events in the corporate world and the international economy.

In Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry, authentic and iterative research, critical analysis, and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

**Prerequisite:** Algebra II 2 semesters

**6916OLSG Civic Engagement Co-ed Fall:** (Sophomore-Senior) We are part of many different communities that shape who we are and what we believe. This course provides students with opportunities to understand better how our society and political system shape their various identities. By exploring aspects of our identities and lived experiences, we evaluate how the concept of citizenship and the individual citizen work together to create the communities we inhabit. From the launching point of the knowledge, values, and feelings we bring into the class, we uncover our own biases, explore the difference between fact and opinion, practice empathy, and learn to voice our own perspectives without silencing the perspectives of others. We investigate how power structures in our society, ranging from government to the media, affect us. Students who take this course will leave with an understanding of our political system, society, and the structural frameworks that shape our identities, while simultaneously developing increased empathy and global awareness.

Prerequisite: One-year high school Social Studies

1 semester

**⅓** credit

**6915OLSG Civic Engagement Co-ed Yearlong:** (Sophomore-Senior) We are part of many different communities that shape who we are and what we believe. This course provides students with opportunities to understand better how our society and political system shape their various identities. By exploring aspects of our identities and lived experiences, we evaluate how the concept of citizenship and the individual citizen work together to create the communities we inhabit. From the launching point of the knowledge, values, and feelings we bring into the class, we uncover our own biases, explore the difference between fact and opinion, practice empathy, and learn to voice our own perspectives without silencing the perspectives of others. We investigate how power structures in our society, ranging from government to the media, affect us. Students who take this course will leave with an understanding of our political system, society, and the structural frameworks that shape our identities, while simultaneously developing increased empathy and global awareness.

Students wishing to pursue a civics or political science project may enroll in the course for the full year. For students continuing into Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry; authentic and iterative research; critical analysis; and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design, or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

Prerequisite:One-year high school Social Studies2 semesters1 credit

**6930OLSG Criminal Justice Reform Co-ed Fall Semester:** (Sophomore-Senior) The United States has the highest incarceration rate in the world. This course examines how the prison industrial complex evolved, and how the legacy of slavery, modern immigration policy, and overt and masked racism impact arrests, indictments, and sentencing. We explore why people are wrongly condemned and evaluate the effectiveness of the process for exoneration, and we ask about the training law enforcement officers, prison wardens, juries, and judges receive. The course culminates with a collaborative project on how our system can be reformed to reduce crime and improve justice. By the end of this course, students will have a framework for understanding the socioeconomics=and politics of the United States penal system.

**6931OLSG Criminal Justice Reform Co-ed Yearlong:** (Sophomore-Senior) The United States has the highest incarceration rate in the world. This course examines how the prison industrial complex evolved, and how the legacy of slavery, modern immigration policy, and overt and masked racism impact arrests, indictments, and sentencing. We explore why people are wrongly condemned and evaluate the effectiveness of the process for exoneration, and we ask about the training law enforcement officers, prison wardens, juries, and judges receive. The course culminates with a collaborative project on how our system can be reformed to reduce crime and improve justice. By the end of this course, students will have a framework for understanding the socioeconomics and politics of the United States penal system.

In Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry, authentic and iterative research, critical analysis, and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

2 semesters

1 credit

**6935OLSG Happiness! The Psychology of What Makes Life Worth Living Co-ed Fall:** (Sophomore-Senior) There's a lot of pressure on young adults to "discover their passions" and "live lives of purpose." Why? Because we want you to be happy and whole, which are states of being that have to be cultivated. Positive psychology is the scientific study of what makes life most worth living (Peterson, 2008), so understanding the traits and actions that lead to well-being and fulfillment are the focus of this class. Students collaboratively explore the outcomes of behaviors such as learned helplessness and learned optimism so that they can identify practices that build resilience, compassion, and gratitude, and they have opportunities to research nuanced topics in the positive psychology literature and design activities that connect theory to lived experience.

6936OLSG Happiness! The Psychology of What Makes Life Worth Living Co-ed Yearlong: (Sophomore-Senior) There's a lot of pressure on young adults to "discover their passions" and "live lives of purpose." Why? Because we want you to be happy and whole, which are states of being that have to be cultivated. Positive psychology is the scientific study of what makes life most worth living (Peterson, 2008), so understanding the traits and actions that lead to well-being and fulfillment are the focus of this class. Students collaboratively explore the outcomes of behaviors such as learned helplessness and learned optimism so that they can identify practices that build resilience, compassion, and gratitude, and they have opportunities to research nuanced topics in the positive psychology literature and design activities that connect theory to lived experience.

In Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry, authentic and iterative research, critical analysis, and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, • environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

2 semesters 1 credit

6939OLSG Latino/a/x Identity in the United States Co-ed Fall: (Sophomore-Senior) What does the term "Latino/a/x" mean, and who exactly does the term represent? This course examines the experience of people living in the United States who identify as Latino/a/x and have ethnic and cultural origins in Latin America. Students examine what historical forces have driven the adoption of this pan-ethnic identity through the lens of race, colonization, migration/immigration, and the media. Special consideration is given to regional differences in Latino/a/x identity formation, the impact of political activism like the Chicano Movement, and the recent creation of "Latinx" to include non-binary Latino/a identities. Students explore topics of their choosing that focus on specific Latino/a/x communities (e.g., Mexican, Dominican, Puerto Rican, etc.), intracultural differences across Latino/a/x communities, or unique expressions of Latino/a/x identities like Mestizaje, AfroLatinidad, and Chicanismo. This course offers students a deeper understanding of diverse and complex identities that make-up Latino/a/x communities.

Prerequisite: One-year high school Social Studies

1 semester

1/2 credit

**6940OLSG Latino/a/x Identity in the United States Co-ed Yearlong:** (Sophomore-Senior) What does the term "Latino/a/x" mean, and who exactly does the term represent? This course examines the experience of people living in the United States who identify as Latino/a/x and have ethnic and cultural origins in Latin America. Students examine what historical forces have driven the adoption of this pan-ethnic identity through the lens of race, colonization, migration/immigration, and the media. Special consideration is given to regional differences in Latino/a/x identity formation, the impact of political activism like the Chicano Movement, and the recent creation of "Latinx" to include non-binary Latino/a identities. Students explore topics of their choosing that focus on specific Latino/a/x communities (e.g., Mexican, Dominican, Puerto Rican, etc.), intracultural differences across Latino/a/x communities, or unique expressions of Latino/a/x identities like Mestizaje, AfroLatinidad, and Chicanismo. This course offers students a deeper understanding of diverse and complex identities that make-up Latino/a/x communities.

Students wishing to pursue a Latino/a/x studies project may enroll in the course for the full year. For students continuing into Semester II, the course shifts into personalized, project-based work, where students engage in deep, sustained inquiry; authentic and iterative research; critical analysis; and rigorous reflection, revision, and assessment as they journey through a self-designed, long-term activism, design, or research project on the topic of their choosing. Guided by a One Schoolhouse teacher, students pursue individual study/self-assessment or collaborative seminar/peer-review. Pathway options from which students choose include:

- Spring Activism Seminar: In this seminar, students identify a need and create a plan to effect economic, environmental, political, or social change in a target community. Utilizing a social science approach to research and evaluation, students are guided through the process of planning the deployment of a novel idea and identifying markers of success. Students may create a strategic plan for a club or non-profit or design an artistic product in this seminar.
- Spring Design Seminar: In this seminar, students design a technological solution to a real-world problem. Through the engineering design process/scientific method, students gather and analyze data to determine the effectiveness of their model or the accuracy of their hypothesis. Students may prototype and produce a public product in this seminar.
- Spring Research Seminar: In this seminar, students answer a theoretical or ethical question. Utilizing the social science/humanities tools for source evaluation, students collect, critique, and evaluate artifacts or primary source documents to explore their thesis. Students may create a written or multimedia product in this seminar.

Upon completion of their inquiry-driven project, students will have gained academic maturity and expanded their ability to engage in a diverse and changing world. They will be able to draw and defend conclusions from theoretical underpinnings, contextual background, and mathematical analysis or source evaluation. Finally, they will have created and tested something useful of their own design or will be able to defend a position based on their own research.

Prerequisite: One-year high school Social Studies 2 semesters 1 credit

## Visual Arts

**2915OLSG AP Art History:** (Sophomore-Senior) Students in AP Art History examine and critically analyze major forms of artistic expression from diverse cultures spanning 27,000 years. By investigating an image set of 250 works, students develop a contextual understanding of art history from a global perspective. Influences such as patronage, politics, class, belief systems, gender, ethnicity and cross-cultural interactions inform students' analysis of the style and content of art. Emphasis is placed on analytical and critical thinking skills, the language of art history, and the methods used by art historians to interpret art objects. Students experience, research, discuss, and write about art, artists and art making. Upon completion of this course, students will have the tools to recognize important works of art and historical styles as well as understand historical and cultural context. Students choosing the AP class are expected to delve deeper into the topics, take AP -style assessments, and prepare for the AP exam in the spring.

2 semesters

## World Language

**1925OLSG Beginning American Sign Language Co-ed (ASL I):** (Sophomore-Senior) When you start any new language, you want to start conversing right away! Unlike all other languages, when English speaking students start learning American Sign Language, they are fingerspelling within the first few weeks so there's no delay in communicating in your new target language. Once students have the basics of letters and numbers mastered, they move on to the five sign parameters: handshape, palm orientation, location, movement, and facial expressions. Like all languages, students also learn parts of speech, and sentence word order and types. Learning happens in cultural context as students explore the history and physiology of deafness, and discrimination experienced by the hearing impaired.

2 semesters

1 credit

1 credit

**1926OLSG American Sign Language II Co-ed (ASL II):** (Sophomore-Senior) Students continue their journey into the Deaf World in ASL II. In this course, students continue developing basic knowledge and understanding of conversational ASL and cultural features of the language and community. Students reinforce their skills of fingerspelling and numbers while learning new vocabulary. Topics covered include school days, sports, daily schedule, describing people, being out around town, food, jobs, and animals. Aspects of deaf culture are integrated into the lessons.

**Prerequisite:** ASL I 2 semesters

**1902OLSG AP Chinese Language and Culture Co-ed:** (Junior-Senior) AP Chinese Language and Culture provides deeper understanding and broader application of Chinese language and culture for advanced or heritage Chinese learners. This course focuses on applying Chinese language and cultural skills in real-world situations, and exploring a variety of topics in Chinese history, geography, music and arts, literature, daily life, and national and global issues. Students use teamwork, group online seminars, one-on-one conferences with the teacher, and a variety of engaging activities and experiential projects to meet individual needs. Students gain the high language proficiency and cultural competency to compare, examine, evaluate and solve conflicts successfully. AP students are expected to delve deeper into the topics, take AP -style assessments, and prepare for the AP exam.

Prerequisite: Department Approval2 semesters1 credit

**1910OLSG Latin I Co-ed:** (Sophomore-Senior) The Latin Beginning I course begins the study of the language, culture and history of the ancient Romans. By the end of the year, students will have gained extensive experience in various competency areas of the language: reading and interpreting, oral expression and aural comprehension. Students will also learn and practice linear-reading strategies that build critical thinking skills. Every step of the way students expand their English vocabulary through the study of Latin word roots. In addition, significant time is devoted to the study of areas of Roman culture and history as presented through the products of the Romans such as art, architecture and engineering techniques. Students also examine evidence of Roman daily life and compare the ancient Roman customs to those of the modern world. Every unit of Latin I incorporates linguistic and cultural/historical material. Many of the unit assessments are collaborative projects with individualized pathways requiring that students work together to create linguistic, artistic and creative materials that demonstrate their understanding of the unit content.

2 semesters

## Summer Programs

Ursuline's Summer Programs foster academic and personal growth through diverse academic and enrichment opportunities.

#### Summer Programs offered by Ursuline Academy include:

- Summer School 1/2 credit courses in an accelerated format
- Summer Experiential Learning unique courses that blend academics with hands-on experience
- One Schoolhouse Online Summer Courses 1 credit courses in an accelerated format offered through One Schoolhouse
- Summer Workshops short, non-credit courses that prepare students for a successful school year. Workshop descriptions and registration link can be found on the Ursuline Academy website.

#### Summer School Credit Courses

#### Ursuline Academy's Summer School 2022 will be offered in two in person, on campus sessions:

- Summer I: June 3-24, 2022
- Summer II: July 18-Aug. 5, 2022 (classes will be virtual July 22 and July 29)

#### **Computer Science**

**3621S Programming I:** (Sophomore-Senior) This core semester course provides students with an introduction to critical thinking and problem solving through programming. Python is quickly becoming the go-to language for universities as well as the most widely used programming language in industry. This course introduces fundamental programming concepts such as data types, variables, function design and control flow with an emphasis on graphics. Best programming practices are emphasized as students design, code, debug, and test algorithms to solve real-world applications.

 Summer I 6/3-6/24
 8:40 a.m.-11:40 a.m. or 12:40 p.m.-3:40 p.m.

 \$475
 ½ credit

## English

**5654S Creative Writing I:** (Sophomore-Senior) This elective course provides a forum for students seeking an opportunity for written self-expression and an opportunity to develop skills to enhance the power and clarity of that expression. The course will focus on two specific areas of creative writing: poetry and short fiction. Much of the class will employ a workshop format in which activities include modeling, class discussion, and peer review. Essential to the success of the class is the willingness of students to submit their work to the critical response of their peers, as well as their ability to evaluate candidly the work of those same peers. Summer I 6/3-6/24 8:40 a.m.-11:40 a.m.

## **Performing Arts**

**2727S Ballet for Fine Arts credit:** (Freshman-Senior) This class will focus on ballet terminology and technique through the execution of barre work, center, across the floor exercises, and ballet variations. The student will have a clear understanding of body alignment, movement quality, port de bras, and flexibility. All levels accepted.

Summer I 6/3-6/24	8:40 a.m11:40 a.m.
\$475	<sup>1</sup> /2 credit Fine Arts or <sup>1</sup> /2 credit PE

**2761S Stage Makeup Design:** (Freshman-Senior) This is an introductory course that studies the theory and practice of make-up design and its application for stage. Students will explore basic makeup principles, old-age makeup techniques, and fantasy makeup design, including the creation of special effects. Students will be applying their own make-up to themselves, and a supply list will be sent prior to the start of the course. Students are encouraged to be a part of the makeup crew during the Ursuline main stage production.

Summer I 6/3 – 6/24 8:40 a.m.-11:40 a.m. \$475 ½ credit

## **Physical Education**

**8620S Ballet for P.E. credit:** (Freshman-Senior) This class will focus on ballet terminology and technique through the execution of barre work, center, across the floor exercises, and ballet variations. The student will have a clear understanding of body alignment, movement quality, port de bras, and flexibility. All levels accepted.

Summer I 6/3-6/24 \$475 8:40 a.m.-11:40 a.m. ½ credit Fine Arts or ½ credit PE

**81325 Wellness:** (Freshman-Sophomore) This course guides students throughout the many dimensions of Wellness (spiritual, physical, mental, emotional, occupational, and social) and provides an atmosphere to discuss and learn about how to live a healthy and stress-free life. Students will develop skills needed to maintain an active lifestyle, learn the importance of nutrition, and discover how to find a healthy balance of all facets of Wellness. Students will also engage in building essential skills needed to maintain optimal health while developing ways to promote healthy lifestyles in our diverse society.

 Summer I
 6/3-6/24
 8:40 a.m.-11:40 a.m. or 12:40 p.m.-3:40 p.m.

 \$475
 ½ credit

## **Social Studies**

**6434S Government:** (Senior) United States Government introduces students to the fundamentals of American government and politics, particularly the major institutions and processes. It also aims to develop students' skills and abilities in analyzing and evaluating issues and public policies in American politics as well as the role of the United States on the world stage.

Summer I 6/3 – 6/24	8:40 a.m11:40 a.m.
\$475	1/2 credit

**6435S Macroeconomics**: (Senior) This course is the study of American society and the free enterprise system. Emphasis is placed upon how society uses its limited resources and produces, distributes and consumes goods and services in order to satisfy the unlimited wants of its members. General principles of economics are presented including theory of supply and demand, money and banking, and monetary and fiscal policies. Summer I 6/3 - 6/24 8:40 a.m. or 12:40 p.m. -3:40 p.m. <sup>1</sup>/<sub>2</sub> credit

**6683S U.S. Women's History** (Sophomore-Senior) This course will provide an introduction to U.S. history centering on the experiences of women. From the colonial era to the present, students will examine turning points in American history and the key role women have played, and continue to play, in shaping the nation. The course will begin with early indigenous and enslaved accounts of life in North America, and continue by revisiting major events through women's eyes. By the end of the term, students will be able to discuss how we might reperiodize U.S. history when placing women at the center of the narrative. This course will include readings from a range of primary and secondary sources, as well as original research.

Summer II 7/18 - 8/5 12:40 p.m.-3:40 p.m. \$475 1/2 credit

## Theology

During the school year, Theology students take part in many activities not included in the summer program that help them to grow in faith and spirituality, including daily masses, Advent and Lenten Reconciliation, and sustained reflection upon their journeys of faith. So that each student may experience these, students are limited to one Summer School Theology course per year.

**7442S Ecumenical and Interreligious Issues:** (Senior) The purpose of this course is to acquaint students with the different major world religions and various Christian faith traditions. By engaging in a detailed study of the sacred writings and works of several world religions in addition to various Christian communities, the course will introduce students to diverse traditions, doctrines, cultures, and histories. Additionally, students will be exposed to the way these communities share similar beliefs with the Catholic Church. The course will also help students identify what common threads join humanity together in its search to understand God. Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the course will help students to recognize the ways in which important spiritual truths can also be found in the varied Christian faith traditions as well as in the major world religions. This course is also intended to help them recognize the ways in which other systems of belief and practice differ from the Catholic faith. Summer II 7/18 - 8/5  $\frac{1}{2}$  credit

**7440S Catholic Social Justice:** (Senior) Formerly known as Living as a Disciple, this course prepares students<br/>for living in a just manner beyond graduation. The Christian understanding reveals that God desires a world in<br/>which all facets of life are guided by justice and charity. Jesus has called upon us to build his kingdom on earth.<br/>The Church, therefore, has been faithful to fostering a just and peaceful world. This course, integrating the<br/>learning of the past three years, uses the Gospels and Catholic Social Teaching to help students appreciate the<br/>richness of the Church's social mission. Topics to be addressed include the dignity of the human person,<br/>poverty, rights and responsibilities of family, workers and community, solidarity and ecology.<br/>Summer I 6/3-6/24<br/>8:40 a.m.-11:40 a.m.<br/>
\$475

**7335S Sacraments: Privileged Encounters with Jesus Christ:** (Junior) This course guides students to better understand how Jesus is personally and visibly present in the actions of the sacraments. Students discover how the sacraments fulfill our human need for physical manifestations of the spiritual. The course ultimately aims at instilling the value of sacraments as tools to help us on our journey to heaven and as personal experiences of Christ's grace.

Summer I 6/3-6/24	8:40 a.m11:40 a.m.
Summer II 7/18-8/5	8:40 a.m11:40 a.m. or 12:40 p.m3:40 p.m.
\$475	1/2 credit

## Visual Arts

**Ceramics:** A multilevel combined course: This course is open to any student whether new or with experience in ceramics. Students on the beginning level will be introduced to the hand building methods of

Pinching, Coiling and Slab as well as an introduction to the wheel. Students with experience in clay will continue at their own level, incorporating more complex forms, sculpture and wheel work. All work will be glazed and fired.

2550S Ceramic Basics I: (Freshman-Ser	nior) <b>Prerequisite</b> : None
2551S Ceramic Basics II: (Sophomore-	Senior) <b>Prerequisite</b> : Instructor Approval
2552S Ceramics III: (Sophomore-Senio	r) <b>Prerequisite</b> : Instructor Approval
2553S Ceramics IV: (Sophomore-Senior	r) <b>Prerequisite</b> : Instructor Approval
Summer I 6/3-6/24	8:40 a.m11:40 a.m. or 12:40 p.m3:40 p.m.
\$475	1/2 credit

**2549S Fused Glass:** (Freshman-Senior) In this class, students explore the ancient art form of fused glass. Students learn the proper process involved in stacking, or layering thin sheets of colored glass, to create their own artistic designs as they develop patterns or simple images. Students may choose to incorporate glass frits and liquid glass to enhance their designs. The stacked glass design is then fused by placing it inside an electric kiln and heating it until the design is fused into one piece. With this process, students may choose to create non-functional works of art or functional plates, bowls, and tiles. Students also learn to make glass beads using a propane torch and glass rods and then experiment with incorporating the beads into jewelry. Students will investigate the historical context and origin of this art form and discover how various cultures have embraced and defined the art of fused glass. Summer I 6/3-6/24 12:40 p.m.-3:40 p.m.

**2538S Studio Art I: Drawing, Painting, and Design Foundations:** (Freshman-Senior) In this class students develop an understanding of the elements of art: line, shape, color, value, form, texture, and space, as the fundamental building blocks for creating a work of art. Students focus on applying the elements of art in a wide variety of artistic challenges by engaging in sketchbook activities and creating works of art. These creative exercises support a working knowledge of each element and allow students to explore a variety of mediums and art forms including drawing, painting, and collage. Students complete the class with a portfolio of approximately four to five works of art. This hands-on art class is designed to benefit the beginning art student as well as challenge the advanced student. Completion of this class prepares students with a foundation of skill and vocabulary to proceed into any upper-level art class.

 Summer II
 7/18-8/5
 8:40 a.m. - 11:40 a.m.

 \$475
 ½ credit

## Summer Experiential Learning

Summer Study Travel programs are not in place for Summer 2022, but we are planning for their return in Summer 2023.

**Ursuline Academy Student Internship Program:** (Senior) This program offers personal development, life-skills mentoring and career awareness through practical experience. These are UA researched and authorized summer internships with Dallas area professionals, many of whom are Ursuline alumnae. Internships are available to rising Seniors and take place between May 31 and August 19, 2022, prior to the senior year. Interested juniors sign up for an individual meeting with the director of the internship program and are matched with internships in the spring of 2022. To earn acknowledgment on transcripts, interns must complete a minimum of 60 hours of internship service, maintain a journal, write a thank you to the mentor, and complete an online evaluation at the conclusion of the program. Completed journals, thank you notes, and evaluations must be submitted to the director of the program no later than August 31, 2022, to qualify for transcript acknowledgement. For Information: Contact Christian Freberg at cfreberg@ursulinedallas.org

Prerequisite: Complete one-to-one meeting with Internship CoordinatorInternship: 5/31–8/19Assignment due by August 31, 2022\$250 (non-refundable)Non-credit

# **Summer Online Courses**

Summer courses are intensive for-credit opportunities for ambitious students who are self-motivated, disciplined, and skilled in time management. Students participating in these courses should plan to devote 20-25 hours per week for all eight weeks to their course. Students receive grades and comments in these classes, which are the equivalent of year-long, high-school courses. Because of the pacing and intensity of for-credit summer courses, students must have the ability to login and complete work for their course daily; students must be available and have internet access from June 13 - August 5 - this is nonnegotiable!

Students who enroll in an online course will have an online One Schoolhouse instructor, not an Ursuline instructor. A designated Ursuline administrator acts as the liaison with One Schoolhouse and shadows the progress of the students taking online courses. The Ursuline administrator periodically checks in with the students. The online course credit and grade will be reflected on the Ursuline transcript and included in the Ursuline GPA. Cost for course is \$1,715.

- Summer Classes Start June 13, 2022
- Mid-Term Grading Period Ends July 8, 2022
- Mid-Term Report Published for Students and Parents/Guardians July 15, 2022
- Last Day of Session August 5, 2022
- Final Report Published for Students and Parents/Guardians August 12, 2022

## **Computer Science**

**3641OLSG AP Computer Science Principles Co-ed:** (Sophomore-Senior) This course investigates the "big ideas" found in our digital world. Using the Python programming language, students demonstrate fundamental concepts of computer programming that can be applied across a variety of projects and languages. Students explore different means of representing information digitally and how our digital world has evolved. They create computer programs to solve authentic problems or for personal interest, such as unique musical pieces, math calculators and data summations. Students discuss the current state of technology and its role in our everyday lives, discerning the positive and negative influences of innovations concerning computer and network technologies to society, culture and economics. Students develop their skills in computational thinking, logical reasoning, and learn to describe processes through algorithms and abstraction. Finally, students demonstrate their learning by creating a portfolio for submission to the College Board and are prepared for the AP Computer Science Principles exam in May. Students planning to submit their portfolio tasks and sit for the AP exam will maintain access to online support and exam prep materials until the exam in May.

**Prerequisite:** Director of Research and Educational Innovation Approval (Sbauer@ursulinedallas.org) 6/13 - 8/05 - \$1,715 *1 credit* 

## Mathematics

**3933OLSG Algebra II Co-ed:** (Junior) Algebra II enriches algebraic and geometric skills to form the foundation for key concepts in advanced math courses. This course covers a full year of Algebra II in eight weeks by addressing algebraic functions and equations of lines and higher order polynomials; exponents and logarithms; rational expressions; absolute value; piecewise; and step. The course ends with an introduction to trigonometry beyond the right triangle. Students explore concepts directly through their own investigations, make and test conjectures about what they observe, and apply these conjectures to solve problems and create new conjectures. Assessments include tests and quizzes, discussion prompts, and group and individual projects. By the end of the course, students will have gained proficiency in critical thinking, pattern recognition, graphing, transformations, and communication.

**Prerequisites:** Algebra I and Geometry, Department Chair and Director of Research and Educational Innovation Approval (tyung@ursulinedallas.org, Sbauer@ursulinedallas.org) 6/13 - 8/05 - \$1,715 *1 credit*  **3914OLSG Precalculus Co-ed:** (Junior-Senior) This course covers a full year of Pre-Calculus in eight weeks by addressing the algebraic and trigonometric concepts that lay the foundation for AP Calculus. Students graph and solve polynomial, rational, exponential, and logarithmic functions and apply these functions to model the relationship between different quantities in the real world. They explore the unit circle, solve trigonometric equations, and study abstract applications by proving trigonometric identities. Students then examine and apply algebraic representations of matrices, vectors, sequences and series, and conic sections by understanding the patterns and behaviors associated with these concepts. The course concludes with an introduction to calculus through limits. Students preparing for AP Calculus BC also have the option of studying polar coordinates, parametric functions, and derivatives. Students demonstrate mastery through traditional and alternative assessments, discussion prompts, reflection on their learning, group collaboration, and individual projects.

Prerequisites: Algebra II, Departmental and Director of Research and Educational Innovation Approval (tyung@ursulinedallas.org, Sbauer@ursulinedallas.org)

6/13 - 8/05 - \$1,715 *1 credit* 

**3401S Calculus Co-ed:** (Junior-Senior) This single variable calculus course will cover the entire AP® Calculus AB curriculum with specific focus on the "A" content of the AP® Exam. Students practice conceptual reasoning and learn how to present a solution algebraically, geometrically, numerically, and tabularly. Students develop a clear understanding of calculus concepts using AP® Exam multiple-choice and free-response questions as checkpoints and guidelines. By the end of the course, students will be able to read and interpret graphical data accurately, use words to explain their reasoning, and provide context for final answers. Major topics include limits, derivatives, related rates, optimization, integrals, volume, and their applications. This personalized course features discussions, reflections, and projects that will help students master skills in an engaging way. It is designed for the ambitious math student looking to either develop a strong foundation in calculus, preview the AP® Calculus AB curriculum over the summer, or advance to AP® Calculus BC the following school year.

**Prerequisites:** Pre-Calculus, Departmental and Director of Research and Educational Innovation Approval (tyung@ursulinedallas.org, Sbauer@ursulinedallas.org)

6/13 - 8/05 - \$1,715 *1 credit* 

#### **Social Studies**

**6933OLSG United States History:** (Junior) This course is a full year social science credit surveying the history of the United States of America. The course begins with an examination of America before Columbus. Having established an understanding of how Native Americans managed and used the land, the course turns to European conquest and colonial America, including how the stage was set for a plural and diverse modern America. The heart of the course centers around the themes of the American Revolution; the rise of democracy, the Republic, and the Constitution; the Civil War and Reconstruction; and how territorial expansion and industrialization laid the foundation for the movements and conflicts of the 20th and 21st centuries. In order to develop a broad understanding of continuity and change in American history, students build a contextual understanding of the major events within each era while exploring political, social, cultural, economic, and religious trends in the United States. Through critical analysis, research and writing; collaborative activities; creative synthesis applications; and traditional and alternative assessments, students demonstrate understanding of cultural implications and historical context, and develop a chronological and thematic appreciation of American history.

**Prerequisite**: Director of Research and Educational Innovation Approval (Sbauer@ursulinedallas.org) 6/13 - 8/05 - \$1,715 *1 credit*