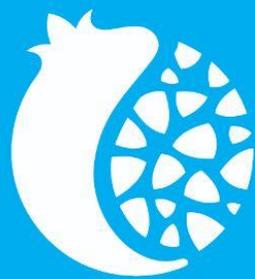


# CURRICULUM GUIDE 2021-2022



**FRANKEL  
JEWISH  
ACADEMY**

# Curriculum Guide

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**For questions about courses or registering for classes, please contact:  
Ella Dunajsky, Counselor [edunajsky@frankelja.org](mailto:edunajsky@frankelja.org)**

\* Note: Not all elective courses are offered every semester.

# Mission and Core Values

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## Mission

Frankel Jewish Academy is a rigorous college preparatory high school pursuing academic excellence and Jewish literacy. We inspire students to think critically, creatively, and compassionately; to dedicate themselves to Jewish tradition, peoplehood, and the State of Israel; and to become lifelong learners and leaders.

## Core Values

Frankel Jewish Academy strives to create and maintain a positive learning environment in which all students have the opportunity to grow academically, Jewishly, emotionally and socially. At FJA, we believe that a high standard of academics goes hand in hand with a high standard of ethics. In support of this belief, we have created a set of Core Values that guides our school community:

- Respecting the importance of Jewish values, mitzvot\*, and daily prayer.
- Acting with derech erez\*.
- Pursuing excellence in Jewish and general scholarship.
- Committing to honesty, integrity, accountability, and personal responsibility inside and outside the classroom and in the general community.
- Respecting all members of the FJA community and all human beings as created in the image of God.
- Participating in and serving the FJA community and the larger Jewish and general communities.

\* mitzvot = Jewish laws, also called commandments or good deeds

\* derech erez = respectful and proper behavior

## Notice of Nondiscriminatory Policy as to Students:

Frankel Jewish Academy admits students of any race, color, gender identity, sexual orientation, disability, national and ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, gender identity, sexual orientation, disability, national and ethnic origin in the administration of its educational policies, admission policies, scholarship programs, and athletic and other school administered programs.

# Graduation Requirements

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Every FJA student must be enrolled in eight courses each semester. Students are expected to be in school the entire school day. For further explanation, please refer to the Student Handbook.

*Note: One credit is equal to two semesters.*

4 credits of English

4 credits of Mathematics

3 credits of Hebrew Language

3 credits of History/Social Studies

3 credits of Science

2 credits of Jewish Texts and Tradition

2.5 credits of Jewish Studies Electives

2 credits of Arts/Activities

8.5 Academic Electives/Study Hall - maximum one study hall per semester

4 Years of *Zman Kodesh* (Minyan)

- The English course of study must include the core, grade-level class each year.
- The Math course of study must include Algebra I, Geometry, and Algebra II.
- The Science course of study must include Biology and also Chemistry or Physics.
- The Social Studies course of study must include World History or AP Human Geography, US History or AP US History, Government/Economics or AP Government.
- The Jewish Studies course of study must include: "Integrated Jewish Texts and Tradition" or Honors Bible and Honors Rabbis in 9th and 10th grade, 0.5 credit (one semester) of Modern Jewish History, and 0.5 credit (one semester) of Arab/Israel Conflict. The remaining credits are fulfilled by taking other Jewish Studies courses.

# **Computer Sciences & Engineering Technologies**

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## **Pre-Engineering Basics**

### **TEC 200**

**Grades: 9-12**

Semester: 0.5 Credit

Prerequisite: None

In Pre-Engineering Basics students will learn the technical drawing and basic sketching principles, with an emphasis on the engineering and design process while also providing an introduction to basic 2D CAD principals. This course is highly recommended for students interested in engineering, architecture, or any other technical design careers.

Students that complete this course will cover the following topics: Pre-Engineering Concepts, Geometric construction, Multi-view drawing, Dimensioning, Sectional views, along with Basic CAD Draw, Edit, Display, and File commands. Students that successfully complete this course will possess the design skills of being able to produce complex, accurate two-dimensional designs that contain various geometric features while adhering to proper drafting standards and techniques. The primary software application used in this class will be AutoCAD.

## **Pre-Engineering 3-Dimensional Computer Aided Design**

### **TEC 202**

**Grades: 9-12**

Semester: 0.5 Credit

Prerequisite: Pre-Engineering Basics TEC 200

Students who take 3-D CAD will experience deep exploration into CAD techniques and 3D design development. This course is highly recommended for students interested in engineering, architecture, or any other technical design careers. Students that complete this course will cover the following topics: 2-D drawing review, 3-D solid modeling, 3-D rendering, 3-D space manipulation, Digitizing, Advanced plotting techniques, Dimension variables, System variables, Design project organization, and Design Projects. Students that successfully complete the 3D CAD program will possess the design skills of being able to produce complex, accurate three-dimensional computer aided designs and solid models that contain various rendered and/or animated, geometric features while adhering to proper drafting standards and techniques. The primary software applications used in this course will be AutoCAD, AutoDesk Inventor and AutoDesk Fusion 360.

## **Engineering Technology**

### **TEC 300**

**Grades:10-12**

Semester: 0.5 Credit (Semester 1 only)

Prerequisite: Pre-Engineering Basics TEC 200

Have you ever wanted to intentionally break things to get a better understanding of what makes them work? Have you ever wanted to throw caution to the wind to develop a machine (and its supporting ecosystem) that may or may not become self aware? Have you ever wanted to compete on the world's stage, at the Technion University, against hundreds of your global peers? This semester-long robotics course will spend the first semester through February focusing on developing a package to be submitted to the Robotraffic competition at the Technion. The categories

that will be represented in the competition incorporate mechanical engineering, electronics and coding, computer aided design (CAD), 3D printing, and a safety presentation. There will be an opportunity for enrolled students to attend the competition. Strong math/science background, though helpful, is not required for enrollment. No prior coding or CAD skills are necessary. The class is open to sophomores and juniors. Seniors may be enrolled by approval only. Lunch/after school activities may be scheduled as needed.

### **Senior Design Project - New Course**

#### **TEC 400**

**Grade: 12**

Semester: 0.5 Credit

Prerequisite: Pre-Engineering 3D CAD TEC 202

The purpose of the Senior Design Project is to allow students to utilize skills gained in previous Pre-Engineering classes to create a custom design project using complex graphics and presentation software. Ideally, students in this class will be paired with a mentor from industry and presented with a “real world” design problem. This course is highly recommended for students interested in engineering, architecture, or any other technical design careers.

### **AP Computer Sciences**

#### **MAT 501**

**Grades:10-12**

Full Year: 1.0 Credit

Prerequisite: Algebra I MAT 101

This is an introductory college-level computer science course. Students will cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. Key concepts covered will include: program design and algorithm development, code logic, code implementation, code testing, and documentation.

# English

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The goals of the English Department at Frankel Jewish Academy are to help students find their personal, analytical, emotional, and intellectual voices through the study of literature, refine their writing skills for college and beyond, and increase their reading comprehension skills to critically analyze text for meaning, themes, and social significance.

*Note: Honors courses move at an accelerated pace, and have more intensive assessments and a rigorous workload.*

## **English 9 ENG 101 / English 9 Honors ENG 101H**

**Grade: 9**

Full Year: 1.0 credit

Prerequisite: None

This course emphasizes literary analysis with instruction in grammar and vocabulary as it relates to academic writing. A writer's workshop format allows students to develop their essay-writing skills. There is an emphasis on skills as they pertain to reading and writing both in the English classroom and beyond. Students will study and discuss a wide selection of texts, including novels, drama, poetry, and short fiction.

## **American Literature ENG 201 / American Literature Honors ENG 201H**

**Grade: 10**

Full Year: 1.0 credit

Prerequisite: 9th Grade English (Honors requires Teacher Recommendation)

This course emphasizes literary works by American authors reflecting the American experience and its history. Students analyze and discuss these literary works to increase awareness and sensitivity to diverse backgrounds, cultures, genders, and perspectives on the American experience. Emphasis is placed on writing, building from the foundational essay skills developed in 9th grade.

## **British and World Literature**

**ENG 316**

**Grade: 11**

Full Year: 1.0 credit

Prerequisite: 10th Grade English

In the first semester of this course students will complete a concentrated study of novels, plays, essays, and poetry written by British authors. Students will explore the characteristics and values of British society reflected in its literature. The second semester will focus on postcolonial literature, a term used to describe the work of writers from formerly colonized nations. We will focus primarily on writing developed from the experience of British colonization in Africa and the Caribbean. By reading a diverse selection of postcolonial texts—including poetry, short stories, and novels—we will examine how the lives and identities of their characters have been radically altered through the experience of colonialism.

## **AP English Language and Composition**

### **ENG 302AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: 10th Grade English

In this advanced placement course, students will conduct an in-depth study of rhetoric and how language functions in a variety of formal and informal texts as well as in everyday life. The year is divided into [units] specifically designed to prepare the students for the AP Exam in May; however, the primary function in class will not be test preparation, but rather developing the skills needed to perform well on the exam amidst a survey of world writing. This course will focus on developing and enhancing reading, speaking, listening, and most especially writing skills; the course will also strengthen comprehension, analytical, and critical thinking skills through in depth study of various forms of literature, essays, speeches, documents, editorials, letters, visuals, grammar, and vocabulary study. Students will be asked to consider connections between texts and to make claims about them in writing. Students are taught to “to write effectively and confidently in their college courses across the curriculum and in their professional and personal lives. [...] The goal of the AP Language and Composition course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers.” [Taken from the *AP Language and Composition Course Description*]

## **Contemporary Literature**

### **ENG 324**

**Grade: 12**

Full Year: 1.0 credit

Prerequisite: 11th Grade English

In this course, students will examine what is trending in literature today and how it differs from popular literature in the past. In an era of constantly changing technology and access to snippets of information, vs. long narratives, this class will explore how current literature reflects contemporary life and culture. Students will read texts that re-imagine classic literature in a new and different way, as well as texts that explore how the vehicle of communication changes for its audience.

## **AP English Literature and Composition**

### **ENG 301AP**

**Grade: 12**

Full Year: 1.0 credit

Prerequisite: 11th Grade English

This course engages highly motivated students in the close reading, discussion, and critical analysis of college-level literature. Students will deepen their understanding of the ways writers use language to create meaning, as well as engage in a conversation and exploration of the nature of literature and intertextuality. This class will focus on the discussion and writing about literature in preparation for the culminating exam. Selected texts span a variety of genres and time periods; authors may include Sophocles, Arthur Miller, William Shakespeare, Emily Brontë, Tom Stoppard, and Arundhati Roy.

**ELECTIVES-** The following electives may be taken in addition to one of the required English courses listed above.

### ***AP Capstone Diploma Track***

*AP Capstone™ is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP® courses – **AP Seminar** and **AP Research\*** – and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses.*

*In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. AP Seminar is a prerequisite for AP Research. Completing AP Seminar and all its required assessment components is necessary for students to develop the skills to be successful in AP Research. In AP Research, students cultivate the skills and discipline necessary to conduct independent research and inquiry in order to produce and defend their scholarly work. [taken from AP Capstone Course Description]*

### **AP Seminar - NEW COURSE**

#### **ENG 304**

**Grade: 10-11**

Full Year: 1.0 credit

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. [Taken from the *AP Seminar* course description) *AP Research will be offered in 2022-23 to students who successfully complete AP Seminar.*

### **Journalism**

#### **ENG 251**

**Grades:10-12**

Full Year: 1.0 Credit

Prerequisite: 9th Grade English

This course focuses on the foundational knowledge of journalism, skills related to writing and editing successful news articles, comprehension of the various roles related to journalism & newspapers, and upkeep of the school newspaper: the Frankel Forum. This will be published bi-weekly, allowing students to accumulate a complete comprehension of the day-to-day workings of a newspaper. This will lead ultimately to student-led inquiries into various types of broadcast journalism.

## **Creative Writing**

**ENG 319**

**Grades: 9-12**

Semester: 0.5 Credit

Prerequisite: None

This creative writing course is designed to support the development of individual voice and writing style. Each semester students determine the writing projects they would like to complete. Past projects include writing poetry, personal narratives, fictional short stories, children's books, and novels.

## **Poetry - NEW COURSE**

**ENG 326**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: 9th Grade English

In this course students will explore various styles, forms, writers, and techniques to develop a critical understanding of the art form.

## **Yearbook**

**ENG 260**

**Grades: 9-12**

Full Year: 1.0 credit

Prerequisite: None

Students taking this elective are responsible for producing and publishing the Frankel Jewish Academy yearbook. To accomplish this, students will be involved in and responsible for a variety of tasks: planning the organization and theme of the book, learning and using the online program for layout and design, creating all copy from headlines to stories, taking and using creative photographs, as well as generating funds to finance the project. Students will hone their time management skills by establishing and meeting submission deadlines.

# Hebrew Language and Literature

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The Hebrew language program at Frankel Jewish Academy is designed to advance students' Hebrew language skills and stimulate their intellectual curiosity. Emphasis is placed on the student's ability to read, write, speak and listen. Graduates will have the ability to make connections between modern Israeli literary texts and Biblical and traditional Jewish sources. Modern Hebrew is a vital tool used to study the history, culture, and traditions of the Jewish people.

Students are assigned to three levels: Novice, Intermediate, or Honors according to their abilities. In all levels, students will be able to read, understand and discuss many topics using authentic texts and will enhance their learning about Israeli culture, pop culture and current events. Literary selections are chosen to increase students' understanding and commitment to Jewish identity and Israel.

## **Hebrew I Novice**

### **WLH 101C**

**Grades: 9-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will learn to read and write in Hebrew and be able to speak and write in short sentences. They will learn verbs, nouns, adjectives and numbers. Thematic units include: Getting Acquainted, My School and My Surroundings.

## **Hebrew I Intermediate**

### **WLH 101**

**Grades: 9-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Incoming Day School students will continue to enhance their knowledge of grammar and vocabulary. They will also enhance their ability to express themselves verbally and in writing. The thematic units for this course are: Food, Family, Clothes & Weather and Time Management.

## **Hebrew I Honors**

### **WLH 101H**

**Grades: 9-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will encounter issues relevant to their lives through literary excerpts and authentic readings. Among the thematic units explored are: New Beginnings, Family, One's Community, and Friends. Students will be able to use past, present, and future tenses (including irregular verbs) in oral presentations, conversations and compositions, and continue to build their vocabulary.

## **Hebrew II Novice**

### **WLH 201C**

#### **Grades:10-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will continue to enhance their knowledge of grammar and vocabulary. They will also enhance their ability to express themselves verbally and in writing in more complex sentences in past, and present tenses. Thematic units include: Food, Family and Time Management.

## **Hebrew II Intermediate**

### **WLH 201**

#### **Grades: 10-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will continue to enhance their knowledge of grammar and vocabulary. They will also enhance their ability to express themselves verbally and in writing in more complex sentences. The thematic units for this course are- Weather & Clothes, Professions, Consumers & Cultures.

## **Hebrew II Honors**

### **WLH 201H**

#### **Grades: 10-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Honors students will be able to use past, present, and future tenses both orally and in writing. They will be exposed to authentic literary Israeli texts and be able to comprehend Israeli media independently.

The thematic units for this course will include: Jewish Communities; Local and Global Stereotypes.

## **Hebrew III Novice**

### **WLH 301**

#### **Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will continue to enhance their knowledge of grammar and vocabulary. They will also enhance their ability to express themselves verbally and in writing in more complex sentences in past, present and future tenses.

Thematic units include: Weather, Sports, Travelling and Getting to Know Israel.

### **Hebrew III Intermediate**

#### **WLH 301C**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will continue to enhance their knowledge and skills of grammar and vocabulary. They will also enhance their ability to express themselves verbally and in writing in more complex sentences using past, present and future tenses. Thematic units include: Travel in Israel, Kibbutzim and Israeli Society.

### **Hebrew III Honors**

#### **WLH 301H**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will gain a better proficiency in Hebrew using their knowledge and skills of grammar and vocabulary in seven verb structures. Students will be able to write a coherent Hebrew essay (introduction, three main paragraphs, and conclusion) about topics taught in class. Thematic units include: Immigration to Israel, Israeli Society (Ashkenazi, Sephardi, secular, and religious Jews in Israel), and its Challenge.

### **Hebrew IV Novice**

#### **WLH 401C**

**Grade: 12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will continue to enhance their knowledge of grammar and vocabulary. They will also enhance their ability to express themselves verbally and in writing in more complex sentences in past, present and future tenses. Thematic units include: Health, Professions, and Tel Aviv & Jerusalem.

### **Hebrew IV Intermediate**

#### **WLH 401**

**Grade: 12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

Students will continue to gain a better proficiency in Hebrew using their knowledge and skills of grammar and vocabulary. They will also enhance their ability to express themselves verbally and in writing in more complex sentences using past, present and future tenses. Thematic units include: Protest in Israel and the Cultures of Tel Aviv and Jerusalem as a reflection of Israeli society at large.

## **Hebrew IV Honors**

### **WLH 410H**

#### **Grade: 12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation

During the final year students will gain a better proficiency and knowledge of grammar in all the seven verb structures and expand their vocabulary. They will be able to read, understand and discuss many topics using authentic texts. Students will enhance their learning about Israeli culture and pop culture, current events and Thematic units will include: Social Protests in Israel, Jerusalem vs. Tel Aviv, Food and Cooking.

## **Israeli Society Through Movies: Challenges and Achievements- NEW COURSE**

### **WLH 442**

#### **Grades: 11-12**

Semester: 0.5 credit

Prerequisite: Teacher recommendation, Hebrew II or Hebrew III Intermediate or Honors

Israeli cinema has become increasingly diverse, sophisticated, and multicultural and is often at the cutting edge of the Israeli cultural scene. Films provide an interesting lens to explore questions about Israeli life and identity: What was the experience of growing up in post-independence Israel? How were Holocaust survivors and new immigrants from Arab countries received during that period? How is the impact of war and the continuing Israeli-Palestinian conflict depicted in film? What are the distinct issues facing Orthodox and Ultraorthodox Israelis? How are marginalized groups (Israeli Arabs, Middle Eastern Jews, Russian Jews and Ethiopian Jews) portrayed in film?

## **Learning About Israel Through Popular Culture- NEW COURSE**

### **WLH 411**

#### **Grade: 12**

Semester: 0.5 credit

Prerequisite: Hebrew III Novice, Intermediate or Honors

This course is especially recommended for those students who will not continue with Hebrew during their senior year. In "Learning About Israel Through Popular Culture," students will learn about the multiple facets of Israeli society through Israeli culture: food, popular Israeli music, T.V ("authentic" and "imported" shows, and ads), etc. Students will also follow current events in Israel as they are reflected through popular culture. The class will be conducted in Hebrew with English in use when necessary depending on the students' level of Hebrew.

# History and Social Studies

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The primary goal of the History and Social Studies Department is to prepare students to become responsible citizens. All departmental courses emphasize the growth of communication skills through both written and verbal expression. The course sequence is designed to broaden student knowledge of the human condition, understand the historical currents that evolved over time, and the emerging trends that appear likely to shape the future. Students improve their critical thinking skills by analyzing and interpreting data and documents, and applying knowledge to new situations in order to shape their own perspective for understanding society. A respect for the underlying values of a democratic society is emphasized throughout the curriculum. Students are motivated to safeguard their rights as citizens, fulfill civic responsibilities, and respect people of all cultures.

## World History

### HSS 103

#### Grade: 9

Full Year: 1.0 credit

Prerequisite: None

This course covers world civilization from its beginnings until the onset of the Cold War, placing an emphasis on comparing Western and Eastern traditions and thought as a thread running through the entire course. By studying the evolution of early societies through modern times, students are able to develop a worldview and timeline in which they visualize different governments and societies. Students gain an understanding of how past decisions account for present circumstances and how geography influences development. Emphasis is placed on critical thinking skills that enable students to write and speak about historical topics and use historical evidence to support their positions. Students are taught to evaluate evidence, develop comparative and causal analyses, interpret historical records, identify bias, and construct sound arguments and perspectives upon which informed decisions in contemporary life can be based.

## AP Human Geography

### HSS 325AP

#### Grades: 9-12

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

AP Human Geography is an introductory college-level human geography course. Students cultivate their understanding of human geography through data and geographic analyses as they explore topics like patterns and spatial organization, human impacts and interactions with their environment, and spatial processes and societal changes. This project-based course is a way for students to begin their college preparation as early as ninth grade and form habits of mind necessary to be successful in the rest of their classes. **This course fulfills the Graduation Requirement in World History.**

## **U.S. History**

### **HSS 201**

#### **Grade: 10**

Full Year: 1.0 credit

Prerequisite: None

This course begins with a review of major events in American history prior to the 1880s. Students then focus on the development of the United States from the Second Industrial Revolution through the present day. Throughout the course, students act as historians using primary sources to study history. They compare conflicting accounts of the past and express informed judgments, both oral and written, about significant events that have shaped the United States and the world. Case study investigation and analysis, creating historical narratives, and writing a research paper are also key elements of the course.

## **AP U.S. History**

### **HSS 308AP**

#### **Grades:10-12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

The AP program in U.S. History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and issues in United States history. The program prepares students for intermediate and advanced college courses by demanding of them efforts equivalent to those made by introductory college courses. Students learn to assess historical materials for their relevance to a given interpretive problem based on their reliability and their importance, and to weigh the evidence and interpretations presented in historical scholarship. The AP U.S. History course develops the skills necessary to arrive at conclusions on the basis of an informed judgment, and to present reasons and evidence clearly and persuasively in essay format. Much of the course work prepares students for the AP examination. This course is offered every year, with preference given to 11th graders. **This course fulfills the Graduation Requirement in US History.**

## **U.S. Government and Economics**

### **HSS 320**

#### **Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: None

This full-year course is designed to inspire and propel students to become educated, active citizens. During the U.S. Government semester, students examine the structure and function of local, state, and national governments (focusing primarily on the national government). They analyze the foundation and evolution of the American political system. Particular attention is paid to the basic values and principles of American constitutional democracy outlined in the Constitution. Students learn about how elections work, including the role of parties, interest groups, and the media, and the importance of citizen participation in government. This course will also evaluate the principles of separation of powers and checks in balances in our federal government by learning about the nuts and bolts of each branch of government.

During the Economics semester, students are acquainted with the field of economics and central problems it addresses - resource allocation and scarcity. Students learn the concepts of basic economics and apply them to national issues. They explore the stock market, banking system, productivity, taxation, and marketing. Students also learn to analyze statistical data pertaining to economic problems. In addition to a survey of micro and macro economics, students study personal finance and business in a free market economy. They learn about real life concepts such as credit, income taxes, budgeting, saving, and more.

## **AP US Government and Politics**

### **HSS 301AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

AP U.S. Government and Politics is a college-level year-long course that not only seeks to prepare students for success on the AP Exam in May, but also provides students with the political knowledge and reasoning processes to participate meaningfully and thoughtfully in discussions and debates that are currently shaping American politics and society. It is important to note that this course is not a history course; it is a political science course that studies the interconnectedness of the different parts of the American political system and the behaviors and attitudes that shape this system and are the byproduct of this system.

AP U.S. Government and Politics accomplishes these goals by framing the acquisition of political knowledge around enduring understandings and big ideas about American government and politics that can be applied to a set of disciplinary practices through the use of a set of reasoning processes. Through the development of this set of political knowledge, disciplinary practices, and reasoning processes, by the end of the course, students will be able to analyze current and historical political events like a political scientist and develop factually accurate, well-reasoned, thoughtful arguments and opinions that acknowledge and grapple with alternative political perspectives.

**This course fulfills the graduation requirement in government/economics**

## **Economics**

### **HSS 319**

**Grades: 11-12**

Semester: 0.5 credit

Prerequisite: None

Students who take AP US Government and Politics to satisfy their government credit have the option to take Economics as an elective. The course material and objectives are the same as the Economics portion of the US Government and Economics class listed above.

## **Comparative Religion**

### **HSS 330**

**Grades: 11-12**

Semester: 0.5 credit

Prerequisite: None

This project-based course will explore the beliefs and practices of the world's major religious traditions. Students will interact with, and gain a greater understanding of the fundamental philosophical and practical applications of each religion, especially their metaphysical and ethical beliefs. Ultimately, students will learn to appreciate and understand the diversity of beliefs throughout while gaining a more global understanding of different belief systems.

## **Contemporary Issues**

### **HSS 326**

**Grades:10-12**

Semester: 0.5 credit

Prerequisite: None

Students will be introduced to various issues facing the world today, including but not limited to such themes as environment, conflict, health, economics, and human rights. They will be able to apply critical thinking and research skills to examine the causes, geographic contexts, and consequences of major global issues and events. Students will take an active role in inquiry, discussion, debate, and proposing solutions while continuing to work on their writing skills, particularly the argumentative essay. This class is designed to allow students to form their own opinions on matters that affect their ever-changing world.

## **Philosophy**

### **HSS 324**

**Grade: 12**

Semester: 0.5 credit

Prerequisite: None

This course is designed to introduce high school students to philosophy from a practical, historical perspective. Students will grapple with the most challenging philosophical questions, study the development of human thought, and analyze the power of specific ideas throughout the ages of human history. Every step along the way, students will draw comparisons to the modern world – from pop culture, movies, music, common slang, trends, and fashion, to more broad concepts of our social, political, economic, and religious influences of today. Studying philosophy develops abilities that are valuable in any human context. These skills go beyond the basic requirements of particular professions, and enhance the analytical, critical, and interpretive capacity of the human mind – which promotes lifelong learning, and an enhanced human experience. Students will study philosophy juggernauts such as: Socrates, Plato, Aristotle, Locke, Hobbes, Bacon, Descartes, Hume, Kant, Mill, Marx, Maimonides, Spinoza, Moore, Heidegger, and Buber.

## **AP Psychology**

**HSS 306AP**

**Grade: 12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

This full-year course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

## **Practical Law**

**HSS 327**

**Grades: 11-12**

Semester: 0.5 credit

Prerequisite: None

This semester-long elective course is an introduction to law and legal systems in the United States. Through mock trials, debates, simulations, films, research projects, guest speakers, and field trips, students will learn more about the legal side of our governmental system. We will evaluate both civil and criminal law, as well as review the basics of the Constitution and Bill of Rights. Through case studies, we will examine how these documents have been interpreted, and how rights have been protected (or not!) throughout history.

## **AP Microeconomics - NEW COURSE**

**HSS 318**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

AP Microeconomics is a college-level course that introduces students to the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

## **Sports and Society - NEW COURSE**

**HSS 329**

**Grades: 11-12**

Semester: 0.5 credit

Prerequisite: None

This semester-long elective course will explore the impact of Women's and Men's sport on both Sociological and History of the United States during the nineteenth and twentieth centuries through a variety of lenses. Among the

many questions we will consider are: How might one define a “sport,” and how have popular understandings of “sport” changed over time? What functions have sports served in American life? How have sports reinforced inequities in American society, such as those among racial, socioeconomic, and/or gendered lines? To what degree have sports defied these boundaries, acting as agents of democratization? Above all, we will ask: What does it mean to study sports historically? Students will examine sport and how sports history is American history. Students will analyze several current sports issues in order to put them in historical context and to examine their impact on American society.

### **HERstory: Women in America - NEW COURSE**

#### **HSS 328**

**Grades: 11-12**

Semester: 0.5 credit

Prerequisite: None

Students will explore the history of the diverse American woman from the pre-colonial era to the present. Course themes include the roles, contributions, and advancement of women in America, as well as the influences of racial, classist, sexual, and religious discrimination on these experiences. Students will read primary and secondary sources, engage in class discussion and activities, and complete projects and/or papers in order to analyze these themes. Ultimately, they will examine how women’s status, image, and legal rights have evolved due to social and economic change in the United States.

### **(Physical) Geography - NEW COURSE**

#### **HSS 317**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

Students will study the basic physical geographical topics of location, place, and region. Special emphasis will be placed on Earth’s planetary cycles & systems, map skills, and geographic literacy - locating countries & physical features of the world. The purpose of the course is to develop a geographically informed person that understands the connections among people, places, and environments; in order to better prepare students for the challenges of an increasingly interconnected global community.

# Jewish Texts and Tradition

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In Jewish Studies, students engage in conversation with the past for guidance on navigating the present and emboldening them to fashion a Jewish tradition that will guide and inform every part of their lives.

Students have the option of choosing from two required “tracks” in 9th and 10th grade Jewish Studies.

- Integrated Jewish Texts and Traditions - Students take a single course in both 9th and 10th grade, where they study Jewish life through the lens of classical and contemporary texts.
- Honors - Students take both a Bible and a Rabbinics course in 9th and 10th grade. This track is recommended for students who would like to take a deeper dive into Jewish text learning and skills acquisition. A background in Hebrew as well as the maturity and self-motivation to engage in this intense curriculum are required..

In both tracks, the Bible and the Talmud are most often our starting points for grappling with contemporary questions in a manner that is intellectually challenging and spiritually moving. The Hebrew Bible is the oldest written collection of the Jewish people. An intimate familiarity with the text and commentaries of the Hebrew Bible is essential for developing a sophisticated and critical understanding of Jewish practice, Jewish history, and Jewish thought. Bible Honors is a more intensive study of these holy texts and commentaries, emphasizing reading in the original Hebrew, with a special focus on grammar.

Rabbinic texts (such as Mishnah, Talmud, and Midrash) provide ways to think about our relationship with God and the purpose of our lives, as well as such topics as Israel and Jerusalem, social responsibility, suffering, and peace. Building skills for independent study, heading towards the reading of Rabbinic texts and commentaries in the original Hebrew, is an important part of the Honors program.

## Being a Jew in the 21st Century

### JST 203

#### Grade: 9

Full Year: 1.0 credit

Prerequisite: None

What does it mean to be part of “the Jewish People”? Who has more influence in defining a group, it’s leaders or the members of the group themselves? How does being part of a group change how I understand myself and the world around me? Through the analysis of Biblical, Rabbinic, and modern texts, students will explore changing definitions of community and the evolution of Jewish traditions (including rituals, customs, holidays, and lifecycle events) over the last 3,000 years.

## **Bible 1 Honors - Leadership and Peoplehood**

### **BIB 120**

#### **Grade: 9**

Full Year: 1.0 credit

Prerequisite: Strong Hebrew background preferred

In Bible 1 Honors, students develop the skills necessary to analyze Biblical narratives as sophisticated and astute readers of the text. Students will learn to recognize key Hebrew, grammatical concepts, words and phrases, literary devices, and recurring themes. Students engage in an in-depth study of select portions of the Torah as well as begin a broad overview of the Bible that will continue in subsequent years.

## **Rabbinics 1 Honors - Innovating Tradition**

### **RAB 120**

#### **Grade: 9**

Full Year: 1.0 credit

Prerequisite: None

The Rabbinics I Honors course opens with an introduction to the *Torah She’Baal Peh* (Oral Tradition), identifying its origins, the sources that make up its corpus and the process for its ongoing development. It then delves into Rabbinic literature related to Jewish holidays and compares the Biblical and Tannaitic narratives, identifying ways in which the Rabbinic tradition transformed these celebrations so that they remained practical and relevant for the Jewish people in a post-Temple, Diaspora existence. As well, in reading the texts, the course highlights the challenges and implications that this transformation had on the identity and reality of Jewish community.

Throughout, the course prepares students to engage in a close reading of traditional Rabbinic texts by providing literary and historical context to the sources and placing an emphasis on the development of the skills necessary to become independent readers of the text. It also engages students in discussions around identity and practice, encouraging them to see themselves as part of a continuum of Jewish tradition and challenging them to recognize and explore the points at which their personal and communal Jewish identities intersect.

## **Jewish Identity and Belonging**

### **JST 202**

#### **Grade: 10**

Full Year: 1.0 credit

Prerequisite: None

In an age when being Jewish means so many different things to so many different people, how do we come together despite these differences? This course introduces students to multiple new lenses through which to view the idea of Jewish peoplehood. Through the examination of traditional and contemporary Jewish texts, students come to understand more about the complex and dynamic systems that make up their own Jewish identity and come to appreciate the ways that others view Jews and Judaism as well.

## **Bible 2 Honors - Identity and Choices**

### **BIB 221**

#### **Grade: 10**

Full Year: 1.0 credit

Prerequisite: Bible 1 Honors

In Bible 2 Honors, students are introduced to the medieval French school of interpretation (*parshanut*), including the commentaries of Rashi and Rashbam. This course is designed to help students recognize and analyze the diverse approaches taken within the Jewish tradition to understanding Biblical literature, with a special focus on how cultural, political, religious, and educational backgrounds shape a commentator's approach to the text.

## **Rabbinics 2 Honors - Rights and Responsibilities**

### **RAB 221**

#### **Grade: 10**

Full Year: 1.0 credit

Prerequisite: Rabbinics 1 Honors

In the Rabbinics 2 Honors course students explore issues of Bein Adam LaChaveiro - interpersonal relationships between people - by studying the volumes of Talmud called Bava Metzia and Bava Kama. In Bava Metzia, students investigate how the Talmud resolves questions of ownership of property and cases of personal injury, and reflect on the concepts of ownership. (When is something mine? How can I prove ownership?, etc.). And in Bava Kama, students explore the Talmudic laws of personal injury and reflect on the values underlying the laws and their application to their personal lives.

Throughout, students will experience the challenges faced in deciding between equally legitimate ideas, so that they are more conscious in their interactions with others within their community and appreciative of the imperfection inherent in a rules-based society.

The course calls upon students' previous exposure to and knowledge of Rabbinic sources, and adds to it by introducing traditional Jewish commentators, such as Rashi, Tosfot, Maimonides and R' Yosef. It requires that students develop and practice independent study and analysis of the rabbinic texts so that they gain an appreciation of the literary, historical, religious and legal implications.

## **Bible 3 Honors - Rebellion, Murder and Challenges**

### **BIB321**

#### **Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Bible 2 Honors

Bible 3 Honors is designed to deepen student knowledge of the Hebrew Bible and provide the tools necessary for students to analyze independently the more advanced writings of the medieval Bible commentators (*mefarshim*). Students are introduced to the medieval Spanish school of interpretation (*parshanut*), including the commentaries of Ibn Ezra and Ramban. The course will also provide an understanding of the core intellectual debates in medieval Jewish and general philosophy as they relate to Bible commentary.

## **Rabbinics 3 Honors - Community, God and Self**

### **RAB 323**

#### **Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Rabbinics 2 Honors

The Rabbinics 3 Honors course has students explore topics related to issues of *Bein Adam LaMakom* - the relationship between humans and the Divine. It guides students through the ways the Rabbinic tradition grappled with theological challenges facing the Jewish people in the post-Temple era, and notes some of those Jewish practices that developed as an attempt to clarify and maintain the relationship with the Divine. Ultimately, the course encourages students to recognize and explore their spiritual/emotional journeys in a way that clarifies the values and ideals that can guide them in all areas of their lives.

The course calls upon students' previous exposure to and knowledge of Rabbinic sources, and adds to it by introducing contemporary Jewish voices as well as non-rabbinic legal and philosophical opinions. It requires that students develop and practice independent study and analysis of the rabbinic texts so that they gain an appreciation of the literary, historical, religious and legal implications.

## **Rabbinics 4 Honors: Advanced Talmud**

### **RAB 423**

#### **Grade: 12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

This course is designed for those senior students who have developed and demonstrated a proficiency in independent Talmud study. These students are expected to appreciate the literary, historical, religious, and legal implications of the text in the original and will be guided to work intensively on Rashi, Tosafot along with Rishonim, and halacha lema'aseh (Ein Mishpat Ner Mitzvah).

# Jewish Studies Electives

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Jewish Studies electives allow students to explore more deeply various areas of Jewish interest including ethics, history, and contemporary issues. All students must take Modern Jewish History and Arab-Israeli Conflict. All courses are One Semester: 0.5 credit

## **Experiences in the Jewish Community**

### **JST 522**

**Grades: 9-12**

Semester: 0.5 Credit

Prerequisite: None

In this course students will study texts related to how Jews build, work, and live together in community. Then students will apply that text study to real world settings, by working on-site with partner organizations in the local Jewish community and gaining valuable experience in how each of us has a role in making community "work."

## **Guardians of the Universe: Jewish Environmental Ethics- NEW COURSE**

### **JST 524**

**Grades: 11-12**

Semester: 0.5 Credit

Prerequisite: Teacher Recommendation

In this course students will learn about and grapple with the Jewish ethical imperatives that relate to our relationship with the world around us. Through a combination of text study utilizing Biblical, rabbinic, and contemporary Jewish texts and hands-on environmental science, students will come to understand how to apply Jewish ethics to our understanding of our role as guardians, caretakers, builders, and even masters of our world. This will include exploring concerns related to land, water, energy, and food.

## **History of the Arab-Israeli Conflict (Graduation Requirement)**

### **JST 512**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: Living the Dream: Foundations of Modern Israel (Preferred)

In this course, students will examine the Arab-Israeli conflict in its historic and international dimensions. The conflict has existed and operated on multiple levels and during different stages of history from the period of great formal empires, to the era of competing nationalist movements, to the Cold War era, to the post-Cold War era, and up to the present moment. As students at an intellectually open school, we will examine the conflict in-depth and from multiple angles and perspectives.

## **Living the Dream: Foundations of Modern Israel**

### **JST 516**

**Grades: 10-12**

Semester: 0.5 Credit

Prerequisite: None

For over 2,000 years the Jewish people longed to return to our homeland of Israel, and have had a modern state for less than a century. In this course students will explore the foundational history of Israel, including the numerous different philosophies of Zionism and visions of what a modern Jewish state would, could, or should look like. We will be concentrating on the late 19th through mid 20th century, including the Israeli Yishuv (pre-1948 Jewish community of Israel) and multiple competing types of Zionist foundations of Israel.

## **Holocaust and Memory**

### **JST 511**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: Modern Jewish History (Preferred)

In this course, students examine the history of 20th century genocide; the rise of Nazism; the incremental development of what became the Final Solution; the Jewish experience in different ghettos, concentration, and death camps; Jewish resistance in those settings; issues surrounding perpetrators, bystanders, and accomplices; the role of the global community; and difficult ethical issues such as the Judenrate.

## **Gender and Sexuality in the Jewish Tradition - NEW COURSE**

### **JST 526**

**Grades: 11-12**

Semester: 0.5 Credit

Prerequisite: None

The paradox of Jewish texts and traditions is that they are at once live and relevant, constantly adapting to meet our needs in each moment, but also deeply rooted in the past, carrying with them vestiges of the historical context in which they originated. Living now in a world in which so much changes so rapidly, it is becoming all too easy to forget or ignore the value that a canon of ancient texts carries when it seems to conflict with modern sensibilities. In "Gender and Sexuality in the Jewish Tradition," we will examine traditional Jewish texts through the contemporary lens of gender and sexuality, constructing ways of reading our shared textual heritage in light of modern sensibilities and societal norms and well as contemporary notions of justice and morality.

## **Jewish Leadership: Challenges and Opportunities - NEW COURSE**

### **JST 525**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: None

Leaders have a very important, even sacred, responsibility. Whether one is a leader in their community, organization, or political structure, leaders represent the will of others, which presents unique challenges. In "Jewish Leadership: Challenges and Opportunities" we will examine these challenges that leaders of all kinds face on a daily basis and

mine the Jewish tradition for approaches that enable us to turn these challenges into opportunities for growth and more effective leadership. Some of the topics we will address may include: theories of change (equality, equity, or revolution?), demographics (quantity vs. quality), types of leadership (the difference between power, authority, influence, and celebrity), and some ethical issues (Is it ever ok to lie to your constituents? Can someone who has violated the public's trust hold a position of leadership? Can money that has been obtained unethically be used to promote good?)

## **Israel on Campus**

### **JST 523**

**Grades: 11-12**

Semester: 0.5 Credit

Prerequisite: None

Israel is a country that draws a great deal of public attention around the globe. Nevertheless, both those who support Israel and those who criticize it often have a limited knowledge about the country. This course presents Israel from multiple perspectives - political, social, economic, historical, and cultural. Students will use this knowledge to examine various movements that seek the delegitimization of the State of Israel, and examine the arguments of these groups.

## **Jewish Journeys**

### **JST 514**

**Grades: 11-12**

Semester: 0.5 Credit

Prerequisite: None

This course will help students navigate their own journeys toward Jewish understanding and identity by exposing them to the diverse paths and perspectives that exist in the contemporary Jewish world. Students will hear many voices from Jewish tradition and will study texts from ancient, medieval, and modern Jewish thinkers, leaders, and rabbis. Topics will include multiple perspectives on God, covenant (berit), chosenness, prayer (tefillah), and faith.

## **Jewish Medical Ethics: Values and Dilemmas in Life and Death**

### **RAB 512**

**Grades: 10-12**

Semester: 0.5 Credit

Prerequisite: None

This course will explore both classical and contemporary dilemmas regarding issues of life and death through the principles of applied Jewish ethics. Through deep textual analysis, students will explore the core Jewish principles and ethics related to the value of life. Topics will include taking a life to save a life, dividing limited medical resources, and triage.

## **Jewish Philosophy**

**JST 517**

**Grades: 11-12**

Semester: 0.5 Credit

Prerequisite: Teacher Recommendation

Have you ever wondered about the nature of existence? Have you ever wondered about the nature of God? Have you ever just wondered? If you have, perhaps you're a philosopher! Come join us in Jewish Philosophy to find out what traditional--and untraditional--Jewish thinkers have been saying about major ideas that impact us on a daily basis. Possible topics include: Why do bad things happen to good people? Do we really have free will? Does prayer work and if so, how? Does prophecy really exist and if so, how does it happen? Does it make sense to believe in God? Are science and religion opposing systems?

## **Israel through Film**

**JST 515**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: None

In this course, we will immerse ourselves in the world of Israel society and culture -- through Israeli film (and maybe some TV). We will explore different facets of Israeli culture and society to better understand and engage in open conversation about some of the most important questions facing Israeli society historically and today. These may include the religious-secular divide, the role of women, the role and influence of the IDF, and others. Come experience some of the best of Israeli film and TV and delve into the many nuances of what it means to live in the modern state of Israel. (All viewings will include English subtitles.)

## **Jewish Personal Ethics: Personal Growth and Character Development**

**RAB 513**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: None

In this course, students will examine the question of what it means to be virtuous and ethical. Through the study of texts, students will work toward gaining an understanding of the temperament, attributes, and character that is central to Jewish values and ethos. Through self- reflection, students will consider their own behavior and how they might transform Jewish values and ideals into action.

## **Jewish Business Ethics: Honesty and Integrity in Business and the Workplace**

**RAB 508**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: None

In this course, students will explore Jewish concepts related to ethical behavior in business and finance. Through examination of classical and contemporary sources, students will have the opportunity to think critically about moral

principles that dictate honesty, integrity, and fairness when it comes to decision-making and conduct in work and trade.

### **Jewish Texts & Art**

#### **JST 519**

**Grades: 9-12**

Semester: 0.5 Credit

Prerequisite: None

Jewish Texts & Art is an opportunity for students to use artistic expression to help find new meaning in Jewish texts. Each unit in this class will include in-depth study of Biblical and Rabbinic sources, examining the religious, social and emotional issues that make these texts timeless and compelling. The unit will culminate with a project in which students explore the themes of a text using different artistic media. Along the way, a range of assignments, both artistic and conventional, will be used to help students develop their skills as both scholars of Jewish texts and as artists.

### **Modern Jewish History (Graduation Requirement)**

#### **JST 520**

**Grades:10-12**

Semester: 0.5 Credit

Prerequisite: None

What does it mean to be Jewish? Are the Jews a religion? A race? An ethnic group? A nation? These questions could not even have been imagined before the modern era, but Jews have spent the last centuries arguing and negotiating with their neighbors (and themselves!) about how Jews should be seen and understood. This course will study the main trends of Jewish life in the last 500 years. Topics will include the creation of denominations (Reform, Orthodox, Conservative), new centers of Jewish life (like America and Israel), Antisemitism, Zionism, the Holocaust, Jewish feminism, and more.

### **Moot Beit Din**

#### **JST 521**

**Grades: 9-12**

Prerequisite: None

Semester: 0.5 Credit

What can ancient Rabbinic arguments teach us about complicated contemporary issues? Quite a lot, it turns out. Moot Beit Din provides a firsthand look at the inner workings of the Jewish legal system and helps develop critical thinking skills by applying the ancient wisdom of halachah (Jewish law) to some of the most significant ethical issues of our time, like cloning or internet privacy.

Working as a team, you will craft an argument and have the option to travel and compete with schools from around the world before a panel of judges.

# Mathematics

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The Math Department offers many levels of courses designed to fit the needs of all students. Within most classes there is an Honors option for those students who qualify for the greater challenge of such a course. This is designed to be a traditional math program that has been enhanced by newer concepts, which are endorsed by the National Council of Teachers of Mathematics.

*Note: Honors courses move at an accelerated pace, and have more intensive assessments and a rigorous workload.*

## **Algebra I**

### **MAT 101**

#### **Grade: 9**

Full Year: 1.0 credit

Prerequisite: None

This course includes all topics taught in a traditional Algebra I course, with new vitality and direction. Calculator technology is introduced and is used to enhance and illustrate topics. Patterns in data are analyzed and formed into algebraic models. Major topics include the basic operations and properties of real numbers, linear equations and graphs, inequalities, absolute value functions, systems of equations, rules of exponents, quadratic functions, factoring of polynomials, and rational equations. Contemporary application problems are included throughout the course to provide a deeper understanding and appreciation of the power of algebra.

## **Geometry**

### **MAT 201**

#### **Grades: 9-10**

Full Year: 1.0 credit

Prerequisite: Algebra I MAT 101

In this full-year course, students develop and enhance their reasoning skills. They study two- and three-dimensional shapes, their transformations and their properties. Using definitions, postulates, and theorems, students learn how to systematically reorganize data into logical conclusions. Major topics include congruence and similarity of triangles, properties of quadrilaterals and other polygons, circles, right triangle trigonometry, areas of polygons, and volume of geometric solids. Additionally, students discover the strong relationship that exists between geometry and the real world in which we live.

## **Algebra II (Honors option)**

### **MAT 102/ MAT 102H**

#### **Grades: 9-11**

Full Year: 1.0 credit

Prerequisite: Geometry - Honors option requires teacher recommendation.

This course assumes mastery of the concepts taught in traditional Algebra I and expands into more complex groups of functions. Algebra II involves greater use of technology to illustrate the material. Major topics include: systems of linear equations, quadratic functions, higher degree polynomial functions, exponential and logarithmic functions,

and rational expressions. Whenever possible, problems relate to real-life situations. Special attention is paid to topics recently endorsed by the National Council of Teachers of Mathematics, which meet the evolving objectives in the field of mathematics.

### **PreCalculus with Trigonometry (Honors option)**

#### **MAT 301/MAT 301H**

**Grades: 9-12**

Full Year: 1.0 credit

Prerequisite: Algebra II (Honors option requires teacher recommendation.)

This rigorous full-year course in pre-calculus prepares students for college level calculus. It includes advanced topics in algebra, analysis of families of functions, in-depth study of trigonometry, multivariable systems of equations, mathematical induction, sequences and series, binomial theorem, and conic sections. It introduces alternate forms of analysis, including polar equations, vectors, matrices, and parametric equations. Appropriate use of technology is emphasized.

### **Operations Research/Statistics**

#### **MAT 308**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Algebra II

This course is designed to cater to math students who are interested in the answer to the question, "When will I ever use this?" Students will use a scientific strategy to analyze problems, such as how a delivery service plans their routes and which cell phone plan one should choose. Students in this class will be using an array of algebraic and numerical techniques to model and examine a variety of situations in order to make predictions and well-informed decisions. As a natural extension of this idea, students in OR/S will also be exposed to topics in Statistics that could be the groundwork for further study in this field.

### **History and Development of Mathematics - NEW COURSE**

#### **MAT 320**

**Grades: 11-12**

Full Year: 1.0 credit

Corequisite: AP Chemistry, AP Physics, AP Calculus and Teacher Recommendation

This course is designed as an additional math class for math-minded students that are curious about how mathematics has evolved throughout human history. Historical significant advancements in both mathematics and the math-based physical sciences are explored from a focus on history as well as the math itself.

### **AP Statistics**

#### **MAT 322AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Algebra II and Teacher Recommendation

AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students develop their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts such as variation and distribution; displaying and presenting data, developing unbiased surveys and experiments, randomization and probability, making conjectures, and performing statistical tests. Students will prepare to take the advanced placement test in statistics.

### **AP Calculus – AB Level**

#### **MAT 307AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Pre-Calculus and Teacher Recommendation

This college-level course prepares students to take the advanced placement test in calculus. Following the guidelines of the AP program, concepts are approached geometrically, numerically, analytically, and verbally. Technology is used regularly to reinforce the material and to assist in interpreting results. Topics include analysis of graphs, limits of functions, asymptotic and unbounded behavior, continuity as a property of functions, concept of the derivative, derivative at a point, derivative as a function, second derivatives, application of derivatives, computation of derivatives, interpretation and properties of definite integrals including Riemann sums, applications of integrals, the fundamental theorem of calculus, techniques of anti-differentiation, application of anti-differentiation, and numerical approximations to definite integrals.

### **AP Calculus – BC Level**

#### **MAT 305APBC**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Pre-Calculus Honors and Teacher Recommendation

Calculus BC is the branch of mathematics that deals with how the functions change and how to represent a function as a polynomial. Also, the course deals with how to use vectors, polar coordinates, and parametric equations to solve real-life problems. Real-life problems usually are modeled as functions in one or more variables. In order to solve such problems, it is important to know how to find the rate of change of functions. The rate of change of a function can be used to determine the behavior of the function and can be used in graphing the function. The total change of a function is an important concept discussed in calculus. In addition to basic calculus topics in calculus BC, students will learn advanced topics, such as power series, Taylor and McLaurin's series, polar graphs and areas in polar curves, parametric equations, vectors, improper integrals, L'hospital's rule, integration by parts, and logistic growth model. The students will learn to work with functions represented graphically, numerically, analytically, or verbally, and interpret the results in a non-mathematical language as well.

# Performing and Visual Arts

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The purpose of the Frankel Jewish Academy arts program is to guide students to comprehend, appreciate, and make educated choices about the arts, while applying the creative process to all areas of their lives. Courses encourage both individual and cooperative work; therefore students must demonstrate a willingness to learn and have fun. Assessment is based upon effort, not talent. In particular, we look at project participation and commitment, interaction with classmates, and effort shown toward understanding basic skills and concepts.

## **Acting I**

### **PFA 151**

#### **Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

Through individual and group exercises, improvisation, monologue and scene study in this class, students will develop knowledge of the basic dramatic skills, as they discover in themselves the use of; face, body, voice, and imagination, in a believable, honest way to transform self to character. Each student will be expected to keep a journal and write an original monologue and scene in class. Original work, published scenes and monologues will be expected to be memorized and performed to the community. (Course qualifies for visual, performing & applied arts requirement)

## **Acting II**

### **PFA 152**

#### **Grades: 9-12**

Semester: 0.5 credit

Prerequisite: Acting I Preferred

An extension of Acting I, Acting II continues the student's journey of self-discovery on what acting techniques work best for them, to create a higher level of performance. A more intensive monologue and scene work will take place and other drama theories. If possible, touring to perform in the community could be expected. This course may be taken more than once.

(Course qualifies for visual, performing & applied arts requirement)

## **Drawing and Painting I**

### **PFA 1331**

#### **Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

Drawing and Painting I is an introductory level art course that will give students the opportunity to grow and understand a variety of drawing and painting techniques. Students will also show understanding of the elements & principles of art. Art projects will be varied in both drawing and painting including observational drawing, finding inspiration from art history, color theory, and a range of painting techniques. Students will be expected to use a sketchbook for process, planning, and reflection throughout the course.

## **Drawing and Painting II**

**PFA 1332**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: Drawing and Painting I

This course is for students who have completed Drawing and Painting I. Drawing and Painting II is an intermediate to advanced level art course that will provide students with the opportunity to build on their understanding of drawing and painting techniques. Art projects will be varied in both drawing and painting giving students opportunities for expression and creativity. Students will begin developing a level of sophistication towards their art making approach through the refinement of artmaking techniques. Students will be expected to use a sketchbook for process, planning, and reflection throughout the course.

## **Advanced Art Portfolio**

**PFA 143**

**Grades:10-12**

Semester: 0.5 credit

Prerequisite: Teacher Recommendation

The Advanced Portfolio course is created for advanced students to develop a body of high quality artwork to present to an art school. The course is designed for students to refine their technical skills, but also so show self-expression and a development of ideas in their artwork. Students will learn how to photograph their artwork for their portfolio, and write thoughtful descriptions in order to express their ideas fully. In this course students will be experimental with the materials, reflective and ambitious in their approach to create artwork that is meaningful to them as individuals.

## **Ceramics I**

**PFA 161**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

This is an introductory art course that will provide students with the opportunity to grow and understand a variety of hand building techniques including coil and slab techniques, and an understanding of the potter's wheel. Students will grow in their ceramic techniques while thinking of unique ideas to approach both functional and sculptural ceramic artworks.

## **Ceramics II**

**PFA 162**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: Ceramics I

This course is for students who have completed Ceramics I, or have previous experience with ceramics. It is an intermediate to advanced level art course that will provide students with the opportunity to grow in a variety of hand

building techniques including coil and slab techniques, and an understanding of the potter's wheel. Students will be expected to create artwork that demonstrates knowledge in creating unique forms, interesting details, surface decoration, and an understanding of the ceramic process.

### **Printmaking & Mixed-Media**

#### **PFA 144**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

This is an introductory visual arts course that allows students to explore a variety of printmaking techniques and processes inspired by contemporary art practices. Students will learn how to create artwork from linocut materials, monoprint, collagraph, basic etching techniques, and collage. Students will experiment with how to use the unique printmaking processes and tools, and combine them with mixed-media practices to create a variety of artworks.

### **Digital Photography**

#### **PFA 136**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

This course is designed to introduce students to the basics of digital photography, with an emphasis on technical, creative, and critical thinking skills. Primary topics of study include: photo composition and editing; portraiture, still life, landscape, and candid photography; plus the history, innovation, and profession of photography. Course work will be project-oriented so students have the opportunity to express themselves and build confidence in creating original art with their digital cameras and/or phones.

### **Introduction to Digital Art**

#### **PFA 141**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

The Digital Art course introduces students to design principles and how to express ideas through visual communication. The elements and principles of design will be an emphasis of the course. Throughout the course, students will have the opportunity to view, analyze, and critique their own artwork, and that of professional artists and designers. Students will develop a range of digital artwork from digital painting, typography, graphic design, logo design, and illustration. The industry standard software, Adobe Creative Suite, will be used for digital artwork.

## **Music Ensemble/Theory**

**PFA 135**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: Previous experience with a musical instrument or singing ability.

The primary purpose of this course is studying and performing a stylistically diverse set of music in a 'rock band' ensemble context. Instrumentation in this class typically includes: vocals, acoustic/electric guitars, keyboard, bass guitar, and drums. Rehearsals of selected music will routinely facilitate an infusion of relevant music theory for discussion and learning. Homework will consist primarily of practicing the assigned music while developing technique and improving general musicianship. The work of this course will culminate in a concert performance during the *Evening of the Arts* show.

## **Vocal Arts**

**PFA 139**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

This course is designed to include instruction in basic vocal technique. Emphasis is placed on note reading, sight singing, breathing, tone placement, ear training, and beginning ensemble techniques. Songs include Broadway, classical, pop, and Hebrew. Concerts are performed on a regular basis.

# Physical Education

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Frankel Jewish Academy's physical education program provides students with opportunities to enhance their physical well-being. Students acquire motor skills, knowledge, and attitudes that are utilized throughout life.

## **Intramurals**

### **ATH 102**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisites: None

Students will use available FJA and JCC facilities to engage in informal athletic activities. All skill levels are welcome. Activities will be indoors and outdoors (weather permitting), with the emphasis on fun. Results expected: exercise of the body to complement the daily exercises of the mind. Activities include, but are not limited to: basketball, floor hockey, weight lifting, and in the spring when the weather cooperates, flag football, soccer, and softball.

## **Power Fitness**

### **ATH 105**

**Grades: 9-12**

Semester: 0.5 Credit

Prerequisite: None

Power Fitness is perfect for everybody and everybody! This class is designed to bring people together to sweat it out. Take the "work" out of workout, by mixing low-intensity and high intensity moves for an interval-style, calorie-burning dance fitness party. A total workout combining all elements of fitness-cardio, muscle conditioning, balance and flexibility, boosted energy and a serious dose of awesome each time you leave the class.

## **Weight Training**

### **ATH 123**

**Grades: 9-12**

Semester: 0.5 credit

Prerequisite: None

Students will be taught safe, effective techniques in using free weights to develop functional strength for sports and general fitness.

# Science

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The science program at Frankel Jewish Academy incorporates a logical sequence of courses beginning with a focus on the biological sciences to set a foundation of understanding life and fostering strong science skills. The next focus is on the physical sciences of chemistry and physics. All students go through biology and chemistry but then schedule options really open up and students are allowed to follow their scientific interests in any direction they choose.

*Note: Honors courses move at an accelerated pace, and have more intensive assessments and a rigorous workload.*

## **Biology or Biology Honors**

### **SCI 301/SCI 301H**

#### **Grade: 9**

Full Year: 1.0 credit

Prerequisite: None

This is an introductory laboratory-based course designed to study living organisms and their physical environment. Students will apply scientific methods of inquiry and research in examining the following topics: the chemistry of living organisms, cell structure, function, and reproduction, cell energy, genetics, natural selection, and ecology.

## **Chemistry or Chemistry Honors**

### **SCI 201/SCI 201H**

#### **Grade: 10**

Full Year: 1.0 credit

Prerequisite: Chemistry Honors requires teacher recommendation

Chemistry is the study of the composition, behavior, and reactivity of matter. Students will learn about the composition of the atom, how it behaves in its various forms, and how different atoms chemically react. This course contains a strong lab component in which students will be experimenting with various substances to explore the physical and chemical properties of matter. The curriculum includes the study of atomic structure, nomenclature, chemical reactions and equations, stoichiometry, thermochemistry, and chemical bonds and structures.

## **Physics**

### **SCI 101**

#### **Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Biology

Physics is the most fundamental of all the sciences. All the other sciences are based on the scientific principles of physics. Students will learn about motion in both one and two dimensions, rotational motion, forces and their applications, momentum, energy, and work. All these topics are taught with hands-on laboratory activities.

## **AP Chemistry**

### **SCI 201AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Chemistry, Biology, and teacher recommendation

This course is designed to be the equivalent of a college-level general chemistry course. It further develops the student's ability to incorporate a variety of mathematical skills in the solution of more complex chemistry problems through the use of many textbook problems and sample AP questions/tests, coupled with a variety of intense laboratory-related activities.

## **AP Physics C**

### **SCI 306AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher recommendation and Corequisite of Calculus.

This course ordinarily forms the first part of the college sequence that serves as the foundation in physics for students hoping to major in the physical sciences or engineering. Strong emphasis is placed on solving a variety of challenging problems. The course contains an advanced laboratory component in combination with the theoretical principles and concepts. Problem-solving skills are developed through textbook problems, sample AP questions/tests, and other supplemental materials.

## **AP Physics 1**

### **SCI 302AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Biology, Chemistry and teacher recommendation

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory simple circuits. These topics are typically taught in the first semester of a college course. Students will develop scientific critical thinking and reasoning skills.

## **AP Biology**

### **SCI 304AP**

**Grades:10-12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

This course is equivalent to a college introductory biology course. The course emphasizes four main big ideas of biology: 1) The process of evolution drives the diversity and unity of life. 2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis. 3) Living systems store, retrieve, transmit and respond to information essential to life processes. 4) Biological systems interact, and these systems and their interactions possess complex properties. By focusing on enduring, conceptual understandings,

students will spend less time on factual recall and more time on inquiry-based learning of essential concepts, and will develop the reasoning skills necessary to engage in the science practices.

## **AP Environmental Science**

### **SCI 312AP**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation and earning at least an 80% in previous science classes.

This course is the study of the environmental systems and concepts. The structure and function of the environment will be studied along with changes that impact ecosystems. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. The course includes a laboratory component with inquiry-based labs and real-world simulations.

## **Honors Anatomy & Physiology**

### **SCI 401**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

Students will investigate the histology, anatomy, and physiology of the various systems of the human body. Course work will involve practical lab dissections of suitable preserved specimens. This course serves as an excellent introduction for students interested in medical/allied health careers and for those interested in learning more about the inner workings of their own bodies. The labs and unit projects in this course are designed to provide a deeper understanding and more memorable experience in the field. The course also focuses on refining the student's interest in fields of personal interest to them.

## **Earth and Space**

### **SCI 400**

**Grades: 11-12**

Full Year: 1.0 credit

Prerequisite: Chemistry

This course is intended for all levels of students. The first semester primarily focuses on earth systems such as geology (rocks, earthquakes, volcanoes, and plate tectonics), meteorology (atmosphere, climate), and oceanography (oceans and water systems). These topics will give you a better global perspective of the earth we live in. The second semester primarily covers concepts in astronomy. The concepts start with the earth and slowly moves outward covering the moon, solar system, galaxy, and many additional aspects of the universe and their characteristics. These topics will give you a better perspective of our place in the universe.

# Supplemental & Online Courses

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## **Independent Study**

### **CRS 502**

**Grades: 11-12**

Semester: 0.5 Credit

Prerequisite: Permission of Principal and Director of College Counseling

An independent study is a course that students undertakes on their own, rather than through a formal class. The student makes this arrangement with the Director of College Counseling and the Principal.

## **Internship**

### **CRS 501**

**Grades: 10-12**

Semester: 0.5 Credit

Prerequisite: Permission of Principal and Director of College Counseling

An Internship is an opportunity to connect with a professional who has the specific knowledge about an occupation or career in which students are interested. Students work closely with these professionals, ask questions and gain experience. The student must make all of the arrangements for this course and it must have prior approval from the Director of College Counseling as well as the principal.

## **Online Course - Various Subjects**

### **CRS 500**

**Grades: 10-12**

0.5 or 1.0 Credits

Prerequisite: Varies By Course

Students may elect to take an approved online course to supplement their educational experience if the course is not one that is currently offered or if the student has exceeded the curriculum in a particular area.

## **Study Hall**

### **STY111/STY112**

**Grades: 9-12**

This course is not for credit. Students may elect to take one study hall each semester. As the class is not for credit, it is not graded and does not factor into the GPA.