

COURSE CATALOGUE



Frankel Jewish Academy

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Note: Not all courses are offered every year.

Mission and Core Values

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, 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, national and ethnic origin in the administration of its educational policies, admission policies, scholarship programs, and athletic and other school administered programs.

Graduation Requirements

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 Rabbinitics in 9th and 10th grade, 0.5 credit (one semester) of Modern Jewish History, and 0.5 credit (one semester) of History of Arab/Israel Conflict. The remaining credits are fulfilled by taking other Jewish Studies courses.

Computer Science & Engineering Technology

Engineering Technology

TEC 300

Grades: 10-12

Semester: 0.5 Credit (Semester 1 only)

Prerequisite: Strong Technology Background and approval of the teacher

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.

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.

AP Computer Science Principles

MAT 501

Grades: 10-12

Full Year: 1.0 Credit

Prerequisite: Algebra 1

AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is recommended that students in the AP Computer Science Principles course have successfully completed a first-year high school algebra course with a strong foundation of basic linear functions, composition of functions, and problem-solving strategies that require multiple approaches and collaborative efforts. In addition, students should be able to use a Cartesian (x, y) coordinate system to represent points on a plane.

Intro to Computer Science

TEC 190

Grades: 10-12

Semester: 0.5 Credit

Prerequisite: None

This course serves as an introduction to the field of Computer Science and programming. Computer Science is a field that lends itself to learning by doing, and that is what this class will entail. Students will explore concepts of computer science through the Python programming language, an extremely popular and useful programming language with many common applications. Concepts will include variables, functions, iteration, conditional statements, and much more, all demonstrated visually with instant feedback through an online IDE (Integrated Development Environment). By the end of the course, students will be able to use their knowledge to develop a larger scale programming project.

English

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.

World Literature

ENG 301

Grade: 11

Full Year: 1.0 credit

Prerequisite: 10th Grade English

In this course, students will examine a variety of texts from various cultures, regions, genres, and time periods to analyze shared elements of human identity and storytelling around the world. Emphasis is placed on writing, building on analytical skills developed in 10th grade.

AP English Language and Composition

ENG 302AP

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: 10th Grade English (course requires Teacher Recommendation)

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 reimagine classic literature, 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 ((course requires Teacher Recommendation)

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, Kazuo Ishiguro, Mary Shelley, and Delia Owens.

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

Media Arts - NEW COURSE TITLE (previously called Journalism)

ENG 252

Grades: 9-12

Full Year: 1.0 Credit

Prerequisite: None

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) the weekly broadcast news (FFTV), and the yearbook (The Jag). Students assume job roles, allowing them to accumulate a complete comprehension of the day-to-day workings of a departmental news organization.

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.

Young Adult Literature - NEW COURSE

ENG 270

Grades: 9-12

Semester: 0.5 credit

Prerequisite: none

In this book club style elective, we will focus on literary narratives written for and/or marketed to young adults. Students will select and self-pace their own reading from a diverse group of authors in order to analyze the social, cultural, and media influences of and on the genre of YA literature. Students may also discuss other forms of YA texts, including music, film, and television.

AP Research- run in 2023-2024 only for students currently enrolled in AP Seminar ; will not be offered in subsequent academic years

ENG 404

Grade: 12

Full Year: 1.0 Credit

Prerequisite: AP Seminar

(Note: 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.)

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.[Taken from the *AP Research* course description]

Hebrew Language and Literature

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 301C

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, Traveling and Getting to Know Israel.

Hebrew III Intermediate

WLH 301

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.

History and Social Studies

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 begins with an overview of basic characteristics of civilizations, focusing in particular on the historical development of major world religions, and continues through the modern era with a look at globalization and decolonization. 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 World History: Modern

HSS 303AP

Grades: 9-12

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation

AP World History: Modern is an introductory college-level modern world history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources, learning to make connections between topics and events, and crafting historical arguments. Key themes of the course include: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. This 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 AND 83% or higher in APWH or 90% or higher in World History

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 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

HSS 300

Grades: 11-12

Semester: 0.5 credit

Prerequisite: None

This course is designed to inspire and propel students to become educated, active citizens. In the U.S. Government course 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 and balances in our federal government by learning about the nuts and bolts of each branch of government.

***U.S. Government (paired with Economics or Microeconomics AP) meets the graduation requirement. This requirement in Government and Economics can also be met by successfully completing the year long course, US Government AP.**

Economics

HSS 319

Grades: 11-12

Semester: 0.5 credit

Prerequisite: None

During the Economics semester-long course, 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, 93% or higher in US History

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.*

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, law, health, economics, sports, 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.

HERstory: Women in America

HSS 328

Grades: 10-12

Semester: 0.5 credit

Prerequisite: Currently enrolled in US History or completion of US History credit

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.

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.

AP Microeconomics

HSS 318

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: Teacher Recommendation, completion of Algebra 2

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.

Practical Law

HSS 327

Grades: 11-12

Semester: 0.5 credit

Prerequisite: current enrollment in Government/AP Gov or previous completion of Gov. credit

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 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.

Sports and Society

HSS 329

Grades: 10-12

Semester: 0.5 credit

Prerequisite: currently enrolled in US History or completion of US History credit

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.

Jewish Texts and Tradition

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, its 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 or Teacher Recommendation

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 or Teacher Recommendation

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

BIB 321

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: Bible 2 Honors or Teacher Recommendation

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 - God and I, Parents and Children

RAB 323

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: Rabbinics 2 Honors or Teacher Recommendation

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 of prayer grappled with theological challenges facing the Jewish people in the post-Temple era. 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.

In the second semester we study the obligations of parents to their children, and children to their parents. Studying Rabbinic texts, students will develop a greater sensitivity to their relationship with their parents, while at the same time, studying what the Rabbis demanded of parents to prepare their children for meaningful, productive and successful 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.

Bible 4 Honors - NEW COURSE

BIB 408

Grade: 12

Full Year: 1.0 credit

Prerequisite: Bible 3 Honors and Teacher Recommendation

Bible 4 Honors continues to develop students' skills at reading the Hebrew Bible in the original, and provides additional tools necessary for students to independently analyze traditional commentaries from the modern period. Students will be introduced to two modern traditional Bible commentators (meforshim), learn about their lives, their methodologies, and how the two are related. They will also learn key texts that illustrate the methodologies of these

commentators. Bible 4 Honors will also develop students' skills at reading the Hebrew Bible by introducing non-narrative texts.

Advanced Talmud - NEW COURSE

RAB 504

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: None

We will study texts that deal with kindness versus self preservation. When is it proper and appropriate to put ourselves first? What do we owe others as they age and what responsibilities change if the other aging person is family. The original Aramic of the text will not be studied. Instead, we will use a translation of the Talmud and there should be no difficulty understanding the concepts studied. Charity, human relations, family and friendships will be at the core of our studies.

Jewish Studies Electives

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

History of the Arab-Israeli Conflict (Graduation Requirement)

JST 512

Grades: 11-12

Semester: 0.5 Credit

Prerequisite: Modern Jewish History (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.

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.

Gender and Sexuality in the Jewish Tradition

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 contemporary notions of justice and morality.

Holocaust and Memory

JST 511

Grades: 11-12

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

campus; 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.

Israel on Campus (online course)

JST 523

Grade: 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. The ultimate goal of this online course is to prepare an FJA senior student for Jewish life on a college campus.

Israel through Film

JST 515

Grades: 11-12 This course is open for Novice Hebrew courses only.

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 TV shows. 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 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 Medical Ethics: Values and Dilemmas in Life and Death

RAB 512

Grades: 11-12

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 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 Texts & Arts

JST 519

Grades: 10-12

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.

Mathematics

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 1

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 1

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 2 (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

MAT 301/MAT 301H

Grades: 10-12

Full Year: 1.0 credit

Prerequisite: Algebra 2

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.

AP PreCalculus

MAT 303AP

Grades: 10-12

Full Year: 1.0 credit

Prerequisite: Algebra 2 and teacher recommendation

AP Precalculus will help to prepare students for other college-level mathematics and science courses while giving some students the opportunity to earn college credit. Units of study include both polynomial and rational functions, exponential and logarithmic functions as well as trigonometric and polar functions. Students will prepare to take the advanced placement test in precalculus.

Operations Research/Statistics

MAT 308

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: Algebra 2

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.

AP Statistics

MAT 322AP

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: Algebra 2 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.

Calculus

MAT 401

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: Pre-Calculus

This course is an introduction to calculus. It reinforces topics from earlier courses and transitions into major topics of calculus. Course content includes: limits and continuity, derivatives, definite integrals, and the application of derivatives and integrals. It is not designed to satisfy the requirements of an AP course in calculus.

Calculus 1 Dual Enrollment (Full Year)

MAT 451

Grades: 11-12

Full Year: 1.0 credit

Prerequisite: Pre-Calculus or Calculus and teacher recommendation

Topics include: limits and continuity, differentiation of algebraic and transcendental functions, mean value theorem, applications of differentiation, anti-derivatives, indefinite integrals, inverse trigonometric functions, substitutions, definite integrals, the Fundamental Theorem of Calculus, applications of integration. Applications will be emphasized. Material taught over the course of the entire school year. Students will be dual enrolled in Lawrence Technology's MCS 1414 Calculus 1 class.

4.000 Credit hours (LTU). Taken from LTU course catalog.

Calculus 1 Dual Enrollment (1 semester)

MAT 451

Grades: 11-12

Semester: 0.5 credit

Prerequisite: Honors Pre-Calculus and teacher recommendation

Topics include: limits and continuity, differentiation of algebraic and transcendental functions, mean value theorem, applications of differentiation, anti-derivatives, indefinite integrals, inverse trigonometric functions, substitutions, definite integrals, the Fundamental Theorem of Calculus, applications of integration. Applications will be emphasized. Material taught over the course of 1 high school semester. Students will be dual enrolled in Lawrence Technology's MCS 1414 Calculus 1 class.

4.000 Credit hours (LTU). Taken from LTU course catalog.

Calculus 2 Dual Enrollment (Full Year and 1 semester options)

MAT 452

Grades: 11-12

1.0 or 0.5 credit

Prerequisite: Calculus 1 Dual Enrollment and teacher recommendation

Topics include, hyperbolic functions, L'Hospital's rule, techniques of integration, application to arc length and surface area, polar coordinates, infinite series, Taylor Series. Students will be dual enrolled in Lawrence Technology's MCS 1424 Calculus 2 class.

4.000 Credit hours (LTU). Taken from LTU course catalog.

Calculus 3 Dual Enrollment

MAT453

Grade: 12

Full Year: 1.0 credit

Prerequisite: Calculus 2 Dual Enrollment and teacher recommendation.

Course Description:

Students will be studying three-dimensional analytic geometry including vectors, vector-valued functions, motions in space, functions of several variables, partial differentiation, multiple integration, integration of vector fields, Green's Theorem and Divergence Theorem. Students will be enrolled in Lawrence Technology's MCS 2414 Calculus 3 class. 4.000 Credit hours (LTU). Taken from LTU course catalog.

Performing and Visual Arts

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

Course Description: 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

Course Description: 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)

Advanced Art

PFA 128

Grades:10-12

Semester: 0.5 credit

Prerequisite: Teacher Recommendation

The Advanced Art course is created for students who have already taken a variety of visual arts courses. The course is designed for students to refine their technical skills, but also show self-expression and a development of ideas in their artwork. Students will be experimental with the materials, reflective and ambitious in their approach to create artwork that is meaningful to them as individuals. This course allows students to develop a body of high quality artwork suitable for a portfolio.

Digital Photography

PFA 136

Grades: 9-12

Semester: 0.5 credit

Prerequisite: None

A photographer is someone who combines the compositional skills of an artist, the analytical mind of a scientist, and the observational soul of a poet. In this introductory course students will become all three, as they study traditional photographic composition and interpret images they capture with their digital cameras in the darkroom of Adobe PhotoShop™. Students will use a digital single lens reflex camera (DSLR) and learn to set up and shoot all shots using the manual settings on the camera. Students without access to a DSLR may use the camera on their phone as long as they download an app that allows manual control.

Drawing

PFA 146

Grades: 9-12

Semester: 0.5 credit

Prerequisite: None

Drawing is an introductory course that allows students to explore a variety of drawing techniques and concepts. Students will create a variety of drawings from observational drawing, 1-point perspective, landscape drawings and drawing with abstraction while experimenting with a variety of drawing materials. Students will use shading pencils, charcoal, pen, pastel, and colored pencils to create their drawings. Students will be expected to use a sketchbook for practice and planning throughout the course.

Music Ensemble/Music 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.

Painting

PFA 147

Grades: 9-12

Semester: 0.5 credit

Prerequisite: None

Painting is an introductory course that allows students to explore a variety of painting techniques and concepts. Students will create paintings inspired by artists from art history, contemporary practices, and personal expression. Students will gain an understanding of color wheel and paint mixing techniques. Students will use acrylic paint, watercolor, gouache, and ink within their projects. Students will be expected to use a sketchbook for practice and planning throughout the course.

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.

Sculpture

PFA 109

Grades: 9-12

Semester: 0.5 credit

Prerequisite: None

Sculpture is an introductory art course that will provide students with the opportunity to grow in a variety of three-dimensional techniques such as modeling, constructing, assemblage, and casting. Students will use a variety of sculptural materials such as chipboard, wire, clay, and found objects to create three-dimensional art. Their sculptures will demonstrate the elements and principles of sculpture; line, space, form, scale, proportion, balance, texture, and pattern.

Survey of Art

PFA 145

Grades: 9-12

Semester: 0.5 credit

Prerequisite: None

Survey of Art is an introductory level art course that will give students the opportunity to grow and understand a variety of art-making techniques from drawing, painting, ceramics, and printmaking. Within the course, the art lessons will be varied to have an introduction to a variety of new art skills. Students will be introduced to the elements & principles of art. Students will be expected to use a sketchbook for practice and planning throughout the course.

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

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.

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

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 SCI 201/Chemistry Honors 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: Chemistry or Biology with teacher recommendation

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 1 (Algebra-based)

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 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 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.

Anatomy & Physiology Honors

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

Independent Study

CRS 502

Grade:12

Semester: 0.5 Credit

Prerequisite: Permission of Principal and Director of College Counseling

An independent study is a course that students undertake 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

Grade: 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

Grade: 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.