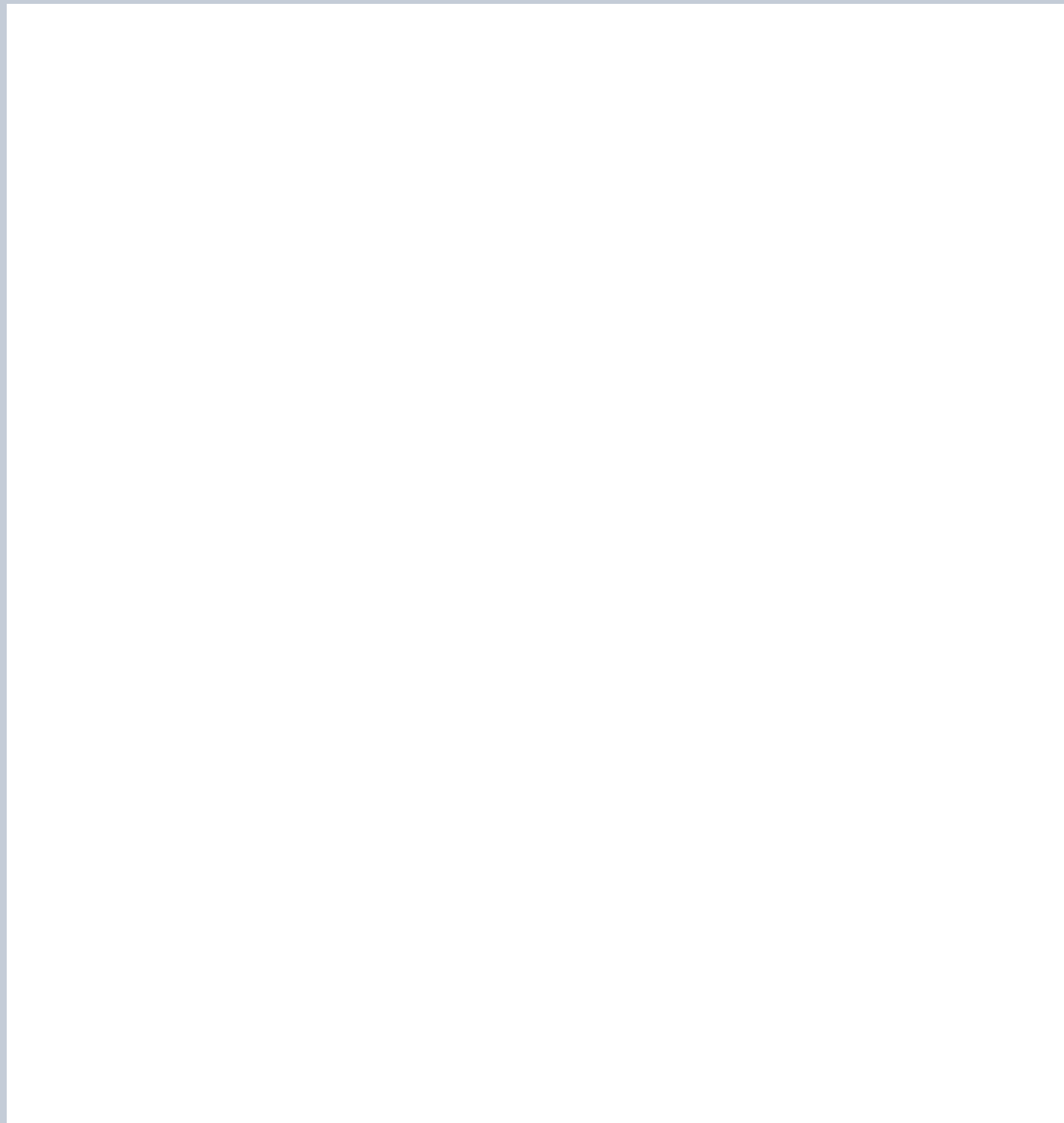


# Frankel Jewish Academy Curriculum Guide



# Curriculum Guide

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# Mission and Philosophy

## Mission Statement

Frankel Jewish Academy is a high school that functions as both an academic and religious institution. It is built upon a dual curriculum of the highest-level college preparatory general studies and classical text-based Jewish studies while operating within a framework of Jewish law.

Our mission is to provide an environment that both educates towards, and engenders an appreciation of, living a traditional Jewish lifestyle, as well as building a relationship with God and a commitment to the Jewish people, the State of Israel, and the United States.

We envision our graduates acquiring an appreciation for the values of Torah and Western Civilization that will empower them to become leaders of the Jewish community and society at large.

## Philosophy

Frankel Jewish Academy is an Open, Halachic, Zionist, American school. We provide a diverse and open academic environment both inside and outside the classroom, welcoming Jewish students from all religious and ideological backgrounds. FJA is committed to the ethical and ritual principles of Jewish law (halacha); students are taught Jewish law, texts, and tradition. Support of the modern State of Israel as a fulfillment of the Zionist aspirations of the Jewish people is an integral part of the daily life of Frankel Jewish Academy. FJA is steadfast in its patriotism to the United States of America and promotes the uniquely American vision of individual freedom.

## **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

A student enrolled at FJA must take the equivalent of seven academic courses every year, including one English class, one Math class, two Jewish Studies classes, and Hebrew Language. Students are expected to be in school the entire school day. Note: one credit is equal to two semesters.

- 4 credits of English
- 4 credits of Mathematics
- 4 credits of Hebrew Language
- 3 credits of History and Social Studies (1)
- 3 credits of Science
- 3 credits of Bible
- 3 credits of Rabbinics
- 2 credits of Upper Level Jewish Studies (2)
- 2 elective credits (e.g. additional classes in English, Social Studies, etc.)
- 1.5 credits of Performing and Visual Arts (3)
- 1 credit of Athletics (4)
- 0.5 credit of Health and Wellness (5)
- Community Service/Synagogue Attendance/Minyan (6)

## **(1) History and Social Studies**

US Government and Economics is a graduation requirement. AP Government will also satisfy this requirement.

## **(2) Upper Level Jewish Studies**

Upper Level Jewish Studies must include one credit (two semesters) of Jewish History including at least a 0.5 credit (one semester) on Israel. The remaining credit may be fulfilled by taking any other Upper Level Jewish Studies courses. Rabbinics IV can be considered an Upper Level course and may be used to fulfill this requirement in the 12th grade year.

## **(3) Performing and Visual Arts**

Beginning with the Class of 2017, students will be required to fulfill 1.5 credits in Performing and Visual Arts which may include participation in a school play.

## **(4) Athletics**

Each student is required to take two semesters of Athletics. Each season of participation in an FJA varsity sport fulfills 0.5 credit of the Athletics requirement. The two 0.5 credits may not be earned in the same sport.

## **(5) Health and Wellness**

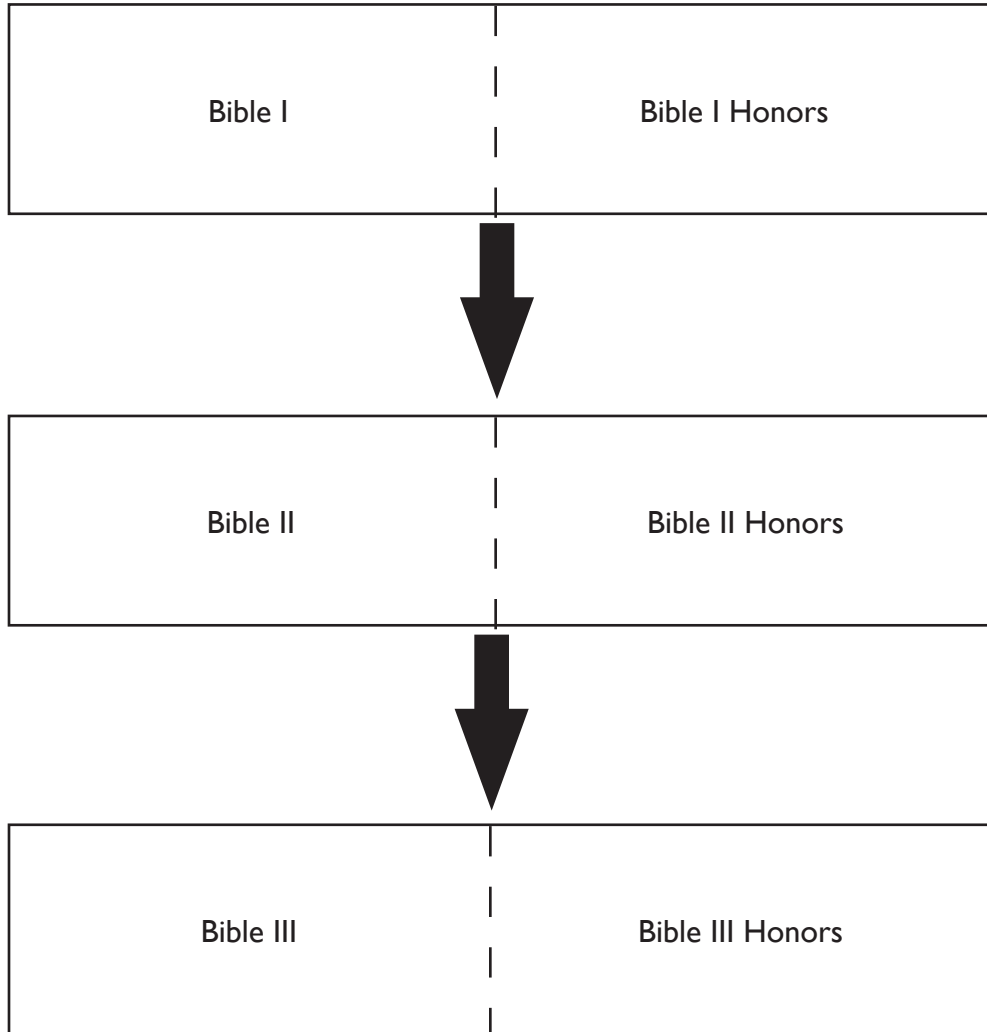
This module offered during Freshman Seminar for 9th graders, provides students with information and insights on relationships, sexuality, nutrition, self-esteem, and stress management. Through facilitated discussions students explore how to develop habits of life long wellness.

## **(6) Community Service/Synagogue Attendance/Minyan**

Each school year students are required to participate in a minimum of 15 hours of community service (with a maximum of 5 hours during the summer) and to attend a minimum of 10 Jewish religious services outside of school. (For more details see the Student Handbook.)

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

# Bible Map



# Bible

The Hebrew Bible is the oldest written collection of holy writing 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. The Bible also plays a central role in Jewish law, both in rabbinic texts and in ritual practice. A literate Jew must be able to read and understand the Bible, preferably in its original language.

Frankel Jewish Academy provides a skills-based Bible curriculum that gives students the tools necessary to become independent readers of the Bible and the traditional medieval Jewish commentaries (*mefarshim*). Midterm and final exams are given in each course to test student knowledge of content and ability to apply acquired skills (both literary and grammatical) to unseen texts. Throughout the year students are given regular quizzes, in-class assignments, tests, and creative projects in order to track their progress and test for understanding.

## **Bible I (Honors option)\***

Full Year: 1.0 credit

In Bible I, students will develop the necessary skills to analyze biblical narratives as sophisticated and astute readers of the text. Students will learn to recognize key Hebrew words and phrases, literary devices, and recurring themes. Students will 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.

## **Bible III (Honors option)\***

Full Year: 1.0 credit

Students who successfully complete Bible I move on to Bible II. In Bible II, 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.

## **Bible II (Honors option)\***

Full Year: 1.0 credit

Students who have completed Bible II move on to take Bible III. Bible III 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.

**\*Note:** Honors sections will emphasize reading the biblical texts and commentaries in the original Hebrew, with a special focus on grammar. Honors students require a strong background in Hebrew as well as the maturity and self-motivation to engage in this intense curriculum.

# English Map

English 9	English 9 Honors
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American Literature	American Literature Honors
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*Upperclassmen: 11th & 12th grade courses*

British Literature <i>(Not offered in 2015-16)</i>	British Literature Honors <i>(Not offered in 2015-16)</i>
World Literature	World Literature Honors

Writer's Craft	
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AP English Language	AP English Literature <i>(Not offered in 2015-16)</i>
Controversial Literature <i>(Seniors only)</i>	Analyzing Literature and Film <i>(Seniors only/Honors option)</i>

# English

The goals of the English Department at Frankel Jewish Academy are to help students find their personal, analytical, emotional, and intellectual voice 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.

## **English 9 (Honors option)\* – 9th Grade**

Full Year: 1.0 credit

This course emphasizes literary reading for content and meaning, essay writing, and oral expression. Students will study a selection of novels, poetry, essays, short fiction, and drama. There is emphasis on writing, vocabulary, and grammar as well as creative expression. Authors include William Shakespeare, George Orwell, Sue Monk Kidd, and J.K. Rowling.

## **American Literature (Honors option)\* – 10th Grade**

Full Year: 1.0 credit

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. There continues to be emphasis on writing, building from the foundational essay skills developed in 9th grade. Authors include Arthur Miller, J.D. Salinger, F. Scott Fitzgerald, and a selection of celebrated poets such as Walt Whitman and Edgar Allan Poe.

## **AP Language and Composition – 11th/12th Grades**

Full Year: 1.0 credit

*Criteria for admission: Teacher recommendation, grade earned in previous course, and standardized test scores.*

This is a full-year course designed for highly motivated students to become skilled readers of non-fiction written in a variety of periods, disciplines, and rhetorical contexts. Students become skilled writers, able to compose for a variety of purposes. Students become aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students write on a variety of subjects from personal experiences to public policies, from imaginative literature to popular culture. Much of the coursework focuses on the culminating exam. This course is offered every other year, alternating with AP Literature.

## **AP Literature – 11th/12th Grades**

Full Year: 1.0 credit

*Criteria for admission: Teacher recommendation, grade earned in previous course, and standardized test scores.*

This course for highly motivated students engages them in the careful reading and critical analysis of fiction. Through the close reading of selected texts, students deepen their understanding of the writer's use of language to provide effect and meaning. As they read, students consider a work's structure, style, and themes as well as more detailed elements, such as the use of figurative language and stylistic techniques. This course is an intensive study of representative works from various genres and periods spanning the 16th to the 21st centuries. Much of the coursework focuses on the culminating exam. This course is offered every other year alternating with AP Language.

## **British Literature (Honors option)\* – 11th/12th Grades**

Full Year: 1.0 credit

This course provides a concentrated study of novels, plays, essays, and poetry written by British authors. The course explores the characteristics and values of British society reflected in its literature. It involves critical analysis within a range of topics, as well as essay-writing with an emphasis on building existing grammar skills into an individual writing style. Authors include William Shakespeare, Jonathan Swift, Jane Austen, and Charles Dickens.

## **World Literature (Honors option)\* – 11th/12th Grades**

Full Year: 1.0 credit

Through a study of works by authors from around the world, students learn how literature reflects the cultures of many nations. They discover how literature expresses social, cultural, political, and personal values within each culture. This course involves extensive analytical reading, essay writing, and grammatical structure. Some of the authors include: Sophocles, Franz Kafka, William Shakespeare, and Jhumpa Lahiri.

## **Writer's Craft – 11th/12th Grades**

Full Year: 1.0 credit

This writing intensive course challenges students to write in various modes of discourse, beginning with expository and persuasive writing and moving to a focus in creative fiction and non-fiction. Students will learn to write for a specific purpose, to a specific audience, while developing their own voice as an author. Students will learn and practice MLA standards. In addition to writing, students will study vocabulary, grammar, and sentence structure. Organized logical thinking and communicating will be emphasized throughout the course.

## **Controversial Literature – 12th Grade**

Full Year: 1.0 credit

This course examines literature focusing on controversial ideas through traditionally feminist texts. Through analyzing a variety of literary works, students will see how literature serves as an important medium of expression for women in their struggle for full equality, as well as recognizing the value of feminist literature. Each of these texts has been banned as a result of its feminist focus. Students will read critically to gain an understanding of how literature is used to make social, political, and religious statements. This course also involves essay writing, vocabulary, and grammar work. Authors include Margaret Atwood, Virginia Woolf, Kate Chopin, and Zora Neale Hurston.

\* **Note:** "Honors option" (for all departments) moves at an accelerated pace, has more intensive assessments, and a rigorous workload.

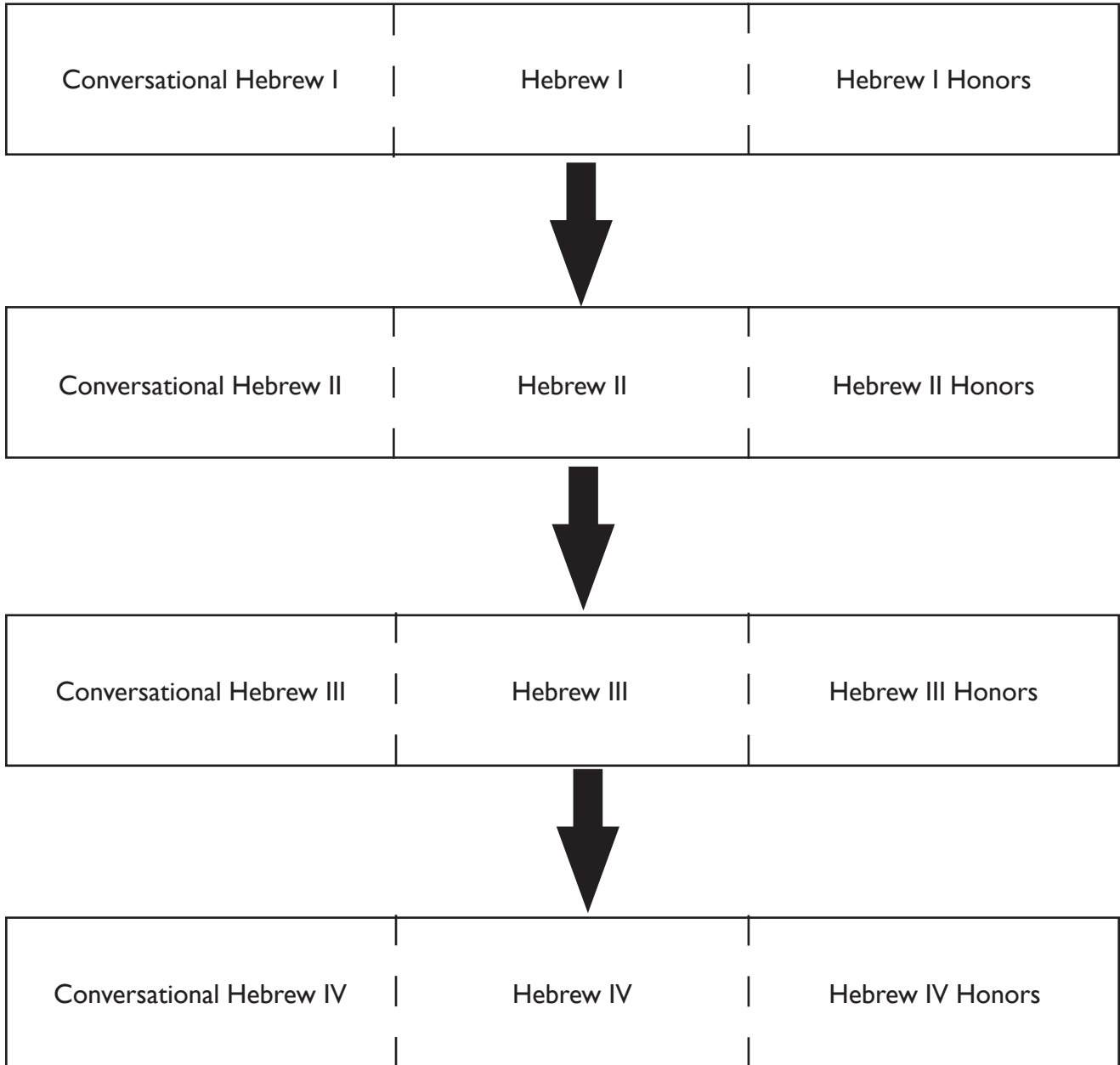


## **Analyzing Film and Literature (Honors option) - 12th Grade**

Full Year: 1.0 credit

This English course explores the art of film and its relationship to literary forms. Throughout the year, we will be analyzing films from various genres and generations, experiencing the styles of famous directors, learning what goes on behind the scenes, and assessing a film's overall meaning. Possible films include classics, like *The Godfather*, psychological thrillers, like *Inception*, foreign films, documentaries, and comedies. The primary texts used are *The Art of Watching Film* by Joseph M. Boggs and Dennis W. Petrie, and Aristotle's *Poetics*. Students will watch and analyze films, participate in lectures, lead cinematic discussions, and complete creative projects in this course.

# Hebrew Map



# Hebrew Language and Literature

The Hebrew language program at Frankel Jewish Academy is designed to advance every student's Hebrew language skills and stimulate their intellectual curiosity. Emphasis is placed on the student's ability to read, write, and speak Hebrew. A core component at every level of our curriculum is the integration of Hebrew language with Jewish studies. When our students graduate, they will have the ability to make the important connection between modern Israeli literary texts that are based on traditional biblical and Hebrew sources. Modern Hebrew is a vital tool used to study the history, culture, and traditions of the Jewish people.

In all levels, students study literature, grammar, conversational Hebrew, and excerpts from Israeli newspapers. Literary selections are chosen to increase student understanding and commitment to Jewish identity and Israel. Students are assigned to Hebrew, Conversational Hebrew, or Honors Hebrew according to their abilities.

## **Hebrew I - 9th Grade**

Full Year: 1.0 credit

The theme emphasized in this level is personal journeys. Students will encounter, through literary excerpts and authentic readings, issues relevant to their lives. Among the topics explored are: new beginnings, the family, one's community, and friends. Students in the conversational level will be able to read and write in Hebrew. Students will be able to speak in short dialogues about daily life using basic prepositions. Advanced 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 - 10th Grade**

Full Year: 1.0 credit

The theme emphasized in this level is Jewish communities, past and present. Students will explore, through literary and media excerpts, issues relevant to their lives. Among the topics studied are Jewish communities both local and global, stereotypes, and otherness, with a special emphasis on Israel as a multicultural society. Students at the conversational level will continue to build their vocabulary, and work on irregular verbs and past, present, and future tenses, as well as engage in conversation. Advanced students will be fluent in past, present, and future in all verb constructs. They will also learn literary texts and be able to comprehend Israeli media independently.

## **Hebrew III - 11th Grade**

Full Year: 1.0 credit

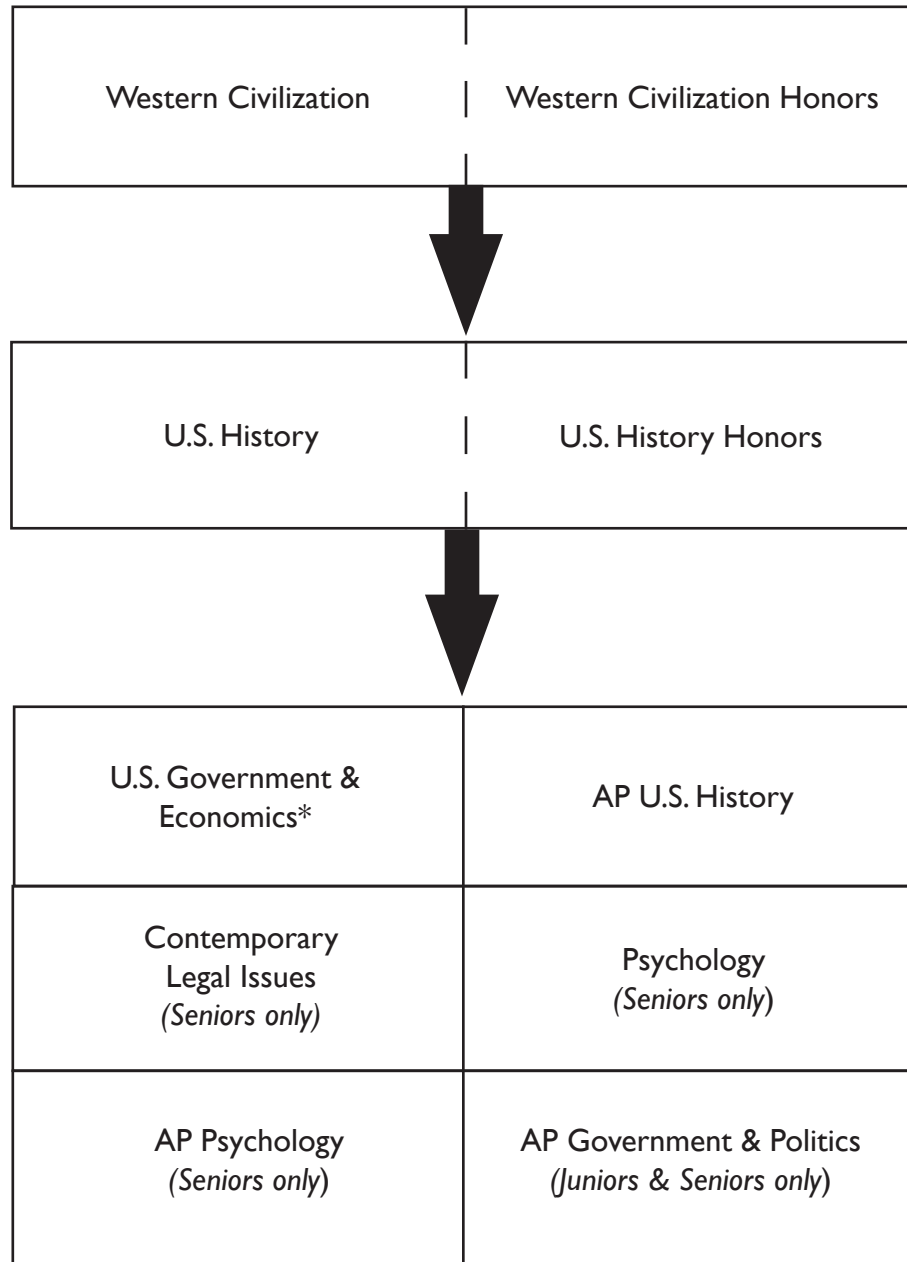
The theme emphasized in this level is issues and dilemmas in Israel's history and how they have affected Israel and Jews around the world. We will explore media and literary excerpts that reflect different historical events. The Honors section will explore topics such as immigration to Israel, Israeli society (Ashkenazi, Sephardi, Secular, and Religious Jews in Israel), and its challenges. The conversational level of this year advances student grammar knowledge. Students will be able to write one- to two-page compositions. Advanced students will continue to broaden their vocabulary and will be able to write a coherent essay (introduction, three main paragraphs, and conclusion) about topics taught in class.

## **Hebrew IV - 12th Grade**

Full Year: 1.0 credit

During the final year at the Academy, students will explore the theme of identity from one's personal Jewish perspective: "Where does my journey take me now as I graduate from the Academy?" Among the topics explored are the contrast between Jerusalem and Tel Aviv and the juxtaposition of these two communities; what it means to be Jewish in Israel vs. Jewish in America, and the role of Israel as part of students' Jewish identity. Students in the conversational course will participate in Hebrew dialogue with Israeli peers, as well as discuss themes of self, culture, community, and society. Students who are more proficient will participate in extensive dialogue in Hebrew and work on comprehending main ideas and themes from media news excerpts.

# History and Social Studies Map



\* U.S. Government & Economics is a graduation requirement. AP Government will also satisfy this requirement.

# 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. There is a strong emphasis on written communication. 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.

## **Western Civilization (Honors option)\* – 9th Grade**

Full Year: 1.0 credit

This course covers world civilization from its beginnings until the onset of the Cold War, placing an emphasis on Western 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.

## **U.S. History (Honors option)\* – 10th Grade**

Full Year: 1.0 credit

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 Government and Politics – 11th/12th Grades**

Full Year: 1.0 credit

*Prerequisite: Teacher recommendation*

The goal of this intensive full year course is to prepare students for the AP Government test. Accordingly, topics of the U.S. Government and Economics course are intertwined with the objectives of the AP test. Research, analysis, interpretation, critical thinking, and decision-making are among the many skills developed. Emphasis is placed on in-depth discussion and writing in which students practice making reasoned decisions about matters of public policy. This course fulfills both the government and the economics requirements for graduation. This course is offered each year, preferably to 12th graders.

## **AP U.S. History – 11th/12th Grades**

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 – 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.

## **Contemporary Legal Issues – 12th Grade**

Half Year: 0.5 credit

Students will explore the world's ever-changing political and social scene and how it has evolved. Students learn about "have" and "have-not" nations, conflicts and conflict resolution, as well as world organizations and their functions. They will be able to describe the causes, geographic contexts, and consequences of major global issues and events. Students take an active role in discussion, debate, role-playing, and foreign policy simulations while continuing to work on their writing skills, particularly the argumentative essay.

## **Psychology – 12th Grade**

Half Year: 0.5 credit

The first half of this elective course introduces students to the study of the mind. Students explore the various branches of psychology including social, abnormal, cognitive, and developmental. The goal of this course is to help students understand how and why people behave as they do. The second half of this elective course seeks to explain how our thoughts, feelings, perceptions, and behaviors are influenced by interactions with others. Specific topics include: interpersonal attraction, personal relationships, social perception, group behavior, conformity, obedience, conflict, cooperation, attitude formation, attitude change, and prejudice along with special attention to psychological disorders.

### **U.S. Government and Economics – 11th/12th Grades**

Full Year: 1.0 credit

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. 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 also study the role of the federal government in international affairs, as well as the role of both governmental and non-governmental international organizations. Individual rights and liberties embodied in the Bill of Rights are examined through landmark Supreme Court cases, mock trials, and debates. Through discussion and written assignments, students practice making reasoned decisions about matters of public policy. 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. In addition to their study of macroeconomics, students study personal finance and business in a free market economy. They explore the stock market, banking system, productivity, taxation, and marketing. Students also learn to analyze statistical data pertaining to economic problems.

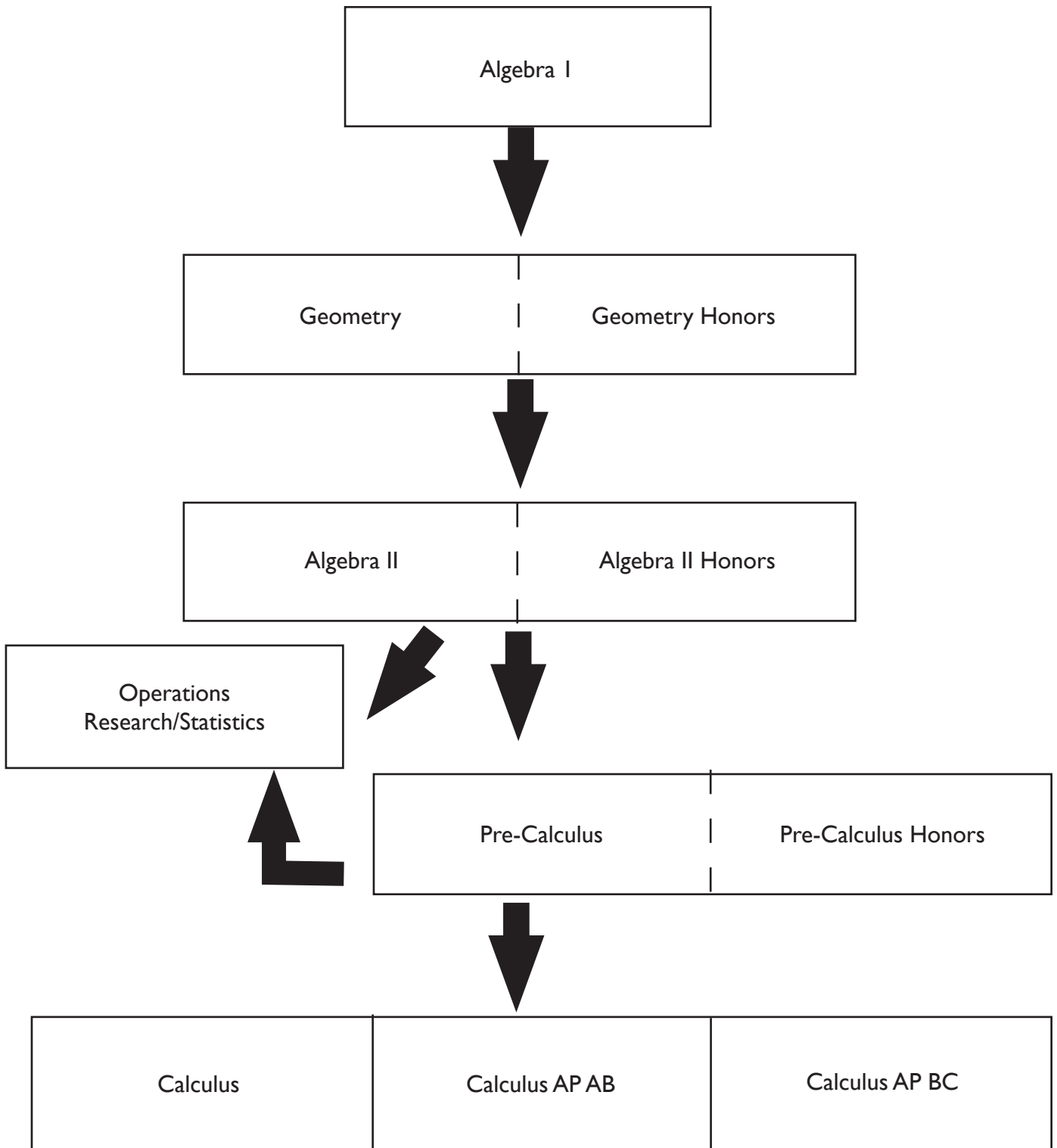
### **AP Psychology - 12th Grade**

Full Year: 1.0 credit

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.

\* **Note:** “Honors option” (for all departments) moves at an accelerated pace, has more intensive assessments, and a rigorous workload.

# Mathematics Map



# 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.

## Algebra I

Full Year: 1.0 credit

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 (Honors option)\*

Full Year: 1.0 credit

*Prerequisite: Algebra I*

*Honors option requires teacher recommendation*

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)\*

Full Year: 1.0 credit

*Prerequisite: Geometry*

*Honors option requires Honors Geometry and 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, rational expressions, and conic sections. 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.

## Calculus

Full Year: 1.0 credit

*Prerequisite: Pre-Calculus and teacher recommendation*

This course introduces students to topics in calculus. These 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 – AB Level

Full Year: 1.0 credit

*Prerequisite: Honors 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

Full Year: 1.0 credit

*Prerequisite: Honors Pre-Calculus 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.



### **Operations Research/Statistics**

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?" It is a scientific way 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.

### **Pre-Calculus with Trigonometry (Honors option)\***

Full Year: 1.0 credit

*Prerequisite: Algebra II*

*Honors option requires Algebra II Honors and 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.

\* **Note:** "Honors option" (for all departments) moves at an accelerated pace, has more intensive assessments, and a rigorous workload.

# PAL

## *(Performing and Visual Arts, Athletics, and Language)*

In addition to our rigorous academic curriculum, we offer an expansive array of subjects, allowing students to explore areas of study that will enrich college careers and personal life choices. Not all courses are offered every semester.

### **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.

#### **Advanced Art**

Half Year: 0.5 credit

Students with previous drawing and painting experience will have the opportunity to enhance skills and techniques, develop ideas, and try something new. The focus of this class will be to effectively express thoughts, concepts, and feelings through art. Both 2-D and 3-D materials will be available for students.

#### **Ceramics I**

Half Year: 0.5 credit

This course is for beginners with no previous experience. Students become familiar with the studio by learning the names of the tools and equipment used. They learn proper practices for organizing their work area in order to make the best use of time and materials. They will learn the skills of handbuilding, slab rolling, and other various beginning techniques. The basic requirement is completion of three projects: one coil piece, one slab piece, and a pinch pot.

#### **Ceramics II**

Half Year: 0.5 credit

This course is for students who have completed Ceramics I or have previous experience working with clay. In this class students progress to advanced slab building, extensive design carving, surface decoration, and draped slabbing. The basic requirement for this class is completion of three projects.

#### **Digital Photography**

Half Year: 0.5 credit

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 you will become all three, as you study traditional photographic composition and interpret images you captured with your digital camera in the darkroom of Adobe PhotoShop™. Students will use a single lens reflex camera (SLR) and learn to set up and shoot all shots using the manual settings on the camera.

#### **Drawing and Painting I**

Half Year: 0.5 credit

Beginning, intermediate, and advanced students will have the opportunity to develop skills and express themselves during this class. Developing basic abilities in drawing and painting will be the focus for beginning students, as well as learning the vocabulary for describing and understanding visual art. More experienced students will build upon previous skills and experiment with a variety of media and subject matter. Student critiques of their own and others' work will be an important aspect of the class. An increased knowledge and understanding of major artists, art genres, and techniques will be developed through discussions and slide presentations. Students will have the opportunity to compete in art competitions and display their work.

#### **Entrepreneurship**

Half Year: 0.5 credit

Students will build and grow business ideas from the ground up and learn skills related to creating, building, and running a small business. Industry experts will be sharing their knowledge and experiences. In addition to creating a business plan, participants will have the opportunity to pitch their plans to venture capital and private equity groups. Another component of this class, will be trips to Detroit where students will learn about the vibrant entrepreneurial environment that exists in and around the Madison Building.

#### **Journalism**

Half Year: 0.5 credit

This course introduces students to fundamental elements of journalism, including its historical development, legal and ethical issues, and the process of creating effective textual and visual content. Students develop researching, writing, and editing skills and apply them in creating and maintaining an online magazine.

#### **Model U.N./Debate**

Half Year: 0.5 credit

Debate is a contest in which two or more speakers present their arguments intent on persuading one another's opinions. The student debater learns how to develop research skills to find the exact information needed in the shortest time possible. Model United Nations is an authentic simulation of the U.N. General Assembly and other multilateral bodies. Some Model U.N. exercises take place in the classroom and others are school-wide. Still others are regional, national, or even international.

### **Music Ensemble/Theory**

Half Year: 0.5 credit

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

Students must bring their musical instruments to every class (with exceptions for drums and piano). The class will focus on musicianship and teamwork. Various musical styles will be performed as a band - from Motown to classic rock to contemporary pop. Basic music theory and conducting will be touched upon in this course. All students will be required to perform songs by memory at the end of the semester.

### **Public Speaking**

Half Year: 0.5 credit

This is a practical course designed to offer the novice public speaker a number of opportunities to organize and prepare public speaking assignments. Students will learn the roles of verbal and nonverbal communication, grow to understand contexts and forms of public speaking, analyze the role of the audience, and develop research techniques for speeches. Students will evaluate the strengths and weaknesses of speeches and will be expected to present speeches on a regular basis.

### **Sculpture and Glass Mosaic**

Half Year: 0.5 credit

Students will have the opportunity to create 3-D works of art using a variety of materials. We will use both traditional materials and found objects. Basic sculpture and glass mosaic techniques are taught after which the emphasis will be on visual expression of ideas. Students should be ready to dive in and create innovative pieces!

### **Stagecraft**

Half Year: 0.5 credit

This introductory class will invite students to learn and develop interest in the backstage workings of The Berman Center for the Performing Arts. Students will work with the Berman technical director to learn all basic elements of stagecraft, including lighting, scenery, scenic art, special effects, and backstage safety. A realistic goal of the class will be to discern student interest and build students' capacities in the theatrical arts while working toward developing advanced classwork or internship opportunities.

### **Video Production**

Full Year: 0.5 credit

Students will learn and practice all the basic aspects of the video production process: script writing, storyboarding, lighting, camera operation, audio recording techniques, and non-linear editing. There will be an emphasis on the use of video as an effective medium for communication and storytelling. This course will be one full year and limited to 10 students. It will require time commitments above and beyond the regularly scheduled PAL block. Instructor approval is required for enrollment.

### **Vocal Arts**

Half Year: 0.5 credit

*Prerequisite: Audition*

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.

### **Woodworking**

Half Year: 0.5 credit

Students in this class will create objects that are useful as well as beautiful. In addition to wood, students incorporate metal, glass, mirror, and paint into their designs. Through the proper and safe use of table saws, sanders, power drills, hand tools, etc., we will produce different kinds of boxes, including jewelry boxes. (A motivated student may then design and produce jewelry to go into the box!) Projects that develop skills will be assigned. Well-conceived and well-planned student-initiated projects may also be discussed with the instructor.

### **Yearbook**

Full Year: 1.0 credit

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.

# Athletics

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. All students are expected to take two semesters of athletic classes, regardless of participation in interscholastic sports. FJA is a member of the Michigan High School Athletic Association (MHSAA), the governing body of Michigan high school athletics.

## **Intramurals**

Half Year: 0.5 credit

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.

## **Lifeguarding, First Aid, and CPR**

Half Year: 0.5 credit

*Prerequisite: Students must be competent swimmers and at least 15 years of age by the time the class is over.*

Upon successful completion of this course, students will be certified in Lifeguarding, First Aid, and CPR. Those students receiving certification may be eligible for summer employment at the JCC as a lifeguard.

## **Weight Training**

Half Year: 0.5 credit

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

## **Yoga**

Half Year: 0.5 credit

Students will be introduced to the art of yoga. Classes will focus on all facets of yoga training, including technique, breathing, and stretching.

## **Zumba**

Half Year: 0.5 credit

Zumba is an exhilarating, effective, easy-to-follow, Latin-inspired, calorie-burning dance fitness exercise that is called a "party of a workout." The students will have a great time as they dance their way to fitness in the dance studio of the JCC. The class is designed for beginners, but even the experienced student will get a good workout with this calorie-burning program. Fun and fitness are the focus of this class.

# Spanish Language and Literature

Learning a second (or even third) language opens the doors to new ways of thinking beyond one's immediate geographic and linguistic world. FJA's Spanish language program is structured so that students acquire a practical working knowledge of the language. Whether traveling to a Spanish-speaking country or pursuing employment where facility with the language is desired or required, FJA students are prepared to converse in daily, practical, and vocational situations. A variety of techniques are used at every level of instruction to accommodate learning styles and produce the highest level of communicative skills in a relaxed, comfortable, and supportive environment.

## **Spanish I**

Full Year: 1.0 credit

This course introduces students to Spanish language and culture. It is a "Survival Spanish" course in which students learn the basic skills of language: speaking, listening, reading, and writing. Students are provided with their own authentic weekly Spanish magazine, reflecting the practical nature of the course. The primary emphasis is on speaking and being able to communicate in the most practical daily and vocational situations.

## **Spanish II**

Full Year: 1.0 credit

This course continues the first year's emphasis on communication, expanding to include current events, modern literature, music, and news. Students hone their skills by reading the next level of an authentic weekly Spanish magazine, thereby developing their comprehension and understanding of Spanish culture. All four basic language skills are developed with the highest and most practical concentration centered on speaking.

## **Spanish III**

Full Year: 1.0 credit

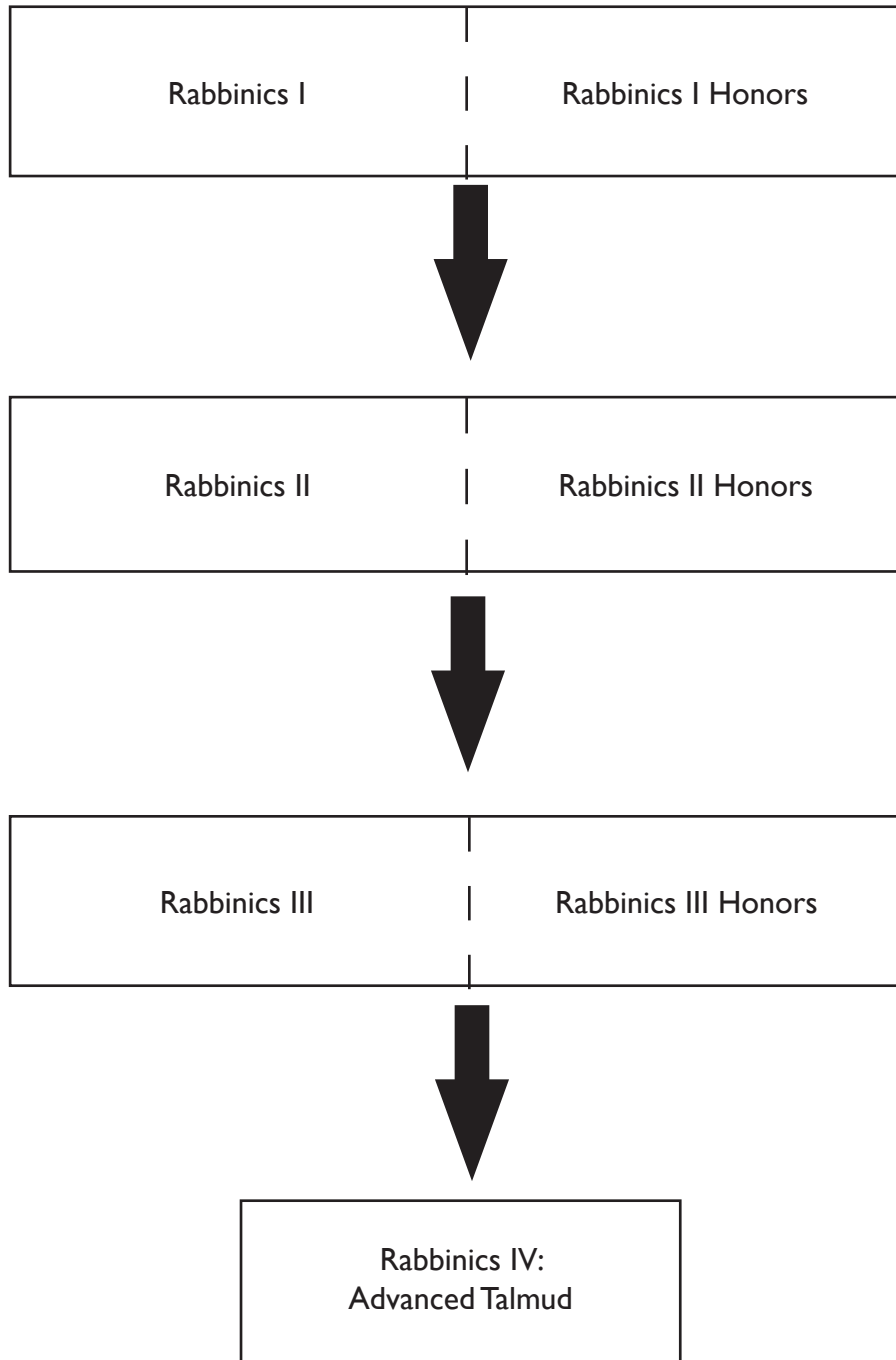
This course, taught chiefly in Spanish, builds upon the two prior years of communication skills and emphasizes the global skill of storytelling and the remarkable story of the Hispanophone (including Sephardic) world. Spanish literature, drama, music, and cinema are woven into the curriculum to further develop students' linguistic skills and their appreciation of Latino, Iberian, and Judeo-Spanish culture.

## **Spanish IV and V**

Full Year: 1.0 credit

This course, taught almost entirely in Spanish, is humanities-centered with a focus on understanding Spanish and its speakers through movies and music, literature and drama, art and politics. Continued competence in conversation is heightened through constant in-classroom interactivity and Spanish writing skills are developed through the composition of short creative pieces.

# Rabbinics Map



# Rabbinics and Jewish Thought

The overall goal of each Rabbinics course is to teach students how to engage the most important texts of our tradition in a manner that is intellectually challenging and spiritually moving. Rabbinic texts are an endless source of spiritual renewal and intellectual stimulation. They provide ways to think about our relationship with God and the purpose of our lives, as well as such issues as Israel and Jerusalem, interpersonal relationships, social responsibility, suffering, and peace. Students study classical sources such as Tanach (the Hebrew Bible), Mishna, Talmud, and Midrash (rabbinic exegesis). They also study classical scholars such as Rashi and Tosafot. Students develop skills in rabbinic terminology, grammar, and language. They acquire the tools necessary to think critically and develop the ability to study sacred texts at a high level throughout their lives.

## **Rabbinics I (Honors option)**

Full Year: 1.0 credit

This course focuses on two areas: 1) an overview of Jewish tradition and 2) an overview of Mishnaic and other Tannaitic texts developed in the first two centuries of the Common Era. The overview of Jewish tradition focuses on the development of Jewish literature, ritual, and practice. It includes a historical look at rabbinic texts and their relationship to the Bible, along with a survey of Jewish ritual and practice, holidays, and the lifecycle. Students will also explore the rationale behind mitzvot (commandments) using the Sefer Hachinuch as a guide. Students will begin to develop reading, translating, decoding, and analytical skills essential to the study of Mishna, midrash, and halachic (legal) texts. Students will study a variety of Mishnaic and Tannaitic texts, including selections of Tractate Berachot, Seder Moed, and Seder Nezikin. Students will learn how to critically analyze these texts in preparation for Talmud study and increase their knowledge and appreciation of how the written and oral law are linked.

## **Rabbinics II (Honors option)**

Full Year: 1.0 credit

The two main themes of this course are interpersonal relationships and social justice. It will engage students in a deeper examination of Amoraic and Tannaitic texts and halachot. Students will develop their conceptual and analytical skills by learning and applying Talmudic terms, concepts and logic, as well as working toward an appreciation of the literary and historical significance of the text. As a step toward independent study, students will begin to utilize dictionaries of key Talmudic terms and Aramaic vocabulary.

## **Rabbinics III (Honors option)**

Full Year: 1.0 credit

A continuation from Rabbinics II, this course guides students to become proficient and independent in their study of the Talmud. Through the use of the Frank and Jastrow dictionaries and the application of Talmudic logic, terms, and concepts, students will practice independent study and analysis of the Talmud working toward an appreciation of the literary, historical, religious, and legal implications of the text.

## **Rabbinics IV: Advanced Talmud - 12th Grade**

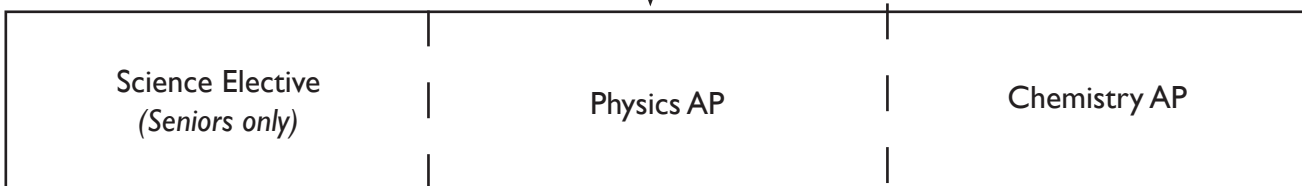
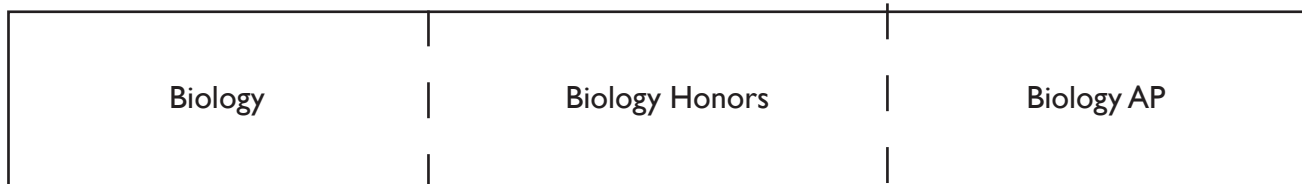
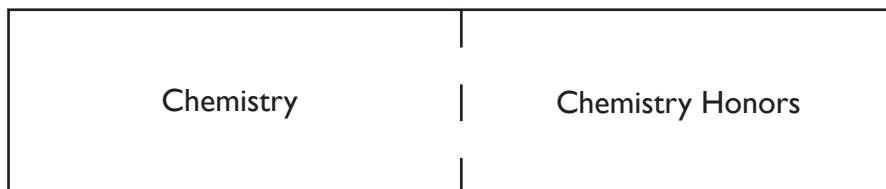
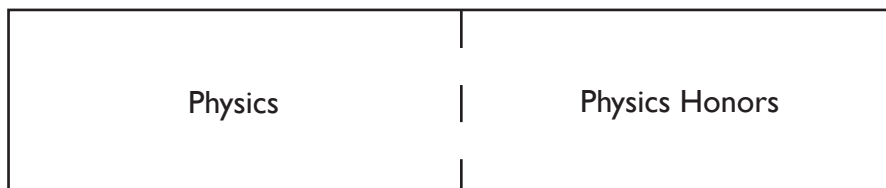
Full Year: 1.0 credit

*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).

**\*Note:** Honors sections will emphasize reading the rabbinic texts and commentaries in the original Hebrew. Honors students require a strong background in Hebrew as well as the maturity and self-motivation to engage in this intense curriculum.

# Science Map



# Science

The science program at Frankel Jewish Academy incorporates a logical sequence of courses beginning with physics. Physics is the study of the fundamental laws of science; it is the foundation on which all other sciences are built. Programs that begin with physics construct knowledge in a logical sequence to avoid unnecessary repetition. The course of study then progresses to chemistry, which is based on the laws of physics, followed by biology, which is based on cellular and molecular interactions. The science program offers a variety of general, Honors, and AP courses.

## Physics (Honors option) – 9th Grade

Full Year: 1.0 credit

Physics is the most fundamental of all the sciences. It establishes a strong foundation for the study of other sciences during the high school years. Students learn about motion, forces, energy, matter, heat, sound, light, and the composition of atoms. All these topics are taught with hands-on laboratory activities. Computers are used to assist in lab data collections, analyses, physics simulations, Internet research, and as a tool for clear communication.

## Chemistry (Honors option) – 10th Grade

Full Year: 1.0 credit

*Honors option 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.

## Biology (Honors option) – 11th Grade

Full Year: 1.0 credit

This course is designed to give students an introduction to major concepts in the fields of cellular and molecular biology while focusing on critical thinking and laboratory skill development. Topics include the chemistry of living organisms, molecular genetics, cell structure and function, cellular energetics, cell division and chromosomes, Mendelian genetics, evolution, and ecology.

## AP Biology

Full Year: 1.0 credit

*Prerequisite: Chemistry and teacher recommendation*

This course is the equivalent to a college introductory biology course. The course emphasizes four essential 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, reproduce, and 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. 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 Physics

Full Year: 1.0 credit

*Prerequisite: Physics, Pre-Calculus, and teacher recommendation*

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 Chemistry

Full Year: 1.0 credit

*Prerequisite: Physics, 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 solving of more complex chemistry problems. Practice methods include textbook problems and sample AP questions/tests, coupled with a variety of intense laboratory-related activities.

## Forensic Science – 12th Grade

Half Year: 0.5 credit

*Prerequisite: Physics, Chemistry, and Biology*

This course integrates concepts from physics, chemistry, and biology and is designed to be a hands-on introduction to basic forensic techniques. Students will learn how to perform hair and fiber analysis, finger printing, blood spatter analysis, and will study ballistics, toxicology, chromatography, forensic genetics, blood typing, collision analysis, and forensic entomology. Throughout the course students will use the forensic techniques they learn to investigate a series of simulated crime scenes.

## Environmental Science - 12th Grade

Half Year: 0.5 credit

*Prerequisite: Physics, Chemistry, and Biology*

This course is the study of environmental systems and concepts. The structure and function of the environment will be studied along with changes that affect ecosystems. The global systems that influence the environment, such as the atmosphere, lithosphere, ecosphere, and hydrosphere, will be investigated. The course will include a laboratory component where the environmental concepts learned in class are explored in inquiry-based labs as well as real-world simulations.



# Upper Level Jewish Studies and Jewish History

After completing the requirements in both Bible and Rabbinics, senior students are required to take two semesters of Jewish History and two semesters of a Jewish Studies elective. These courses are a semester long, unless otherwise indicated. All students must fulfill an FJA graduation requirement by taking the course History of the Arab-Israeli Conflict. The history of the Jewish people is extraordinarily rich and inspiring. In their Jewish History electives, students learn about the evolution of the Jews' intellectual, cultural, and political developments. Jewish Studies electives allow students to explore more deeply various areas of Jewish interest including ethics, history, and contemporary issues. Not all courses are offered every year.

## **History of the Arab-Israeli Conflict**

Half Year: 0.5 credit

*Required for Graduation*

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.

## **Chasidism: Heroes, Heretics, and History**

Half Year: 0.5 credit

This class will focus on three main areas of study: history, personalities, and Chasidic ideas. Students will learn the context of the development of Chasidic Jewry. Students will explore how and why Jews settled in Poland, how mysticism returned to common Jewish practice, the danger of false messiahs, and the birth of Chasidism. Students will also examine stories of Chasidic masters to understand their approaches to life and texts, as well as their spiritual ambitions.

## **Holocaust and Memory**

Half Year: 0.5 credit

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 Judenrat.

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

Half Year: 0.5 credit

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 Eco Ethics: Understanding our Roles and Purposes within the Natural World**

Half Year: 0.5 credit

In this class, students will work to understand what our roles are on this earth, both as Jews and humans. We will use biblical, rabbinic, and contemporary texts to understand the role of humans on Earth and their relationship with nature. We will explore what the "ideal" relationship between Man and Earth should be and whether there are essential changes to our lifestyle and ideology that we should consider.

## **Jewish Journeys**

Half Year: 0.5 credit

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**

Half Year: 0.5 credit

This course will explore both classical and contemporary dilemmas regarding issues of life and death. 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**

Half Year: 0.5 credit

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.

## **Scribal Arts**

Half Year: 0.5 credit

This course will explore the over 3,000-year-old tradition of Hebrew writing. Using the traditional equipment of quill, parchment, and ink, students will learn how to write the Hebrew letters as they appear in the Torah. Students will learn and practice the basics of how to scribe letters, as well as how to beautify them. Students will then move on to writing words and verses. Throughout the course, students will look at basic Jewish laws concerning the letters and explore their deeper mystical meaning.



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