

ACADEMIC PROGRAM COURSE GUIDE 2024-2025


NORTH SHORE HEBREW ACADEMY ישיבת חוף הצפון

## ELEVENTH GRADE

ACADEMIC PROGRAM
cOURSE GUIDE
2024-2025

## CORE AND ELECTIVES

II TH GRADE



## JUDAIC STUDIES



TALMUD

TANACH

HALACHA / MACHSHAVA

HEBREW LANGUAGE


## TALMUD

Through the course of their study, our students develop a deep understanding and appreciation for Talmud study - its principles, methodologies, and law. Beyond developing their reading and comprehension skills, students develop training in analytical reasoning and logical argumentation, and learn how to navigate and debate complex legal and philosophical matters. In order to create a vibrant, unified and collaborative community of Torah learning that cuts across classes and grades, the entire school learns the same masechet (tractate) of Talmud (although, of course, teaching is tailored to be grade-appropriate).

## MASECHET PESACHIM

This year, we will study topics in the 10th chapter of Pesachim in great depth (iyun). These topics pertain to the mitzvot performed on Shabbat and Yom (קידוש /הבדלה) and Pesach in particular (מצה, מרור, ד' כוסות, הסיבה). We will explore how these mitzvot highlight the special sanctity of these days. Our thorough analysis of the principles underlying הלכות will showcase the depth of Torah and lead to a greater appreciation of Jewish law.

## BEIT MIDRASH PROGRAM

Instead of the standard single-period Talmud course offerings listed below, students have the option to apply for our intensive Beit Midrash program, which offers two daily periods dedicated to Talmud instead of one. This program replaces the Halacha/Machshava requirement. The extra time of Talmud study provides students with a unique opportunity to immerse themselves in an intellectually challenging, yet relaxed learning environment. It also allows students to learn other parts of the given masechet at a faster pace [בקיאות] to be exposed to many different topics and concepts within the pages of the Talmud. Our aim is to foster a serious and enjoyable atmosphere that not only facilitates in-depth Torah learning and spiritual growth, but also encourages chavruta study, the formation of genuine friendships within the group, and the cultivation of supportive and meaningful relationships between students and their rebbeim. Students are trained to read and analyze Rashi, Tosafot, and other Rishonim inside. The course engages in intensive textual analysis, legal reasoning, and conceptual analysis. Graduates of our program have gone on to the most prestigious yeshivot and seminaries.


## TANACH

## All juniors take Tanach. For the next academic year, the Torah Portion of the course focuses on Bereishit, and the Navi portion focuses on Melachim.

## 11TH GRADE CHUMASH: BEREISHIT

In this course, we will study Sefer Bereishit, learning many familiar texts we may have studied in our childhood, except now we have the opportunity to learn them anew with fresh eyes, new perspectives, and more mature and sophisticated academic and interdisciplinary approaches. Special focus will be on the literal interpretation of the text (peshat) enriched by analyses drawn from classic commentators and midrashim. Attention will also be given to the language and structure of the text, as well as "big ideas" that emerge from them, allowing students to uncover timeless life lessons from the stories of our Avot and Imahot and the gradual emergence of the Jewish people.

## 11TH GRADE NEVI'IM: MELACHIM

Students will be studying the book of Melachim with an emphasis on the sections related to Eliyahu ( מלכים א פרק יז - מלכים ב פרק ב) and Elisha (פלכים א מלכים פרק - פרק יג). The powerful and mysterious persona of Eliyahu HaNavi spans over some of the most tumultuous chapters in Nach. Eliyahu confronts corruption and repeatedly risks his own life. His approach of zealotry is intense and powerful. He takes initiative in performing miracles and is successful in bringing the people back to G-d. His successor Elisha has a different approach. We will contrast the different approaches of these neviitim and study what Jewish leadership could look like.


All juniors take Halacha / Machshava. For the next academic year, the Halacha part of the course will cover Hilchot Shabbat. The Machshava part of the course will focus on Religious Zionist thought.

## HILCHOT SHABBAT

In this class, students will learn about the laws of Shabbat, analyzing relevant sources, from the Torah, Mishnah and Talmud, earlier and later halakhic authorities (Rishonim and Aharonim). Students will trace each halakha from the source through the latest practical applications and will gain critical knowledge and skills to navigate the complexities of Shabbat observance in the modern world today.

## RELIGIOUS ZIONIST THOUGHT

What is the religious significance of the secular State of Israel? This course grapples with this question exploring the perspectives of prominent Religious Zionist thinkers of the modern era. While the Zionist movement initially emerged mainly from the efforts of secular activists, it also saw the involvement of religious Zionists with varied views on secular partnerships and the Zionist endeavor. This course examines the works of influential figures such as Rabbi Kook, Martin Buber, Rabbi Soloveitchik, Rav Judah Alkalai, Rav Ovadia Yosef, and Rav Aharon Lichtenstein, shedding light on their interpretations of the relationship between religious belief and the establishment of the State of Israel.


## HEBREW LANGUAGE AND LITERATURE

## עברית Olפרות

Students in the ninth grade are initially placed by ability level measured by personal interviews and formal placement tests.
Once placed, students may advance according to the following standard sequence:

- Preparatory Level - מכינה
- Intermediate Level
- Grade Level
- Advanced Level - בחינה

A student may begin his or her Hebrew Language study in the beginner's level and proceed to the intermediate level during the course of the ninth grade. In every grade there are class sections to accommodate the varying needs of each student. Students are placed in homogeneous classes with their peers at the precise level that will ensure they will be challenged to improve their language skills.

## GENERAL STUDIES



ENGLISH

HISTORY

MATHEMATHICS

SCIENCE

PHYSICAL EDUCATION

# All students are required to take four years of English. Teacher recommendation and administrative approval are required for AP courses. 

## DEVELOPMENT OF U.S. LITERATURE

In this course, 11th grade students trace the roots of American Literature from the 17th century to the present. A major project involves them in putting a noteworthy, but somewhat controversial literary work "on trial." Public performances by the winning teams are viewed by the entire school and invited guests. Academic research is extended to secondary sources. Students also read and write about news articles on current events that connect to curriculum as well as poetry that connects to texts. Vocabulary is culled from works studied and incorporated into writing. Supplementary poetry, short fiction and non-fiction essays are also addressed.

An advanced section will highlight rhetorical strategies and stylistic techniques that authors use in order to create their messages. Students who choose to do so will be prepared to take the AP English Language and Composition exam in May. A skills section will also be available to those students who will benefit from assistance with writing tasks and reading comprehension. Placement will be based on department approval with input from administration.

> All juniors are required to take U.S. History. Teacher recommendation and administrative approval are required for the AP course. Students may opt to take an additional history course as an elective.

## ADVANCED PLACEMENT: UNITED STATES HISTORY

A course in United States History is required for all juniors. Students may take Advanced Placement United States History. The Advanced Placement Program is designed to allow high school students the opportunity to pursue college-level studies while attending high school. While the course covers the same periods of history as the regular U.S. history course, emphasis will be placed on reading original sources and analyzing differing interpretations of historical events.

## UNITED STATES HISTORY

All eleventh grade students who do not take AP U.S. History are required to take this course. It covers the political, economic, and social conditions in the United States from the beginning of our history to present times. The Constitution and the historical setting in which it was written will be studied. Students will understand the great historical developments that led to the U.S. becoming the democratic super-power of the world today. They will read textbooks, original sources, and current affairs articles in order to learn how to draw conclusions and become informed citizens and voters. Based on teacher and administrative input, students may be placed in sections that are specialized in order to address their needs for enrichment and/or remediation.


Students are required to take one math course in their junior year. Placements are determined by the mathematics department.

Pre- Calculus BC
Pre- Calculus AB
Algebra II with Trigonometry
Intermediate Algebra II

## PRE- CALCULUS BC

This course is given to eleventh grade students who have completed Algebra II with Trigonometry. Students further develop their algebraic and trigonometric skills that are necessary for success in AP Calculus BC. Students study linear and quadratic functions, polynomial functions, inequalities, functions, exponents and logarithms, analytic geometry and conic sections, trigonometric functions, trigonometric equations, triangle trigonometry, trigonometric addition formulas, polar coordinates and complex numbers, vectors and determinants, sequences and series, matrices, limits, continuity, techniques of differentiation, and related rates. Teacher recommendation and administrative approval are required.

## PRE- CALCULUS AB

This course is given to eleventh grade students who have completed Algebra II with Trigonometry. Students further develop the algebraic and trigonometric skills that are necessary for success in AP Calculus AB. Students study linear and quadratic functions, polynomial functions, inequalities, functions, exponents and logarithms, analytic geometry and conic sections, trigonometric functions, trigonometric equations, triangle trigonometry, trigonometric addition formulas, and introduction to limits. Teacher recommendation and administrative approval are required.

## ALGEBRA II WITH TRIGONOMETRY

Students enhance their algebraic skills and develop an understanding and mastery of trigonometric concepts. Students extend their study of real numbers, equations and inequalities, functions, systems of equations, polynomials, rational expressions, complex numbers, quadratic equations, transformations, second degree equations, polynomial functions, exponential and logarithmic functions, an in depth study of trigonometric functions, graphs, identities, and equations, probability, and statistics.

## INTERMEDIATE ALGEBRA II

Students enhance their algebraic skills and develop an understanding and mastery of a variety of topics in Algebra, Trigonometry and Pre-Calculus. Topics include polynomials, set theory, trigonometry, matrices and linear algebra, functions, conic sections and game theory. Students are encouraged to develop skills and work habits that will last throughout their academic and future careers.


Students are required to take one science course in the junior year. Physics as a third year of science is strongly recommended. Placement is determined by the department in consultation with the administration. Teacher recommendation and administrative approval are required for enrollment in an AP course.

## AP Physics 1

## Physics

Foundational Physics

## Environmental Science

## AP PHYSICS I

AP Physics I is an algebra-based, introductory college-level physics course. The course focuses on Newtonian mechanics and dynamics; Circular motion and Gravitation; Work, Power and Energy; Linear Momentum, Simple Harmonic Motion; and Torque and Rotational motion. Students cultivate their understanding of physics through classroom study, demonstrations, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. AP Physics 1 students will keep and are encouraged to retain their physics laboratory notebooks, reports, and other materials as colleges may require students to present their laboratory materials from the course before granting college credit for the laboratory component.

## PHYSICS

Introductory Physics considers topics related to energy and matter, the principles that govern motion of particles and waves, and the interaction of particles. The use of mathematics as a "language" for describing physical phenomena and solving problems is emphasized throughout the course. For this reason, we delay enrollment into the course until eleventh grade when students have achieved a high level of skills in mathematics (algebra and trigonometry). The laboratory is used to derive and illustrate major concepts of physics. Students need to become skilled at performing laboratories and at analyzing data and formulating broad principles that account for the physical phenomena being studied. Students will be taught how to use spreadsheets to organize and graph data and to use sensors to record data electronically. The major topics covered in this course include mechanics, work energy theory, spring systems, wave phenomena and electricity and magnetism.

## FOUNDATIONAL PHYSICS

Foundational Physics considers topics related to energy and matter, and the principles that govern the motion of particles and waves. Mathematics is introduced as a "language" for describing physical phenomena and students are encouraged to solve problems using mathematics throughout the course. For students who struggle with math, this course shows them real world applications without the complexity of multi-step equations. The laboratory is used to teach the concepts of physics and make connections to basic math. In this way, students will experience physics in a way that is meaningful and directly applicable to their lives. The topics covered in this course include mechanics, work-energy theory, spring systems, optics, electricity and magnetism.

## ENVIRONMENTAL SCIENCE

Environmental Science is an elective science course intended to cover the principles and methodologies used to study the interrelationships between organisms and their physical surroundings and the impact of humans on the natural world. This course is necessarily interdisciplinary and depends on the successful integration of science with political, sociological, and economic issues. The underlying themes developed in the course are: energy conversions are involved in all ecological processes, matter must be recycled in ecological systems, ecological systems are all interconnected, humans alter ecological systems, ecological problems occur in a political, cultural, and economic context, and human survival depends on developing practices that allow for sustainable ecosystems. This course includes a laboratory component that allows students to apply and reinforce course concepts as well as an engaging field component centering upon environmental monitoring. Field trips to local nature centers and municipal utilities are also integral to the curriculum. Teacher recommendation and administrative approval are required for enrollment.

## All juniors are required to take physical education.

Mr. Malis / Ms. Arjang

Students meet individually with the school's PE instructors to evaluate their level of activity and to review their individual wellness and fitness needs.
Students, with their instructor's guidance, develop personal plans to meet their goals. Over the course of the year, the PE instructors monitor each student's individual progress according to the plan.

## ELECTIVES



## COMPUTER SCIENCE

HISTORY/SOCIAL SCIENCES

WORLD LANGUAGES

BUSINESS

ENGINEERING

ART


## All courses in the computer science department are electives. Teacher recommendation and administrative approval are required.

## AP COMPUTER SCIENCE A

This course is equivalent to a semester-long, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both structural and objectoriented problem solving and design using the Java language. The AP Computer Science A course includes a minimum of 20 hours of hands-on structured lab experience to engage students in individual or group problem solving. Prerequisite: Computer Science Essentials, College Python Programming, AP Computer Science Principles or equivalent computer science experience. Teacher recommendation and administrative approval are required for enrollment.

## INTRODUCTION TO ARTIFICIAL INTELLIGENCE

This course introduces students to the main ideas in Artificial Intelligence (AI) through project-based learning. Students will learn to ask questions of data and represent data through visualizations. They will also use critical thinking skills to look at how data is presented to them or used in articles and social media. The projects will range from exploring how Al is used in image recognition or price predictions, to how Spotify creates a shuffle list of their favorite song list. The course will cover the technical side AI, where students will be introduced to software used in the industry: Python, Pandas, scikitlearn, Colab Notebooks. In addition, the course will examine the implications of Al including Data Ethics, Data Privacy, and how Al impacts all areas of our life.

## COLLEGE PYTHON PROGRAMMING

College Python Programming is equivalent to a first-semester, college-level course in programming. The course introduces students to coding essentials including problem solving and program design, algorithms (sequence, selection/decisions, iteration/loops), data collection (lists, sets, dictionaries and scalar values), abstractions (procedures, functions), graphical user interfaces and user experience design. This is a project-based learning course where Python applications will be created and explored within a backdrop of traditional problems and more current computer science fields such as data visualization, machine learning, web scraping and integration with engineering projects. Collaboration will also be a key component in the class. Students may opt to earn college credit through LIU upon successful completion of this course. No experience required.


## ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS

Eleventh grade students will be given the option to take Advanced Placement U.S. Government. The advanced placement program is designed to allow students the opportunity to pursue college level courses in high school. This one-year course is the study of the role of the national government and its relationship to the concept of liberty in a pluralistic society. The course will cover the influence of American political culture, political parties, public opinion, the media, and interest groups on the Congress, the Presidency, and our Court System. A sophisticated understanding of majority-rule democracy, constitutionalism, and civil liberties will be stressed. The course also includes a study of economics and its interrelation with the U.S. government. Teacher recommendation and administrative approval are required for enrollment.

## ADVANCED PLACEMENT PSYCHOLOGY

This is an elective open to juniors. The focus of this course is to introduce students to the systematic and scientific study of the behavior and the mental processes of both human beings and animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the methods psychologists use in their science and practice. Among the topics studied are neurology, emotions, sensations, memory, thinking, human development, and psychological health and disorders. The students will have an opportunity to participate in experiments, research, and oral presentations. Teacher recommendation and administrative approval are required for enrollment.


## Students are encouraged to pursue their study of foreign language if they have completed advanced levels in previous years．Teacher recommendation and administrative approval are required．

## FRENCH III

The students continue to develop the four basic language proficiencies in a communicative setting．Emphasis continues to be on acquiring an extensive active vocabulary that will enable them to communicate in a wide variety of real－life situations．French language skills are enhanced by written application and reading and writing abilities are polished．Maximum communicative practice is afforded by additional concentration on listening skills．French newspapers，short stories and films are presented to stimulate discussion and reading comprehension．

## SPANISH III

The students continue to develop the four basic language proficiencies in a communicative setting．Emphasis continues to be on acquiring an extensive active vocabulary that will enable them to communicate in a wide variety of real－life situations．Spanish language skills are enhanced by written application and reading and writing abilities are polished．Maximum communicative practice is afforded the student with additional concentration on listening skills．Spanish newspapers，short stories and films are presented to stimulate discussion and reading comprehension．

## SPANISH IV

The students enrolled in this course master topical vocabulary，grammar， idioms，and practical expressions on an advanced level．They discuss a variety of contemporary themes gathered from authentic materials，including novels． Newspaper article analysis assigned weekly and written paragraphs and essays submitted．This course emphasizes aural comprehension and oral proficiency． Those students wishing to enroll can take this course for college credit from Adelphi University．Three college credits may be earned．（Adelphi Spanish 122）
All business courses are electives. We have partnered with several local colleges to offer courses for college credits. Students may enroll in these courses at a significantly reduced cost and earn college credits. Teacher recommendation and administrative approval are required.

## COLLEGE ACCOUNTING I

The objective of this course is to introduce students to the language of business--Accounting. At the conclusion of the class, students should be able to perform basic accounting functions, understand the concepts of accounting, and be able to use accounting data to make sound business decisions. Students will be able to use software to conduct accounting transactions, including QuickBooks and Excel. We will focus on real world applications of accounting principles. Students can earn three college credits. Teacher recommendation and administrative approval are required for enrollment.

## INVESTMENTS AND ENTREPRENEURSHIP

This is a two semester course. In the first semester, which deals with investments, students learn the basic principles by which the modern corporation manages its assets, controls its liabilities and raises new capital. Topics covered include the valuation and rates of return on securities, financial statement analysis, forecasting, planning and budgeting, working capital management, introduction to capital budgeting techniques, and cost of capital considerations. There is also a focus on security markets and investment opportunities and real estate transactions. Students are exposed to the concepts of markets efficiency and risk and return. The objective is to provide a systematic method of analyzing investment portfolios. The second semester, Entrepreneurship deals with marketing strategies and the application of required skills, resources, and techniques that transform an idea into a viable business. Entrepreneurial decisionmaking is stressed. Students may have the opportunity to engage in a specific entrepreneurial venture when they are given the opportunity to integrate entrepreneurship, marketing, and computer application skills in a simulation that provides students with an in-depth, realworld view of what it is like to run their own restaurant. Using Microsoft Office (or equivalent applications), they will assemble and create all of the documents that a "real" restaurant would need to open its doors. Guest speakers enliven both semesters, and both courses are available for college credit. Teacher recommendation and administrative approval are required for enrollment.


## All courses in the engineering department are electives. Teacher recommendation and administrative approval are required.

## MECHANICAL ENGINEERING

This course is the third year of engineering track. Students use their independent thinking skills to analyze and critique peerreviewed hypothesis-driven scientific research articles. This course will extensively cover how to write a research paper that follows strict standards, including organizational techniques, proper citing and how to effectively construct graphs, diagrams and tables. Concurrently, students are expected to design and submit their own groundbreaking research projects to science and engineering fairs. Students will build robots to solve various tasks while learning how hardware interacts with software. Together as a class, students will figure out how to incorporate signal processing, machine learning and computer vision to detect potential or a desired change in a pattern of behavior. Yearlong group projects will require students designing and building mechanical engineering systems. Teacher recommendation and administrative approval are required for enrollment.


## All courses in the Art Department are electives. Teacher recommendation and administrative approval are required.

## STUDIO ART I

## Ms. Folk

This is the basic art course in which students will acquire knowledge that is intended to lead to a mastery of skills related to the Elements of Art and the Principles of Design. In this course students will maintain an active sketchbook and journal and learn how to use a variety of media and illustrative materials. They will gain a historical knowledge of art by studying facets of art history and exploring artistic reference. Current trends and inspiration of the art world will be included in their studies. Museum and Gallery trips are planned.

## STUDIO ART II

## Ms. Folk

Studio Art II is a second-year course that provides an opportunity for students to expand on the drawing and painting concepts introduced in Studio Art 1. Emphasis is placed on a deeper understanding of design principles, drawing techniques and painting skills leading to the development of abilities that are necessary for advanced art courses. Students are given more in depth problems to solve creatively while becoming more adept through a broad exposure to various media. Students will advance both technically and conceptually, preparing them for the next level of art at North Shore. In addition to refining their artistic skill set, the students will learn about 21st century art and have the opportunity to visit contemporary art institutions. Prerequisite Studio Art I.


AP ART I

## Ms. Folk

Advanced Placement Art I is a distinctive and rigorously demanding course of study which teaches students how to elevate their creative process, critical thinking, investigative skills and 'student voice' in preparation of effectively completing The College Board requirements of the AP Studio Art Exam administered at the end of Senior year. The AP Studio Art Exam consists of a student developed body of successful artwork which will be submitted in a portfolio. The culmination of the student produced artwork during the school year is aimed at conceptualizing and targeting their sustained investigation. The Sustained Investigation section of the AP Art and Design portfolio is a series of works that are very consistent in theme and approach or it may evolve and develop as the visual idea is explored, ending in a different place than where it began and will be scored according to a three-point scale for each of four separate sets of criteria: inquiry; practice, experimentation and revision; materials, processes and ideas; drawing skills. Prerequisite Studio Art I.

## AP ART II

## Ms. Folk

Advanced Placement Studio Art is a distinctive and rigorously demanding course of study which teaches students how to elevate their creative process, critical thinking, investigative skills and 'student voice' in preparation of effectively completing The College Board requirements of the AP Studio Art Exam administered at the end of the school year. The AP Studio Art Exam consists of a student developed body of successful artwork which will be submitted in a portfolio. The culmination of the student produced artwork during the school year is aimed at targeting and exploring their chosen sustained investigation which was selected in AP Art 1. The investigation focuses on a body of work based on a "Central Theme" and focuses on a process of INVESTIGATION, GROWTH and DISCOVERY. Students are required to attend to their sketchbooks and continuously explore and research their Art Assignment topics so that they may develop the vital skills needed to successfully complete their investigation. Prerequisite: AP Art


## FASHION I

## Ms. Dammacco

The purpose of this course is to introduce students to the world of fashion design. They will acquire knowledge and skills related to the principles of fashion illustration and design by utilizing a range of media and a variety of techniques to create versatility in their work. Students will learn the proportions of the fashion (croquis) figure. They will learn through the elements and principles of design as they pertain to fashion, design terminology for apparel and recognition of design styles are also included as components of the course. Students will be required to demonstrate creative use of inspiration and design experimentation through various projects and a design journal and will be assessed on their knowledge of terminology, styles and applicability of the elements and principles. Museum and fashion show trips are planned.

## FASHION II

## Ms. Dammacco

This design course further encompasses the fashion design process from inspiration through production learned in Fashion Design 1. Focus is on developing the fashion silhouette and fabric rendering techniques using a variety of materials. Students will study the interconnectivity between fabric weight/texture and garment representation based on rendered croquis. Principles and creative standards common to all design fields will be introduced. Projects will deal with pragmatic and creative issues. Assignments are progressive so that students will have the opportunity to establish their professional identity. They will utilize a range of media and a variety of techniques to create versatility in their work and portfolio. Additionally, sewing basics will be introduced to students. Students will be exposed to how a historical timeline of fashion is reflective of society. This will help to illustrate the ways in which material use has been affected by the technological changes in manufacturing. Museum, fabric store trips, and fashion show trips are planned. Prerequisite: Fashion I.


## ARCHITECTURE I

## Ms. Dammacco

This is a course in which basic fundamentals of architecture are examined and perfected. While design will be the main emphasis for this level and the student should have a good background in basic mathematics. Students will learn about the design process and explore the architectural concepts of space, form, function, and technology. Students will learn how to create mechanical and freehand drawings, draw in 1,2 and 3pt perspective, interpret and create floor plans, create orthographic and isometric drawings, understand drawing to scale and read blueprints, construct scale models, consult with groups on various approaches to design problems, address environmental concerns and conservation efforts, learn to render architectural styles, explore the history of architecture, reference the internet for architectural sources and create computer renderings using CAD. Trips to or visits by working architects are anticipated.

## ARCHITECTURE II

## Ms. Dammacco

This course is for the student who has completed the requirements for Introduction to Architecture 1 and plans possibly to pursue his or her architectural studies as part of their college education. Students will reinforce skills they learned in the earlier course and focus in on design techniques, as well as review and study the history of architecture, build scale models from plans and build vertically, understand shape, convex and concave, space, light, acoustics, circulation, enclosure, boundaries, path, threshold and portal, understand the use of planes and their relationship to patterns, consider issues dealing with commercial/ public space, render hand illustrations using a variety of media, become aware of the need for conservancy and the need for buildings that reflect respect for environments and future generations and learn about the history and evolving technologies of modern architecture. Emphasis will switch to vertical construction and consideration of public space vs. private space as well as architectural production as a process of analysis, critique and synthesis. Students will study architectural design as a mode of cultural communication and imaginative experimentation. They will work at a variety of scales, with a variety of techniques in a variety of research situations while being asked to comprehensively address architectural problems. This course aims to broaden and deepen the students' awareness of architecture as a discipline as they work on preparing a portfolio for presentations to colleges. Prerequisite Architecture I.

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