TVT Community Day School

COURSE CATALOG

UPPER SCHOOL

2025 | 2026

Table of Contents

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Graduation Requirements

290 Total Credits	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ATHLETICS/PE 20 credits	CIF Sport, Team Manager Strength & Conditioning, ISPE			
VISUAL & PERFORMING ARTS 10 credits	Art, Film, Music, Intro to Design, Yearbook			
ENGLISH 40 credits	English 9 or English 9 Honors	English 10 or English 10 Honors	English 11 or AP English Language and Composition	English 12 or AP English Literature and Composition or AP English Language and Composition
ELECTIVES 50 credits	Outside of courses required for graduation, courses in any academic department may be taken for elective credit			
WORLD LANGUAGES 30 credits	Hebrew (1-9), Spanish (1 - AP Spanish Language)* *Students who do not elect to take Hebrew must prove proficiency in Hebrew reading or complete a 15-hour Hebrew reading course			
HISTORY / SOCIAL SCIENCE 40 credits	Early Modern History or Honors Early Modern History	Global Conflicts of the 20th Century or AP European History	US History or AP US History	History/Social Science Electives * U.S. Govt or AP U.S. Govt & Politics *strongly* recommended
JEWISH STUDIES 40 credits	Jewish Studies 9 or Honors Jewish Studies 9	Jewish Studies 10 or Honors Jewish Studies 10	Jewish Studies 11	Jewish Studies 12
MATH 30 credits (through Alg. 2)	Sequence varies depending on placement. See progression chart in math section below			

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SCIENCE 30 credits	Conceptual Physics or Physics Honors	Chemistry or Chemistry Honors	Biology or Biology Honors	Electives Available * It is strongly recommended that students take 4 years of science
COMMUNITY SERVICE	100-hour requirement over four years			

GRADUATION REQUIREMENTS

TVT students' graduation requirements exceed top university expectations. Most students in Grades 9- 12 may take up to eight courses. Many choose to use one of these elective periods to double up on an academic subject in which they are passionate.

The term *elective* is used to describe any courses taken above and beyond departments' graduation requirements (e.g., AP Biology, Yearbook, or AP Psychology). Course offerings may change to accommodate interest and enrollment. The dual Jewish Studies and General Studies curriculum helps students hone their critical thinking skills as well as make deep connections between the academic and the personal. Unless otherwise noted, "successful completion" of a course is shown by earning a grade of C– or higher.

GOLD DIPLOMA REQUIREMENTS

Students who desire to earn a TVT Diploma with gold distinction will need to earn 310 credits as follows:

Jewish Studies	40 Credits/4 years
Hebrew	40 Credits/4 years
English	40 Credits/4 years
History/Social Science	40 Credits/4 years
Science	40 Credits/4 years
Math	40 Credits/4 years
Arts	10 Credits
Athletics/PE	20 Credits
Electives	40 Credits/4 years

Additionally, they will need to meet the following requirements:

- Semester grades of C or above
- Successful completion of four academic years for 40 credits (i.e., doubling up science in a given year would not meet the requirement if science was not taken all four years.)
- A student will not be penalized towards a diploma with gold distinction if they max out in TVT course offerings in a particular subject matter (e.g., a student who finishes second-year calculus as a junior)

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- Courses taken outside of TVT only count towards the requirement with prior approval from the Division Head (e.g., courses taken online due to a scheduling conflict)
- Each 9th and 10th grader is required to complete one Immersion course each academic year

ELECTIVE COURSE OFFERINGS

TVT offers a broad assortment of elective courses across multiple departments. Outside of courses required for graduation, courses in any academic department may be taken for elective credit. When students build their four-year academic plan with their college counselor in preparation for upper school, close attention should be paid to the curriculum guide. With careful planning, a student will be able to avail themselves of all possible elective courses throughout their upper school experience.

DROPPING/ADDING OR MOVING BETWEEN REGULAR & HONORS/AP COURSES

Students may add or drop courses during the first two weeks of that course, or they may level-down (e.g., go from AP Chemistry down to Honors Chemistry) at the semester mark, without consequence. Students must fill out an Add/Drop Form, obtain appropriate signatures, and give this form to the Registrar. Once the form is approved, the student will then be issued a new schedule. Dropping a course after the third week will result in a notation on the transcript as W (Withdraw) - this notation will likely have a negative impact on a college's perception of a student's transcript. This rule does not apply to students who level-down at the semester mark or to students moving between sections of the same course (e.g., moving from "Geometry – period A" to "Geometry – period B"). See Student Handbook for further details.

ADDING AN AP COURSE

The deadline for re-enrolled students to add an AP course that requires summer work is June 27th at 3:00 pm unless the 27th falls on a weekend, in which case the Friday before June 27th is the deadline. If there is no summer work required, then the last day to add is the first day of school.

NON-DISCRIMINATION POLICY

Tarbut V'Torah (TVT) 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 administration of its educational policies, admissions policies, scholarship programs, and athletic and other school-administered programs.

COURSE LENGTHS

Unless otherwise noted, all courses are year-long.

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ATHLETICS/PE

DEPARTMENT PHILOSOPHY

Physical activity, whether individual or organized, positively impacts a student's well-being. The department promotes the development of leaders, team players, and lifelong learners. Other goals include the following:

- To provide physical activity essential to optimum growth and development
- To contribute to the pursuit of a lifelong healthy lifestyle
- To provide opportunities for physical, mental, and social development through teamwork, strategizing, conditioning, practices, and competitive games
- To provide a learning environment to strengthen work ethic, accountability, sportsmanship, and discipline

Competition melds together physical potential and capabilities in a meaningful way as athletes build character, self-confidence, along with physical and mental stamina. Student athletes are expected to put forth real effort and participate with passion and purpose. Our goal is not to identify winners but to make winners of students on and off the field or court.

Students earn 5 credits for each season they participate in sport as an athlete or team manager. Students may also opt to take Strength & Conditioning as a 5-credit, semester-long elective which can be taken twice for a possible total of 10 credits.

STRENGTH & CONDITIONING*

This course will discuss the scientific principles of physical conditioning through resistance and cardiovascular training. The course will provide an introduction of strength conditioning theories and principles to improve fitness, health, overall wellness, and athletic performance. Students will gain the basic knowledge and skills needed to perform and instruct safe and effective strength and conditioning workouts.

Length: Semester
Grade Level: *9-12*
Prerequisites: *None*

TEAM MANAGER

TVT recognizes that there are a number of ways for a student to be involved in and benefit from athletics as part of their education. Being a team manager involvesthe student in the team through score keeping, practice set-up, video recording, equipment management, and other responsibilities.

Length: One season
Grade Level: *9-12*
Prerequisites: *None*

INDEPENDENT STUDY PHYSICAL EDUCATION (ISPE)

While our primary recommendation is that all students participate in TVT's interscholastic athletics programs or a Strength & Conditioning Course, we do offer an independent study physical education (ISPE) program to upper school students that don't participate within our interscholastic athletics program.

Grade Level: *9-12*
Prerequisites: *See Criteria Below:*

- Participation in the sport/activity must be under the guidance of a qualified professional coach or instructor. Neither the parent nor a student is allowed to be the supervisor of the program
- Students may not participate in ISPE for a sport that is currently offered at TVT
- Students must demonstrate an exceptional degree of devotion, commitment, and passion for the sport/activity
- The coach/instructor must provide a schedule that shows activity for a minimum of 400 minutes every two weeks/ten school days while school is in session
- The ISPE program is one school year and will count for 10 credits towards graduation requirements for athletics/physical education. If the student would like to continue within the program for the following school year, the student must re-apply for the program to earn up to 20 credits

CIF SPORTS

FALL	WINTER	SPRING
Cross Country	Boys Soccer	Boys Tennis
Girls Golf	Girls Soccer	Boys Golf
Girls Tennis	Boys Basketball	Girls Beach Volleyball
Girls Volleyball	Cheerleading	Boys Volleyball
	Girls Basketball (depends on enrollment)	Boys Baseball (depends on enrollment)

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ENGINEERING & COMPUTER SCIENCE

The courses included in TVT's engineering curriculum invite students to apply scientific, mathematical, and computational knowledge to solve complex problems of social and global significance. These courses are rooted in the iterative process of the engineering design cycle and prioritize skills such as quantifying criteria and constraints, constructing explanations, and developing and optimizing design solutions.

INTRODUCTION TO DESIGN*

In this introductory computer-aided design course where no prior computer science or engineering is required, students will explore a landscape of design tools and solve intricate problems with Design Thinking. The course begins in guided fashion, but quickly becomes a canvas for individual expression. Independent endeavor drives you as you create models of your designs. The challenge throughout this course will be to find solutions and to plan, document, and communicate your ideas as you build professional skills.

As the course evolves from structured activities to open-ended projects, you will share your unique lens on material selection, human-centered design, manufacturability, assemblability, and sustainability. You will also build technical representation and documentation skills through 3D computer modeling using Computer Aided Design (CAD) applications. As part of the design process, you will bring your visions to life with precise 3D-printed engineering prototypes. You will also develop testing protocols to drive decision-making and design improvements.

The course explores the intersection of design and computation, so you will create algorithms, perform statistical analysis, and craft mathematical models. You will also explore professional engineering practices, including project management, peer review, and environmental impact analysis in design teams. While individual expression is central to the course, ethical considerations are also considered as we seek to understand professional practice and product development.

Grade Level: *9-12*
Prerequisites: None

INTRODUCTION TO COMPUTER SCIENCE *^

Hello World! In this introductory course, we will explore one of the most essential 21st century skills – computer programming! No prior computer programming skills are necessary as you will learn foundational concepts of computer science using the Python programming language. The course will teach you fundamental skills such as how to analyze programs and how to design and implement programs in your own code. You will learn how to use basic data types, control structures, simple data structures, and functions. The course also includes an introduction to algorithms and object-oriented programming. In addition to computer programming, you will also gain an understanding of essential general computing concepts. Coursework will include a blend of in-class exercises, readings, at-home assignments, and a few larger projects.

Grade Level: *9-12*
Prerequisites: None

HONORS ANALOG AND DIGITAL ELECTRONICS*+^

How do the everyday technological gadgets in the world around you really work? How do we get from 1's and 0's to mobile devices and wearable technology? If you're interested in learning about the answers to these questions and understanding the technology that powers almost all of our modern vehicles and devices, Analog and Digital Electronics is for you (no previous engineering or computer science necessary!).

The course begins with the fundamentals of electronic circuits – studying electric current/voltage and then examining key components used in both analog and digital circuits: resistors, capacitors, LED's, relays, timers and counters. We will learn about major milestones in the history of electrical technology, including direct vs. alternating current and the transistor. We will also explore basic electronics skills, including soldering and solderless breadboards.

This course will expose you to combinational and sequential logic design, communication methods, engineering standards, and technical documentation. You will analyze, design, and build digital electronic circuits. While implementing these designs, you will hone your professional skills, creative abilities, and understanding of the circuit design process. The overarching goal of the course is to give you hands-on experience working with electronic components, and a sense of how a circuit can be expected to work. You will design your own circuits to accomplish tasks of interest. While implementing these designs, you will continually

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build your skills, creative abilities, and understanding of the circuit design process.

Grade Level: *9-12*
Pre-or-Corequisite: Algebra 2 / Trigonometry

HONORS DATA SCIENCE AND ARTIFICIAL INTELLIGENCE *+^

The Advanced Topics in Computer Science course offers highly motivated students the opportunity to expand on the topics covered in prior computer programming coursework. Data scientists are utilized in many different industries to identify and analyze patterns in data. In the first semester of this year-long course, you will learn the essential skills of a data scientist, which include data collection, cleanup, transformation, analysis, and visualization. You will write algorithms and build statistical models to explain phenomena and solve problems.

You will then be introduced to important programming concepts that enable the use of artificial intelligence (A.I.) in computer science applications followed by the use of basic A.I. algorithms. You will work on projects that utilize A.I. to make predictions and solve problems. The course also touches on the social and moral considerations involved in the development and implementation of A.I. Assignments, projects, and assessments are implemented using the Python programming language. Students who have taken a computer programming course in a language other than Python will be able to get familiar with Python via a summer programming assignment.

Grade Level: *10-12*
Prerequisites: Introduction to Computer Science or AP Computer Science Principles or AP Computer Science A

HONORS MACHINE LEARNING AND ROBOTICS: MICROMOUSE*+^

Can you build and program a robotic mouse to solve a maze on its own faster than other competitors? It may seem out of reach, but Machine Learning and Robotics: Micromouse will teach you how to do exactly that. This is an advanced course for students interested in the interaction between the digital and the physical, between code and machine, between computer science and electromechanical movement. In this project-based course, you will learn about concepts, algorithms, and models commonly used in artificial intelligence and machine learning systems, and you will use your programming skills to race toward the center.

When the class moves into its main phase, students will build and program autonomous, maze-solving cars that follow the standards set in IEEE's Micromouse competition. The course will guide you through a series of labs and projects that expose you to a number of robotics concepts. The course will expose you to programming microcontrollers, autonomous navigation, sensors, control, and basic electrical engineering, while preparing you for an in-class competition at the end of the year.

Grade Level: *10-12*
Prerequisites: Electrical Engineering or Analog & Digital Electronics and Introduction to Computer Science or AP Computer Science Principles or AP Computer Science A. Concurrent or prior enrollment in AP Precalculus or AP Calculus AB or BC)

ADVANCED PLACEMENT

AP COMPUTER SCIENCE A*+^

AP Computer Science A is equivalent to a first-semester, college-level Computer Science course. 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 object-oriented and imperative problem solving and design using the Java programming language. These techniques represent proven approaches for developing solutions to problems that can scale up from small and simple to large and complex. Included in the course is an intense and focused preparation for the Advanced Placement exam. Students must have already taken Introduction to Computer Science or AP Computer Science Principles and must be recommended by their teacher.

Grade Level: *10-12*
Prerequisites: Introduction to Computer Science [recommended] OR Corequisite: Honors/AP level math class at the Algebra 2 / Trigonometry level or higher.

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ENGLISH

DEPARTMENT PHILOSOPHY

The English program at TVT provides opportunities for students to examine essential questions about the nature of the individual and communities in order to develop compassion, an appreciation for diverse perspectives, and insights into what it means to be human. Students learn interpretive strategies that help them analyze character, point of view, setting, and other literary elements, which enhance their ability to engage deeply with complex ideas and reflect on their own thinking. They are also taught how to formulate questions and engage in respectful debate.

Students are exposed to genres such as novels, short stories, drama, poetry, and non-fiction to study literary and rhetorical strategies, discover the power of language, and find their authentic voices. Writing activities provide students with an opportunity to practice critical thinking and analytical skills, as well as opportunities for expression and self-discovery. Through peer feedback, project-based learning, and digital literacy, students hone their communication skills, work collaboratively, and learn to apply language in real-world contexts. In doing so, students develop empathy, critical thinking, and communication skills that empower them to connect across differences, think deeply, and advocate for change, all of which are essential tools for building critically engaged communities.

ENGLISH 9*^

English 9 broadens students' historical, social, cultural, literary, and personal consciousness by exploring literature from around the world and from different eras. Core reading includes novels, short stories, and poetry from a variety of cultures and time periods. Writing instruction teaches writing as a process that involves thinking, planning, composing, revising, editing, and sharing. Writing assignments are varied and focus on developing students' reflective and analytical voices. Vocabulary and grammar study are also important parts of the course; students master vocabulary from core reading and a personalized vocabulary program, and they study grammar and mechanics that sharpen personal communication skills as well as prepare students for the SAT/ACT.

Grade Level: *9*
Prerequisites: *None*

ENGLISH 9 HONORS*^

The difference between English 9 Honors and English 9 is that the honors students have a greater volume of reading and analytical writing and are required to work more independently. Honors students are expected to have mastered the five-paragraph essay upon arrival into this class. English 9 Honors broadens students' historical, social, cultural, literary, and personal consciousness by exploring literature from around the world and from different eras. Core reading includes novels and short stories as well as poetry and may include such authors as Homer, Shakespeare, Huxley, Achebe, Marquez, and Kafka. Writing instruction teaches writing as a process that involves thinking, planning, composing, revising, editing, and sharing. Writing assignments are varied and focus on developing students' reflective and analytical voices. Vocabulary and grammar study are also important parts of the course; students master vocabulary from core reading and a personalized vocabulary program, and they study grammar and mechanics that sharpen personal communication skills as well as prepare students for the SAT/ACT.

Grade Level: *9*
Prerequisites: *Two of the following: Completion of English 8 with a grade of A- or better; qualifying score on English Dept. placement test; teacher recommendation*

ENGLISH 10*^

In this course, students read from a variety of plays, novels, poems and short stories and consider the themes that help illuminate the human condition and our own personal journeys. Core British and European literature texts help students explore the development of the English language. English 10 challenges students to expand their critical reading, writing, and thinking skills as well as social, political, and personal awareness through literature that augments their study of European history. Writing assignments aim to sharpen the skills of close reading, literary analysis, argumentation, comparison, and narration as well as to promote thoughtful reflection. Students continue to broaden their vocabulary from core reading and with a personalized vocabulary program. Ultimately, the goal of this course is to increase student confidence in writing skills and familiarity with literature as students prepare for college (and the SAT/ACT) in the coming years.

Grade Level: *10*
Prerequisites: *English 9 or English 9 Honors*

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ENGLISH 10 HONORS*+^

Honors English students have a different reading list than their English 10 counterparts, and a greater volume of reading and analytical writing. Honors English students are required to work more independently. English 10 Honors challenges students to expand their critical reading, writing, and thinking skills as well as social, political, and personal awareness through literature that augments their study of European history. Core reading includes representative authors from British and European literary traditions. An increased reading of poetry is meant to develop both appreciation for the genre and familiarity with its technicalities. Writing assignments aim to sharpen the skills of close reading, literary analysis, argumentation, comparison, and narration as well as to promote thoughtful reflection. Students continue to broaden their vocabulary from core reading and with a personalized vocabulary program.

Grade Level: *10*
Prerequisites: *Two of the following: Completion of English 9 with a grade of A- or better or of English 9 Honors with a B+ or better; qualifying score on English Dept. placement test; teacher recommendation*

ENGLISH 11*^

Students continue to expand their critical reading, writing, and thinking skills as well as their social and political awareness through literature that parallels their study of American history. Core reading includes novels, plays, short stories, and poetry, and authors such as Colson Whitehead and F. Scott Fitzgerald. Students continue their exploration of major literary and philosophical movements. Writing assignments aim to sharpen the skills of close reading, documentation, literary analysis, and comparison/contrast. Students continue to broaden their vocabulary from core reading and with a personalized vocabulary program. Usage mechanics, timed writing, and sentence skill practice continue to prepare students for their college entrance exams (ACT and SAT).

Grade Level: *11*
Prerequisites: *English 10 or English 10 Honors*

ENGLISH 12*^

In English 12, students build on their critical reading and writing skills. A thematic unit of study of drama culminates with a senior play production. Texts may include Shakespeare's Hamlet or Othello. Novels, short stories, poetry, and drama are explored. This course provides students with opportunities to write about a variety of subjects and to demonstrate an awareness of audience and purpose in writing.

Ultimately, the goal of this course is to increase students' confidence in their writing skills—and familiarity with literature—in advance of the journey to college next fall.

Grade Level: *12*
Prerequisites: *Completion of three years of English*

ADVANCED PLACEMENT

AP ENGLISH LANGUAGE AND COMPOSITION*+^

The AP English Language and Composition course is designed to help students become skilled readers and writers of prose written in a variety of rhetorical contexts. Both their writing and their reading should make students 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 effective writing. This college-level course provides students with opportunities to write about a variety of subjects and to demonstrate an awareness of audience and purpose in writing. The course also includes a major college-level research project requiring students to conduct and organize research independently over several months. The overarching objective in this course, as well as most first-year college-level writing courses, is to enable students to write effectively and confidently, both at college and later in their professional lives.

Grade Level: *11*
Prerequisites: *Successful writing sample + either teacher recommendation or completion of English 10 with a grade of A- or better / English 10 Honors with a B+ or better*

AP ENGLISH LITERATURE AND COMPOSITION*+^

AP English is an accelerated, literature-based course, which uses writing as the primary mode of assessment and introduces students to college level scholarship involving careful reading and critical analysis of imaginative literature. Focus includes the historical placement of works as well as features of genre, literacy of Western tradition, rhetorical analysis, and sentence

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style and correctness. In addition to writing about each major work of literature under study, students produce essays on poetry, drama, and non-fiction. The texts and assignments, especially concentration on the timed essay, help prepare students for the College Board AP English Literature exam. The texts and level of inquiry are equivalent to a college freshman humanities course.

Grade Level: *12*
Prerequisites: *Two of the following: Completion of English 11 with a grade of A- or better or of AP Lang with a B+ or better; qualifying score on English Dept. placement test; teacher recommendation*

ELECTIVES

CREATIVE WRITING*

In this course, students will be provided with numerous opportunities to practice writing in a variety of styles and genres, and they will also study works of imaginative/creative writing to deepen their understanding of how writers strategically use language to provide both meaning and pleasure to readers. In the first quarter, students will read and write poetry since this is a concise and focused way to practice and play with voice and style, and in the second quarter, students will read and write creative nonfiction. The spring semester will focus on how to construct works of fiction. It will cover principles of plot and organization, character development, conveying characterization effectively in writing, etc. Students will be provided with a toolkit of stylistic devices to add interest to their writing in any genre, and they will also be given strategies to avoid writer's block and uncover new ideas for writing. In addition to improving students' writing skills, this course will deepen their literary analysis skills because of the time they will spend dissecting and learning from pieces of professional writing. Students will be trained to provide constructive feedback for one another's work in a workshop setting, and will also be asked to read their work at an evening event each semester, and as such they must be comfortable sharing their work with others.

Grade Level: *9-12*
Prerequisites: *None*

21ST CENTURY YEARBOOK DESIGN AND PUBLICATION*

This elective course is an exciting opportunity for upper-school students to delve into the process of creating a memorable and captivating middle-school/upper-school yearbook. Students will explore the essential elements of design, photography, journalism, and project management while collaboratively crafting a visual narrative that preserves cherished memories and tells the story of the academic year. Students will have access to Canon DSLR cameras to learn basic photography techniques, including composition, lighting, and editing, to capture compelling images. They will develop skills in layout and graphic design, typography, photo editing, and publishing by utilizing software tools to create a professional-quality yearbook. Students will practice crafting engaging captions, headlines, and stories that complement images and provide context to events captured. Through leadership and teamwork, students will experience the entire production process, from planning and organization to meeting deadlines. In order to provide a depth and breadth of coverage, students must be willing to attend multiple after-school sporting events, art shows, film festivals, and music showcases. As a member of the yearbook staff, students will enjoy a unique opportunity to blend creativity, storytelling, design, and teamwork while creating a tangible and cherished memento for the TVT community. By engaging in every aspect of the yearbook production process, students will develop invaluable skills that extend far beyond the classroom. This course meets the 1-year Art requirement for graduation.

Grade Level: *9-12*
Prerequisites: *None*

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HISTORY & SOCIAL SCIENCES

DEPARTMENT PHILOSOPHY

The goal of the History & Social Sciences Department is to develop inquiring, knowledgeable, and informed young adults who are also critical thinkers, critical readers, and effective communicators. Along these lines, our vision is to provide students with both the knowledge and skills needed to prepare them for the academic rigors of college and their futures as life-long learners. By creating connections between past and present, the department also aims to develop within our students a greater awareness of their place and role within local, national, and global communities.

EARLY MODERN HISTORY*^

The period between the 15th and 18th centuries represents a turning point for both European and World History. By studying this time period students will understand key historical developments that led to the rise of the modern world. This course examines how the world was transformed by new encounters between civilizations and tracks changes in economic systems, the growth of the state, development of new ideas and challenges to social hierarchies. It also focuses on the cause and effect of political, economic, religious, social, and artistic continuity and change. Students will deepen their knowledge of history through the examination of numerous primary and secondary sources as well as through class activities and discussions structured to teach and foster independent learning. Students in this course are expected to come to class excited to learn history and participate in independent learning opportunities designed to foster reading, writing, and critical thinking skills.

Length*: Year*
Grade Level*: 9 or incoming new student to TVT with no prior World History Class*
Prerequisites: *None*

HONORS EARLY MODERN HISTORY*^

The period between the 15th and 18th centuries represents a turning point for both European and World History. By studying this time period the students will understand key historical developments that led to the rise of the modern world. This intensive course examines how the world was transformed by new encounters between civilizations and tracks changes in economic systems, the growth of the state, development of new ideas and challenges to social hierarchies. It also focuses on the cause and effect of political, economic, religious, social, and artistic continuity and change. Students in this course are expected to come to class excited to learn history and participate in both group and independent learning opportunities designed to foster higher-level reading, writing, and thinking skills. Honors Early Modern History requires students to complete numerous written essays, participate in class discussions, and be responsible, independent learners. Upon successful completion of Honors Early Modern History, students will be able to:

- Demonstrate an understanding of historical chronology by mastering the knowledge of historical narrative of early modern history from the mid-15th century
- Interpret and apply data from original documents
- Use historical data to support generalizations and interpretations
- Effectively use analytical skills of evaluation, cause and effect, and comparison

Length: *Year*
Grade Level: *9 or incoming new student to TVT with no prior World History Class*
Prerequisites: *Two of the following:*

1. *Grade of A in previous History & Social Sciences class*
2. *Qualifying score on History & Social Sciences placement exam*
3. *Teacher recommendation*

20TH CENTURY GLOBAL CONFLICTS*^

Students begin the course with a survey of the nineteenth century, to provide context, and an exploration of European diplomacy from 1870 up to the causes and course of the war to end wars. The Russian Revolutions of 1917, Russian civil war, and the role of Lenin will be evaluated. The years 1918- 1939 will be examined exhaustively, and the challenges to democracy in Italy, Germany, and Spain will be considered. The causes, course, and consequences of World War II will be studied, followed by a thorough analysis of the breakup of the Grand Alliance and the origins and spread of the Cold War. The course concludes by examining the spread of the Cold War in Europe and Asia.

Length: *Year*

Grade Level: *10*
Prerequisites: *None*

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20TH CENTURY UNITED STATES HISTORY*^

20th Century US History is a study of the political, cultural, social, and economic background of the United States. The course will start with a general review of America's history from the Civil War to approximately 1900. The focus is on the origin and development of democratic institutions in America, the nation's social framework, and cultural revolution. This will lead into a more in-depth study of America in the 20th century and will focus on the Progressive movement, American involvement in imperialism, and World War I and its aftermath. The second semester covers the period between the 1920's and the 1990's with particular emphasis upon the Great Depression, World War II, the Cold War, Civil Rights, and the Vietnam War.

Length: *Year*
Grade Level: 11
Prerequisites: *None*

U.S. GOVERNMENT*^

This course examines the structure and function of the U.S. government as outlined in the Constitution. Students will explore the principles of freedom and responsibility that define American citizenship, while analyzing constitutional amendments and landmark Supreme Court cases that have shaped the nation's legal landscape. Through simulations, discussions, and case studies, students will gain a deeper understanding of how government decisions influence individuals and society, as well as the role of political parties and the electoral process. The course will also encourage students to apply historical and constitutional concepts to current political issues, fostering an understanding of their impact on American democracy.

Length: *Semester*
Grade Level: *11 & 12*
Prerequisites: *None*

ADVANCED PLACEMENT

AP EUROPEAN HISTORY*+^

This course prepares students for the Advanced Placement test in European History and also is designed to satisfy intellectual curiosity about an influential and dramatic part of world history. Students study Europe from the Renaissance to present day. The complexity of readings, deep level of analysis, and rigorous pace of the course provides accelerated and motivated students a college-level experience. In addition to the class lectures, discussions, and tests, students will be expected to do considerable reading of historical texts and primary source documents and writing of essays, both in-class and as homework.

Length: *Year*
Grade Level: *10-12*
Prerequisites: *Two of the following:*

1. *Grade of A- or better in previous History & Social Sciences class*
2. *Qualifying score on AP Placement Exam*
3. *Teacher recommendation*

AP US HISTORY*+^

This course prepares students for the Advanced Placement Test in United States History. Advanced Placement U.S. History is an accelerated and intensive study of United States history from pre-colonial to contemporary times. Basic historical, economic, geographical, social, and political knowledge and concepts, as well as reasoning and research skills will be emphasized. Students receive extensive training in the writing of timed essays and primary document analysis.

Length: *Year*
Grade Level: *11*
Prerequisites: *Two of the following:*

1. *Grade of B- or better in previous AP History class*
2. *Qualifying score on AP Placement Exam*
3. *Teacher recommendation*

AP US GOVERNMENT AND POLITICS*+^

This semester-long course prepares students for the Advanced Placement Test in United States Government and Politics.. Advanced Placement U.S. Government is an accelerated and intensive study of the laws and constitutional norms of the United States of America. Students will familiarize themselves with key documents that shaped the constitution, and landmark Supreme Court decisions that have influenced our

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understanding of the laws and liberties we possess.

Length: Year
Grade Level: *12*
Prerequisites: *Two of the following:*

1. *Grade of B or higher in a prior AP History & Social Sciences class*
2. *Teacher recommendation*
3. *Grade of A in current CP History & Socials Science class*

AP COMPARATIVE GOVERNMENT AND POLITICS*+^

This semester-long course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.

Length: Semester
Grade Level: *11 & 12*
Prerequisites: *Prior History & Social Sciences class with a grade of A- + Teacher recommendation*

AP PSYCHOLOGY*+^

This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. This course provides an overview of the field of psychology, including research, theory, and application, and prepares students for the AP Psychology exam. Specific topics include the biological bases of behavior, sensation and perception, learning, cognition, motivation and emotion, development, social cognition and social influence, personality and individual differences, and mental disorders and therapy. An underlying theme of the course is the importance of understanding objective, empirical methods of collecting and interpreting data, including a basic knowledge of descriptive and inferential statistics. In addition, students must be able to understand and critique descriptive, predictive, and experimental research methods.

Length: *Year*
Grade Level: *11 & 12*
Prerequisites: Grade of A- or higher in 10th- or 11th-grade History & Social Sciences class + teacher recommendation

AP MACROECONOMICS*+^

AP Macroeconomics is an advanced course designed for 11th and 12th-grade students. This semester-long course aims to give students an in-depth understanding of the economic principles that shape the world. It introduces students to macroeconomic principles, such as inflation, economic growth, unemployment, and monetary policies. Students will gain a deeper understanding of economic theories and learn how these concepts might apply to real-world situations. They will also explore international trade, economic development, and economic systems. Students will use charts, graphs, and data sets to analyze, describe, and explain economic concepts.

Length: Semester
Grade Level: *11 & 12*
Prerequisites: All three of the following:

1. Grade of A- or higher in current History & Social Sciences course
2. Grade of B+ or higher in Algebra 2 course
3. Teacher recommendation

NON-AP ELECTIVES

SOCIAL PSYCHOLOGY*^

Social psychology is the scientific study of how people think about, evaluate and respond to their social experiences. Social psychologists are interested in understanding a wide range of phenomena, such as: attitudes, emotions, group dynamics, altruism, cooperation, competition, aggression, prejudice and discrimination. The goal of this class is to provide students the opportunity to apply social psychological theories to their own lives. We will also discuss scientific research methods commonly used to investigate social psychological phenomena. Students will learn critical thinking skills regarding the merits of research methods and findings, and will design their own research study. By the end of the class, students will be able to answer questions such as: what are the causes and consequences of prejudice, when do people most likely conform to social pressures, how can positive psychology increase our health and performance, what can we do to change people's attitudes, how can people overcome their biases and stereotypes.

Length: *Year*
Grade Level: *10-12*
Prerequisites: *None*

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BUSINESS & FINANCIAL LITERACY*

This semester-long course includes the study of money, banking and financial concepts. Topics in business focus on basic principles of supply and demand, markets and the global economy. Financial literacy will cover financial decisions related to career choices, budgeting, banking and credit, insurance, spending and saving, taxes, investing, and buying/leasing as main topics. This course challenges students to think critically through collaborative projects and activities, presentations, and unit assessments. Upon successful completion of the course, students will demonstrate knowledge of key financial concepts, appreciate the consequences of financial decisions, and apply their learning authentically by creating a budget and financial plans.

Length: Semester
Grade Level: *11-12*
Prerequisites: *None*

AMERICA AND VIETNAM*^

This semester-long course introduces students to one of the most complex events of the 20th century, the Vietnam conflict. It will examine the causes for the development of Vietnamese nationalism, why the U.S. became involved in Vietnam, and situate the Vietnam conflict within the broader Cold-War context. Lastly, students will learn about the short and long term consequences of the war, for America, Vietnam and neighboring countries.

Length: Semester
Grade Level: *11-12*
Prerequisites: *None*

MOCK TRIAL*^

This course will introduce students to the Judicial branch of the government and the legal system of the United States. Students will learn, practice, and perform courtroom procedure for either civil or criminal case, develop character, write and perform direct examination, cross examination, opening statements, closing arguments, and explore a variety of constitutional issues. Students will develop their own trial strategies and compete in small groups against other schools. Finally, students will learn the California Evidence code and practice objections in various courtroom simulations to prepare for participation in the Constitutional Rights Foundation's Orange County Mock Trial competition. ***THIS CLASS MEETS DURING ZERO HOUR MONDAY - THURSDAY (7:45 a.m. - 8:40 a.m.)***

Length: Semester
Grade Level: *9-12*
Prerequisites: *None*

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JEWISH STUDIES

DEPARTMENT PHILOSOPHY

The goal of the Jewish Studies Department is for students to create an authentic Jewish self (no matter observance level or faith). Jewish studies classes ask students to investigate Jewish ways of belonging, living, thinking, creating, responding, (re)acting, and interacting. Along the way, classes balance Jewish literacy and Jewish skills to enable our graduates to enter college with the Jewish "know how" to participate, energize, and enrich Jewish life within their community of choice.

FOUNDATIONS OF JUDAISM

Are you a new or recently new student to TVT? Are you a TVT veteran looking for a Jewish elective that will help you fill in the gaps of your Jewish learning? If so, then this Jewish Studies course is for you. Foundations of Judaism is an introductory course that covers the "What, Why, and How" of Judaism. Using Joseph Telushkin's "Jewish Literacy" as our primary text, this course focuses on the biblical story of the Jewish people, Jewish life cycle, the yearly Jewish Holiday cycle as well as the ritual and ethical practices that define someone as "Jewish." A small percentage of each class period will be devoted to advancing a student's skills as a Hebrew reader. Students will leave this year-long class with Jewish knowledge, Jewish know-how and a full stomach. If this is your first year at TVT, this course can be used to replace the grade-level Jewish Studies course.

Grade Level: *9-12*
Prerequisites: *None*

JEWISH STUDIES 9: WAYS OF BELONGING**

Ninth-grade Jewish Studies explores the essential question of "Who's a Jew?" through the lens of blood, belief, and behavior. The course is structured as follows:

- **Behavior:** Through a close reading of the Book of Ruth and Jonah (mostly in English) students will investigate the role that behavior plays in the historical definition of "Jewish."
- **Belief:** For 1/3 of the year, students will investigate 5 key questions of Jewish theology and hear how 5 guest speakers answer these questions as well. These theology lessons will culminate with the writing of a personal theology paper.
- **Blood:** What role does Jewish ancestry play in determining one's Jewishness? Students will investigate how the "Who's a Jew" debate plays out among the various Jewish denominations and within Israel today.

Students will emerge from this class with a personal, nuanced understanding of the variables used to answer this age-old question and with the ability to textually support their personal definition of "Who's a Jew."

Grade Level: *9*
Prerequisites: *None*

HONORS JEWISH STUDIES 9: WAYS OF BELONGING**

Ninth-grade Honors Jewish Studies follows the normal 9th grade Jewish Studies curriculum. Rapid lesson pacing and a predilection towards primary text materials differentiates this class from non-honors. Honors students culminate their year of learning by presenting to parents in a teaching-and-learning evening.

Grade Level: *9*
Prerequisites: *Teacher Recommendation*

JEWISH STUDIES 10: WAYS OF LIVING, THINKING, AND CREATING**

Tenth-grade Jewish Studies is the year when TVT students are introduced to serious Talmud study for the first time. Through the study of thematic units like Lost and Found, Overreaching, and the Stubborn and Rebellious Child, students will begin to understand why Talmud study is the "Jewish proving ground" for rigorous, critical, and creative thinking. Through exposure to the "Talmud's greatest hits," students will be able to appreciate the Talmud as the ultimate repository of Jewish ideas and ideals. Students will emerge from this class with an appreciation of the Talmud as Judaism's quintessential "pluralism poster child."

Grade Level: *10*
Prerequisites: *None*

HONORS JEWISH STUDIES 10: WAYS OF LIVING, THINKING, AND CREATING**

10th Grade Honors Jewish Studies explores how the Jewish people have expressed themselves intellectually and creativity throughout the ages. 10th grade students are methodically introduced to both the Mishna and the Talmud for the first time. Through the study of thematic units like, Honoring your Parents, Lost in the Desert,

Saving-a-Life and Lost-n-Found, students will begin to understand why the Mishna and the Talmud were the starting points for critical and creative Jewish thinking. Throughout this year-long introduction to Talmudic logic, students will be introduced to the joys and jousting of serious Jewish study. This is a class where future lawyers and scientists will begin to spread their Jewish intellectual wings. Honors level class will spend part of their study time focusing on original Hebrew and Aramaic texts. Honors students will end their first semester with an oral Talmud exam and will culminate their year of learning with a parent teaching-and-learning evening. Those who love to incessantly ask "why" "why not" and "what if you thought of it this way" will find a welcome home in 10th Grade Honors Jewish Studies.

Grade Level: *10*
Prerequisites: *Teacher Recommendation*

JEWISH STUDIES 11: WAYS OF RESPONDING*

Eleventh-grade Jewish Studies is devoted to the spiritual and factual preparation for our end-of-year Poland/Israel trip. Guided by the essential question, "How have Jews reacted and responded to their historical journey from powerlessness to power," students will explore the history of both the Holocaust and the formation of the State of Israel. By the end of the first semester, students will be able to articulate the causes of and the world's response to the Holocaust. We'll end the semester by exploring the long-lasting theological, political, and social effects of the Holocaust. By the conclusion of our semester of Israel study, students will have explored the development of Zionism and the continual attempts toward peace. They will leave the course with the ability to intelligently and persuasively articulate Israel's right to exist in the present and future.

Grade Level: *11*
Prerequisites: *None*

JEWISH STUDIES 12: WAYS OF (RE)ACTING AND INTERACTING**

As students prepare themselves to leave the TVT cocoon, twelfth-grade Jewish Studies focuses on how our Jewish Identity and practice influence the way we act and interact with the larger world. Throughout the year, students will hear guest speakers offer their personal theology as students are challenged to formulate and ultimately present their own theology to the larger TVT community. Twelfth-grade Jewish Studies also explores the non-Jewish religious world that students will face as they leave TVT. Developing a sophisticated understanding of Jewish sexuality, ethics, and citizenship will help our students navigate toward the Jewish ideal in the world beyond TVT. Lastly, twelfth-grade Jewish Studies will focus on the skills of how to "Do Jewish and Live Jewish" in an environment where living Jewishly requires intention, commitment, and "Jewish know-how."

- antti-semitism and how to respond to it
- what to do when you get to college and you want to "do- Jewish" stuff
- ethics: real-life scenarios through the Jewish lens
- pluralism within the Jewish world and what that means for me
- how to write a dvar Torah

Grade Level: *12*
Prerequisites: *None*

OLD TEXT, NEW QUESTIONS - GETTING FAST AT READING THE TORAH SLOW(LY)

What happens when we read the Torah stories that we know and love through a new lens? This class will ask students to revisit the most famous moments of the Torah and read beyond the "who, what, where" of the text to uncover new meaning within. By employing the skills that an English student uses to unpack the meaning of poetry, students will use a literary approach towards understanding the "whys" and "why nots" of the Torah's main protagonists. By employing a sensitivity similar to that of a Supreme Court justice looking at the constitution, students will delve beneath the Torah's surface to uncover why word order, word-choice and story placement matters. Students will be guided on this close-reading-journey by both the traditional medieval commentators as well as Torah scholars of today.

This hybrid course will be held in-person from 8:00 – 8:40 three days a week. In addition, students will be required to view and take an open note quiz on a weekly, 45-minute video.

Grade Level: *9-12*
Prerequisites: *None*

This class can be taken by two types of student:

(1) Students whose course selection results in conflicts with their grade-level Jewish Studies classes.

(2) 11th and 12th graders who wish to take an honors level Jewish Studies class. To receive honors credit for this class, 11th and 12th graders must also read and complete assessments on book readings in what would have been their grade level JS class.

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Course Availability: It is important to note that a course may not be offered in a given year due to low course enrollment.

MATHEMATICS

DEPARTMENT PHILOSOPHY

TVT mathematics department aims to instill habits of mathematical thinking that will prepare students for further inquiry in math and to attain the computational skills needed for everyday life. Students are taught to approach mathematics from multiple perspectives, including numerical, graphical, and symbolic. In addition to simply satisfying the metrics of each course, the teachers focus on student discovery through individual explorations. Students are encouraged to form learning groups that offer a natural context for practicing mathematical communication.

The goal of TVT Mathematics is for all students to study mathematics successfully at a pace and depth appropriate to their individual needs, so courses are stage-not-age, often without grade-level designations. The program is flexible in that it provides challenge and interest necessary for those who want a sound mathematical background on which to base further study while satisfying the needs of students for whom math is not their primary orientation.

THE DIFFERENCE BETWEEN HONORS AND AOPS

Students frequently wonder how The Art of Problem Solving (AoPS) courses differ from Honors courses. The two programs are both accelerated, but the goals are different. Honors students learn the concepts of mathematics at a high level so that they can be applied in areas of science, engineering, and technology. In AoPS, students study mathematics from the depth of its foundations, proving most essential theorems, and then students are tasked with solving competition-level mathematics puzzles and riddles. In short, while Honors students enjoy math and are very good at it, students who are a good fit for AoPS are those who find they can never spend too much of their time pondering solutions to problems of intense difficulty. AoPS students are those who regularly enjoy doing mathematics outside of class.

MATHEMATICS PLACEMENT

Because success in mathematics depends on students sequentially mastering material, TVT Mathematics takes course placement very seriously. Placements are decided in concert with the department using the prerequisites for each course and teacher recommendation. Placements for students are completed during the Semester 2 preceding each academic year. All placements are provisional and require that students maintain their level of work through the end of the school year.

Courses at the level of Algebra 2 and above require a graphing calculator. Students may purchase any device that is approved for use by the College Board (generally these devices are standalone calculation devices that do not have QWERTY keyboards). The department recommends the Texas Instruments TI-84 Plus.

US MATH PROGRESSIONS

These pathways are meant as guidelines only and illustrate typical sequences for students. Any course can be taken once prerequisites are satisfied. Please see the current course catalog for detailed placement information.

	College Prep Pathways		Honors Pathways				Elective Offerings	
	Algebra 1	Geometry	Geometry Honors		Algebra 2/Trigonometry Honors		AoPS Algebra 2/Trigonometry & Pre-Calculus	
Common Progressions for Grades 9-12	Geometry	Algebra 2/ Trigonometry	Algebra 2/Trigonometry Honors		AP Precalculus		AP Calculus AB	*Statistics* ++ / *AP Statistics* ++
	Algebra 2/ Trigonometry	Precalculus	AP Precalculus		AP Calculus AB OR	AP Calculus BC	AP Calculus BC	
	Precalculus	Calculus	AP Calculus AB OR	AP Calculus BC	AP Calculus BC OR	Multivariable Calculus+ - Linear Algebra and Differential Equations+	Multivariable Calculus - Linear Algebra and Differential Equations*	

+*Multivariable Calculus*" and "*Linear Algebra and Differential Equations*" will be offered every other year

++*Statistics* or *AP Statistics* can be taken as a standalone math course or alongside another math class, following the successful completion of any Algebra 2/Trigonometry course

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Course Availability: It is important to note that a course may not be offered in a given year due to low course enrollment.

ALGEBRA 1*^

In Algebra 1, students build on their numerical proficiency as they encounter symbolic manipulation of linear and quadratic functions. Substantial units include writing and solving linear equations/inequalities, solving linear systems, factoring, working with exponents, radicals, and polynomial expressions. Graphing in the Cartesian plane is also covered.

Prerequisites *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Algebra placement exam*
3. *Test average of 83% or better in Pre-Algebra*
4. *Passing grade in Algebra Foundations*

GEOMETRY*^

The emphasis in this course is problem-solving strategies, graphing, conjecturing, explaining, proving and spatial visualization. Students encounter polygons and three-dimensional figures, elementary trigonometry, circles, congruence, similarity, perimeter, area, and volume. The course is built around problems that help students understand ideas and relationships, develop practical skills, and extend ideas through challenging applications. The integration of algebra in the course maintains and continues the development of necessary algebraic skills.

Prerequisites: Passing grade in *Algebra or Honors Algebra + one of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Geometry placement test*

GEOMETRY HONORS*^

Geometry Honors includes the study of logical arguments and proofs in the context of spatial problems. In the development of geometric concepts, students are introduced to challenging problems involving triangles, quadrilaterals, polygons, and circles, as well as right triangle trigonometry and three-dimensional geometry. The course uses algebra where appropriate to reinforce the skills and concepts necessary for subsequent honors-level mathematics courses.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Geometry placement test*
3. *Test average of 93% or better in Algebra 1 OR 83% or better in Algebra 1 Honors*

ART OF PROBLEM SOLVING: GEOMETRY, COUNTING, & PROBABILITY*^

The AoPS track is built for the exceptional mathematics student who is both capable and interested in exploring and executing the Mathematics curriculum from the perspective of depth. The AoPS approach favors very, very deep analytical approaches to topics in Mathematics, sometimes moving more slowly than Honors because of the depth of analysis expected from the student. AoPS track students are passionately committed to the study of Mathematics for its own sake and are intrigued by (and want to explore) critical problems in Mathematics.

In AoPS Geometry, Counting & Probability, students will study in depth the concepts of planar geometry, including congruent and similar triangles, quadrilaterals, polygons and circles. They will also study three-dimensional prisms, pyramids, polyhedra, as well as curved-surface cylinders, cones, and spheres. The second part of the course addresses major topics in discrete mathematics, including counting techniques, combinatorics, and probability.

Prerequisites: *Two of the following:*

3. *Teacher recommendation*
4. *Qualifying score on Geometry placement test*
5. *Test average of 83% or better in AoPS Algebra 1*

ALGEBRA 2 / TRIGONOMETRY*^

Algebra 2/Trigonometry develops the mathematics background necessary for successful entry into Precalculus, Statistics, and Calculus. Students review and extend their mastery of elementary algebra through work with polynomials and rational functions and are introduced to exponential and logarithmic functions and their graphs from both algebraic and graphical perspectives. Students also work with basic trigonometric functions and their graphs. The course is built around problems that help students understand mathematical ideas and relationships through applications. Graphing calculators are required for this course. The department recommends the Texas Instruments TI-84 Plus calculator.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Algebra 2/Trigonometry placement test*
3. *Test average of 70% or better in Geometry*

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ALGEBRA 2 / TRIGONOMETRY HONORS*^

Algebra 2/Trigonometry Honors reinforces a student's algebra skills from a standpoint of functions. Students work toward understanding polynomial, rational and transcendental functions from both algebraic and graphical standpoints. The course ends with a substantial unit on trigonometry that includes proving identities. Graphing calculators are required for this course. The department recommends the Texas Instruments TI-84 Plus calculator.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Algebra 2/Trigonometry placement test*
3. *Test average of 93% or better in Geometry OR 83% or better in Geometry Honors*

ART OF PROBLEM SOLVING: ALGEBRA 2/TRIGONOMETRY AND PRECALCULUS*^

This course is a sophisticated exploration of essential algebraic topics beyond that which were contained in AoPS Algebra 1. Students in this course study methods for solving equations, systems of equations, and inequalities. Conic sections and quadratic, polynomial, rational, exponential, and logarithmic functions are also studied. Advanced topics include geometric and arithmetic sequences and series, mathematical induction, and the Binomial Theorem, as well as piecewise-defined functions, and functional equations. As with other AoPS courses, students learn by solving problems. This inquiry-based approach to learning the topics in Algebra 2 is meant to allow students to discover many important algebraic properties from first principles. In order to understand the need for any particular theorem, students are led first to ask a question to which they do not yet know the answer. Once the motivation for a theorem is understood, students then embark on a guided process of discovery of the theorem and its consequences. Students are further asked to engage in advanced problem solving that calls on their abilities and knowledge across topics to solve multi-faceted problems. Students in this class must be comfortable with struggle and should have the tenacity and desire to stick with difficult mathematical material until its meaning has become clear.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Algebra 2 placement test*
3. *Test average of 83% or better in AoPS Geometry*

ADVANCED PLACEMENT

AP PRECALCULUS*+^

AP Precalculus develops students' understanding of functions modeling dynamic phenomena. Throughout the course, the mathematical practices of procedural and symbolic fluency, multiple representations, and communication and reasoning are developed. Students experience the concepts and skills related to each function type through the lenses of modeling and covariation, and engage each function type through their graphical, numerical, analytical, and verbal representations. The course content is organized into 4; Polynomial and Rational Functions, Exponential and Logarithmic Functions, Trigonometric and Polar Functions , and Functions Involving Parameters, Vectors, and Matrices. Finally, students begin the study of differential calculus from limits to derivatives. The Texas Instruments TI-84 Plus graphing calculator is required for this course.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Precalculus placement test*
3. *Test average of 93% or better in Algebra 2/Trigonometry OR 83% or better in Algebra 2/Trigonometry Honors*

AP CALCULUS AB*+^

Students complete the College Board's AB Calculus rubric which is akin to most first semester courses in Calculus offered at the university level. Limits and continuity, derivatives—their techniques and applications—single variable integration, computation of areas as well as the volumes of solids of revolution are covered. Among the theorems stressed in the course are the Intermediate Value Theorem, Extreme Value Theorem, Squeeze Theorem, Rolle's Lemma, Mean Value Theorem, and The Fundamental Theorem of Calculus. Students in the course also spend about one month reviewing for the AP Exam. Graphing calculators are required for this course. The department recommends the Texas Instruments TI- 84 Plus calculator.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Calculus placement test*
3. *Test average of 90% or better in Precalculus OR 80% or better in AP Precalculus OR 80% or better in AoPS Algebra 2/Trigonometry and Precalculus*

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AP CALCULUS BC*+^

Students complete the College Board's BC Calculus rubric, which covers roughly the same material as the first two semesters of college calculus. In addition to the material covered in AP Calculus AB (outlined above), the course covers the remaining basic concepts of single variable calculus: techniques of integration, integration in polar coordinates, infinite sequences and series, basic calculus of vector functions and an introduction to differential equations. Students in the course also spend about two weeks reviewing for the AP Exam. Graphing calculators are required for this course. The department recommends the Texas Instruments TI-84 Plus calculator.

Prerequisites: *Two of the following:*

1. *Teacher Recommendation*
2. *Test average of 90% or better in AP Precalculus*
3. *Test average of 80% or better in AP Calculus AB*

AP STATISTICS*+^

Advanced Placement Statistics is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. Students are introduced to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Topics include exploring data, planning study, anticipating patterns, and statistical inference. Graphing calculators are required for this course. The department recommends the Texas Instruments TI-84 Plus calculator.

Prerequisites: *Teacher recommendation + completion of Algebra2/Trig or as a test average of 85% or better in Algebra 2/Trigonometry or 80% or better in Algebra 2/Trigonometry Honors*

ELECTIVES

STATISTICS*^

Students approach statistics in this scourse by applying their learning to solve real-world examples that help prepare them for future career paths and college statistics. Topics include exploring data, planning studies, anticipating patterns, and statistical inference. Upon successful completion of this course, students will be ready for AP statistics or Calculus. Graphing calculators are required for this course. The department recommends the Texas Instruments TI-84 Plus calculator.

Prerequisites: *Teacher Recommendation + completion of Algebra 2/Trigonometry*

PRECALCULUS*^

This course is taught with an eye toward preparing students to take some level of calculus the following school year. As such, students spend extensive time studying polynomial, rational, and transcendental functions from algebraic, numerical, graphical, and verbal perspectives. From there, students explore exponential, logarithmic and trigonometric functions while continuing to investigate transformations of these parent functions. An introduction to matrices, counting & probability, analytic geometry, vectors, parametric curves and polar coordinates are also covered. The department recommends the Texas Instruments TI-84 Plus calculator.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Precalculus placement test*
3. *Test average of 83% or better in Algebra 2/Trigonometry OR Test average of 75% in Algebra 2/Trigonometry Honors*

CALCULUS*^

Students in this course learn about limits and continuity, derivatives, and single variable integration as they apply to real-world situations. Topics will be approached from multiple perspectives, including graphically, algebraically, numerically, and verbally. Graphing calculators are required for this course. The department recommends the Texas Instruments TI-84 Plus calculator.

Prerequisites: *Two of the following:*

1. *Teacher recommendation*
2. *Qualifying score on Calculus placement test*
3. *Test average of 83% in Precalculus*

LINEAR ALGEBRA WITH DIFFERENTIAL EQUATIONS**+^

This course provides an integrated approach to linear algebra and differential equations, emphasizing the interplay between the two fields. Topics include vector spaces, linear transformations, eigenvalues and eigenvectors, systems of linear equations, and their applications to differential equations. Using Gilbert Strang's Differential Equations and Linear Algebra, students will gain a theoretical foundation and practical problem-solving skills.

Prerequisites: *Passing Grade in AP Calculus BC or Multivariable Calculus + Teacher recommendation*

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SCIENCE

DEPARTMENT PHILOSOPHY

The TVT Science Department empowers students to change the world through engagement with the most current body of scientific knowledge, skills, and mindsets. Through the creation of authentic opportunities to explore science, the Department aims to promote scientific literacy in an environment that is hands-on, collaborative, integrative, inquiry-driven, and rooted in discovery. Core science courses are designed to provide students with introductory knowledge in Physics, Chemistry, and Biology and science practices such as asking questions, using models, planning and carrying out investigations, analyzing and interpreting data, using mathematical and computational thinking, constructing explanations, engaging in arguments from evidence, and obtaining, evaluating, and communicating information.

CONCEPTUAL PHYSICS*^

This algebra-based course is an introduction to the core scientific concept of energy and how it flows in nature. Energy is viewed through several lenses in this course: mechanical (motion and forces), thermal (temperature and states of matter), vibrational (waves/light), atomic (atomic/nuclear structure), biological (metabolism & living systems), geological (energy within the earth and its atmosphere). While learning about energy, students will also be mastering a conceptual understanding of the main concepts of Physics. Laboratory work is an essential component of the class and students learn how to analyze data and interpret trends in a variety of ways.

Grade Level: *9-10*
Prerequisites: *None*

HONORS PHYSICS*^

This course is an introduction to the core scientific concept of energy and how it flows in nature. Energy is viewed through several lenses in this course: mechanical (motion and forces), thermal (temperature and states of matter), vibrational (waves/light), atomic (atomic/nuclear structure), biological (metabolism & living systems), geological (energy within the earth and its atmosphere). While learning about energy, students will be mastering the fundamentals of physics and computational methods. This course applies principles from both algebra and geometry to the main concepts of Physics and demonstrates how they apply to the world we live in. The emphasis is split between a conceptual understanding of principles and computational application of those principles. Laboratory work is an essential component of the class and students learn how to analyze data and interpret trends in a variety of ways.

Grade Level: *9*
Prerequisites: *Algebra Honors and teacher recommendation*

CHEMISTRY*^

This course provides an introduction to the main principles of Chemistry. Topics covered include Atoms & Molecules, Energy, Acids & Bases, Electrochemistry, and more! The laboratory investigation component of the course emphasizes the scientific method and develops laboratory skills. Overall, emphasis will be placed on developing critical thinking skills and a conceptual understanding of the material, and the ability to apply that knowledge to real-world scenarios.

Grade Level: 10-12
Prerequisites: *Physics and Algebra 1*

CHEMISTRY HONORS*+^

This course provides an introduction to the main principles of Chemistry. It is a prerequisite and provides a grounding for A.P. Chemistry. Topics covered include Atoms & Molecules, Acids & Bases, Chemical Kinetics, Thermodynamics, Electrochemistry, and more! The laboratory investigation component of the course emphasizes the scientific method and develops laboratory skills. Overall, emphasis will be placed on developing critical thinking skills and a strong conceptual understanding of the material, and the ability to apply that knowledge to real world scenarios.

Grade Level: *10-12*
Prerequisites: Physics, Algebra 1, and teacher recommendation

BIOLOGY*^

This course provides an introduction to the principles of biology and prepares students for college biology. Topics covered include ecology, animal behavior, evolution and the origin of life, biochemistry, cell biology, cell division, genetics, biotechnology, classification of organisms, and a comparison of the three domains of life. The laboratory investigation component of the course emphasizes the scientific method and develops laboratory skills. The impact of

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biology on society and current ethical issues are discussed throughout the course.

Grade Level: *11-12*
Prerequisites: *Chemistry and Algebra 1*

BIOLOGY HONORS*+^

This course is an introduction to the study of living things with an emphasis on biochemistry, cell biology, gene expression, genetics, evolution, and ecology. The main goals are for the student to develop a conceptual framework for modern biology and as well as a deeper appreciation of science as a process as opposed to an accumulation of facts. Because of the rapid pace of discovery in the life sciences, our primary emphasis is on developing an understanding of the unifying concepts that connect the major topics of biology. Hands-on laboratory work will be integrated throughout the course accounting for approximately 25 percent of our class time.

Grade Level: *10-12*
Prerequisites: *Chemistry or co-enrollment in Chemistry Honors, Algebra 1, and teacher recommendation*

ADVANCED PLACEMENT

AP BIOLOGY*+^

This course is an advanced study of living things with an emphasis on biochemistry, cell biology, energy flow, cell communication, heredity, gene expression, ecology, and evolution. Our curriculum is based on that developed by the College Board with the main goals being for the student to develop a conceptual framework for modern biology, as well as a deeper appreciation of science as a process as opposed to an accumulation of facts. Because of the rapid pace of discovery in the life sciences, our primary emphasis is on developing an understanding of the unifying concepts that connect the major topics of biology. Hands-on laboratory work will be integrated throughout the course accounting for approximately 25 percent of our class time.

Grade Level: *11-12*
Prerequisites: *Physics, Chemistry, Biology, Algebra 1, a grade of B or higher in prerequisite courses, and Teacher Recommendation*

AP CHEMISTRY*+^

This course is an advanced study of chemistry equivalent to an introductory-level college course. The goal is for students to attain a depth of understanding in topics to include atomic and molecular structure, chemical formulas and reactions, stoichiometry, relationships within the periodic table, bonding, states of matter, intermolecular forces, chemical kinetics, thermodynamics, chemical equilibria, acids/bases, buffers, and electrochemistry. Additionally, students will engage in hands-on laboratory work, integrated throughout the year, accounting for 25 percent of the course. All of the problem-solving, laboratory investigations, and class activities are based on the practice of Chemistry as described in the College Board curriculum.

Grade Level: *11-12*
Prerequisites: *Physics, Chemistry, Algebra 1, a grade of B or higher in prerequisite courses, and Teacher Recommendation*

AP PHYSICS 1*+^

This course is an introduction to physics and follows the curriculum of the AP Physics 1 College Board course. It is designed to prepare students to score well on the AP 1 exam. It is an algebra-based course that introduces the main concepts in Physics and how they apply to the world we live in. Laboratory work is an essential ingredient of the class and students learn how to analyze data and interpret trends in a variety of ways.

Grade Level: *10-12*
Prerequisites: *Physics, Geometry, Algebra 2 (concurrent), a grade of B or higher in prerequisite courses, and Teacher Recommendation*

AP PHYSICS C: ELECTRICITY & MAGNETISM AND MECHANICS*+^

This course is an advanced, calculus-based study of electricity, magnetism, and mechanics designed to prepare students to take and pass the AP Physics C exam. The coursework is demanding and covers the same material as a first year, calculus-based college physics course. The topics covered in the course are kinematics, Newton's laws of motion, work, energy and power, linear momentum, circular motion and rotation, oscillations and gravitation, electrostatics, conductors, capacitors, electric circuits, magnetic fields and electromagnetism. AP Physics C requires a solid understanding of calculus. This course emphasizes analytical and problem-solving skills.

Grade Level: *10-12*
Prerequisites: *Physics, AP PreCalculus, AP Calculus AB or BC (Concurrent), a grade of B or higher in prerequisite courses, and Teacher Recommendation*

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AP PSYCHOLOGY*+^

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. This course provides an overview of the field of psychology, including research, theory, and application, and prepares students for the AP Psychology exam. Specific topics include the biological bases of behavior, sensation and perception, learning, cognition, motivation and emotion, development, social cognition and social influence, personality and individual differences, and mental disorders and therapy. An underlying theme of the course is the importance of understanding objective, empirical methods of collecting and interpreting data, including a basic knowledge of descriptive and inferential statistics. In addition, students must be able to understand and critique descriptive, predictive, and experimental research methods.

Grade Level: *11-12*
Prerequisites: Grade of A- or higher in 10th- or 11th-grade History & Social Sciences class + teacher recommendation

ELECTIVES

SCIENCE RESEARCH HONORS*+^

This course provides students with the opportunity to delve into the research process, make discoveries, and contribute to the greater science community. The first semester will consist of a series of laboratory activities in biology, environmental chemistry and physics where students learn techniques in scientific investigation. Then, under the guidance of the instructor, students will design and implement a laboratory, engineering or field research project with the goal of presenting their findings at the Orange County Science and Engineering Fair. The final module of the course will focus on scientific writing with an option for publication in high school journals. Successful Science Research Honors students will be passionate about science and must be willing to work independently. This course can be repeated multiple times.

Grade Level: 9-12
Prerequisites: *Co-enrollment in Honors Physics, Honors Chemistry, or Honors Biology OR completion of CP Physics, Chemistry, and Biology + Teacher recommendation based on interview*

BODY SYSTEMS AND DISEASES *^

This course is designed to facilitate learning and comprehension of the structure and function of each body system, from a biochemical standpoint. We will study common diseases which can affect specific body systems. The course will cover common chemical reactions and processes in the body, which work in harmony to facilitate overall body function. Also integrated into the course is medical terminology which will facilitate learning and comprehension of the basic terms and abbreviations used within the medical field. The course includes in-depth instruction on the respiratory, genitourinary, cardiovascular/ circulatory, immune, endocrine, gastrointestinal, nervous, and musculoskeletal systems also includes cell physiology, diseases, and disorders, as well as health maintenance.

Grade Level: *10-12*
Prerequisites: Co-enrollment in Biology OR completion of *Physics, Chemistry, Biology, and Algebra 1*

SUSTAINABILITY HONORS **

This advanced, project-based course explores integrative approaches to pressing environmental challenges such as climate change, biodiversity loss, pollution, food systems, and water scarcity. Students will engage in interdisciplinary investigations, collaborate on innovative solutions, and apply systems thinking to real-world problems. Through hands-on projects, critical analysis, and community engagement, the course empowers students to develop actionable strategies that balance environmental, social, and economic sustainability. Ideal for motivated learners seeking to make a meaningful impact on people and the planet.

Grade Level: *9-12*
Prerequisites: Co-enrollment in *Honors Physics, Honors Chemistry, or Honors Biology OR completion of Physics, Chemistry, Biology, and Algebra 1*

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VISUAL & PERFORMING ARTS

DEPARTMENT PHILOSOPHY

The TVT Visual and Performing Arts Department provides students the ability to marry ideas to action. Whether learning to play music, making a film, or creating a piece of visual art, the discipline of taking an idea to its artistic conclusion is vital to the creative process. Students are challenged at all skill levels through trial and error, collaboration, revision, and execution. The most up to date technology and state-of-the-art facilities give students exposure to what is being used by industry professionals. The skills learned through this process can be applied to all aspects of life.

ELECTIVES

STUDIO ART*

Students will explore a variety of artists, art processes and materials such as drawing, painting, printmaking, two & three-dimensional design, and digital art. Emphasis is placed on understanding the Elements of Art and Principles of Design as a basis for composition. Student artwork will reflect aesthetics and cultural/historical contexts. Willingness to get involved in the creative process is a more important requirement than the student's talent or previous experience.
Grade Level: *9-12*
Prerequisites: *None*

STUDIO ART II*

This course is designed as an extension for advanced exploration of the concepts covered in Studio Art. Studio Art II students further refine skills in the aesthetic process and creative expression. Levels of expectations and approaches vary depending on the assignment. Students will explore a variety of artists, art processes and materials such as drawing, painting, printmaking, two & three-dimensional design, and digital art. Emphasis is placed on understanding the Elements of Art and Principles of Design as a basis for composition. Student artwork will reflect aesthetics and cultural/historical contexts.
Grade Level: 10-12
Prerequisites: *Studio Art*

STUDIO ART III**

Studio Art III is an upper-level course designed for students who wish to refine technical skills while also developing an understanding of art making as a means of communicating and investigating topics or ideas of significance. Emphasis will be placed on the student's ability to initiate, explore, and resolve ideas in a series of works, which are evidence of growth, and the capacity to bring work to completion. Instructional materials highlight works of art featured in art history, giving students the opportunity to build familiarity with these foundational works and practice analyzing and interpreting a wide range of artistic examples. It is expected for any student intending to enroll in Advanced Placement Studio Art to successfully complete this course. Students will be continually encouraged to expand their creative ideas as well as their technical potential.
Grade Level: 11-12
Prerequisites: *Studio Art II*

ART PORTFOLIO DEVELOPMENT**

In this course, students with special interest and ability in art will have an opportunity to work in depth with areas of special interest and prepare a portfolio of artwork as an expression of high school art achievement. This is a desirable course for any student wishing to develop a portfolio for college. Emphasis is placed on creating more complex visual statements. A wide range of materials and processes will be further explored, and students will have the opportunity to focus on a chosen subject or medium.
Grade Level: 11-12
Prerequisites: *Studio Art II*

21ST CENTURY YEARBOOK DESIGN AND PUBLICATION*

This elective course is an exciting opportunity for upper-school students to delve into the process of creating a memorable and captivating middle-school/upper-school yearbook. Students will explore the essential elements of design, photography, journalism, and project management while collaboratively crafting a visual narrative that preserves cherished memories and tells the story of the academic year. Students will have access to Canon DSLR cameras to learn basic photography techniques, including composition, lighting, and editing, to capture compelling images. They will develop skills in layout

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and graphic design, typography, photo editing, and publishing by utilizing software tools to create a professional-quality yearbook. Students will practice crafting engaging captions, headlines, and stories that complement images and provide context to events captured. Through leadership and teamwork, students will experience the entire production process, from planning and organization to meeting deadlines. In order to provide a depth and breadth of coverage, students must be willing to attend multiple after-school sporting events, art shows, film festivals, and music showcases. As a member of the yearbook staff, students will enjoy a unique opportunity to blend creativity, storytelling, design, and teamwork while creating a tangible and cherished memento for the TVT community. By engaging in every aspect of the yearbook production process, students will develop invaluable skills that extend far beyond the classroom. This course meets the 1-year Art requirement for graduation.

Grade Level[*] *9-12*
Prerequisites: *None*

CONTEMPORARY MUSIC PERFORMANCE**

In this course, student musicians will work together to play contemporary popular music as part of an ensemble. Students will learn about important musical works, composers, and performers, and further develop their skills as an instrumentalist or vocalist. Throughout the course, students will build on their understanding of musical form, notation, and the shorthand used to communicate musical ideas. They will apply a musical vocabulary to analyze works of music and collaborate with their fellow musicians. Above all, students will learn to express and excel in their musical talents within an environment of encouragement and mentorship. The band will showcase their musical accomplishments in two major performances each year.

Grade Level: *9-12*
Prerequisites: *None*

MUSIC COMPOSITION AND PERFORMANCE*

This course provides students the opportunity to learn the mechanics of writing music including but not limited to: songwriting, film scoring, arranging, and improvisation. The course is open to all qualified instrumentalists and/or vocalists.

Those taking the class will need to operate some recording software (i.e. Garage Band, Logic, Pro Tools, etc.). Students will also need to be able to run some type of notation software such as Sibelius or MuseScore. Students will produce original music which will be recorded and pressed for limited release. Participants will also prepare all material, original and otherwise, for performances in and outside of school.

Grade Level: *9-12*
Prerequisites: *Audition and teacher recommendation*

VOCAL MUSIC ENSEMBLE**

Vocal Music Ensemble is an inspiring and dynamic course designed to cultivate musical artistry, vocal technique, and ensemble collaboration among students. This class provides a platform for students to explore and develop their singing abilities while fostering a sense of community through shared musical experiences. Throughout the course, students will embark on a comprehensive journey that covers a wide range of musical genres, from classical and jazz to contemporary and world music. The curriculum focuses on building and refining vocal skills, including breath control, pitch accuracy, vocal range expansion, and expressive interpretation. Students will engage in vocal warm-ups, exercises, and individualized coaching to enhance their singing proficiency. Collaboration is a key component of this course, and students will work together to create harmonious and polished vocal performances. Emphasis will be placed on ensemble techniques, including blending, balance, and precision, as well as developing a keen ear for musical nuances. Through regular rehearsals and performances, students will gain valuable experience in teamwork and communication, fostering a strong sense of camaraderie among ensemble members. This course is open to students of all vocal abilities, from beginners to experienced singers. Whether you're a seasoned performer or someone looking to discover and develop your vocal talents, Vocal Music Ensemble offers a supportive and inclusive environment for all students to thrive. Join us on this musical journey, where voices unite to create harmony, passion, and a lasting love for the art of singing.

Grade Level: *9-12*
Prerequisites: *None*

21ST CENTURY AUDIO/ VISUAL ENGINEERING**

The performing arts are about a lot more than just the performers on stage; the people working behind the scenes are just as essential to the success and creative direction of any production. In this course, students will

learn important principles, techniques, and best practices of audio / visual engineering and production. They will learn to use state-of-the-art audio, lighting, and projection systems and understand the ins and outs of audio mixers, lighting consoles, microphones, equalizers, compressors, lighting instruments, projectors, and more. Students in this course will marry technical and creative skill sets to apply what they learn in support of TVT performing arts productions.

Grade Level: *9-12*
Prerequisites: *None*

DIGITAL PHOTOGRAPHY*

& Broad
Grade Level: *9-12*
Prerequisites: *None*

EXPLORING FILM & BROADCAST**

This course is designed for upper school students who want to explore the exciting world of film and broadcast production. Whether your goal is to produce a short film, create a compelling news segment, improve your short form video content, or delve into documentary film production, this hands-on production class has something for all developing filmmakers and content creators. Students will study the art and craft of visual storytelling by analyzing and producing films, short form content, documentaries, and broadcasts to understand what makes them impactful. From camera techniques and lighting to sound design and editing, students will learn the tools of the trade while gaining a strong foundation in visual storytelling and screenwriting. This course also provides opportunities for real-world learning, including collaborations on projects, community screenings, and peer critiques. By the end of the year, students will have the skills to create their own original content and an appreciation for how film and broadcast productions shape our culture and connect us to the world.

Grade Level: *9-12*
Prerequisites: *None*

ADVANCED FILM & BROADCAST**

This advanced course empowers upper school students to refine their expertise in all aspects of film and broadcast production, from pre-production planning, post-production editing, and distribution. Students will analyze films, documentaries, broadcasts, and contemporary short form digital content to understand innovative visual storytelling and production techniques. Emphasizing collaboration and creativity, this course develops skills in advanced cinematography, editing, sound design, and graphic design. Students will also master the art of crafting compelling narratives, delivering pitches, and producing original works. Their final projects will be showcased in the annual *VAPA BLOWOUT* and *Pride of the Arts* events, celebrating their talent and growth.

Grade Level: *9-12*
Prerequisites: *Instructor Approval*

ADVANCED PLACEMENT

AP MUSIC THEORY*+

The Advanced Placement (AP) Music Theory course enables highly motivated students to engage in college-level work in the areas of reading and analyzing notated music and aural training. Particular emphasis will be placed upon developing listening skills, sight-singing ability, and knowledge of rhythm, melody, harmony, and other compositional devices. The work of the course will emphasize preparation for the Advanced Placement Music Theory examination
Grade Level: 10-12
Prerequisites: *Teacher Approval*

WORLD LANGUAGES

HEBREW

The study of Hebrew will allow students to better understand the history, culture, and traditions of the Jewish people. Proficiency in Hebrew will help to foster a strong sense of belonging to the Jewish people and will help to inspire student commitment to lifelong Hebrew learning.

While TVT's Hebrew program emphasizes the four major language acquisition skills of listening, speaking,

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reading, and writing, priority is placed on Hebrew speaking. In order to achieve the aim of conversational mastery, TVT's Hebrew scope and sequence are based on ACTFL's (American Council for the Teaching of Foreign Languages) designations for speaking proficiency.

HEBREW 1*^

Hebrew 1 is for students with no previous experience reading, writing or speaking Hebrew. The first few months of this course are devoted to Hebrew reading and writing. Students will use Ulpan Or Absolute Beginner alphabet study kit as well as Ulpan Or E -curriculum. During this year of study, students will learn 250 high frequency Hebrew words and expressions. A major focus of this class is to give students the skills and confidence to read, write and understand very basic Hebrew conversations. Communication at this level revolves around familiar topics using phrases that have been practiced and memorized. By the end of Hebrew 1, a student will successfully be able to introduce him/herself, to greet others, to answer Yes/No/Who/What/When/Where questions related to basic conversation, feelings, food, directions, numbers and Israel. Students emerge from Ulpan-Or Novice Low level with the knowledge that they too can master the Hebrew language and with the desire to continue their Hebrew studies at a higher level. Students that complete Hebrew 1 successfully, will continue their Hebrew studies in Hebrew 2.

Grade Level: *9-12*
Prerequisites: *none*

HEBREW 2*^

In this course, students will increase their active vocabulary by an additional 500 words, including pronouns, nouns and adjectives and expressions that are essential for everyday conversations. Communication at this Novice Mid-level revolves around familiar topics using phrases that have been practiced and memorized. By the end of Hebrew 2, students will successfully be able to enter and exit a conversation, ask simple one-to-two-word questions, answer questions with simple expressions or memorized phrases and offer basic information about themselves and others. During the year, students will complete Ulpan-Or ebook, *Novice Mid* units 1-10. During the year students will master the use of the infinitive and present verbs form Binyan Pa'al subgroups 1-6. The content of the course will include in-depth acquaintance, nouns in school numbers, members of the family, body part, colors, clothes., fruits and vegetables, shopping in the market, items in the house and directions. Grammatical concepts in this level will include concepts such as have/don't have, mine, yours, ours, adjectives in male female and plural.

Grade Level: *9-12*
Prerequisites: *Hebrew 1*

HEBREW 3*^

In Hebrew 3 students will increase their active vocabulary by an additional 400-500 words and expressions that are essential for everyday conversations. Communication at this Novice High level highlights a student's ability to exchange information about familiar topics using phrases and simple sentences. During the year, students will complete the workbook Ulpan Or e-curriculum Novice High units 1-10. Students will extend their knowledge of the infinitive. The curriculum embarks on a journey following a boy and a girl who arrived in Israel for a Bar/Bat Mitzvah trip. Through their adventures, the students will learn rich vocabulary and expressions that are relevant to everyday life in Israel. Seeing Israel through the videos accompanying the texts allows the students to learn basic grammar and structure while experiencing Israel in a fun way.

Grade Level: *9-12*
Prerequisites: *Hebrew 2*

HEBREW 4 HONORS *+^

In this course, students will solidify and make active the vocabulary learned in the past. Communication at this Intermediate Low-level highlights a student's ability to participate in conversations using simple sentences. By the end of Hebrew 4, students will be able to express wants and needs when in a familiar situation. Additionally, will be able to offer a confident response to a query, answering factual questions based upon familiar information. During the year, students will master the use of verbs in the past tense as well as how to use prepositions to create more sophisticated sentences. Students will study and strive to reproduce Hebrew dialogues and will interact with near-authentic materials. Lastly, students will read and discuss Ulpan-Or's interactive Newspaper (intermediate level).

Grade Level: *9-12*
Prerequisites: *Hebrew 3 and Teacher Recommendation*

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HEBREW 5 HONORS*+^

In Hebrew 5 Honors, students will transition from past tense to the future with exposure to modified authentic language experiences. Communication at this Intermediate Mid-level highlights a student's ability to participate in conversations using a series of sentences, employing the necessary linking words and logical, sequential flow. By the end of Hebrew 5 students will be able to handle social interactions in everyday situations by asking and answering a variety of questions. Additionally, students will be able to guide a conversation from inception to completion, to talk about daily tasks, and to express a personal preference. During the year, students will be exposed to situations between parents and teens while practicing their use of the Future tense as they study and strive to reproduce authentic monologues. During the year, students will complete Ulpan Or E-Curriculum Intermediate- Mid units 1-10. The contact of the course will include emotions between parents and teens, regarding Facebook, school grades, quality time with parents, relationships with their friends, and siblings. This class will be supplemented by short Hebrew stories produced by the company "Gesher." Lastly, students will read and discuss Ulpan-Or's interactive Newspaper (intermediate level).

Grade Level: *9-12*
Prerequisites: *Hebrew 4 and Teacher Recommendation*

HEBREW 6 HONORS*+^

Hebrew 6 Honors is a complete immersion-based class. Communication at this intermediate-high level allows students to read and translate text that deals with different types of people and their traits, students will enhance their vocabulary with in-depth adjectives. Encountering different nations and their stereotypical traits; loud and warm Israelis, polite and witty British, as well as friendly Americans. Students at this level are also able to express themselves in various time frames about subjects beyond their area of expertise, sharing a conceptual knowledge of cause and effect. The students will master their usage of the passive tense verb in all 5 binyanims. During the year, students will complete Ulpan Or E-Curriculum Intermediate -High, Newspaper and Hebrew book produced by the company "Gesher.-stylebook.

Grade Level: *9-12*
Prerequisites: *Hebrew 5 and Teacher Recommendation*

HEBREW 7 HONORS*+^

Hebrew 7 Honors is a complete immersion-based class. The students will acquire vocabulary of 500 new words and expressions related to current events, literature, and culture. The course will enrich students' knowledge of Hebrew grammar, enhancing listening, speaking, and writing skills at a regular native pace. During the year, students will work with text related to the family in a hotel, the life of soldiers in the Israeli Army, traffic reports, men in space, terrorism and about Leah Goldberg and a writer and a poet. completing Ulpan Or, E-Curriculum at Advanced Low level. Other Ulpan Or materials, such as the high-level Hebrew newsletter, will be supplemented by the company "Gesher.-stylebook, and one original Hebrew novel.

Grade Level: *9-12*
Prerequisites: *Hebrew 6 and Teacher Recommendation*

HEBREW 8 HONORS*+^

Hebrew 8 Honors is a complete immersion-based class. This advanced mid-level exposes students to authentic newspaper articles and literature, as well as videos of news from Israel. The course will enrich students' knowledge of Hebrew passive vs active verbs and Gerunds. This level will cover verbs that are an exception to the rules, syntax that include a high level of Hebrew related to current affairs, literature, and poetry. In order to increase students' listening comprehension, students will watch current TV series from Israel about subjects such as medical issues, diet, Aric Einstein, hobbies, and friendships. The course will be supplemented with one original Hebrew novel.

Grade Level: *9-12*
Prerequisites: *Hebrew 7 and Teacher Recommendation*

HEBREW 9 HONORS*+^

Hebrew 9 Honors is a complete Hebrew-based honors class. This advanced high level course uses authentic newspapers, literature and tv programs. This level exposed the student to an academic Hebrew speaking and writing and enabled them to experience lecturing in Hebrew. Students will discuss, read and learn about Eliezer Ben Yehoda the founder of the Hebrew language, advantages and disadvantages of cell phones and technology, saving life, donating organs, robots vs, manpower and even practice a job interview in Hebrew. The course will be supplemented with one original Hebrew novel.

Grade Level: *9-12*

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Prerequisites: *Hebrew 8 and Teacher Recommendation*

HEBREW READING

TVT upper school students who do not elect to take Hebrew must prove proficiency in Hebrew reading or complete this 15-hour Hebrew Reading Course. This course is for High School students that have never learned Hebrew before. The goal of this class is to allow students to learn Hebrew Reading skills.

The class will take place once during the summer months, and once in each semester. The course will include 15 hours of class time, and additional review at home will be essential for success. A reading test will be administered to determine Pass or Fail.

Students that are interested in continuing to learn Hebrew can do so by signing to Hebrew 1 in the next school year.

Grade Level: *9-12*
Prerequisites: *None*

SPANISH

Students who complete the full curriculum, Spanish 1 through 4 and AP, will be able to write, analyze texts, and speak the language. Our overall objective in the Spanish department is to support and motivate the students to continue learning the Spanish language and culture as well as prepare them to be open and engaged to new cultures. We use structured grammar methods, encourage critical thinking, provide sentence structure practices, include cultural research presentations, design dialogue presentations, and incorporate total physical response (TPR) so that students are able to learn in multiple modalities.

SPANISH 1*^

Spanish 1 is a comprehensive beginning course in which the student achieves facility in all aspects of listening, understanding, speaking, writing, and reading of the first-year lessons. Idiomatic expressions and verb conjugations are stressed in addition to other grammatical concepts. Hispanic history and civilization are introduced in conjunction with customs as a supplement to the text.

Grade Level: *9-12*
Prerequisites: *None*

SPANISH 2*^

Spanish 2 begins with a general review of Spanish 1 and quickly advances to a more complex development of the four major skills: listening, speaking, reading, and writing. A proficiency-oriented and integrative approach to teaching permits students to progress from controlled practice to more meaningful practice, and ultimately, open-ended activities in the four major language skills. Cultural awareness is included at every learning stage by means of articles, lectures, and audio-visuals. Authenticity of expression is emphasized so that the students develop a sense of social and contextual appropriateness. High frequency and high interest vocabulary is placed in a context that is culturally realistic, as well as meaningful and interesting for students. The indicative as well as the subjunctive moods are studied and reinforced in paragraphs and oral discussion. The students are expected to speak Spanish at an appropriate level during class.

Grade Level: *9-12*
Prerequisites: *Spanish 1*

SPANISH 3*^

Spanish 3 begins with an extensive review of Spanish 2, bridging necessary gaps. Various opportunities encourage and motivate the students to develop fluency and accuracy in the four major skills of speaking, listening, reading, and writing. Students use as much real-life and "active" vocabulary for constant reinforcement and communication, and they progress in developing functional Spanish. The approach to this course is proficiency-oriented and integrative, with the four skills and culture reinforcing one another in a spiraling fashion. Situations that are relevant to the students and high-frequency vocabulary motivate the

students to initiate and participate in active communication. Short stories and poems further expand student interest and serve as stimuli for student-centered oral and written communication and critical thinking skills.

Grade Level: *10-12*
Prerequisites: *Spanish 2*

SPANISH 4*^

Spanish 4 is conducted in Spanish and is an advanced level course that prepares the student for the Spanish SAT 2 and Advanced Placement Spanish. This course focuses on proficiency and active communication in Spanish through advanced grammar study, writing, lecture, and classroom discussion. The student will develop fluency in spoken and written Spanish by studying various genres of literature and poetry. Vocabulary acquisition, idiomatic fluency, and natural expression are broadened through additional outside readings, magazines, and newspapers. Classroom presentations, reporting, and writing on current events and various cultural interests help develop competency in listening, speaking, reading, and writing. The course content will reflect interests that are shared by students and teachers and will include topics on film, theater, art history, and contemporary issues. Frequent compositions improve ability to compose expository passages with fluency and accuracy of expression. Intensive language study further expands proficiency in realistic communication, critical thinking, and interpretation.
Grade Level: *11-12*
Prerequisites: *Spanish 3*

ADVANCED PLACEMENT

AP SPANISH LANGUAGE*+^

This course is designed to be comparable to advanced (fifth and sixth semester or the equivalent) college/university Spanish language courses. Throughout the course, the grammatical component of Spanish will be reviewed and tested using different approaches. Students will develop listening, reading comprehension, and oral expression skills. They will also cultivate a foundation in Spanish language grammar composition. This course seeks to help students develop Spanish in the following ways: comprehending formal and informal spoken Spanish; acquiring vocabulary and mastering grammatical structures to read newspaper and magazine articles, as well as modern Spanish literature; composing expository passages; and fluently expressing ideas orally. The course prepares students for success on the AP Spanish Language Exam.

Grade Level: *11-12*
Prerequisites: *Spanish 4 and Teacher Recommendation*

** This course is approved by the University of California **This course is pending UC approval*
+ This course is weighted ^ This course is approved by the NCAA
Course Availability: It is important to note that a course may not be offered in a given year due to low course enrollment.

LEARNING CENTER

LEARNING LAB

(FEE BASED - $5,025)

The Learning Lab is a small group, executive functions class built into the school day. It is intended to empower students to optimize their potential at TVT. This executive functions class will help students improve their study skills, stay organized, and remain on-track with their classes. **Note**: *This class does not receive graduation or elective credit.*

Learning Lab objectives/services:

• Creation and maintenance of an organizational plan to support homework, projects, studying, and test preparation

• Regular monitoring to assist with homework assignments being completed and turned in on-time

• Ongoing communication with teachers regarding academic progress and performance in the different classes, including regular tracking of grades.

•Strategies to guide students to improve study and organizational skills to promote their academic success.

• The Learning Lab teacher is available to answer student questions related to specific assignments.

• The Learning Lab teacher will help students to review assignments/projects instructions. The Learning Lab teacher will also help students to create a plan and timeline for class projects.

• Self reflection and self monitoring to help students build independence with their studies and self-advocacy with teachers.

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