How do I decide which class to take?
Consider courses that interest you and are in your areas of academic strength.

How do I know if a class is right for me?
Within each subject area, courses generally are arranged from classes with the fewest prerequisites, meant for younger students, to classes most suitable for students with more advanced skills or who are at a higher grade level.

Writing & Literature

The Writing Process (AM or PM)

3000.1	MTh	8:30–12:00	Jeanne Phung
3000.2	MTh	1:00–4:30	Jeanne Phung
3000.3	MTh	8:30–12:00	Dan Guerrero
3000.4	MTh	1:00–4:30	Dan Guerrero
3000.5	TF	8:30–12:00	Kevin Morris, Jr.

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 7 OR 8

This course will explore the purposes for which authors write and will ask students to become purposeful readers and writers. Lessons and activities will focus on the process of writing—pre-writing, drafting, editing, and revising. Students will work in editing groups, help each other revise drafts, and learn the qualities of good writing. They will learn techniques for crafting well-written sentences, logical paragraphs, and coherent essays. Students will read, study, and discuss writing styles, and they will practice what they have learned in numerous writing assignments.

Reading for Creative Writing (AM or PM)

3002.1	TF	8:30-12:00	Paul Heller
3002.2	TF	1:00-4:30	Paul Heller

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 7 OR 8

This class will focus on reading critically and passionately, and on fostering creative writing skills. Students will read poetry, short stories and other works of literature, and write responses to the readings. They will visualize the imagery and explore the themes of literature in relation to their own lives. For more inspiration, class activities may include drawing and art, campus explorations, and a visit to a local museum. Students will share their insights into the mind of the author and seek to understand their own writing processes. Through improvisation, class discussion, and writing exercises, students will learn to identify and experiment with various narrative techniques. They will develop a portfolio of their own creative writing and will also write one analytic essay that will reflect their growing expertise as readers and writers.

Dan Guerrero's The Writing Process

Writing for High School (AM or PM)

3003.1	TF	8:30–12:00	Hillary Walker
3003.2	TF	1:00–4:30	Hillary Walker
3003.3	MTh	8:30–12:00	Matt Amaral
3003.4	MTh	1:00–4:30	Matt Amaral
3003.5	TF	8:30–12:00	Agnes Mazur
3003.6	TF	1:00–4:30	Agnes Mazur

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

This class will provide a vehicle for students to learn to mold facts, speculations, beliefs, and opinions into cogent, powerful statements. Through reading, class discussions, and group work, students will investigate different styles and forms of writing that provide a range of models for approaching thinking and writing. Emphasis will be on learning to refine thinking and on improving writing through editing and rewriting. Students will be assigned approximately 2-4 pages of writing, in addition to regular reading assignments, per class.

NOTE: Ms. Mazur's writing class will center on the immigrant experience.

Public Speaking & Writing (AM or PM)

3004.1	TF	8:30–12:00	Cathy Berman
3004.2	TF	1:00–4:30	Cathy Berman

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

Prerequisite: *completion of the 8th grade for 3004.1 and completion of the 7th grade for 3004.2.*

3004.1 FOR STUDENTS COMPLETING GRADE 8 AND UP
3004.2 FOR STUDENTS COMPLETING GRADE 7 AND UP

According the the Book of Lists, the fear of public speaking ranks number one in the minds of the majority of people. Google "the fear of public speaking" and you will get 70 plus pages of links, not including the related searches. Whether you fear or fancy being in front of an audience, this course will teach you the skills and give you the practice you need to become a confident public speaker. For the speech to persuade, students will take what they have learned and then devote time to the art of argumentation. What is my purpose? How can I move the members of my audience to my point of view? In addition to the formal presentations, the class will require each student's active participation in a variety of activities: discussion, debate, and impromptu presentations. You gain the confidence you need to speak in front of an audience only by speaking in front of an audience. But think what fun you will all have as you exchange ideas—ideas about yourself and your world.

Wheeler Hall (left), site of the SD Student Orientation

Question
I'm having trouble figuring out which writing class is most appropriate for my skill level, age, and grade. What advice can you give me?

Answer
After carefully reading the course descriptions, list your course selection and alternate choices on your application. Then include a note with your application saying that you would like to have your selection reviewed for appropriateness. Based on your writing sample, grade, and age, we can then direct you to the most appropriate class.

Writing for College (AM or PM)

3005.1	MTh	8:30-12:00	S. Jeung & S. McDonald
3005.2	MTh	1:00–4:30	Candace Nolan-Grant
3005.3	TF	8:30–12:00	Page McBee

Recommended credit: 5 units
Homework per class meeting: 4-6 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

In this course students will become better prepared for college work by developing their critical reading, thinking, speaking, listening, and writing skills. They will learn the process of producing well-organized, well-written, well-developed, and intellectually complex essays. They will perform the stages of writing from clarification of the assignment to final revision, working on grammar, composition, and editing. In addition to learning how to organize and present their ideas persuasively, students will also develop their time-management skills. They will study a wide range of engaging fiction and nonfiction texts on a range of issues.

Advanced Reading and Writing (AM or PM)

3008.1	MTh	8:30-12:00	Kelly Mogilefsky
3008.2	MTh	1:00–4:30	Kelly Mogilefsky

Recommended credit: 5 units
Homework per class meeting: 4-6 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

Prerequisite: *students must have completed grade 10 or 11*

In this course, which prepares students for college-level work, students will advance their reading and writing skills by thinking about and responding to rich and complex works of literature. They will learn to explore the meanings of a literary work: what the author says and how she or he uses effective and powerful language to say it. In preparation for reading literature in college, students will study styles, voices, points of view, and narrative strategies. As students strengthen their composition and editing skills, as well as deepen their understanding of grammar, their own writing will emerge more fluidly, with greater clarity and impact. By reading literature, writing essays and engaging in intense discussions, students will receive practice in skills needed for the Advanced Placement exams as well as writing papers for any of their academic subjects.

Paul Heller's Reading for Creative Writing

Question Who teaches ATDP classes?

Answer *We choose ATDP instructors from a pool of exceptionally talented public school, private school, and university instructors. If a course below lists the faculty as "Staff," that means we were still finalizing arrangements at press time. Faculty listed are subject to change.*

Fine Arts

Beginning Acting 1
Improvisational Theater and Acting

3010.2	MTh	1:00–4:30	Gary Graves
3010.4	TF	1:00–4:30	Gary Graves

Recommended credit: 5 units
Homework per class meeting: 2 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

Nobody hands you a script for life—you have to improvise your way through it. In this course, through improvisational scene work, theater games, and story telling, students will develop their ability to act and interact freely and perceptively. They will have the opportunity to study acting techniques and work at short scenes, learning to trust their abilities in new, untried situations, and taking risks that help develop confidence in their ability to think on their feet, whether in school, social, or dramatic situations. They will also discover how to become more aware of their environment and how to be supportive of others. Improvisational theater helps students expand their creativity and, therefore, influences every area of life and studies. This course may be taken concurrently with Beginning Acting 2.* (Please see important note below about credit.)

Beginning Acting 2
Further Adventures in Improv and Performance

3012.2	MTh	1:00–4:30	Gary Graves
3012.4	TF	1:00–4:30	Gary Graves

Recommended credit: 5 units
Homework per class meeting: 2-4 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

Prerequisites: *Beginning Acting (from ATDP during a previous summer), concurrent enrollment in Beginning Acting 1, or permission of the Director.*

This fun, interactive course is the continuation of Beginning Acting 1 and provides the equivalent of second semester introductory dramatic arts. Building on lessons around the performance of monologues, scenes, and improvisation, students will learn to delve into the study of acting at a deeper level. From script analysis to building a character, this course will tackle the basic challenges of acting on stage, while continuing to explore the exciting world of improvisational performance.

Gary Graves' Beginning Acting I & 2

* IMPORTANT NOTE ABOUT BEGINNING ACTING 1 & 2:

Completion of Beginning Acting 1 and 2, whether together or over two summers, carries a recommendation of credit to fulfill the UC (f) Visual & Performing Arts (VPA) eligibility requirement for a year-long course. Beginning Acting 1 alone cannot be used to satisfy the UC VPA requirement, but we suggest that you check with your school counselor for specifics on how one or both may be used toward graduation requirements. There is discounted tuition for concurrent enrollment in Beginning Acting 1 and 2—tuition: $705; materials fees: $55; total: **$760**.

Drawing and Design

3014	MWF	1:00–4:30	Susanne Cowan

Recommended credit: 10 units
Homework per class meeting: 2-4 hrs.
Tuition: $705 • Materials fees: $75 • Total: **$780**

FOR STUDENTS WHO HAVE COMPLETED GRADE 7 OR 8

In this course students will learn how to understand, discuss and create artwork. Students will develop skills in drawing a variety of subjects such as portraits, landscapes and still-lifes. Using a range of media including pencil, charcoal, pastel, colored pencil, and watercolor, students will learn to observe and depict form, light and color. Students will work from nature, models, and their imaginations. Course assignments include exercises in contour, gesture, and tone techniques, as well as a few graphic design exercises using collage and/or block prints. The highlight of the course is a field trip to the San Francisco Museum of Modern Art, during which students observe and discuss the art on display. Using the art seen at the museum, as well as lectures on art history presented in class, students will apply art concepts in creative assignments that experiment with style. These later projects include abstract self-portraits, a comic book, and an advertisement. No previous drawing experience is necessary.

Artwork from a student in
Susanne Cowan's Drawing and Design class

Advanced Placement Art History

3016	MWF	1:00–4:30	Laura Shefler

Recommended credit: 10 units
Homework per class meeting: 6-8 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$740**

Prerequisites: *For students who have completed Grade 9 or higher. Completion of sophomore year is recommended.*

In this fast-paced course, students will acquire the knowledge, vocabulary, and critical thinking skills to respond intelligently to art. The course provides an opportunity to prepare for the AP Art History exam in May 2011. Encompassing sculpture, painting, architecture, and other creative forms, the class will cover Western art from the cave paintings at Lascaux to the Impressionists to the 4-dimensional multimedia innovations of the 21st Century, as well as topics from the great artistic traditions of Asia, Africa, Oceania, and the Americas. In class, students will view and analyze an extensive collection of images, striving to understand the artworks within their historical contexts—for instance the Roman conquest of Europe, the expansion of the Mughal Empire, the French Revolution, or the US-Soviet Cold War. At the same time, students will consider cultural context: Why was a particular piece of art made? With whose money, and for what purpose? How do the ethnic identity and the gender of the artist influence the style or content of a work of art? For an additional fee, students in this class will have the option of taking Saturday review classes in the spring of 2011 to prepare for the AP examination in May of 2011.

Laura Shefler's AP Art History class

Question What do the materials and/or lab fees pay for?

Answer *The fees cover the associated costs of supplies and equipment used in class, science and computer lab facilities, design studios, photocopying, and field trips.*

Languages

First-Year Latin

3021	MWF	8:30–12:00	Matt Davis

Recommended credit: 10 units
Homework per class meeting: 4-6 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

FOR STUDENTS WHO HAVE COMPLETED GRADE 9 & UP

First-Year Latin, the equivalent of a full year of high school Latin (one semester of college Latin), will introduce students to the fundamentals of classical Latin with specific attention paid to vocabulary, morphology, and syntax. Throughout the course, students will also be introduced to the historical and literary cultures of ancient Rome and the development of the Latin language into its modern descendants, including Spanish, Italian, and French.

Matt Davis' First-Year Latin

Junko Hosoi's First-Year Japanese (PM section)

First-Year Japanese (AM or PM)

3024.1	MWF	8:30–12:00	Junko Hosoi
3024.2	MWF	1:00-4:30	Junko Hosoi

Recommended credit: 10 units
Homework per class meeting: 5-6 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

This course is based on a fun, relaxed, playful, and effective approach to learning Japanese. This method is a synthesis of many innovative teaching techniques developed to help accelerate students' language learning. The two major components of this course are: (1) acquisition of basic communication skills of elementary Japanese and (2) learning hiragana and katakana syllabaries as well as some kanji characters. The language is taught multimodally: lots of physical movement, use of pictures and graphics, conversation practices, story telling, and some story creating. Students also learn about modern Japanese life. This course is equivalent to one year of high school Japanese.

Second-Year Japanese

3025	MWF	8:30–12:00	Hideko Lowe

Recommended credit: 10 units
Homework per class meeting: 5-6 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisite: *Completion of First-Year Japanese or permission of the Director.*

Using a multi-modal approach, the class will begin where First-Year Japanese left off. The course will include a comprehensive review of katakana and kanji that students have already learned, and the introduction of much more kanji. Emphasis will be placed on consolidation of listening and speaking skills; the additional grammar and constructions will advance students' understanding even further. In addition to our focus on learning the language, students will learn about culture and customs in contemporary Japanese life. This course covers the full content of second-year

Sushi-making in First-Year Japanese

Third-Year Japanese

3026	MWF	1:00-4:30	Kazumi Yahata-Pettersson

Recommended credit: 10 units
Homework per class meeting: 5-6 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisite: *Completion of Second-Year Japanese or permission of the Director.*

In addition to further development of listening and speaking skills, this course will also review grammar for advanced reading and writing. Students will add to their vocabulary of kanji and will study literary works. Cultural presentations will provide additional opportunities to learn about Japanese life as well as to practice language skills and conversation. This course covers the full content of third-year high school Japanese.

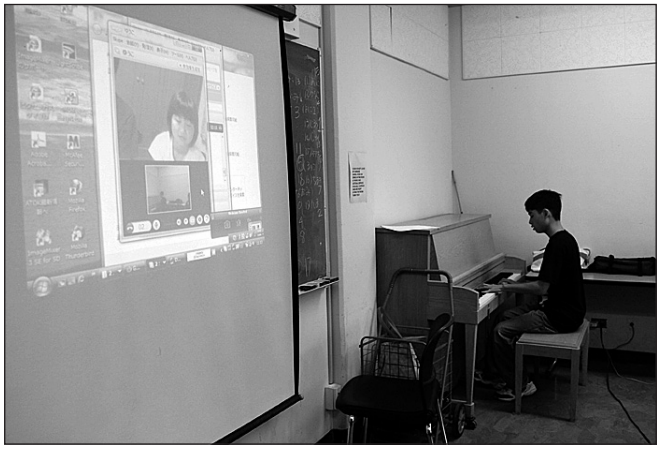
Fourth-Year Japanese

3028	MWF	1:00-4:30	Kazumi Yahata-Pettersson

Recommended credit: 10 units
Homework per class meeting: 5-6 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisite: *Completion of Third-Year Japanese or permission of the Director.*

Fourth-Year Japanese will continue to build and develop language skills in conversation and writing. Speaking activities will explore the formal, informal, humble, and honorific forms. Literacy and vocabulary will focus on further mastery and acquisition of new kanji. As in preceding courses in the sequence, activities will revolve around lectures, discussions, skits, and literature. Students will also learn more about Japanese culture through films, games, and history. Class will be conducted primarily in Japanese. This course covers the full content of fourth-year high school Japanese.



Students in the Japanese language classes video-chatting and talent-sharing with students in Japan.

*Interested in being an **internet TA** (iTA) for your class? Then consider applying for this course/project:*

The Virtual ATDP

3030	By Arrangement	Lloyd Nebres

Recommended credit: internet TA (iTA)/community service credit
Tuition: $0 • Materials fees: $0 • Total: **$0**

Prerequisites: *(1) Demonstrable working knowledge of website design and construction—XHTML and CSS skills, familiarity with web standards; (2) current maintenance of a weblog or online journal; (3) prior participation in online communities and forums. Prospective participants should contact Lloyd Nebres (lloyd@berkeley.edu) for an online interview prior to applying.*

The Virtual ATDP (TVA) is the online component for ATDP, existing not just during ATDP's summer session but also through the regular school year. This online community involves ATDP students, TAs, instructors, mentors, staff and alumni. Participants during the summer will be designated as internet TAs (iTA) for an ATDP course and will work closely with the TVA project manager and with the course instructor. For that course, the iTA will: (a) create and maintain the class website; (b) set up and moderate a group discussion forum or bulletin board; and (c) facilitate the class's online community via instant messaging. For examples of websites, weblogs, and forums from the previous summer, visit TVA at http://virtualatdp.berkeley.edu:8081/tva/websites/

Computer Science

The assessed materials fee includes charges for using the Graduate School of Education's Tolman Microcomputer Facility or other computer labs on campus.

The Internet Classroom

3033	MWF	8:30–12:00	Cynthia Nie & Sam Pierce

Recommended credit: 10 units
Homework per class meeting: 2-3 hrs.
Tuition: $705 • Materials fees: $165 • Total: **$870**

In this class, students will learn how to understand, navigate and engage the internet with ease; become familiar with the underlying technologies of a computer network; design and code standards-based websites; and acquire a meaningful context within which to place our "information age," with its diverse array of online communities. Students will create websites using XHTML and CSS, with an eye towards coding according to web standards. They will be introduced to various common technologies that make up today's internet and will be experimenting with off-the-shelf programs such as Adobe Photoshop and Flash. Students will investigate the technical, sociological, and even philosophical issues regarding the impact of the internet and information technology on students and their families, on schools and their communities, and on society at large.

The Advanced Internet Classrooom

3034	MWF	1:00–4:30	Alex Hong & Cynthia Nie

Recommended credit: 10 units
Homework per class meeting: 2-3 hrs.
Tuition: $705 • Materials fees: $165 • Total: **$870**

This course is geared towards aspiring web designers who are interested in learning how to effectively deliver ideas online. Students will develop the skills to code and publish standards-based websites, with an emphasis on design and common practices. They will master the building blocks for presenting content on the web and exercise these skills through design exercises with the student's own creative ideas. Students will also be introduced to the theory and practice of developing designs for today's internet, with its multitude of user-driven website communities and content management systems. Applicants should be proficient with computer and internet use and will be required to take a placement test for this class. (Students who have taken a previous Internet Classroom course are welcome to apply for this class, although the material for the first 2 weeks will overlap with previous summers' coursework.)

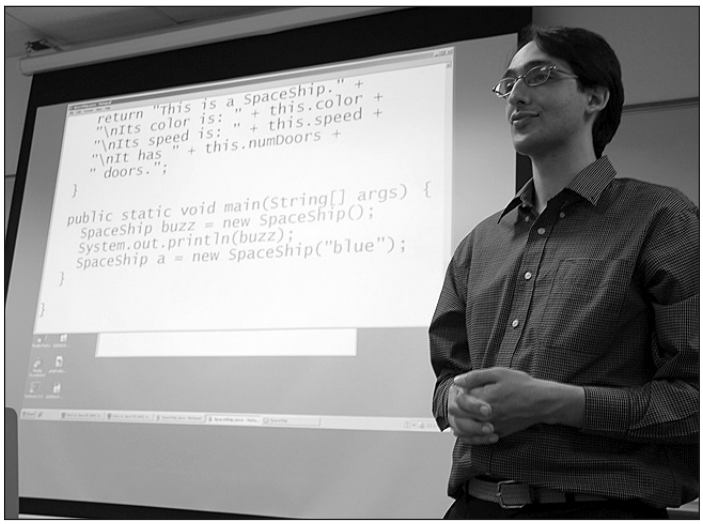
Introduction to Java (AM or PM)

3037.1	MWF	8:30–12:00	Jonathan Berney
3037.2	MWF	1:00–4:30	Jonathan Berney

Recommended credit: 10 units
Homework per class meeting: 2-3 hrs.
Tuition: $705 • Materials fees: $165 • Total: **$870**

Prerequisite: *Algebra—students must be comfortable with mathematical thinking, particularly the ideas of a variable and a function. It is preferable that students be able to access the internet from outside of class in order to submit homework assignments.*

This course will introduce students to object-oriented programming in Java. In the first half of the course, students will be introduced to essential programming building blocks, beginning with the idea of a variable. From there, students will learn about common control structures, including "if" statements and "for" loops. Students will also learn about simple data structures, such as the Array. With this knowledge, students will move on to study object-oriented programming concepts and how to apply these to their work. During the second half of the course, students will demonstrate their creative potential by authoring artificial intelligence agents for two simple two-dimensional computer games.



Jonathan Berney's Introduction to Java

If you are interested in computer technology, also see 3030 The Virtual ATDP, p. 7.

Mathematics

Students choose from *two* kinds of math courses:

1. Accelerated courses covering a full year of material in six weeks—Algebra I, Geometry, Algebra II/Trigonometry, Precalculus, AP Calculus AB, and AP Statistics. Students must be prepared to learn at a rigorous and intensive pace and to do many hours of demanding homework daily. Classes meet three days per week.
2. Enrichment courses focusing on specific topics and areas—Foundations of Algebra and Introduction to Geometric Thinking. The class pace is challenging but not rushed. These courses, which carry a recommendation of one semester of credit, help students gain a deeper understanding of math, become more well-rounded, and be better prepared for math classes at school. Classes meet two days per week.

APPLICATION PREREQUISITES

If you are applying for Algebra I, Geometry, Algebra II/Trigonometry, Precalculus, AP Calculus AB, or AP Statistics*:

(1) you MUST have a GRADE OF A in your current mathematics class;
(2) you cannot repeat a math course you have already taken;
(3) your Teacher Recommendation Form must be completed by your current mathematics teacher;
(4) you can enroll in only one course; and,
(5) you must take and pass the diagnostic examination given on Saturday, May 22, 2010.

* AP Statistics does not have a diagnostic exam.

PLACEMENT REQUIREMENTS

For Algebra I, Geometry, Algebra II/Trigonometry, Precalculus or AP Calculus AB:

Final course placement is contingent upon your diagnostic examination score. If you are unable to take the test on Saturday, May 22, the acceptance letter will provide instructions on scheduling a make-up test.

Question

Is it a good idea for me to take a math course at ATDP when I'm planning to repeat the same course for credit next year back at my school?

Answer

We strongly recommend against doing so. It usually is not in a student's best interest to repeat the same material twice. The student's time and effort are better spent in taking a course for credit.

Foundations of Algebra (AM or PM)

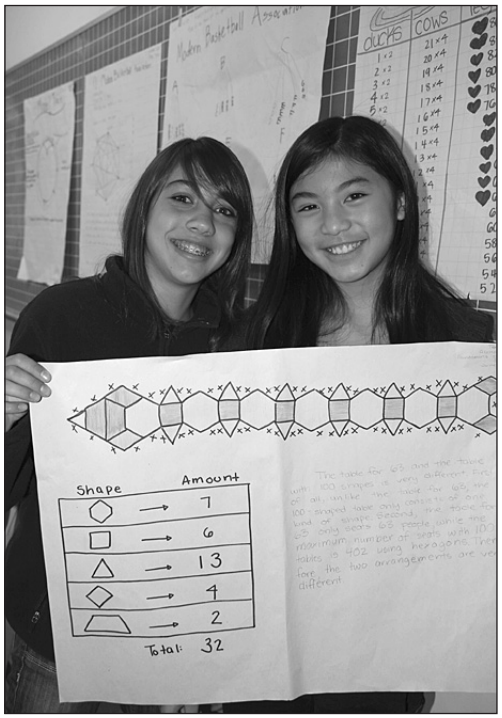
3040.1	TF	8:30–12:00	Claudia Benedetti
3040.2	TF	1:00–4:30	Mary Sue Kennedy

Recommended credit: 5 units
Homework per class meeting: 3-4 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 7 OR 8
Note: *This class is for students who have NOT taken Algebra I.*

This course is designed to strengthen and develop skills that are essential for students who will be entering an Algebra I course in the fall. We will study strategies for problem solving, patterns and functions, probability, graphing, equations, properties, exponents and geometric thinking. During the six-week course, we will identify individual student curricular needs then design instruction to challenge all students in the class. Students will approach problem solving using a scientific approach defining the problem, making predictions and hypotheses, testing assertions, using algebra to generalize from specifics, making conclusions and supporting them with logical argument and proof.

Note: This class will have a diagnostic test on Saturday, May 22, 2010, but it will not affect course placement.



Foundations of Algebra

Algebra I

3041	MWF	8:30–12:00	S. Estrada & R. Gonzalez

Recommended credit: 10 units
Homework per class meeting: 6-10 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisites: *Completion of Pre-Algebra in addition to the prerequisites listed on p.* ***17***.

This six-week course covers a full year of Algebra I and is aligned with state and NCTM standards for high school algebra classes. Topics to be covered include data organization; patterns and graphs; writing and solving equations; numeric, geometric, and algebraic ratios; slopes and rates of change; linear functions; factoring quadratics; graphing and systems of linear and nonlinear equations, area and sub problems; radicals and inequalities; exponents and quadratics; rational and irrational numbers; and quadratic functions. Applicants should be strong math students who are self-motivated, willing to work very hard for six weeks, and eager for a significant challenge. Students should be prepared to spend at least eight hours outside of class preparing for each class session. The atmosphere of the class is cooperative; the emphasis is on working together.

Geometry (AM or PM)

3043.1	MWF	8:30–12:00	Nakia Baird
3043.2	MWF	1:00–4:30	Nakia Baird
3043.3	MWF	8:30–12:00	Yoonok (Kathy) Lee

Recommended credit: 10 units
Homework per class meeting: 8-10 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisites: *Completion of Algebra I in addition to the prerequisites listed on p.* ***17***.

This fast-paced course completes all topics of first-year Geometry: points, lines, planes, and angles; deductive reasoning; parallel lines and planes; congruent triangles; quadrilaterals; inequalities in geometry; similar polygons; right triangles; circles; constructions and loci; areas of plane figures; areas and volumes of solids; coordinate geometry; transformations; and an introduction to trigonometry. Because the course covers a full year of Geometry, students will spend at least eight hours outside of class preparing for each class session.

Introduction to Geometric Thinking (AM or PM)

3042.1	TF	8:30–12:00	Dave Reiter
3042.2	TF	1:00–4:30	Dave Reiter

Recommended credit: 5 units
Homework per class meeting: 5-7 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

Prerequisite: *Completion of Algebra I.*

This course is designed for students who want to preview selected topics from high school Geometry. The approach is informal, with hands-on activities that will allow students to explore geometric concepts. Through a variety of techniques such as cooperative learning, the discovery method, and model making, students will learn about the major concepts of Euclidean geometry. Students will work on a number of special projects such as tessellations. This course will give students the confidence and background to perform well in the regular or honors Geometry courses at their schools in the fall.

Math teachers at last summer's Student Orientation—
from left, Raul Gonzalez, Mary Sue Kennedy, and John Kawamura

Question
Is the time listed for homework accurate, or is that just how long it takes other students who aren't as smart as I am?

Answer
The homework hours listed represent the homework time reported by the previous year's classes. It is safe to expect that the amount of homework you do will be somewhere within the range given.

Algebra II/Trigonometry (AM or PM)

3045.1	MWF	8:30–12:00	Toby Jaw
3045.2	MWF	1:00–4:30	Toby Jaw
3045.3	MWF	8:30–12:00	Ian Thacker

Recommended credit: 10 units
Homework per class meeting: 8-10 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisites: *Completion of Algebra I and Geometry in addition to the prerequisites listed on p.* ***17***.

This extremely fast-paced course completes all topics of second-year Algebra with trigonometry: linear functions and relations; systems of linear equations and inequalities; quadratic functions and complex numbers; exponential and logarithmic functions; rational and irrational algebraic functions; quadratic relations and systems; higher degree functions and polynomials; sequences and series; graphing techniques; circular and trigonometric functions; and use of mathematical models for applications and problem solving. Because the course covers a full year of material, students will spend a great deal of time outside class preparing for each class session.

Claudia Benedetti's Foundations of Algebra

Precalculus (AM or PM)

3046.1	MWF	8:30–12:00	Katharine Morton
3046.2	MWF	1:00–4:30	Philippe Henri

Recommended credit: 10 units
Homework per class meeting: 6-10 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisites: *Completion of Geometry and Algebra II/ Trigonometry in addition to the prerequisites listed on p.* ***17***.

This fast-paced course will complete all topics necessary for success in Calculus: coordinate geometry including rational functions and their graphs; conic sections including rotation of axes; elementary functions including inverses and transformation theory; exponential and logarithmic functions; all topics from the trigonometry framework including polar coordinates, polar graphing, polar form of complex numbers, DeMoivre's Theorem, Trigonometric identities, triangle trigonometry for right triangles and non-right triangles, graphs of the trigonometric functions and their inverses; sequences, series, sigma notation; proof by mathematical induction; introduction to limits; and introduction to differentiation.

Philippe Henri's AP Calculus

Question

I'm applying for a math class that has a placement test. What are my chances of passing the exam?

Answer

Students who meet the prerequisites listed above and who have strong applications usually earn a passing score. If your score is too low or too high, we will help you find a more suitable course placement.

See ***Introduction to Business & Finance*** *on p. 15 if you are interested in math and have completed Algebra II/Trig.*

Shasta Ihorn's AP Statistics

Advanced Placement Calculus AB

3047	MWF	8:30–12:00	Philippe Henri

Recommended credit: 10 units
Homework per class meeting: 6-10 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisites: *Completion of Precalculus in addition to the prerequisites listed on p.* ***17***.

This extremely fast-paced, one-year AP Calculus course will cover all of the material for the Calculus AB AP examination in May 2011: introduction to differential and integral calculus of functions of one variable, with applications and an introduction to transcendental functions; techniques of integration; applications of integration; infinite sequences and series; first-order ordinary differential equations; second-order ordinary differential equations; oscillation and damping; series solutions of ordinary differential equations. For an additional fee, students in this class will have the option of taking Saturday review classes in the spring of 2011 to prepare for the AP examination in May of 2011.

Question

I didn't learn as much as I would have liked in my math class this year. Can I repeat a math class at ATDP that I have already taken at my regular school?

Answer

No, we do not allow ATDP students to repeat math classes. Instead, we suggest that you consider taking a math elective for which you have completed the prerequisites or a course in another field of study.

Advanced Placement Statistics

3049	MWF	8:30–12:00	Staff

Recommended credit: 10 units
Homework per class meeting: 5-7 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisites: *Completion of Algebra II with a final grade of A and a very strong math teacher recommendation. Completion of at least freshman year of high school or permission of the Director. Completion of at least sophomore year is recommended.*

Statistics is perhaps the most widely applicable branch of mathematics, and coursework will be based almost entirely upon real-world data. This course provides an opportunity to prepare for the May 2011 AP examination in Statistics. The course is guided by the AP syllabus and covers the following areas: organizing data, normal distributions, linear and nonlinear regression, relations in categorical data, designing samples and experiments, simulating experiments, probability, random variables, binomial and geometric distributions, sample distributions, statistical inference, confidence intervals, tests for significance, and chi-square tests. The course expectation is that all students will become fluent with the language and formulas of statistics and with some of the technology that is available for statistical analysis. Both the textbook and the AP exam are designed for the TI-83 graphing calculator, which has extensive statistical capabilities. For an additional fee, students in this class will have the option of taking Saturday review classes in the spring of 2011 to prepare for the AP examination in May of 2011.

Social Sciences

World Mythology

3050	TF	1:00–4:30	Adriana Valencia

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 8 & UP

This course will consider mythology, broadly framed. It will take as its point of departure the understanding that mythologies structure societies: they provide explanations for natural phenomena, justify social relationships, and affirm collective identities. This course seeks to provide an understanding of the symbolic and metaphoric importance of myth, and will explore relationships between myth and ritual myth, myth and urban space, and myth and the individual. Through critical readings of Egyptian, Sumerian, Norse, Greek, Roman, and Anglo-Saxon myths and epics, as well as myths from Asian and Sub-Saharan African traditions, we will interrogate both the content and structure of myths: how do myths talk about the past? What prescriptions do they have for the organization of society? What universal elements do they possess? How do they affect us today? Progress will be measured through a daily critical response journal, as well as a midterm, a final, two short papers, and one longer paper.

Architecture students at a field trip to the Contemporary Jewish Museum in downtown San Francisco

Introduction to Psychology

3052	TF	1:00–4:30	Staff

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 8 & UP

The word psychology comes from the Greek *psyche*, which means "soul," and -ology, which has come to mean "the study of." This course will focus on the nature, dimensions, methods, and issues of this study of human behavior. As this is an introductory course in psychology, the syllabus is rather broad. Course topics will include learning and memory, language and thought, emotion and motivation, mental abilities, and cognitive processes. Students will be required to lead classroom discussions and will work in research teams to develop and conduct original studies.

Introduction to Sociology

3053	MTh	8:30–12:00	Leo White

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 8 & UP

What if psychology alone still leaves you with questions about how your and others' experiences are connected with the society you live in? Where can you seek such knowledge? In this course, we will examine such relationships by exploring "the sociological imagination," to use a term coined by sociologist C. Wright Mills. For example, we will use Durkheimian theory to investigate why so many people paint themselves in school or other team colors, why they chant in unison, and why they think that it is so much fun. We will learn how these and other acts function to ensure social solidarity, define the in-group, and maintain a collective identity. We will also learn how such phenomena affect persons and groups, to their benefit or detriment. Over the course of the class, students will collect data on the sociological phenomenon of their choice and analyze it using three theoretical lenses to reshape the way they see that phenomenon. Our final project will include an oral presentation of research findings, in the same way that other sociologists present their new knowledge to their colleagues.

Question
What's the difference between the 5-unit Psychology course and AP Psychology?

Answer
Introduction to Psychology is a survey course intended to introduce students to selected topics. In intensity, they can be compared to one-semester courses. AP Psychology covers a full-year curriculum and prepares students for the AP examination in May 2011.

Architectural Design

3055	MWF	8:30–12:00	S. Cowan & A. Valencia

Recommended credit: 10 units
Homework per class meeting: 4-5 hrs.
Tuition: $705 • Materials fees: $125 • Total: **$830**

FOR STUDENTS WHO HAVE COMPLETED GRADE 8 & UP

This course explores the built environment and introduces students to the architectural profession. The class focuses primarily on the formal principles of architectural design by examining examples from lectures and by visiting buildings on and off campus. Students will also develop an understanding of concepts in two-dimensional composition, furniture design, landscape architecture, and urban planning. Students will express their ideas in scaled models and drawings. The course consists of several weeklong projects including: architectural drawings of existing buildings, abstract sculptural design, furniture design, and designing new landscape and architectural structures. While working individually and in teams, students will be able to explore their creative potential and test their ability to work effectively in groups. Knowing how to draw or build models is not a prerequisite for this course.

The Practice of Law (AM or PM)

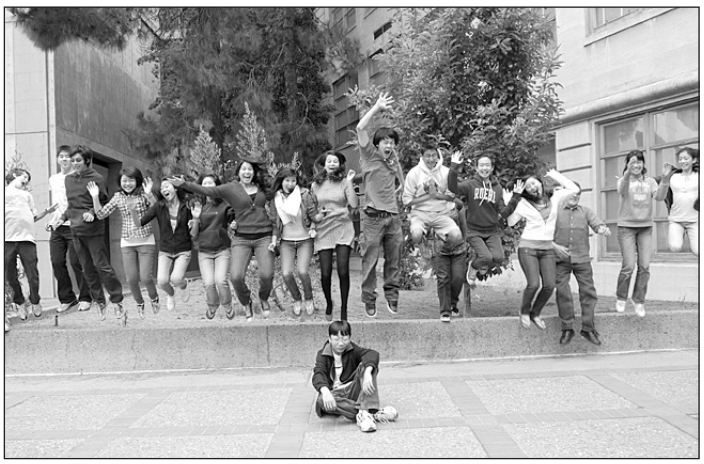
3058.1	TF	8:30–12:00	Gary Kitajo
3058.2	TF	1:00–4:30	Gary Kitajo

Recommended credit: 5 units
Homework per class meeting: 3-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 8 & UP

This course will provide an overview of social institutions and functions addressed in the practice of law. Students will participate in each of the lawyer's roles: investigation, research, advocacy, negotiation, trial preparation, and dispute resolution. In the process, students will examine the nature and history of law, interrogate parties, argue hypothetical cases, arbitrate conflicts, and draft legal documents. This class will require active participation in lively classroom activities and projects, which will include simulated trials, oral argument, and case briefing. Students will be encouraged to participate freely in robust classroom discussions and debates, with a premium placed on the open exchange of ideas and opinions. The course will culminate in a mock trial, conducted in a local courtroom before a judge. College-level texts will be used.

Susanne Cowana & Adriana Valencia's Architectural Design



Gary Kitajo's Practice of Law

Question

How can I tell if a particular course is appropriate for someone at my skill or grade level?

Answer

First see if the course description lists any prerequisites. When possible, within a subject area the courses are arranged from classes that have the fewest prerequisites or that are meant for younger students to classes most suitable for students with more advanced skills or who are at a higher grade level.

Introduction to Business & Finance

3059	MTh	8:30–12:00	J. Lyons & J. Walukiewicz

Recommended credit: 5 units
Homework per class meeting: 4-6 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

Prerequisite: *Completion of Algebra II/Trig. or higher course in mathematics.*

This course is designed as a concise introduction to business for high school students. Students will explore fundamental principles of finance and economics, including the basics of valuation, risk and return, and demand and supply. The course will emphasize real-world application through applied problems and projects, guest speakers, and a visit to UC Berkeley's Haas School of Business. We will study how firms make decisions, the role of banks and markets, and timely topics such as the underlying causes of the current financial crisis. Throughout, students will increase their financial literacy and gain tools for person financial planning, including an understanding of how interest accumulates and understanding residential mortgage terms and risks. Students will find that they can make exciting connections between these topics and the mathematical concepts they have learned in their math classes.

Contemporary Explorations of the Mind

3060	MTh	1:00-4:30	Alex James

Recommended credit: 5 units
Homework per class meeting: 4-5 hrs.
Tuition: $475 • Materials fees: $55 • Total: **$530**

FOR STUDENTS WHO HAVE COMPLETED GRADE 8 & UP

Thought, experience and imagination are possible only because we have minds. But what is the mind and how is it related to the physical world? Are our minds identical to our brains or are they distinct? What is consciousness and what can science tell us about it? Could a computer have conscious experience? To what extent can animals have thoughts or use language? In this course, we will explore the mysterious realm of the mind, pursuing answers to these and other questions. Part of the course will focus on the ways neuroscientists have presented their research and the philosophical assumptions contained therein. No background in philosophy is required.

Stevie Jeung's Wednesday Exploration on technology and the internet

Advanced Placement Psychology

3061	MWF	8:30–12:00	David Chun

Recommended credit: 10 units
Homework per class meeting: 8-10 hrs.
Tuition: $705 • Materials fees: $55 • Total: **$760**

Prerequisite: *Completion of at least freshman year of high school or permission of the Director. Completion of at least sophomore year is recommended.*

This course provides an opportunity for students to prepare for the May 2011 AP examination in Psychology. The course is guided by the AP Psychology syllabus and covers the following areas: History of Psychology as a Science, Research Methods, Statistics, Biological Bases of Behavior, Sensation and Perception, States of Consciousness, Learning, Cognition, Motivation and Emotion, Developmental Psychology, Personality, Testing and Individual Differences, Abnormal Psychology, Treatment of Psychological Disorders, and Social Psychology. The course uses a college textbook and will require a lot of reading, active participation in classroom activities (discussions and labs), completion of an independent research project, and completion of examination questions similar to those given in the actual AP examination. For an additional fee, students in this class will have the option of taking Saturday review classes in the spring of 2011 to prepare for the AP examination in May of 2011.

Last summer's Psychology and AP Psychology students got a special tour of the new fMRI machine near Tolman Hall, with Prof. Ben Inglis demonstrating the capabilities of the machine.

Natural Sciences

Introduction to Biotechnology (AM or PM)

3071.1	MTh	8:30–12:00	Jena Mori Lee & Jay Chugh
3071.2	MTh	1:00–4:30	Jena Mori Lee & Jay Chugh

Recommended credit: 5 units
Homework per class meeting: 4-6 hrs.
Tuition: $475 • Materials fees: $175 • Total: **$650**

FOR STUDENTS WHO HAVE COMPLETED GRADE 7 OR 8

In this course, students will be introduced to the principles and techniques of molecular biology that are used to study and manipulate DNA in basic research, medicine, forensics, and agriculture. We will begin by studying the structure and chemistry of DNA, and we will then learn about many of the laboratory techniques used in recombinant DNA technology, including restriction digests, PCR, bacterial transformation, and immunological assays. In each class meeting, students will conduct hands-on experiments and learn about the real-world uses and implications of biotechnology. Additionally, students will complete weekly current events reports and examine the ethical considerations raised by advances in the field.

Marine Biology

3073.1	TF	8:30–12:00	Nathan Kirk
3073.2	TF	1:00–4:30	Nathan Kirk

Recommended credit: 5 units
Homework per class meeting: 4-6 hrs.
Tuition: $475 • Materials fees: $175 • Total: **$650**

FOR STUDENTS WHO HAVE COMPLETED GRADE 8 OR 9

This course is an introduction to the major marine ecosystems. We will concentrate on laboratory investigations into the identification, behavior, and ecology of marine organisms, and we will use live local specimens when possible. The laboratory work will also consist of intensive individual and small-group activities to fully understand the complex anatomy and physiology of a variety of marine species. We will go on a field trip to Moss Beach tide pools near Pacifica, in the San Francisco peninsula, to study tide pool and intertidal ecology.

Question

Will any ATDP science courses take the place of a high school science course?

Answer

Most ATDP natural science courses are 5-unit, college-preparatory elective courses intended to prepare you for high school science courses, not to replace them. The exception is AP Biology, a 10-unit class which takes the place of the high school course of the same name and prepares students for the AP exam; however, AP Biology does not take the place of regular or honors high school biology.

A sea-star dissection lab in Nathan Kirk's Marine Biology

Introduction to Chemistry (AM or PM)

3075.1	MTh	8:30–12:00	Paul Daubenmire
3075.2	MTh	1:00–4:30	Paul Daubenmire

Recommended credit: 5 units
Homework per class meeting: 4-6 hrs.
Tuition: $475 • Materials fees: $175 • Total: **$650**

Prerequisite: *Completion of Algebra I.*

FOR STUDENTS WHO HAVE COMPLETED 8th GRADE & UP
Throughout this course, the laboratory activities and discussions will focus on how chemists describe matter and its changes within the context of alchemy and early chemists. Understanding the periodic table, the particulate nature of matter, ionic compounds, and solution chemistry will provide the basis for students to think about the world in terms of particles and their interactions. This course provides a grounding in scientific principles which will prepare students to continue on to a high school chemistry class.

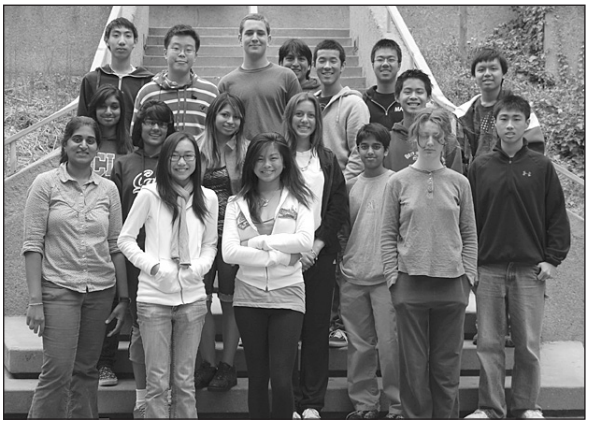
Advanced Chemistry

3077	MTh	8:30–12:00	Sandhya Rao

Recommended credit: 5 units
Homework per class meeting: 4-6 hrs.
Tuition: $475 • Materials fees: $175 • Total: **$650**

Prerequisite: *Completion of Algebra I and high school Chemistry.*

FOR STUDENTS WHO HAVE COMPLETED 9th GRADE & UP
This course provides an opportunity for students who have already taken high school chemistry to deepen their knowledge. Laboratory activities and discussions focus on how chemists can control the types of reactions that occur—everything from color changes to explosions. Topics include bonding, chemical reactions, moles, elementary thermodynamics, and quantum chemistry. This class is ideal for students who want either to review their knowledge or to learn more chemistry in preparation for an AP Chemistry course.



Sandhya Rao's Advanced Chemistry

Chemistry students prepping for lab work.

Question
Will I be placed in my first choice of class?

Answer
We always start by attempting to place students in their first choice. Make sure that your course choices are suitable to your grade level and experience and that you have met the prerequisites. Completed applications are evaluated in the order that they are received.

First preference is given to returning students; however, to increase their chances of being placed in their first choices, both new and returning students should submit their completed applications well before the deadline. If two similarly qualified students apply, the application completed first will be given first preference.

Advanced Placement Biology

3079	MWF	8:30–4:30	G. Martinez & E. Thiel

Recommended credit: 10 units
Homework per class meeting: 8-10 hrs.
Tuition: $1,045 • Materials fees: $175 • Total: **$1,220**

Prerequisites: *Completion of Algebra I and high-school Biology and a background in Chemistry. Completion of at least freshman year of high school or permission of the Director is required. Completion of at least sophomore year is recommended.*

This course provides an opportunity for students to accelerate their study of biology with an introductory college-level biology course, and to prepare for the May 2011 AP examination in Biology. The course uses a college-level textbook and follows the College Board course outline. Laboratory work is extensive and will be included in each class session. Topics include Molecular and Cellular Biology (biochemistry, cells, energy transformations), Genetics and Evolution (genetics, molecular genetics, evolution), Population Biology (plant biology and animal biology, including that of humans), and Ecology. For an additional fee, students will be invited to attend additional review sessions in the spring of 2011 in preparation for the May 2011 examination.

Introduction to Neuroscience

3081	TF	8:30-12:00	Robin Ball

Recommended credit: 5 units
Homework per class meeting: 5-6 hrs.
Tuition: $475 • Materials fees: $175 • Total: **$650**

Prerequisite: *Completion of at least one of the following courses: A high school or ATDP Psychology class, an AP or honors Biology class, or AP or honors Chemistry class.*

This course provides an introduction to the exciting field of neuroscience. Neuroscience covers a vast array of subjects, from how nerve cells are activated and signal to how we perceive and sense the world around us, and how we are able to think and learn. Throughout the course, we will address the fundamental question in the field: How can a collection of relatively simple brain cells lead to complex brain functions such as consciousness and emotions? We will learn the strategies that the brain uses to organize and integrate all the information it receives—and what can go wrong when this process is disrupted by disease. We will explore the nervous system through readings including primary research articles in the field, as well as through classroom activities and discussions. There will also be an opportunity for students to delve more deeply into a topic of interest through independent research.

Greg Martinez and Eric Thiel's AP Biology