UC Berkeley
Academic Talent
Development Program

2020 Secondary Division Paper Application Packet

This packet contains instructions and forms for submitting a paper application. Complete information about attending the program—including program policies—can be found in our printed catalog or online at atdp.berkeley.edu.

> **Did you know?** You can complete an ATDP application entirely online at atdp.berkeley.edu. Use these paper forms and instructions if you are not able to submit your application online. Online services will not be available to applicants who submit the paper form.

The following pages provide detailed instructions for completing the three steps required to complete your application:

① Choose a course

② Prepare required materials

③ Submit your application

If you require assistance at any point in the application process, please reach out to us over the phone, via email, or in person. See our contact information below. We are happy to help families and applicants!

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¡Se habla español!

① CHOOSE A COURSE

Browse the course offerings listed here, or in our paper catalog, or at **atdp.berkeley.edu/sd/catalog**. Choose one course that interests you and up to three alternates. Make note of the listed course number and any grade requirements or prerequisites. ATDP has a strict attendance policy (see p. 21 of the catalog or atdp.berkeley.edu/policies); keep this in mind as you review the course schedule.

All courses run during the six weeks of June 22–July 31, 2020 unless otherwise noted.

Course availability may change throughout the application season as courses fill. Check **atdp.berkeley.edu/sd/catalog** for frequent updates.

KEY

Course Title			
Course Number	Weekly Schedule	Meeting Time	Instructor

🕐 **Course load** (Half year or full year equivalent)

☻ **Total tuition** (with reduced tuition shown based on a 100% financial aid award)

📄 **Amount of self-study and homework required per class meeting** Estimated time commitment per week

☝ **Grade requirement** Note also any listed academic prerequisites

🏛 **Meets A–G UC/CSU college entrance requirement** (Not all ATDP courses are currently A–G approved; check our website for updates as more courses are processed for approval.)

WRITING & LITERATURE

The Writing Process

SD4000.1	Tu & F	8:30 - 12:00	Tyleen Kelly
SD4000.2	Tu & F	1:00 - 4:30	Tyleen Kelly

🕐 **Half year equiv.**   ☻ **$650** ($80 w/ full aid)

📄 **2–5 hrs/meeting** Up to 18 hrs/week   ☝ **Recommended for current 7th or 8th graders**

This course is meant for students who are mastering their middle school writing skills and transitioning to high school. Students will investigate the purposes for which authors write and will 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 study 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.

⚠ *Exceptionally well-prepared Sixth Graders may apply for this course.*

Reading for Creative Writing

SD4001.1	Tu & Th	8:30 - 12:00	Staff

🕐 **Half year equiv.**   ☻ **$650** ($80 w/ full aid)

📄 **2–5 hrs/meeting** Up to 18 hrs/week   ☝ **For current 7th or 8th graders**

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.

Crafting Effective Essays

SD4003.1	M & Th	8:30 - 12:00	Gaby Wyatt
SD4003.2	M & Th	1:00 - 4:30	Gaby Wyatt

🕐 **Half year equiv.**   ☻ **$650** ($80 w/ full aid)

📄 **3–6 hrs/meeting** Up to 20 hrs/week   ☝ **Recommended for current 8th or 9th graders**

This class will provide a vehicle for students to sharpen their high school level reading and writing skills. Students will mold facts, speculations, beliefs, and opinions into cogent, powerful statements. Through readings, class discussions, and group work, students learn how to develop arguments to answer complex questions and then support their original claims with sufficient and significant evidence. From carefully constructed paragraphs to complete essays, successive assignments will allow students to investigate different approaches to their writing. Emphasis will be on learning to refine thinking and on improving writing through outlining, editing and rewriting.

Analytical Writing

SD4004.2	M & Th	1:00 - 4:30	Elizabeth Scherman

🕐 **Half year equiv.**   ☻ **$650** ($80 w/ full aid)

📄 **3–6 hrs/meeting** Up to 20 hrs/week   ☝ **Recommended for current 9th or 10th graders**

This course, taught at the advanced high school level, will allow students to strengthen their analytical reading and writing skills. Students will practice reading with care and will hold meaningful discussions about the texts they study, which may include visual texts as well as written texts. They will learn to incorporate critical thought and deep textual analysis to produce 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.

Advanced Creative Writing

SD4006.2	Tu & F	1:00 - 4:30	Alex Franklin

🕐 **Half year equiv.**   ☻ **$650** ($80 w/ full aid)

📄 **2–4 hrs/meeting** Up to 16 hrs/week   ☝ **For students currently in Grade 9 and up**

This course will focus on purposeful reading and developing advanced creative writing skills. Students will read short stories, poems, and a novel, discuss the form and purpose of meta-fiction, and revise their writing through class workshops before presenting their finished work. Students will revise and craft

tone so that they can assure a reader, "This narrative came from a living, breathing, thinking being." In their clever meta-narratives, students will also learn to be mindful not to trample on the purpose, message or content of their stories.

Advanced Literary Analysis

SD4008.2	M W F*	1:00 - 4:30	Jeff Neilson

⏱ **Half year equiv.**	💰 **$650** ($80 w/ full aid)
📋 **2–5 hrs/meeting** Up to 25 hrs/week	🎓 **For current 9th or 10th graders**

This is a course for people who enjoy literature and analytic discussion so much that they want to become superb at these activities. Students will be expected to tackle complex works of literature with relish—texts will include fiction and poems, leading up to a Shakespeare play. Students will work not only at their analytic essay writing, but also at leading discussion. We will emphasize close reading and precise writing, and from this students' own writing will emerge more fluidly with greater clarity and impact. The course is both preparation for reading literature in college and for doing well in AP English literature courses.

NOTE: This course has a four-week schedule. It starts July 6 (not June 22) and ends July 31.

FINE ARTS

Introduction to Public Speaking

SD4010.1	Tu & F	8:30 - 12:00	Elizabeth Scherman
SD4010.2	Tu & F	1:00 - 4:30	Laura Shefler

⏱ **Half year equiv.**	💰 **$650** ($80 w/ full aid)
📋 **2–5 hrs/meeting** Up to 18 hrs/week	🎓 **For current 7th or 8th graders**

Students in this course will develop the writing and performance skills needed to become clear, compelling, confident, and persuasive public speakers. We will practice a variety of speaking styles, including impromptu (speaking "off the cuff" with minimum preparation time), dramatic interpretation (of monologues from novels, plays, and films), debate (defending a position on a controversial issue), and oratory (a formal speech that seeks to inform, inspire, or persuade on a topic of your choice). We will also study, view, and analyze the performances of some of the most powerful orators of the past century. If you are seeking to reduce your anxiety

about public speaking, this course provides a friendly, nonthreatening environment in which to increase your confidence. If you already enjoy public speaking, you will have an opportunity to enhance and practice your skills.

⚠ *Exceptionally well-prepared Sixth Graders may apply for this course.*

Students in grade 9 and up see **Public Speaking & Performance**, at right.

Fundamentals of Art

SD4011.1	Tu & Th	8:30 - 12:00	Margaret Niles

⏱ **Half year equiv.**	💰 **$700** ($130 w/ full aid)
📋 **2–4 hrs/meeting** Up to 16 hrs/week	🎓 **Open to all qualified SD students**
🏛 **Visual & Performing Arts (F)**	

This course is a comprehensive, in-depth study of the fundamentals of the arts. Students will develop observational and drawing skills through the use of a variety of media and subject matter. We will be covering a range of techniques adaptable to any student level, using various media including pencil, ink, pastel, watercolors, paint, collage and printmaking. Students will explore their imagination and creativity through the investigation of themselves in self-reflections and use the basic concepts of art as knowledge to develop their ideas. Students will create multiple projects that reflect the arts as a part of their lives, viewing art in perspectives and problem solving through expression to create art as a lifelong skill. This hands-on studio class involves group and individual instruction to encourage multiple ideas and creativity.

Architectural Design

SD4015.1	M W F	8:30 - 12:00	Tyleen Kelly

⭕ **Full year equiv.**	💰 **$1000** ($150 w/ full aid)
📋 **4–8 hrs/meeting** Up to 33 hrs/week	🎓 **For students currently in Grade 8 and up**
🏛 **College-Preparatory Elective (G)**	

This course will introduce students to the multiple forms of approaching the discipline of architecture. They will learn about the causes and consequences of architectural design through contemporary and historical examples. They will develop critical skills of observation that will allow them to see the built environment as the materialization of design, but also as the representation of societal constructions that respond to specific cultural ideas. By learning to analyze and design the space critically, they will begin to understand the power of architectural design in building human relations, from the scale of the house to that of the city. Students will learn to think about the processes that revolve around the planning, production, and perception of architecture. They will practice drawing and drafting skills and learn the language of architectural representation, in order to address the challenge that implies to design and re-imagine spaces. The overall purpose of this course is to offer students the necessary knowledge to understand architecture as a means to their creativity and their possible future professional development.

Public Speaking & Performance

SD4016.2	M & Th	1:00 - 4:30	Laura Shefler

⏱ **Half year equiv.**	💰 **$650** ($80 w/ full aid)
📋 **2–5 hrs/meeting** Up to 18 hrs/week	🎓 **Recommended for students currently in Grade 9 and up**
Prerequisite: Completion of Public Speaking or 9th grade English	

This course will approach public speaking and presentation as essential element of success in many fields of pursuit, from business to science to the arts. Students will develop and polish their ability to engage, entertain, and communicate with an audience while projecting skill, confidence, and grace. Students will work in groups on all components of a public presentation, including writing, production, and delivery. We will learn strategies from the orators of the past as well as contemporary speakers and performers. The class will culminate in a performance before an audience during the last week of class.

Students in grade 7 or 8, see **Introduction to Public Speaking**, below left.

LANGUAGES

First-Year Japanese

SD4023.1	M W F	8:30 - 12:00	Junko Hosoi

⭕ **Full year equiv.**	💰 **$950** ($100 w/ full aid)
📋 **4–8 hrs/meeting** Up to 33 hrs/week	🎓 **Open to all qualified SD students**

This course is based on a fun, 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 multi-modally: 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.
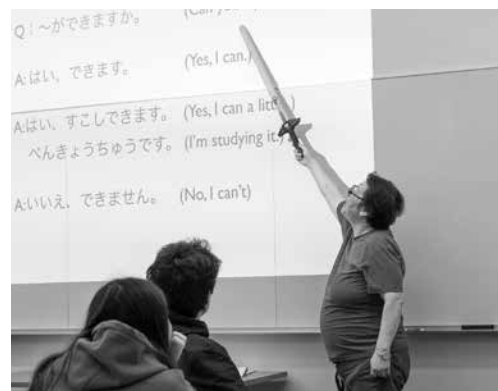
Second-Year Japanese

SD4024.1	M W F	1:00 - 4:30	Maryam Golestan

- ⭘ Full year equiv.
- 💲 $950 ($100 w/ full aid)
- 🗒 4–8 hrs/meeting Up to 33 hrs/week
- 🖐 Open to all qualified SD students

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 high school Japanese.

COMPUTER SCIENCE

Introduction to Programming
Solving Problems with Python

SD4030.1	Tu & Th	8:30 - 12:00	Flint Christensen
SD4030.2	Tu & Th	1:00 - 4:30	Flint Christensen

- ⏱ Half year equiv.
- 💲 $800 ($200 w/ full aid)
- 🗒 2–5 hrs/meeting Up to 18 hrs/week
- 🖐 Open to all qualified SD students

This course is designed for complete beginners with no previous background in computer science. The course is highly visual, dynamic, and interactive, making it engaging for new coders. This course teaches the foundations of computer science and basic programming, with an emphasis on students developing logical thinking and problem solving skills. In this course students will learn material equivalent to a semester high school introductory course in Computer Science and be able to program in Python. Conditionals, looping, functions and data structures are all covered extensively. The course utilizes a blended classroom approach. The content is fully web-based, with students writing and running code in the browser. Teachers utilize tools and resources to leverage time in the classroom and give focused one-on-one attention to students.

Elements of Web Design
The Internet Classroom

SD4033.1	M W F	8:30 - 12:00	Samuel Pierce

- ⏱ Half year equiv.
- 💲 $1100 ($200 w/ full aid)
- 🗒 2–5 hrs/meeting Up to 25 hrs/week
- 🖐 Open to all qualified SD students
- 🏛 College-Preparatory Elective (G)

In this course, students will learn to combine computer code with graphic design to create their own websites. No programming experience is necessary; however, even students with advanced programming knowledge will be challenged to master the intricacies of using code for markup and design. Students will become familiar with computer networks and file systems as they build standards-based web pages from the ground up using HTML and CSS. Students should be prepared to flex their creative muscles: coding topics will be balanced with a discussion of good visual design and layout, including digital graphics production and manipulation. They will also explore non-technical topics such as anonymity, journalism (fake and not fake), intellectual property & copyright, social media, and yes: memes. This course provides the necessary foundation for students who want to continue on to contemporary web/mobile app development.

⚠ *Exceptionally well-prepared Sixth Graders may apply for this course.*

Computer Science Principles (AP-aligned)

SD4034.1	M W F	8:30 - 12:00	Flint Christensen

- ⭘ Full year equiv.
- 💲 $1100 ($200 w/ full aid)
- 🗒 3–6 hrs/meeting Up to 30 hrs/week
- 🖐 For students currently in Grade 8 and up; completion of Grade 9 recommended
- 🏛 College-Preparatory Elective (G)

This course is accessible for beginning programmers, but covers all of the content included in the AP Computer Science Principles course and will prepare students to independently take that exam in May 2021. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Students cultivate their understanding of computer science through working with data, collaborating to solve problems, and developing computer programs as they explore concepts like creativity, abstraction, data and information, algorithms, programming, the Internet, and the global impact of computing.

Programming in Java (AP-aligned)

SD4035.1	M W F	8:30 - 12:00	Anh Nguyen
SD4035.2	M W F	1:00 - 4:30	Anh Nguyen

- ⭘ Full year equiv.
- 💲 $1100 ($200 w/ full aid)
- 🗒 3–6 hrs/meeting Up to 30 hrs/week
- 🖐 Recommended for current 7th or 8th graders
- 🏛 College-Preparatory Elective (G)

Prerequisite: Completion of *Algebra I* or *Integrated Math 1* required. Completion of an introductory computer science class recommended.

This course will introduce students to object-oriented programming in Java. Programming experience is helpful but not necessary; students applying for this course must already feel comfortable with file systems, rules of syntax, and mathematical thinking, particularly the ideas of variables and functions. Students learn about object-oriented structures like classes very early in the course, along with basic Java syntax and graphics. Students will also learn how to process data structures like arrays and lists. Students will use searching and sorting algorithms to create powerful programs. Toward the end of the course, students will demonstrate their creative skills through various projects that explore advanced applications, such as graphical user interfaces, as well as their ability to write formal documentation.

Web Development
The Advanced Internet Classroom

SD4037.1	Tu & Th	8:30 - 12:00	Samuel Pierce

- ⏱ Half year equiv.
- 💲 $800 ($200 w/ full aid)
- 🗒 3–6 hrs/meeting Up to 20 hrs/week
- 🖐 Open to all qualified SD students
- 🏛 College-Preparatory Elective (G) - UC Honors

Prerequisite: Completion of *Elements of Web Design* and a programming class (such as *Programming in Java*), or a passing score on a placement test, or permission of the Director.

Want to build your own online store, mobile-friendly chatroom, or even your own Facebook? This course will teach students how to build complex, dynamic websites using PHP and Javascript. This course expands on the concepts in *Elements of Web Design* and computer programming classes. Students will become familiar with several new languages and the basics of database programming & relational data design. As the complexity of coursework increases, students will be introduced to topics in programming ethics, examining how these capabilities impact modern societies and culture, such as through AI and "Big Data." Particular attention will be paid to the reading and comprehension of programming APIs, allowing students to continue to grow as independent computer scientists.

MATHEMATICS

Applying for accelerated math courses

These courses are marked with ▶▶ and have additional requirements. See page 11 of the print catalog or online at atdp.berkeley.edu/math-application/ for these special details.

Foundations of Algebra

SD4040.2	Tu & Th	1:00 - 4:30	Claudia Benedetti

◐ Half year equiv.	💰 $650 ($80 w/ full aid)
📋 2–5 hrs/meeting Up to 18 hrs/week	🎒 For current 7th or 8th graders

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 and 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. Working with the Common Core Curriculum, proofs will entail writing the process of the solution in complete form, thus demonstrating students' mastery of the curriculum. This class is for students who have not taken Algebra I.

⚠️ *Exceptionally well-prepared Sixth Graders may apply for this course.*

▶▶ Algebra I

SD4042.1	M W F	8:30 - 12:00	Justine Won

⭕ Full year equiv.	💰 $1000 ($150 w/ full aid)
📋 6–10 hrs/meeting Up to 36 hrs/week	🎒 Open to all qualified SD students
🏛️ Mathematics (C)	

Prerequisite: Completion of *Pre-Algebra,* grade of A in current math class, Teacher Recommendation Form completed by current math teacher, and passing score on placement test.

This six-week course covers a full year of Algebra I and is aligned with Common Core standards for high school Algebra classes. Topics to be covered include patterns and graphs; writing and solving equations; numeric, geometric, and algebraic ratios; slopes and rates of change; linear functions and graphing; factoring quadratics and other polynomials; systems of linear equations and inequalities; radicals and exponents; rational and irrational numbers; and graphing quadratic functions and finding roots. Students frequently spend eight hours outside of class preparing for each class session. The atmosphere of the class is cooperative; the emphasis is on working together.

Introduction to Geometric Thinking

SD4043.1	Tu & Th	8:30 - 12:00	John Ku

◐ Half year equiv.	💰 $650 ($80 w/ full aid)
📋 2–5 hrs/meeting Up to 18 hrs/week	🎒 Recommended for current 7th or 8th graders

Prerequisite: Completion of *Algebra I* or *Integrated Math 1.*

This course is designed for students who want to tackle 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 dive into the major concepts of Euclidean geometry. Students will work together on a number of conceptual and applied projects such as constructing tessellations. This course will give students the confidence and background to engage at a high level with the coursework in the regular or honors Geometry courses at their schools in the fall.

▶▶ Geometry

SD4044.1	Tu & F	8:30 - 12:00	Philippe Henri
SD4044.2	Tu & F	1:00 - 4:30	Philippe Henri

⭕ Full year equiv.	💰 $1000 ($150 w/ full aid)
📋 6–10 hrs/meeting Up to 40 hrs/week	🎒 Open to all qualified SD students
🏛️ Mathematics (C)	

Prerequisite: Completion of *Algebra I,* grade of A in current math class, Teacher Recommendation Form completed by current math teacher, and passing score on placement test.

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 spend at least eight hours outside of class preparing for each class session.

Introduction to Higher Algebra

SD4045.1	Tu & Th	8:30 - 12:00	Eli Lebow

◐ Half year equiv.	💰 $650 ($80 w/ full aid)
📋 3–6 hrs/meeting Up to 20 hrs/week	🎒 Open to all qualified SD students

Prerequisite: Completion of *Geometry* or *Integrated Math 2.*

Can you solve a geometry problem more easily if there is a square root of -1? Are "proofs" just for Geometry or can it apply to Algebra as well? This course is designed to explore advanced topics in algebra, from the point of view of operations and properties of operations. Students will gain a deeper understanding of algebra, and of problem-solving and how to think about mathematics. Students will prove facts of algebra from axioms, and will write both proofs and more informal reasoning. Topics include the familiar properties of operations (such as the distributive property) and unfamiliar properties of other operations (such as anticommutativity); number systems, $\sqrt{-1}$, and complex numbers; modular arithmetic ("clock arithmetic"); and an introduction to the concepts of group and ring. The atmosphere of the class is cooperative; the emphasis is on understanding why something is true and explaining it, not merely on obtaining answers. This course will introduce some topics covered in college-level Abstract Algebra and will provide additional preparation to students entering Algebra II or Integrated Math 3 and to students interested in engineering.

▶▶ Algebra II/Trigonometry

SD4000.1	Tu & F	8:30 - 12:00	Georgina Mountain

⭕ Full year equiv.	💰 $1000 ($150 w/ full aid)
📋 6–10 hrs/meeting Up to 40 hrs/week	🎒 Open to all qualified SD students
🏛️ Mathematics (C)	

Prerequisite: Completion of *Geometry,* grade of A in current math class, Teacher Recommendation Form completed by current math teacher, and passing score on placement test.

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 spend a great deal of time outside class preparing for each class session.

Applied Mathematics
Understanding Higher Math through Physics & Tinkering

SD4047.1	M W F*	8:30 - 12:00	Kaushik Basu

⏱ **Half year equiv.**		💲 **$650** ($80 w/ full aid)	
📝 **2–5 hrs/meeting** Up to 25 hrs/week		🎒 **Open to all qualified SD students**	

> **Prerequisite:** Completion of *Algebra II* or *Integrated Math 3.*

Have you wondered how much gas you would save if the highway speed limit were dropped to 55 miles per hour? Would you imagine that dropping paper cones may have some bearing to that question? In this course we will explore mathematical descriptions of objects in the real world through hands on projects. Students will build models using cardboard and paper to prove mathematical theorems. We will learn to use approximations effectively, and discover how they lead to the study of calculus in a natural way. We will also learn trigonometry and vectors, as well as a technique called dimensional analysis, which blends physics into algebra. Students will discover how to compute the volumes of unusual geometric objects using Cavalieri's Principle, and use origami folding to shed new light on conic sections. We will test our mathematical results along the way by considering their physical meaning in extreme, and hopefully absurd, situations. In the process, we will get a sense of how numbers are used in science, as well as how physics inspires new mathematical ideas.

***NOTE:** This course has a **four-week** schedule. It starts July 6 (not June 22) and ends July 31.*

⏩ Precalculus

SD4048.2	M W F	1:00 - 4:30	Staff

⏱ **Full year equiv.**		💲 **$1000** ($150 w/ full aid)	
📝 **6–10 hrs/meeting** Up to 36 hrs/week		🎒 **Open to all qualified SD students**	
🏛 **Mathematics (C)**			

> **Prerequisite:** Completion of *Algebra II* or *Integrated Math 3,* grade of A in current math class, Teacher Recommendation Form completed by current math teacher, and passing score on placement test.

This fast-paced course completes all topics necessary for success in Calculus: elementary functions including inverses and transformation theory; polynomial and rational functions and their graphs; exponential and logarithmic functions; trigonometric functions of real numbers, graphs of the trigonometric functions and their inverses; trigonometric functions of angles; analytic trigonometry, identities; polar coordinates and vectors including polar graphing, polar form of complex numbers, DeMoivre's Theorem, roots of unity; analytic geometry, conic sections including rotation of axes, polar equations of conics, parametric equations; sequences, series, sigma notation; proof by mathematical induction; introduction to limits; introduction to differentiation. The course emphasizes conceptual understanding, technical skills, and the use of technology to use mathematics to model the real world.

Statistics (AP-aligned)

SD4049.1	M W F	8:30 - 12:00	Michelle Lackney

⏱ **Full year equiv.**		💲 **$1000** ($150 w/ full aid)	
📝 **6–10 hrs/meeting** Up to 36 hrs/week		🎒 **Open to all qualified SD students**	

> **Prerequisite:** Completion of *Algebra II* or *Integrated Math 3,* grade of A in current math class, and Teacher Recommendation Form completed by current math teacher. No placement test.

Statistics is perhaps the most widely applicable branch of mathematics, and coursework will often use real-world data. The class is equivalent to a one-semester, introductory, non-calculus-based college course in statistics and will prepare students for the AP Statistics examination in May 2021. Guided by the AP Statistics syllabus, this course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There will be four themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students will use technology, investigations, problem solving, and writing as they build conceptual understanding and become fluent with the language and formulas of statistics. In class, students will use graphing calculators that have extensive statistical capabilities, and students will be expected to bring a graphing calculator with statistical capabilities to the AP exam.

SOCIAL SCIENCES

Social Psychology

SD4052.2	Tu & Th	1:00 - 4:30	Cyrell Roberson

⏱ **Half year equiv.**		💲 **$650** ($80 w/ full aid)	
📝 **2–4 hrs/meeting** Up to 16 hrs/week		🎒 **For students currently in Grade 8 and up**	

Social psychology is the scientific study of the way people think about, feel, and behave in social situations. It involves understanding how people influence, and are influenced by, others around them. A primary goal of this course is to introduce you to the perspectives, research methods, and empirical findings of social psychology. We will use a college-level textbook along with supplementary readings to cover topics including: impression formation, conformity, pro-social behavior, interpersonal attraction, persuasion, stereotyping and prejudice. Equally important is the goal of cultivating your skills for analyzing the social situations and events that you encounter in your everyday lives. Finally, throughout the course, emphasis will be placed on developing critical and integrative ways of thinking about theory and research in social psychology.

AI in the Economy
The Business and Financial Impacts of Artificial Intelligence

SD4056.2	Tu & Th	1:00 - 4:30	David Powell

⏱ **Half year equiv.**		💲 **$650** ($80 w/ full aid)	
📝 **3–6 hrs/meeting** Up to 21 hrs/week		🎒 **For students currently in Grade 8 and up**	
🏛 **College-Preparatory Elective (G)**			

Artificial intelligence has rapidly emerged as a key driver of business, economic opportunity, and competition. As a natural extension and evolution of key computing technologies, AI today reaches deeply into our networked ecosystem, including our search engines and social media. Students will investigate how these technologies have been responsible for reshaping business, social norms, and economic prosperity. This course will provide a condensed "deep dive" into AI, culminating in a capstone portfolio project that will provide students with the opportunity to demonstrate their understanding, knowledge, creativity and insights into the current and future impacts of AI. Students will investigate how these technologies have been responsible for reshaping business, social norms, and economic prosperity. This course will provide a condensed "deep dive" into AI, culminating in a capstone portfolio project that will provide students with the opportunity to demonstrate their understanding, knowledge, creativity and insights into the current and future impacts of AI.

The Practice of Law
An Overview of Law School

SD4058.2	M & Th	1:00 - 4:30	Gary Kitajo

⏱ **Half year equiv.**		💲 **$650** ($80 w/ full aid)	
📝 **2–5 hrs/meeting** Up to 18 hrs/week		🎒 **For students currently in Grade 8 and up**	
🏛 **College-Preparatory Elective (G)**			

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, trial preparation, and dispute resolution. In the process, students will examine the nature and history of law, interrogate parties, argue hypothetical cases, and draft legal pleadings and documents. This class requires active participation in lively classroom activities and projects, which include simulated trials, oral argument, and case briefing. Students are 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 courtroom setting before a presiding judge.

Business & Finance

| SD4059.1 | Tu & Th | 8:30 - 12:00 | Jennifer Lyons |

- ◐ **Half year equiv.**
- ◉ **$650** ($80 w/ full aid)
- ▤ **2–5 hrs/meeting** Up to 18 hrs/week
- ⬡ **Open to all qualified SD students**
- 🏛 **College-Preparatory Elective (G) - UC Honors**

> **Prerequisite:** Completion of *Algebra II* or *Integrated Math 3*.

This course is a concentrated, practical and exciting introduction to quantitative topics in business for high school students. Students will explore fundamental principles of finance, statistics and economics, including the basics of valuation, risk and return, data analysis and demand and supply. The course will emphasize real-world application through applied problems and projects. We will study how firms make capital budgeting decisions, the role of banks and markets, and we will explore timely macroeconomic topics such as currency fluctuation, inflation, interest rate determination, and financial crises. We will see how statistics are used to convey information as well as to support arguments and make inferences, and we will learn to bring a healthy skepticism to the statistics and the data we consume. Throughout, students will increase their financial literacy and gain tools for personal financial planning for college and beyond, including how interest accumulates, the pitfalls of credit, and understanding residential mortgage terms and risks. The course is intended to connect these topics and the mathematical concepts students learn in school, making their math classes more interesting and relevant.

Philosophy & Critical Thinking

| SD4060.1 | Tu & F | 1:00 - 4:30 | Alex James |

- ◐ **Half year equiv.**
- ◉ **$650** ($80 w/ full aid)
- ▤ **2–5 hrs/meeting** Up to 18 hrs/week
- ⬡ **For students currently in Grade 8 and up**
- 🏛 **College-Preparatory Elective (G)**

This course is an introduction to the interrelated fields of philosophy and critical thinking. Philosophy is the exploration of the fundamental questions of existence, life, and reality, aiming to reconcile our understanding of things from various domains. Philosophers seek to address philosophical problems, such as the problem of free will or the problem of consciousness, and construct philosophical systems that enable us meaningfully to organize our knowledge. Critical thinking is the activity of taking a critical look at our beliefs, and at the method by which we form and justify these beliefs and convey them—in writing, speech and debate—within a community of knowers and inquirers. Critical thinking offers guidance in logic and reasoning, and helps us gain awareness of the ways in which we can be led astray in the search for truth. The study of philosophy and critical thinking provides students with the resources and experience to become deeper and clearer thinkers and more capable writers, learners and researchers.

Psychology (AP-aligned)

| SD4061.1 | Tu & F | 8:30 - 12:00 | Isabella Ahrens |

- ○ **Full year equiv.**
- ◉ **$950** ($100 w/ full aid)
- ▤ **3–6 hrs/meeting** Up to 30 hrs/week
- ⬡ **For students currently in Grade 9 and up; completion of Grade 10 recommended**
- 🏛 **College-Preparatory Elective (G)**

This course provides a rigorous introduction to the fundamental concepts in psychology and prepares students for the May 2021 AP examination in psychology. Topics include the neurological processes that lead to thought and behavior, the processes that allow people to sense and perceive information from the environment, sleep and dreams, behavior, sources of the motivation to act, emotional experiences, language, memory, human development across the lifespan, personality, psychological disorders, friendship, altruism, bias and discrimination, research methods, and statistics. The course uses a college textbook and requires that students do a significant amount of independent reading. Students come to class prepared to engage in interactive work, such as the analysis of case studies and current or historical events. Students also design and carry out an independent research project. In order to fully prepare students for the AP examination, students get ample practice answering AP-style questions.

NATURAL SCIENCES

Introduction to Biotechnology

| SD4071.1 | Tu & Th | 8:30 - 12:00 | Staff |
| SD4071.2 | Tu & Th | 1:00 - 4:30 | Staff |

- ◐ **Half year equiv.**
- ◉ **$800** ($220 w/ full aid)
- ▤ **3–6 hrs/meeting** Up to 20 hrs/week
- ⬡ **For current 7th or 8th graders**

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.

Introduction to Engineering

| SD4072.2 | Tu & Th | 1:00 - 4:30 | Sean Ward |

- ◐ **Half year equiv.**
- ◉ **$800** ($220 w/ full aid)
- ▤ **2–5 hrs/meeting** Up to 18 hrs/week
- ⬡ **For current 7th or 8th graders**

The course is designed to give students an overview of diverse engineering disciplines—mechanical, electrical, and civil—in order to find out what engineers actually do. Students will see the difference between "science" as the discovery of new knowledge and "engineering" as the uses of that knowledge in new environments. Students will practice their own engineering skills, finding out how things work in the real world through various projects and hands-on activities. The course will emphasize creative and analytical problem solving, hands-on building activities, design, and teamwork.

Exploring Chemistry

| SD4073.2 | M W F* | 1:00 - 4:30 | Fatima Mizbani |

- ◐ **Half year equiv.**
- ◉ **$650** ($80 w/ full aid)
- ▤ **2–5 hrs/meeting** Up to 18 hrs/week
- ⬡ **Recommended for current 7th or 8th graders**

In this hands-on lab science course, we will observe chemical and physical changes, examine the properties of substances, and hypothesize and investigate experimental outcomes. Students will develop their observation and analytical skills by conducting experiments and recording their results. We will learn about some of the fundamental concepts in chemistry, such as atomic structure, the periodic table, reaction types and the natural tendencies and forces that make chemicals react with one another. Students will leave this course with lab chemistry skills and a greater understanding of how chemistry is at work in the world around them.

***NOTE:** This course has a **four-week** schedule. It starts July 6 (not June 22) and ends July 31.*

Introductory Chemistry
Principles, Calculations, and Labs

SD4074.1	Tu & Th	8:30 - 12:00	Katy Kuei
SD4074.2	Tu & Th	1:00 - 4:30	Katy Kuei

⏱ **Half year equiv.**	💲 **$800** ($220 w/ full aid)
📋 **3–6 hrs/meeting** Up to 25 hrs/week	🎓 **For students currently in Grade 8 and up**
🏛 **Science (D)**	

Prerequisite: Completion of *Algebra I* or *Integrated Math 1*.

Throughout this course, daily anchor laboratory activities and discussions will focus on how chemists describe matter and its changes within the context of chemistry fundamentals. Students will develop their writing skills, reading comprehension, and critical thinking through lab write-ups, daily news readings, and innovative group projects. Lab work will require the application of algebra to solve problems; a strong math background is highly recommended. This course provides a grounding in scientific principles equivalent to first-semester high school chemistry curriculum.

Advanced Biotechnology

SD4075.1	M W F*	8:30 - 12:00	Staff
SD4075.2	M W F*	1:00 - 4:30	Staff

⏱ **Half year equiv.**	💲 **$800** ($220 w/ full aid)
📋 **3–7 hrs/meeting** Up to 32 hrs/week	🎓 **For students currently in Grade 9 and up**
🏛 **Science (D)**	

Prerequisite: Completion of *Algebra I* or *Integrated Math 1*.

In this course, students will conduct advanced biotechnology experiments, including DNA extraction, PCR, bacterial transformation, and protein gel electrophoresis. Students will also research and design their own inquiry-driven experiments, which they can then continue during the school year in preparation for the science fair. Additionally, we will explore ethical and political implications of biotechnology; topics include genetically modified organisms, cloning, reproductive biotechnology, and stem cell research.

*****NOTE:** This course has a **four-week** schedule. It starts June 22 and ends **July 17** (not July 31).*

Advanced Robotic Engineering

SD4077.1	M W F	8:30 - 12:00	Dirk Wright

⏱ **Half year equiv.**	💲 **$650** ($80 w/ full aid)
📋 **2–4 hrs/meeting** Up to 24 hrs/week	🎓 **Open to all qualified SD students**

Prerequisite: Completion of *Algebra I or Integrated Math 1*.

This hands-on, project-based robotics class is designed to develop students' creativity and technological savvy, and engineering skills through the process of building, programming and operating robots designed to perform specific tasks/challenges. The course begins with simple experiments involving sensors and motors. More-complicated tasks involve building integrated prototype devices that collect data using sensors, process this data using computer-language code (Robot C), and execute tasks via computer-controlled motorized manipulation of simple machines follow. Students are responsible for developing devices in teams and communicating the reasons why they chose a particular method for achieving their team's goals. This will be done in various ways, including maintaining an engineering notebook, designing websites/blogs/posters and making presentations. The course fosters cooperative interaction and emphasizes the interdisciplinary nature of robotics and the social and real-world application of technical enterprise.

Cognitive Neuroscience

SD4081.2	Tu & Th	1:00 - 4:30	Anu Murthy

⏱ **Half year equiv.**	💲 **$650** ($80 w/ full aid)
📋 **4–8 hrs/meeting** Up to 25 hrs/week	🎓 **For students currently in Grade 9 and up**

Prerequisite: Completion of high school biology *or* high school chemistry *or* AP Psychology.

Cognitive neuroscientists aim to answer one of the last remaining fundamental questions of science: how does a three-pound lump of organic material—the brain—support such a wide array of functions, such as perception, thinking and reasoning, emotion, movement, and consciousness? Through active college-style lectures, demonstrations, and hands-on activities, we will explore modern theories and applications of adult and developmental neuroscience, along with the research methodologies used (e.g., single unit recording, fMRI, EEG, psychophysics). We will use diverse college-level reading materials to introduce key topic areas of Cognitive Neuroscience, including cells and systems, sensation and perception, attention, learning and memory, emotion, and development. An end-of-year project will provide the opportunity to learn how to read and evaluate primary research articles directly from the scientists in the field and propose an experiment on a brain topic of special interest.

Introduction to Cancer Research

SD4083.2	M & W	1:00 - 4:30	Anu Murthy

⏱ **Half year equiv.**	💲 **$650** ($80 w/ full aid)
📋 **4–8 hrs/meeting** Up to 25 hrs/week	🎓 **For students currently in Grade 9 and up**

Prerequisite: Completion of high school biology.

Cancer researchers are working harder than ever to understand the mystery behind the unregulated growth of cells, otherwise known as cancer. They strive daily to develop novel ways to detect and stop the growth of these rogue cells in the body. A combination of instructional strategies will be used to teach key topics such as the regulation of cell division, including how cell regulation goes awry in organisms, the metabolic needs of cancer cells, the molecular basis of metastasis or spread of cancer, and how cancer cells escape detection by the immune system. In addition to college-style lectures on these topics, students will be exposed to hands-on activities and modeling to understand the basic cell division processes, higher level analytical case studies, experimental data analysis drawn from primary research articles, and genetic pedigree analysis. An end-of-class project will allow students to explore treatment strategies in use, such as CAR T-cell immunotherapy, and other innovations under development. Students will showcase their understanding of the research methodologies by presenting on a topic of their choice in the field of oncology.

② PREPARE REQUIRED MATERIALS

Please prepare the following items in the order listed below. **Items numbered 1 through 6 are required for a complete application.** We request you include College Board PSAT/SAT scores (item 7) if they are available, and federal tax documents (item 8) if you wish to apply for financial aid.

1. Application Processing Fee

There is a processing fee for each application. The fee is $50 for domestic students. For international students attending school outside the US, the fee is $80. This fee is non-refundable. It covers only the cost of application processing and does not apply toward tuition or facilities fees. Available payment methods include:

- ~~Online payment by credit/debit card~~ *Online applications only*

- Check or money order made payable to "UC Regents." Write "SD" and the student's first and last name on the memo line. Mail or deliver your check payment to ATDP (see "Mailing Instructions" below).

- Those applying for need-based financial aid may apply for a processing fee waiver if the fee poses a financial hardship. See item 8 below.

We cannot accept cash payments or foreign checks/money orders.

2. Letter of Interest

Please write a cover letter to accompany your application, 200 word minimum, explaining your reasons for choosing each of the courses listed on your application. In your (the student's) own words, include information about your interest in the subject(s), what you hope to learn, and related experience, if any. If the course(s) you list have prerequisites, mention how you have met them. In this letter, only discuss courses in which you are actually interested in enrolling. *Remember, this letter should be about YOU and your personal interest & qualifications, not about the relevance of the course(s) in general.*

Your letter may also include any special circumstances, such as transportation or scheduling needs.

If you are applying for two courses, include your petition in your letter. Specify your desired course schedule, and explain your plan for managing the increased time commitment.

3. Teacher Recommendation Form (TRF)

Include a copy of ATDP's **Teacher Recommendation Form** (attached) that has been completed by a current teacher in any academic subject (e.g., mathematics, science, language arts; not elective, advisory, or extracurricular classes).

The teacher's academic subject need not match the subject of the ATDP course(s) to which

you are applying, with one exception. If you are applying for *Algebra I, Geometry, Algebra II/Trigonometry, Precalculus* or *Statistics* (*AP-aligned*) this form must be completed by your current math teacher. (Refer to the math section of our printed catalog to review all prerequisites for our accelerated math courses.)

Remember that your teacher's time is valuable. We recommend sending your teacher this form *at least one week* before you plan to submit it with your application.

Provide your teacher with the paper form and an envelope. Your teacher should complete the form, seal it in the envelope, sign his or her name across the sealed flap, and then return the envelope to you. Include the sealed envelope with your mailed materials.

Do not request a separate letter of recommendation. Do not submit more than one Teacher Recommendation Form with your application materials.

4. Copy of Report Card

Submit a legible copy of your first semester (or most recent) report card for the current ('19–'20) school year.

We request that you send final grades, but if those are not available, you may submit your most recent progress report. Do not delay submitting your application to wait for final grades; if necessary, we may ask for an updated report card after receiving your application. If you need assistance obtaining a copy, ask in your school office.

5. Copy of Test Scores

Submit a legible copy of your most recent California standardized test (CAASPP) or other standardized achievement test scores (e.g., Stanford Achievement Test, Iowa Test of Basic Skills, or other school-administered test that gives national percentile scores). The test must have been taken within the past three years (i.e., 2019, 2018, or 2017) and include scores in the areas of math and reading/ELA.

Do not delay submitting your application to wait for more recent test scores. Include whatever acceptable test scores you have from the last three years.

If you have not taken a standardized achievement test in the past three years, submit a signed note with a school stamp from an administrative staff person at your school indicating so.

6. Academic Product or Essay

Please submit an academic product that meets the criteria of one of the following three options (A, B or C). This work should be one of which you are especially proud and which was completed since September 2019. While the work may have been done for a school assignment, it need not have been. The product you submit need not be in the same subject area as that to which you are applying, but keep in mind that the written component must develop your own original thinking beyond restating facts.

Option A – Existing Essay or Story

Submit an essay or story of at least 500 words that shows your original thought and that is long enough for you to develop your ideas. A social studies or science report is not appropriate unless it relies heavily on your own analysis in addition to reporting factual information.

Option B – Other Existing Product

If you'd like to submit a piece of academic work that deviates from a traditional essay or story format (e.g., art, poetry, computer programs, and science experiments), you must also submit a clear, well-developed explanation of your work. Your written explanation should be at least 500 words and must be long enough to clearly demonstrate your thinking as you developed this product.

Option C – Write an Essay

Write a well-developed essay of no more than 1,500 words on one of the topics below. You may type or write in ink on lined paper. Take time to consider the topic in depth and organize your answer. Be sure to title your essay.

- In a detailed essay, propose a new state holiday. Choose a person or cause that you feel is significant, yet not currently celebrated as much as they should be, and why they deserve to be honored with a day of observance. Include the specific date of the holiday, and explain its meaning. Justify your proposal by including historical context as well as any significance this person or cause represents to you personally.

- Identify someone from a book, movie, show, or video game that you dislike as a character. Explain what you think makes them a bad character: Is the character poorly written? Do you personally dislike specific traits of theirs? Or are they meant to be disliked or hated? (Do you "love to hate" this character?) Are there things you would change about this character to make them better? Make sure you organize your

essay and use direct quotes from the work to support your opinion.

7. Copy of SAT/PSAT Scores (optional)

If available, include a legible copy of your College Board PSAT and/or SAT scores. These scores will be used for research purposes only, and they will not affect placement decisions. Note that the SAT and PSAT are aptitude tests, not achievement tests, so they are not acceptable substitutes for item 5.

8. Need-based Financial Aid (optional)

To apply for financial aid, please submit a copy of both parents' most recent Federal Tax Return AND ALL SCHEDULES (i.e., the complete tax return) for each applicant.

For preliminary consideration and to avoid delay in submitting your application, you may submit your 2017 return if your 2018 return is not yet available. We will ask for your 2018 return at a later date, if required.

Do not send original documents.

If there are special circumstances, submit a letter of explanation and photocopies of any supporting documents (e.g., unemployment forms).

If the $50 processing fee poses a financial hardship, submit a letter of explanation with your supporting documents listed above.

Send your complete application materials no later than Wednesday, March 4. We will not consider financial aid requests for applications that are completed after the standard application deadline.

An invoice for fees due and the amount of financial aid awarded (if any) will be included in the student's acceptance packet, which will be mailed on Thursday, April 9, 2020.

③ SUBMIT YOUR APPLICATION

Carefully complete the enclosed **Application Information Form** with your information and course choices, and ensure that both the student applicant and a parent/guardian sign the Statement of Commitment at the end of the form. Then, gather the items you prepared in step 2 and mail them in a single package to:

University of California, Berkeley
Academic Talent Development Program
Graduate School of Education
70 University Hall #1160
Berkeley, CA 94720-1160

Use the checklist below to ensure you have provided all required items.

Only complete applications will be considered. Do not send the application in parts.

Make sure you have included all required documents in the order below! Applications missing required items will NOT be considered.

❑ Processing fee ($50 check, payable to "UC Regents") on top of other documents
    or
  Signed note of explanation if this poses a financial hardship

❑ Application Information Form with signed Statement of Commitment

❑ Letter of Interest

❑ Envelope containing your Teacher Recommendation Form, with teacher's signature over the sealed flap

❑ Photocopy of most recent report card

❑ Photocopy of achievement test scores *or* signed, stamped note from school administrative staff indicating none are available

❑ Academic product or essay

❑ Photocopy of College Board PSAT and/or SAT scores, if available (optional)

❑ Federal tax return and all schedules, if applying for need-based financial aid (optional)

APPLICATION POSTMARK DEADLINES	
Early	**Wednesday, February 5, 2020**
Standard	**Wednesday, March 4, 2020**
Extended	**Wednesday, May 27, 2020**

APPLY AS EARLY AS POSSIBLE.
Applications are considered for acceptance and course placement in the order they are completed.

APPLICATION INFORMATION FORM

2020 SECONDARY DIVISION (GRADES 7-11)

atdp | SD

Note: Please review the application instructions (enclosed) before completing this form. In order to have a complete application, you must submit all required supporting documents indicated in these instructions.

University of California, Berkeley
Academic Talent Development Program
Graduate School of Education
70 University Hall #1160
Berkeley, CA 94720-1160

https://atdp.berkeley.edu
atdpoffice@berkeley.edu
510-642-8308

I. Basic Information

STUDENT'S LAST NAME	STUDENT'S FIRST NAME	MID. INIT.	GENDER	DATE OF BIRTH	AGE

PARENT/GUARDIAN'S LAST NAME	PARENT/GUARDIAN'S FIRST NAME	DAYTIME PHONE ❑ Cell ❑ Work ( )	PRIMARY HOME/FAMILY PHONE ( )

MAILING ADDRESS (INCLUDE APT. NO.)	CITY	STATE	ZIP CODE

PARENT/GUARDIAN'S EMAIL ADDRESS	STUDENT'S EMAIL ADDRESS (IF AVAILABLE)	ATDP sets limits on how we use student email addresses. See "Contact" below.

GRADE	NAME OF CURRENT SCHOOL	SCHOOL ADDRESS

Have you attended ATDP before?
❑ No, I am a new applicant
❑ No, but I have applied previously*
❑ Yes, I have attended the **Secondary Division***
❑ Yes, I have attended only the **Elementary Division***

*LAST YEAR APPLIED

List any siblings also applying to ATDP
NAME(S) OF SIBLING(S)

Which division(s) are they applying for?
❑ SD (Secondary)   ❑ ED (Elementary)   ❑ Both

If this is your first time at ATDP, how did you learn about us?
PLEASE BE AS SPECIFIC AS POSSIBLE

Examples: BART advertisement, a website (please specify), school counselor, name of family friend, etc.

II. Course Selection

List one or more course choices below, in order of preference. If your primary choice (1) is full or your application is not competitive for it, we will consider your alternates (2-4) in order to schedule you.

Each selection you list represents a committed interest in enrolling in that course; **do not list alternates if you would prefer not to attend rather than take an alternate course.**

	COURSE TITLE	SCHEDULE	COURSE #	DAYS	AM/PM
1 Primary		❑ Any available schedule is acceptable** ❑ Only consider specified schedule →	SD40		
2 Alt.		❑ Any available schedule is acceptable** ❑ Only consider specified schedule →	SD40		
3 Alt.		❑ Any available schedule is acceptable** ❑ Only consider specified schedule →	SD40		
4 Alt.		❑ Any available schedule is acceptable** ❑ Only consider specified schedule →	SD40		

TWO CONCURRENT COURSES – RESTRICTIONS APPLY
❑ I am petitioning to take two courses AND I have explained my request in my Letter of Interest (Application Item 2).

Recommended for returning students only. See page 5 of the SD catalog for information and restrictions on petitioning to take two courses.

**You may have a better chance of placement into your preferred course by selecting this option.

CONTINUE TO NEXT PAGE →

III. Biographical Data

In order to help us develop a greater base of knowledge about our student population, please complete the questions below. **Your responses in this section will not affect your admission status or course placement.**

1 Please indicate your ethnic background by checking ALL that apply.

- ❑ American Indian/Alaskan Native I
- ❑ Latino/Other Hispanic-American S
- ❑ African-American/Black B
- ❑ Pacific Islander U
- ❑ Mexican/Mexican-American/Chicano C

- ❑ Pilipino/Filipino-American P
- ❑ Chinese/Chinese-American A
- ❑ Vietnamese/Thai/Other Asian V
- ❑ East Indian/Pakistani E
- ❑ White/Caucasian (& Middle Eastern) W

- ❑ Japanese/Japanese-American J
- ❑ Korean/Korean-American K
- ❑ Other (please indicate): O _____
- ❑ Decline to state D

2 Which language(s) did you speak first?

❑ English   ❑ English and another language (specify): _____   ❑ Another language (specify): _____

3 In what country were you born?

❑ USA   ❑ In another country (specify): _____, and I came to the USA in the year _____.

4 Please indicate the highest level of education completed by each parent by writing the corresponding letter in each space.

- A. Elementary school
- B. Some high school
- C. High school diploma or equivalent
- D. Business or trade school
- E. Some college

- F. Associate or two-year degree
- G. Bachelor's or four-year degree
- H. Some graduate or professional school
- I. Graduate or professional degree

Completed by mother (or parent/guardian 1) ☐

Completed by father (or parent/guardian 2) ☐

5 OCCUPATION OF MOTHER (OR PARENT/GUARDIAN 1)   OCCUPATION OF FATHER (OR PARENT/GUARDIAN 2)

6 Please indicate the approximate income of your parents last year.

- ❑ Less than $10,000 A
- ❑ $10,000 - $25,000 B

- ❑ $25,000 - $50,000 C
- ❑ $50,000 - $75,000 D

- ❑ $75,000 - $100,000 E
- ❑ $100,000 - $150,000 F

- ❑ $150,000 - $200,000 G
- ❑ Over $200,000 H

IV. Financial Aid

Are you applying for need-based financial aid?   ❑ No   ❑ Yes, and I have included my family's most recent Federal Tax Return and all Schedules (i.e., the complete tax return).

V. Statement of Commitment

All students and parents must agree to and sign the following statement of commitment prior to admission into ATDP.

"I understand that students may be dismissed from the Program without refund because of absences, failure to complete assignments, or behavior involving academic dishonesty or interpersonal interactions that is unfitting to the purpose of the Program."

_____
Signature of Student Applicant
(Student MUST sign)

_____
Signature of Parent or Guardian
(Parent MUST sign)

Berkeley
UNIVERSITY OF CALIFORNIA

Berkeley *Graduate School of* Education

Remember: your application is NOT COMPLETE without all required items!
See list and instructions at atdp.berkeley.edu/apply/sd

APPLICATION POSTMARK DEADLINES

Early	**Wednesday, February 5, 2020**
Standard	**Wednesday, March 4, 2020**
Extended	**Wednesday, May 27, 2020**

APPLY AS EARLY AS POSSIBLE. Applications are considered for acceptance and course placement in the order they are completed.

TEACHER RECOMMENDATION FORM

2020 SECONDARY DIVISION (GRADES 7-11)

atdp | SD

In order to apply, each student must submit one recommendation form completed by a **current teacher in any academic subject** such as mathematics, science, language arts; **not** elective, advisory, or extracurricular classes. The teacher's academic subject need not match the subject of the ATDP course(s) to which the applicant is applying (with the exception of accelerated math courses; these applicants must provide this form to their current math teacher).

Students mailing their application must use the paper version of this form. For students applying online, this form can be submitted at **atdp.berkeley.edu/trf**

Dear Applicant and Family,

Fill out the information at right, then provide the form to your teacher with an envelope. Remember that your teacher's time is valuable. We recommend giving your teacher this form *at least one week* before you plan to submit it with your application.

Do not request a separate letter of recommendation. Do not submit more than one Teacher Recommendation Form with your application materials.

Applicant Information (to be completed by student)

STUDENT'S FULL NAME

STUDENT'S SCHOOL

Please indicate the deadline you're selecting for your application:

☐ Early: Wednesday, February 5   FINANCIAL AID AVAILABLE

☐ Standard: Wednesday, March 4   FINANCIAL AID AVAILABLE

☐ Extended: Wednesday, May 27   FINANCIAL AID **NOT** AVAILABLE

Dear Teacher,

You are receiving this form because your student is applying to the Academic Talent Development Program (ATDP), a UC Berkeley summer program which offers challenging classes for highly motivated students. For your reference, your student has indicated their application postmark deadline above. More information about the program can be found at atdp.berkeley.edu.

Please,

1. complete the information at right and both parts on the second page of this form,

2. seal the form in an envelope* and sign your name across the seal on the envelope's flap, and

3. return the sealed envelope to the student.**

Make any inquiries at atdpoffice@berkeley.edu or 510-642-8308. Your insights and recommendations are carefully considered. Thank you very much for your feedback and assistance.

* The student has been instructed to provide an envelope. Any envelope is acceptable.

** If you or your school has a policy of sending all correspondence directly, you may do so using the address listed below. Please do not delay as we will not consider a student's application until all materials, including this form, have been received.

Teacher Information (to be completed by teacher)

ACADEMIC COURSE IN WHICH YOU TEACH THIS STUDENT | GRADE LEVEL(S) YOU TEACH

YOUR NAME

YOUR SIGNATURE

x

YOUR EMAIL (PLEASE PRINT CLEARLY)

1. If you are this student's current math teacher, please indicate the student's current performance in math.

Current math letter grade

Current math course (check one)

☐ 6th grade math   ☐ Precalculus/Math Analysis

☐ 7th grade math   ☐ Calculus

☐ 8th grade math   ☐ Other (please indicate):

☐ Algebra I

☐ Geometry

☐ Algebra II/Trigonometry

PLEASE CONTINUE TO NEXT PAGE →

Academic Talent Development Program
Graduate School of Education
70 University Hall #1160
Berkeley, CA 94720-1160

https://atdp.berkeley.edu
atdpoffice@berkeley.edu
510-642-8308

Berkeley
UNIVERSITY OF CALIFORNIA

Berkeley Graduate School of Education

2. For this student, how often have you observed the following?

	NA*	Rarely	Sometimes	Frequently	Almost always
takes novel approaches to projects or assignments	☐	☐	☐	☐	☐
connects new ideas with existing knowledge or interests	☐	☐	☐	☐	☐
plays with academic concepts through jokes, art, writing, or other creative means	☐	☐	☐	☐	☐
demonstrates teamwork in class activities	☐	☐	☐	☐	☐
is self-directed and works well independently	☐	☐	☐	☐	☐
acts as a leader or role model in class	☐	☐	☐	☐	☐
is persistent in solving problems or completing tasks	☐	☐	☐	☐	☐
takes on challenging tasks that are complex and/or difficult	☐	☐	☐	☐	☐
asks insightful questions or makes comments that show a grasp of the material	☐	☐	☐	☐	☐
demonstrates advanced comprehension of class material	☐	☐	☐	☐	☐
completes high-quality work that exceeds requirements	☐	☐	☐	☐	☐
grasps new information quickly	☐	☐	☐	☐	☐
	NA*	Rarely	Sometimes	Frequently	Almost always

* check "NA" if there has not been an opportunity to observe this behavior

3. Comments

a. Please include comments, examples, or concerns regarding this student's academic or creative abilities. We particularly value specific observations. Please write concisely in the space below—***ATDP does not review separate letters of recommendation.***

b. Please comment on any supports this student uses at school.