

Caltech 101: An Introduction to Caltech Undergrads

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Objectives: This document contains information and perspectives from representatives of the Caltech undergraduate Academics and Research Committee (ARC) on

- What undergraduate hope to get from their TAs
- A general overview of undergraduate academics
- Resources for TAs

If you have any questions, please feel free to contact us (emails ids are above for @caltech.edu) and/or check out the ARC's website at arc.caltech.edu.

What undergraduates hope to get from their TAs

- Recitations
 - Sessions with material that is supplementary to lectures
 - **Easy to follow examples** applicable to problem sets and **handouts** with concepts and problems are really nice and appreciated!
 - May also review difficult problems from problem sets and quizzes
- Office Hours
 - Very useful when **timed around when problem sets are due** (1-2 days before)
 - Can help students individually, together on the whiteboard, or "q & a" style
 - Please don't give away answers, but checking answers after working through a problem is okay
 - If there are many undergrads in office hours, it's helpful to start a queue
- Quiz/Midterm/Final Reviews
 - Not required, but an awesome way to help decrease the stress of your students and help out :)
 - Usually coordinated by the head TA and led by only a few TAs
- Aside from class
 - Students may have questions about your research or email you with questions about collaboration, homework, etc. during term
 - Especially when SURF (summer research) applications are due (~ February), students may also ask TAs for recommendations letters

Academics for Undergrads

- All freshmen take the same background courses in math, physics, chemistry, and biology (called “core classes”)
- All classes during the first two term are only pass/fail (**grades start 3rd term**)
- Freshman choose their majors/options during 3rd term
- **Sets, quizzes, and tests are generally take-home** and taken on the honor code
- Physics sequence: Mechanics and then 2 terms of Electricity and Magnetism
- Math sequence: Single Variable Calculus / Linear Algebra / Multivariable Calculus, so **most students don't know Multivariable Calculus until 3rd term**
 - Courses branch into practical and analytical tracks for math and physics
- Upperclassmen can serve as Deans tutors in the houses and provide tutoring free for other students

General Information about Undergrads

- Freshman can be less vocal, so you may have to reach out to them more
- Lack of attendance in lectures/recitations can be typical as the term progresses
- Freshmen are generally very heavily influenced by upperclassmen opinions
- During 3rd term, freshman activity in section and office hours spike (grades start!)

Resources

- **Academics and Research Committee (ARC):** that's us! We...
 - Handle various course concerns submitted by students
 - Operate course capture (recording and uploading lectures online)
 - Work with ombuds, students who provide feedback to profs about classes
 - Host the ASCIT Teaching Awards, given 3rd term to 4 profs and 4 TAs nominated and selected by students for their excellent teaching!
- **Board of Control (BoC):** handles Honor Code Violations
 - If you suspect a student of cheating or you think any Honor Code violation has occurred, all you should do is report it to the BoC
 - BoC will take care of the rest (determining whether a violation occurred, consequences) and keep you updated
- **Center for Teaching, Learning, and Outreach (CTLO)**
 - Works closely with the ARC to ensure classes are running smoothly
 - An excellent resource for all sorts of TA-related questions!
 - Contact:
 - Cassandra V. Horii (cvh@caltech.edu)
 - Jennifer Weaver (jweaver@caltech.edu)
- **Hixon Writing Center (HWC)**
 - Usually for humanities/writing-intensive STEM classes
 - Students can get one-on-one advice and review papers with an HWC tutor
- **Caltech Undergraduate Admissions Office:** General info about undergraduate life
<http://www.admissions.caltech.edu/content/explore>