The TA's Guide to EFFECTIVE TEACHING at UC Davis



ABOUT THIS GUIDE

This guide is meant to provide all graduate instructors at UC Davis, regardless of discipline and experience, with a resource they can refer to throughout their teaching career. This is not intended to be a comprehensive overview to successful teaching, but instead, an introduction with important information to help you get started and think about how to make your teaching more effective to help your students learn.

This guide is designed to be accessible to beginning TAs, with practical advice and pertinent information about teaching for the first time at UC Davis, and experienced instructors, with additional information and ideas to help improve one's teaching skills. Moreover, the effective teaching practices and principles presented here are meant to be feasible and applicable for any TA in any discipline working with any level of students, whether you are a STEM TA teaching an introductory lab to a humanities TA leading an upper division discussion section.

This guide is organized around the following objectives:

- To clarify your role and responsibilities as a TA at UC Davis
- To help you feel confident on your first day of teaching
- To offer you concrete strategies to support diverse student populations
- To guide your lesson planning and course structure
- To encourage you to engage your students
- To demonstrate the benefits of on-going, consistent, and meaningful feedback
- To support you in reflecting on and investing in your teaching
- To introduce you to campus resources available for TAs and students

While we recommend that you read the guide in its entirety, we have also designed this guide to make it easy for you to reference sections relevant to your specific teaching concerns. Each chapter offers a short summary of pedagogical concepts and theories, followed by concrete strategies that you can apply in your classroom and a list of frequently asked questions from UC Davis TAs. We have also included practical advice from experienced TAs throughout each chapter and references to additional resources (online, on campus, throughout the guide) that may provide you with further support and/or information.

Finally, if you ever encounter a scenario or a question that cannot be answered by this guide, feel free to contact the Center for Educational Effectiveness. We hope you have a wonderful and successful time teaching at UC Davis!

WELCOME TO UC DAVIS!



We are grateful that you have chosen our community as the place to undertake graduate training in your area of study.

In the coming years, you will build on the knowledge you have from your own undergraduate work to become experts in your field and investigators undertaking original research of great importance. At the same time, you will become part of our teaching and learning community. As teaching assistants, you will be a main point of contact for students as they embrace learning and experimentation in your field. Your impact will be large.

Much of the emphasis in graduate work is on research. This makes sense as research is your passion, and what will ultimately distinguish you in

your chosen profession or in academia if that is your path. I hope at the same time you will see your teaching is of great importance in your overall development as a researcher and educator during your years at UC Davis. Experiences with you in the classroom will open new doors for our students. Your knowledge will encourage them to ask questions they have never considered. Your behavior will model how to positively contribute to a learning community and interact with diverse individuals. You will be able to help them navigate college and learn about graduate school. Your enthusiasm will motivate them to overcome struggles with material and see how in-class knowledge can ultimately be applied to make the world a better place.

Teaching can have a positive impact on your own life. This may not be initially apparent. It can be challenging to balance the demands of teaching with coursework and research. You may find the hours you put into teaching in direct conflict, even, with your many other responsibilities. It is important, as you embark now on your career as a teacher, to understand that there are real benefits in taking the time to develop an intentional and successful teaching practice. Teaching, especially teaching foundational concepts in introductory courses, enables graduate students to write stronger dissertations with farther-reaching results. Using your time in the classroom to actively learn what works and what does not will help you, should you pursue an academic job, distinguish yourself in a crowded field of applicants, and build a competitive teaching portfolio. Moreover, engaged teachers who learn from experience and examine their students' learning outcomes reach students in exceptional ways, opening up pathways to your own area of expertise for the next generation. Should you choose a career beyond academia, your teaching will translate to other wide-ranging skills applicable outside of the classroom, including public speaking, thinking creatively and logically, fostering inclusivity, and appreciating diversity.

As you embark on this new teaching practice please reach out to the Teaching Assistant Consulting (TAC) Program Fellows at the Center for Educational Effectiveness for support. They will give you the tools you need to facilitate student learning and the space to try, assess, and try again. Our students are fortunate that you are here. In your classrooms, their lives will be changed for the better.

Carolyn Thomas

Dean and Vice Provost for Undergraduate Education

Professor of American Studies

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CHAPTER 1: GETTING STARTED

What is a UC Davis Teaching Assistant?

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I'm the TA! Where do I Start?

Building Confidence
Strategies for Planning Your First Day
Strategies for a Successful First Day of Class
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Frequently Asked Questions

What is a UC Davis Teaching Assistant (TA)?

Teaching Assistants assist instructors of record (usually faculty members) with instructional responsibilities for undergraduate; and sometimes graduate-level courses. Since students may spend the majority of their time in certain courses interacting and learning with TAs, your role is integral for undergraduate education at UC Davis.

General TA Responsibilities

While your specific responsibilities will vary across disciplines and departments, and will depend on the expectations of the instructor of record, the following are general responsibilities expected of any TA at UC Davis. For additional information about your appointment, see the <u>Graduate Student Employment Handbook</u> found on the Graduate Studies website.

TAs are crucial players in the educational experiences of undergraduates at UC Davis. They serve many roles, including but not limited to facilitating students' learning, clarifying confusion about lecture material, and determining whether students are mastering course objectives through assessments. Because many TAs are also learners in their own graduate courses, they bring a unique perspective and often serve as liaisons between their students and course professors. Put simply, TAs are the footsoldiers of undergraduate education, and their role and importance cannot be overstated.

—Eric Jensen, AI, Spanish, TAC 2015-2017

Attend lecture: It is common for TAs new to a course to attend lecture, which refers to the section taught by the instructor of record, even if they do not spend it "lecturing". At a minimum, you may want to attend the first day to be introduced to your students. Attending lecture offers several benefits: you will be exposed to the course content in the same manner as your students, you can align your teaching with the instructor of record's expectations and objectives, you know what was or was not covered in lecture, and you can remain consistent by using the same nomenclature and notation as the instructor of record. That said, attending lecture may take time away from other activities, such as giving feedback on assignments, so you should ask the instructor of record what the expectations are for the whole term, or alternative ways to be informed of what was covered during lecture (e.g., obtaining lecture notes).

Facilitate lab or discussion sections: In addition to lectures delivered by the instructor of record every week, many courses have a weekly discussion or lab section. Usually these sections are the responsibility of one or more TAs, depending on how many sections exist. In some courses, TAs are given specific topics to review during section, while others may have complete autonomy over the content. It is a good idea to talk to other TAs to understand the expectations, find out what material students in the course often struggle with, and approaches to helping them understand it. You should also speak with the instructor of record to find out their objectives for what students will learn, and how they expect you to achieve those objectives. Overall, your job is to facilitate student learning.

Collaborate with other TAs for the course: Many large enrollment courses will have multiple TAs. Benefits to working together include consistency across sections (e.g., grading criteria), sharing resources and materials, and helping each other if an emergency arises (e.g., cover sections or grade student work). In some instances, there may be a lead TA (who has taught the course before with the instructor of record) that guides newer TAs, and/or there may be weekly meetings with the instructor and all course TAs. Consider setting up a regular meeting with all TAs for a course if one does not already exist.

Hold weekly office hours: Ask the instructor of record or your hiring department how many weekly office hours you are required to conduct, and where. If a designated location for hosting office hours is not provided, you may have students visit you in your office or at another appropriate public location (e.g., Student Community Center, department library, etc.). During office hours, you are expected to be available to help students with any questions they have, go over material, and prepare for exams and assignments. Oftentimes, TAs may schedule additional office hours prior to an exam or at the end of the quarter.

When students come to office hours, engage them in reflection on how class has been going. If they let you know that a certain activity worked well or really didn't work well, ask them to elaborate. When you compare your own reflections to student reflections, there may be significant differences in your perceptions of your teaching strategies. —Sarah Silverman, TA, Entomology, TAC 2016-2018

Prepare and proofread exam questions: It is common for a TA to contribute questions to an exam, especially if material covered during discussion section is complementary to lecture and therefore relevant for assessment. It is also common for instructors to ask their TAs to proofread an exam before giving it to students to make sure questions are worded clearly and the formatting is correct.

Proctor exams: Distributing exams, especially in large classes, requires multiple people to be efficient. You may be asked to be present only during the beginning of the exam or you may be expected to sit with students as they take their exam, answer questions, keep track of time, and be vigilant for wandering eyes to ensure academic integrity.

See Chapter 5 for concrete classroom strategies

As a TA, you are not responsible for:

- Creating the instructional content of the entire course;
- Selecting student assignments for the entire course;
- Planning and writing an entire examination;
- Determining the final grade for students (without supervision of the instructor of record);
- Providing the entire instruction of a group of students enrolled in a course;
- Adjudicating charges of plagiarism, academic dishonesty, or student conduct issues.

See Chapter 4 for strategies for grading and providing written feedback

Provide feedback and grading: TAs may be asked to grade an exam, or a portion of an exam, in collaboration with the instructor of record, other TAs, or a Reader (a graduate student who is hired only to assist with grading). Grading an exam may involve scoring Scantron multiple-choice forms at the Center for Educational Effectiveness (CEE), using a pre-written answer key, and/or creating an answer key with the instructor. Similarly, with written assignments, grading autonomy may vary. You may have to write your own rubrics or work closely with a Reader and/or the instructor to assure assignments are graded quickly and fairly. If the discussion or lab portion of the course is graded, you may be responsible for determining this portion of students' overall grade. Whether grading exams or written assignments, you may also be asked to provide feedback to students in the form of written comments.

Advise the instructor of record of plagiarism and issues with student conduct: While TAs have autonomy and authority in their own classrooms, student behavioral issues or issues of academic dishonesty should be discussed with the instructor of record in a timely manner. This may require copying the instructor on email communications, asking to meet with the instructor, or bringing up an issue during a TA meeting.

Guest lecture: If you are interested in developing your teaching skills, seek out opportunities to "guest lecture," or teach a unit in the lecture portion of the course. Find out at the beginning of the term if the instructor of record plans to miss any lectures due to travel obligations and offer to fill in, either using the instructor's lecture notes or your own. Alternatively, if a lecture topic is closely related to your own research interests, ask if you may present your research and lecture on the topic.

Benefits of Being a TA

- Gaining teaching experience as a graduate student is a valuable source of
 professional development. You will learn leadership skills that you can use
 throughout your career. It is also an opportunity to think deeply about
 your discipline, or a related one, and convey your passion to your students.
 Often we learn the most about a topic by teaching it to others!
- Working as a TA allows you to form personal relationships with faculty members other than your advisor and committee members.
- Teaching can be remarkably inspiring, satisfying, and fulfilling.
- You are paid, receive healthcare coverage, and your in-state fees are
 partially remitted. You may TA during the academic year at 25-50%
 time, 75% when you have passed your qualifying exams and are "all but
 dissertation" (ABD) and 100% time during summer sessions.
- If you plan to work at an institution of higher education, whether it is research-focused (such as UC Davis) or a teaching-focused institution (such as a California State University, a small liberal arts college, or a community college), your application will be more competitive if you have substantial pedagogical knowledge and teaching and mentoring experience.

TAs at UC Davis are represented by the AGSE/ UAW union.

The hours and type of work done by TAs are outlined in a contract that is updated regularly. To learn more, visit the Academic Student Employee (ASE) unit and the AGSE/UAW union's website at: http://www.uaw2865.org

Challenges of Being a TA

- Teaching takes time. As a graduate student you will find yourself juggling
 multiple areas of interest and responsibility. You will have to learn to
 allocate your time between teaching, research, coursework, and your
 personal life. However, this experience will also prepare you for work as a
 faculty member, if that is the route you choose to take.
- Teaching, like most skills, takes practice, but TAs are not expected to be expert instructors upon stepping into the classroom. Set realistic expectations for yourself, and be sure to ask for help when you encounter areas of difficulty. This guide is one source of information, but you can turn to other resources as well, including senior graduate students, the TA Consultants at the Center for Educational Effectiveness (CEE), departmental administrators, and other campus resources.

See "Campus Resources" for TAs and Students" at the end of this guide for a list of other available resources

I'm the TA! Where do I Start?

TAs and students alike are usually anxious about their first few class sessions. However, the first days can be exciting if handled properly, and will set the tone for the remainder of the quarter.

Building Confidence

- Being a TA is all about the students, not about you! Remember, you are a facilitator of student learning, and are not expected to be an expert.
- Expect to be nervous, but also expect to do well.
- Visualize the classroom experience going well. Be confident in yourself!
- Reach out to the TA Consultants (TACs) to discuss your questions about teaching or to get feedback from an experienced peer.
- Review your lesson plan and materials before class, and remember that you learn much faster than your undergraduates (you've had more practice!), so you can stay ahead of them even if the material is new to you.
- Practice your first class by speaking it aloud to a friend, a wall, or your dog.
- Think about other challenges that you may face (e.g., no student participation) and envision how you'll handle them.

Think back to your experience as a student. Who were your favorite instructors? What did they do in the classroom that positively impacted your learning? How did you respond as a student in that environment? A great way for any instructor to start is by modeling the behavior of those whom they think are exemplary instructors. —Slande Erole, TA, Political Science, TAC 2018-2019

The TACs are an experienced group of graduate student instructors who provide consultations and workshop to campus Teaching Assistants (TAs), Associate Ins (Als), and postdocs to support instruction and promote student learning at UC Davis. Representing a range of backgrounds and disciplines, TACs work with graduate students from across campus. Learn more at CEE

STRATEGIES FOR PLANNING YOUR FIRST DAY

Confirm the day, time, and location of your class. Use the <u>Registrar's website</u> to check the time of your section or lab. Use the <u>UC Davis campus map</u> to locate buildings.

Identify the type of technology that will be available in your classroom. Do you need keys to access it? Do you know how to use it? We highly recommend visiting the room before you begin teaching and testing any technology that you may plan to use. You can find out what equipment is standard in your classroom by visiting the Registrar's website. For on-call support for using the classroom media equipment or if you are locked out of the media cabinet, contact UC Davis Academic Technology Services (ATS) at 530-752-3333 or e-mail ats@ucdavis.edu.

Familiarize yourself with the Canvas site that your class is using. Canvas is the UC Davis learning management system that can be used to manage your course, communicate with students, share course materials, and more. If you have not been added to the course site, speak with the instructor of record who will add you to the Canvas site. Take time to learn how to use Canvas and add materials that your students need.

Dig Deeper

Go online to sample section syllabi

Create a syllabus for your discussion section or lab. Even if it is not required by the instructor of record, you may want to create a section syllabus that addresses objectives, policies, participation, and study tips pertinent to your specific section or lab. It demonstrates that you are prepared and may help you set expectations on day one.

Plan the activities you will do on your first day. Make a thorough plan for your first day. Prepare more activities than you expect to need (do not rely on students to fill time by asking questions). Remember, however, that a successful day does not necessarily mean getting through all of the activities you planned. It can be helpful to practice in the room you will teach in and have someone check that you are audible from the back of the room. If you plan to run your discussion section or lab a certain way all quarter (e.g., small group work, lots of participation), you should get started on the first day to set student expectations.

Locate where you can make copies. Speak with more experienced TAs in the department or your hiring department to find out where to make copies for course materials. You do not need to pay for copies out of pocket.

Find out how many students you will have. Check your class roster on Canvas to see how many students are enrolled in your section or lab. The number of students may change in the first several weeks of the course as students rearrange their schedules. Talk to the instructor of record or other experienced TAs about how to handle students who add the class late.

Determine and obtain the materials (e.g., chalk, whiteboard markers, etc.) that you will need. If you will be using the media cabinet to show a video or project a presentation, your computer may need a VGA or HDMI adaptor. Ask the program coordinator of your hiring department where you can find supplies needed for your class.

Decide when and where you will conduct office hours. Speak with the instructor of record or ask the program coordinator of your hiring department how many office hours you are required to hold and if there is a designated place to hold them. Many departments assign graduate students to offices and office hours can be held there. It is important that you confirm this prior to your first meeting with your section so that you can provide your students with that information.

STRATEGIES FOR A SUCCESSFUL FIRST DAY OF CLASS

Arrive early. There is always at least a ten minute passing period between classes. If you need more time, you can check on the <u>UC Davis Conference and Event Services website</u> to see if there is another class or event in your space before or after your scheduled class. Allow plenty of time to set up before students arrive. You may want to establish a comfortable atmosphere by chatting with students as they arrive. Possible topics: their major, their summer/winter/spring break, their previous experience with the subject of the course.

Write the course section on the board with any other important information (e.g., your name, office hours, office location, your email) so students know that they are in the right place as they arrive.

Introduce yourself. You may want to provide a brief biographical sketch, such as where you're from, your position at UC Davis (e.g., PhD student from Plant Sciences), how you got excited about the field, and/or what you find most compelling about the subject. You will seem more accessible and friendly if the students know something about you.

Explain section/lab expectations (e.g., objectives of the section, homework, participation, technology in the classroom, how will you post materials or communicate with students, etc.). You may refer to your syllabus, if you created one for your section/lab, or make a list on the board. This will also help students understand how your section/lab is related to lecture.

Explain what students can expect from you. Will you read drafts of papers? Hold review sessions? How will you evaluate their work? How often will you respond to emails? Are you only available during office hours or also after lecture/section/lab? Be transparent about what your responsibilities are as a TA.

Remind students what they need to bring to section/lab (e.g., textbook, lab notebooks, dictionary, etc.). Be a role model on the first day by bringing what you expect students to have.

Have students introduce themselves in small groups or pairs. This will help them feel comfortable with one another and make connections. By building a trusting environment, they will be more likely to speak up in class as the quarter progresses. This may include sharing their name and major, but also information pertinent to the course. For example, If you are teaching a math class, you may ask them to state one way that math enriches their daily lives. If you are teaching a foreign language class, you may ask them how the language they are learning has or may help them outside of the classroom.

Observe the room environment. Try to walk around the room on the first day so that you can see whether the boards and/or the screens are visible or not, the readability of your handwriting, and how well you and your students can hear each other from different parts of the room. Circulating the room to interact with students and examine their work can also provide feedback to you about student understanding.

Bring a copy of your class roster so that you can take attendance (or have a sign-in sheet). You may want to take notes on how to pronounce students' names, what nicknames they prefer, and the pronouns they use for themselves (she/her/hers, he/his/his, they/them/theirs).

Be aware of what you are doing and how you are doing it! Speak slowly, clearly, and loudly! Act confidently. Try to make eye contact with all of your students, not just those seated in the very front.

Stay a few minutes after class to answer students' questions about the course, the material you covered that day, or other logistical concerns they may have.

Best Practices for International TAs

As an international TA, the U.S. educational system experienced by UC Davis students may be quite different from the one that you are accustomed to for both linguistic and cultural reasons. This includes different expectations of student academic preparation and performance, different policies governing grading and citation, and different relationships between students and teachers. Your fellow TAs, the TA Consultants at the Center for Educational Effectiveness (CEE), and this guide can provide a wealth of information that may help you become familiar with your new academic learning and teaching environment.



Be comfortable and confident about being a passionate and intelligent teacher speaking imperfect English. Students will appreciate your efforts and your uniqueness. —Shan (Zoe) Lin, TA, History, TAC 2016-2017

The following are some strategies to help you navigate and adjust to the U.S. educational system at UC Davis:

Be aware of common characteristics of American universities. In the U.S., instructors and students are generally informal with one another. You may encounter students drinking coffee or eating in class, wearing casual clothes, or calling their instructor by his or her first name. This kind of informality usually does not mean that the students are any less serious about learning or that they lack respect for their instructor. Other common U.S. educational practices include:

- Asking questions during class. The U.S. educational system encourages students to participate actively in class.
- Challenging instructors' grading procedures on exams and other graded assignments. Students may speak with
 you and/or the inst ructor of record if they think a mistake has been made. Be prepared to explain your grading
 procedures and to make your expectations clear.
- Forming one's own opinion. Developing analytical skills are important and students are expected to think independently and creatively about issues and concepts.

Ask questions! Communicate with other TAs, especially international TAs, in your department about their experiences working with students and professors. For example, what specific problems have they encountered, and how have they solved these problems? Communicate with the instructor of record with whom you will be working. For instance, what are their expectations of you and of the students in lecture and in the discussion section or lab? What is the grading policy?

Address the language issue directly with your students as early as possible. If you are an English Language Learner (ELL) or have a strong accent, acknowledge that your English may be difficult for them to understand. You could say, for example, "English is not my native language. I'll do my best to make sure you understand me, but I'll need your help. Let me know when you do not understand something I say and make an effort to try to understand what I am saying." If you speak a non-American variety of English, Encourage students to ask you to repeat if necessary and to see you after class or during office hours for further clarification.

• Write an outline of the day's activities on the board or provide information on a handout. If you mispronounce a word or have difficulty explaining a concept, your students will still know what you are talking about.

Do not let the language barrier stop you from expressing your ideas. Your thoughts, feedback, and expertise are a great asset for your classroom, even if they are not grammatically correct. In fact, you and your perfectly imperfect English can be a great inspiration for many students in your classroom. —Arik Davidyan, TA, Molecular, Cellular, and Integrative Physiology, TAC 2018-2019

- Write difficult terms and concepts on the board and/or use PowerPoint, overheads, and diagrams to supplement your oral presentations.
- You may choose to tell them where your accent is from and how your accent and language are an important part of your identity.
- Practice pronouncing keywords and other vocabulary that you use frequently with another TA, a colleague, or a friend. These may be field, lecture- or lab-specific, or words commonly used in the classroom (e.g., syllabus, Scantron). If you are struggling with a term, write the word on the board.

Check for student understanding frequently. Provide opportunities for students to ask questions in order to gauge if they are understanding what you are saying. This will demonstrate that you care about their learning and will help you ensure that you are communicating effectively.

Keep in mind that the reason students resist your accent and language may have little to do with you. Some UC Davis students lack prior experience with people from other countries, and those who have not been exposed to non-American accents may automatically think that they cannot understand international TAs. Some students also may use your accent as an excuse for their own poor performance in the class, even though it is really due to other factors (e.g., poor study skills). Emphasize how being exposed to different accents will add to the students' own diversity and perspective. Most importantly, do not be discouraged about your English!

From a linguistic point of view, no accent is inherently better or worse than any other—your American students have accents, too! If your students have difficulty understanding your accent at first, remind them that their ears will naturally adjust to understand it better over time, so long as they make an honest effort to listen. You can speed up this process by speaking slowly and loudly, making sure to enunciate important words and write them on the board, and doing frequent comprehension checks. —Dan Villarreal, TA, Linguistics, TAC 2015-2016

Frequently Asked Questions

What should my students call me? Generally, the instructional setting at UC Davis is informal, and TAs often ask their students to call them by their first name. However, what your students call you is ultimately up to you. Some TAs may feel that using surnames helps establish the appropriate professional distance between them and their students and leads to fewer disciplinary problems. Another consideration is that although you may feel comfortable when your students use your first name, some students are uncomfortable in this situation. Their culture may require that they show respect to teachers by addressing them as Mr., Ms., Professor, or Doctor.

Refer to the strategies for presenting information effectively in Chapter 5

See "Campus Resources for TAs and Students" at the end of this guide for a list of services that can support your teaching and your English language learning

See Chapter 4 to learn concrete strategies for checking for student understanding

Please note that apart from the strategies listed in this section, many of the concepts and ideas covered throughout this guide are applicable to ALL TAs, including International TAs What should I wear? While your dress can subtly influence your students' attitudes towards you and the course, your competence and personality are much more important. Some TAs dress more formally early in the quarter to establish their authority, then dress more casually later in the quarter. Most would describe TA dress at UC Davis as casual, and many TAs do not dress differently on days that they teach than days that they attend classes themselves. Look around campus to see what other TAs are wearing and dress to feel comfortable and to be able to move easily and confidently. Lastly, if you are teaching a lab, you may be required to wear certain clothes, so check with your lab and other experienced TAs.

What if I do not know how to use Canvas? First, ask other experienced TAs or your instructor of record for support. If that is not possible, contact Academic Technology Services (ATS), which has a Canvas help staff. You can attend a workshop or a drop-in session. You can also set up one-on-one learning sessions or, if you are working with several TAs who want training, you can set up a session by emailing trainers@ucdavis.edu.

What do I need to know about using copyright-protected materials for teaching? According to U.S. Copyright Law, TAs may publicly display and perform copyrighted works, and utilize copyrighted materials in the classroom as long as they fall under the "fair use" section of the law. "Fair use" allows limited distribution of copyrighted materials without the permission of the copyright owner. In order to determine if your use of the materials falls under "fair use", ask yourself the following two questions: 1. Are you planning on using the work in a different way, or for a different purpose, than the original creator? 2. Are you using an amount of that work that is narrowly tailored to your new purpose (learning objective)? If you've answered yes to both, then you are most likely covered under "fair use". A few examples include: photocopying a chapter of a book for your teaching use only, or making digital copies of articles (or videos) available to your students online with full appropriation and then removing it once the course ends. If in doubt, ask the instructor of record or visit UC Davis Copyright to learn more.

Where should I sit or stand? Use of physical space in the classroom is an important instructional tool. Generally, standing makes you the center of attention, whereas sitting focuses more attention back to the group. Try to move around the room so that you have proximity to all students, regardless of where they are seated. When students speak during whole group discussions, move away from them slightly so that they project their voices across the room. This helps the other students hear the response.

One of my favorite classes to teach is completely discussion-based. To help students feel more welcome in the class I arrange the seats in a circle and sit down in one of the chairs next to them. This makes us all visually on the same level and helps students feel more comfortable. —Carlyn Peterson, TA, Animal Science, TAC 2018-2019

How do I answer questions effectively? First, listen carefully without interrupting and then ask clarifying questions if needed so you can be sure to understand the content of the question. Then, validate the question. For example, you can thank the student for bringing it up, nod encouragingly, or state that the question is a good one. Then repeat the question for the class. This is important because this ensures that the entire class hears the question. If appropriate, turn the question back to the class to encourage dialogue between students, which will increase student engagement and learning. If you can, relate the content in your response to something the students can identify with. Finally, when you have finished giving your answer, ask if further explanation is needed. If the question is outside the scope of what you are covering or requires a lengthy discussion, you may want to follow up with the student after class or during office hours.

What should I do if I do not know the answer? You are not expected to know everything. If you do not know an answer, you can handle it several ways:

- Pose the question back to the class; see if anyone else knows the answer. (This is a good strategy even if you do know the answer to encourage participation from the students.)
- Ask the students to look up the answer (you may need to direct them to the appropriate resources) and share it in the next class session. You may want to emphasize how knowing how to find the answer may be more helpful than just knowing the answer.
- Admit without hesitation or apology that you do not know the answer. It is okay to say you do not know, but
 do tell students you will find out. Once you have looked it up, email the class or address it in the following
 class session.

The important thing is to not make up answers. You may give students the wrong information and students might "see through" your response and not trust you or your knowledge. If you make a mistake and a student catches you, it is important to correct yourself and analyze your error. This process helps normalize error and helps students identify and correct mistakes in their own work. Students do not expect you to know everything, and admitting you do not know the answer actually makes you appear more human and helps the students trust you.

Am I going to have to lecture? In general, TAs are not supposed to "lecture" in their sections. Generally, TAs spend no more than 15 minutes presenting or reviewing material, and then spend the rest of the class time facilitating student activities. The objective of discussion section and lab is to encourage students to engage with each other and the material to deepen their understanding of the content.

What should I do if a student complains about me to the instructor of record? Each instructor of record handles these situations differently since a great deal depends on the context and content of the complaint. It is likely that the instructor of record will let the student know that s/he has been heard and that the incident will be investigated. Expect the instructor to ask you for your version of the situation. In most cases, the complaint is caused by miscommunication. Work out the situation collaboratively with the instructor. Avoid potential problems by always documenting your communications (e.g., emails) with all of your students and staying professional during all of your interactions with your students.

What should I do if the student complains to me about the instructor of record? Listen attentively so you can follow up appropriately and acknowledge how your student is feeling. In your response to the student, do not say anything negative about or undermine the instructor of record. You should see yourself both as a team member of the course and as a student advocate at the same time.

How should I negotiate my relationship with the instructor of record? Talk to them early, ideally before the quarter starts, and clarify daily and weekly expectations for your role as a TA. In some cases, the instructor may not be very involved with what happens during section/lab, but always make sure that you understand the expectations. Try not to be shy and hesitant about bringing up new ideas to the instructor of record (e.g., there is no rubric, but you would like to make one). It's also important to note that your relationship with the instructor of record may vary from your relationship with your advisor and other faculty members. If you find that your relationship with the instructor of record (or any other individual on campus) is strained and causing you discomfort on campus, you may contact the Ombuds Office (Surge IV, 530-219-6750). If you need more teaching-related support, seek advice from more experienced TAs or the TA Consultants with the Center for Educational Effectiveness (CEE).

I do not know what the instructor of record expects of me. What should I do? It is the responsibility of the instructor of record to communicate what is expected of you, but he/she might forget to do so or not give you enough information. Set up a meeting (or series of meetings) to go over the details. You may also want to speak with TAs that have worked with that instructor before to get a better idea of his/her workstyle.

How should I hold the chalk so it does not squeak? Hold the chalk at a 45-degree angle to the board surface and/or break the chalk in half. Inevitably, at some point the chalk will squeak anyway. Use this disruption as an opportunity for humor. You can respond by covering your ears with your hands and, with a pained look on your face, saying, "Wow, I hate it when that happens!"

See Chapter 5 on how to manage your classroom

How do I manage professional and personal boundaries with my students?

This depends a lot on your personality and comfort level as an instructor. However, it is generally easier to become more casual and friendly as the quarter progresses and harder to become more authoritative and firm, so you may consider being firm in the beginning of the quarter and establishing authority early, and then become more personable as the quarter progresses. What you ask students to call you, what you wear, and how you handle disruptions in class can help you construct the kind of relationship you want to have with your students as well.

Your office is neutral space for meeting with students. It is a good idea to keep your space inviting, yet professional. Your office is also a great space to display any visual signs that showcase your professional affiliations as well as your philosophies regarding inclusion ("LGBTQ Ally" or "UndocuAlly" signs, for example). The space in which you work and speak to students one-on-one can have an impact in how much students approach you outside of class while at the same time providing a neutral space that can communicate clear boundaries. —Lina Reznicek-Parrado, TA, Spanish & Portuguese, TAC 2017-2018

Where can my students leave things for me? The best way to collect things is in person, so try to arrange a time when you will be in the office to collect items directly from your students. Also, ask whether you will be given a mailbox. If the department assigns you a communal TA mailbox rather than a private one, you should not use it to collect assignments unless students put their assignments in a sealed envelope. This procedure may be inconvenient, but it is necessary to avoid lost or plagiarized papers. According to the Family Educational Rights and Privacy Act (FERPA) and UC Policy, student work is confidential, so leaving it in a public space where other students or staff to see is not allowed.

See Chapter 4 to learn more about FERPA and how it relates to your TA responsibilities

What should I do if a student wants to see me outside of my office hours? First, find out why your student cannot see you during office hours. If it is due to their schedule or reasons of confidentiality, then try to accommodate them. Unless the student is seeing you about a confidential matter, you might open up additional office hours to the entire class so that other students do not perceive that you are giving special treatment.

What should I do if a student invites me to coffee? Ethically, TAs are not allowed to receive gifts or payments from registered students in their class, nor are they allowed to date students who are currently in their class or could be in their class in the future. As such, you may want to ask the student why he/she wants to invite you to coffee and suggest that you both speak during office hours instead.

What should I do if I am a victim or a witness of sexual harassment and discrimination? You should contact the UC Davis Harassment and Discrimination Assistance and Prevention Program (<u>HDAPP</u>); 530-752-9255) immediately for further guidance. You will be able to file a complaint, access confidential resources, and speak with advisors about the situation. The HDAPP website also provides information about what is considered discrimination or sexual harassment, what you can do about it, and UC Davis policies and procedures.

What should I do if a student tells me about something that sounds like sexual harassment or discrimination, or sexual violence? You'll be teaching students who may be close in age and experience to you. Because of this, students may feel comfortable disclosing stressful situations to you. Here are some guidelines for responding:

- Listen supportively. Gently let the student know that because of your role as a TA, there is certain information you may need to share with others (harassment, discrimination, sexual violence, etc.).
- Explain to the student that you're a "Responsible Employee," meaning that under PPM 400-20, the Sexual Violence & Sexual Harassment policy, you are responsible for consulting with the UC Davis Harassment and Discrimination Assistance and Prevention Program (HDAPP) if you are on notice about sexual violence or sexual harassment.
- Explain that there are "Confidential Resources" on campus who do not have this same reporting obligation, meaning a student can talk with them freely about these concerns and they can support the student in deciding among their options. Ask the student whether they prefer to speak with a Confidential Resource first or whether they'd like to share their concern with you. If they prefer to speak to a Confidential Resource, you can offer to call with them to schedule an appointment. You can find a list of Confidential Resources at http://hdapp. ucdavis.edu under the "Resources" tab.
- If the student needs support for sexual violence, refer them to the Center for Advocacy Resources and Education (CARE). Offer to help the student contact CARE right now.
- Tell a supervisor such as your faculty member, Department Chair or department staff such as the MSO/CAO about the information you received, and/or call HDAPP directly to consult.
- Follow-up with the student within a few days to check-in.
- Document your actions in notes to yourself.

Remember: someone has done this before! Don't be shy about seeking out advice or agendas from past TAs for the course. The instructor on record can often help direct you to previous TAs and, in my experience, they are more than willing to share what they have learned. —Chris Miller, TA, Animal Biology, TAC 2017-2018

NOTES

NOTES

CHAPTER 2: UNDERSTANDING YOUR STUDENTS

Who are UC Davis Students?

How do Students Learn?

Student Engagement **Different Modes of Learning Guided Practice** Provide Feedback to Students

How Can I Create an Inclusive Classroom Environment?

How Can I Best Support My Students?

Transfer Students Multilingual Learners First-year Undergraduates First-generation College Students Students in Distress Difficult Students Students with Disabilities

Frequently Asked Questions

Who are UC Davis Students?

According to the UC Davis Principles of Community, every member of the university community should practice and support mutual understanding, freedom of expression, courtesy, sensitivity and respect for all members of our diverse community of learning. In aspiring to fulfill these principles and to support student retention and achievement, it's imperative that we be mindful of the diversity that exists in our classrooms and not make assumptions about our students and their needs.

As of Fall 2016, UC Davis had approximately 29,100 undergraduate students. While gender and ethnicity tend to be the statistics used to identify student demographics, other categories have implications for our teaching and our students' learning but are often overlooked in the discussion about diversity in the classroom. The following statistics provide insights into who our students are and what they may need to be successful at UC Davis and in our classes.

- 44.38% of new first-year undergraduates in Fall 2016 reported they would be the first generation in their families to receive a college degree
- 38.75% of the new incoming undergraduates in Fall 2016 were transfer students
- 15.58% of undergraduates were international students in 2016-17
- 5.78% of undergraduates were 25 years or older in 2016-17
- 94% of domestic undergraduates in Fall 2016 were residents of California

These statistics suggest that our students vary greatly in their learning needs, expectations, experiences, abilities, and interests. While it may be helpful to consider these categories to understand our students broadly, keep in mind that each student may fall into more than one of these groups (e.g., a transfer student may also be a first-generation

^{*}Statistics are from the Center for Educational Effectiveness, data provided by Budget and Institutional Analysis (retrieved April 2017)

college student) and that students with similar backgrounds and experiences will have unique learning needs. Further, your students will not all learn effectively the same way that you did, nor will they have similar experiences and support structures to help them succeed. Thus, knowing who your students are, both as a group and individually, can help you create effective learning experiences for them as a TA

UC Davis students are as diverse as the people of the State of California. Many were born nearby, but many come from far away to learn. Many have parents who are alumni of UC Davis, but many are also the first in their family to set foot in a college classroom. Take a few minutes to learn about your students' backgrounds and you will be impressed by the diversity of their experiences and perspectives. The better you get to know your students, the better you will be able to capitalize on their unique experiences as you introduce them to course material. —Eric Jensen, AI, Spanish, TAC 2015-2017

How do Students Learn?

Ideally, effective teaching meets the learning needs of each individual student. However, this is nearly impossible given that every group of students is so diverse and classes may be too large to get to know every single student. Nonetheless, as TAs, we can aim to help all of our students learn and succeed by basing our teaching on these principles of how students learn:

- Students experience deeper learning and retain more information when they are actively engaged in the learning process,
- Students learn best across different modes,
- · Students learn through guided practice, and
- Students need ongoing feedback about their learning.

I want my students to know that I see them as human beings before I see them as students, and that learning is something that we humans do. —Arik Davidyan, TA, Molecular, Cellular, and Integrated Physiology, TAC, 2018-2019

See Chapters 4 and 5 for specific strategies related to these four areas

Student Engagement

There are many benefits to engaging our students in the classroom:

- Students learn more effectively and retain more information when they are doing things and thinking about what they are doing, rather than passively listening to reciting information.
- Students become more motivated and interested in the class and the material when they have a chance to engage with ideas, and are consequently less bored.
- Students are encouraged to understand the material in order to be able to use and engage with it, rather than rely on rote memorization.
- Students have more opportunities to participate in class, which helps them learn how to communicate ideas, contribute to a scholarly learning community, and make connections with their classmates.
- Students, and not the instructor, become the center of the classroom.

See Chapter 5 for a list of possible classroom strategies for engaging your students Student engagement may include interaction between the student and the instructor, between the student and the content, and between the student and their classmates, and may involve: activities in small groups or pairs, individual student reflection or writing, small or large group discussion, problem solving, games, case studies, debates, role playing, and more.

Different Modes of Learning

Students benefit when they can learn using many parts of the brain, and by engaging with what they are learning in a variety of ways. While there is a common myth that individuals have different learning styles, or a mode in which one learns best (e.g., visual learners learn by seeing, verbal learners learn by reading and writing, aural

Students learn in so many different ways and these ways may even change according different topics. Don't be afraid to try new approaches in the classroom, such as small group activities, technology, and simulations. It's surprising how just a little creativity can encourage yourself and students to feel more engaged. —Marisella Rodriguez, TA, Political Science, TAC 2016-2018

learners learn by hearing, and kinesthetic learners learn by doing and making), there is little evidence to suggest this is the case.

All students benefit when we create opportunities for them to interact with material and demonstrate their knowledge in different ways. So, what should we do?

- Depending on the subject, some modes of learning are more preferable and
 effective than others. For instance, it makes disciplinary sense to teach acting by
 doing, rather than just reading about acting. Consider what you want students to
 learn when deciding how to best teach a certain topic.
- Have students interact with the material visually, verbally, aurally, and kinesthetically. All students will benefit from learning about and reinforcing content in a variety of modes. For example, in a chemistry lab, you may want to present molecules visually on the screen, have students manipulate a 3D model or a tangible item, and ask students to describe the molecule in groups. In a history class, you may want to present a series of events and then have students create a physical timeline that explains the causes and the effects in relation to a larger context (e.g., a geographical region, current day policies). By presenting material in a multimodal way, you ensure that all students can participate in the learning process regardless of ability or language background.

Guided Practice

Learning something new requires guidance and lots of practice. As an instructor, you can provide students with scaffolding that allows them to build upon previous understanding to process, integrate, and store new knowledge alongside pre-existing

knowledge. Scaffolding refers to assistance or guidance that helps students achieve outcomes that they may not be able to accomplish on their own. It may be helpful to follow the "I do - we do - you do" model, where you first demonstrate or introduce the process, then work through or solve an example with your students together, providing guidance and feedback, and finally have students complete the task on their own. This model provides scaffolding, repetitive practice, and eventual independent accomplishment.

It is also important to note that you should not mistake yourself as the only "expert" in the classroom for scaffolding students because more advanced or experienced peers can also serve as "experts" to teach and help fellow classmates. As a result, you may consider incorporating group or pair work into the "I do - we do - you do" model.

Provide Feedback to Students

Feedback is essential for learning, yet students are often only provided feedback on what they know and don't know on formal, graded assignments. Feedback may come from instructors, peers, and self-assessment, and is most helpful when provided frequently and informally. Frequent informal feedback on student understanding encourages and rewards meaningful learning, helps prepare students by making them aware of what they do and do not know, and can help you know where your students stand. The following are a few examples of how you can provide feedback to your students throughout the quarter:

- Have students submit an outline and/or an annotated bibliography prior to a final essay or project.
- Have students submit drafts of their thesis statements.
- Call on students to share their answers with the class or have them work in pairs.
- Poll students and address misunderstandings during class.

These last two strategies both provide opportunities to give students real-time feedback about their knowledge ,and correct errors before they become ingrained. Calling on students helps ensure that your understanding of the class' knowledge level is not biased by volunteer responses.

Peer feedback can be helpful and can encourage independent learning. Here are a few ways to incorporate peer feedback into your classes:

- Require peer review of outlines, drafts, or lab reports prior to submission.
- Have students present projects and assignments in small groups.
- Have students evaluate their peer's work with an analytic rubric that will be used for the final graded assignment. (An analytic rubric consists of two or more criteria for a given assignment.)
- Use a discussion forum where students can share ideas and receive feedback. You
 can use a tool, like the discussion thread application in Canvas, to post sample
 questions or problem sets that students can answer collaboratively.

See Chapter 4 for more strategies on how to check for student understanding and provide feedback

See Chapter 4 to learn more about rubrics

Lastly, personal feedback encourages students to develop responsibility for their own learning and reflect upon it. You can incorporate opportunities for self assessment into your classroom by doing the following:

- Provide time and space for reflections on their learning or about their performance on an assignment.
- · Have students identify what they don't understand or what they would like to explore further about the content.

By receiving feedback about their learning periodically, students can revise and improve their thinking before a high-stakes assignment or exam. If you only provide feedback after a graded assignment, the student will not have an opportunity to learn from their mistakes. Additionally, providing feedback on interim outlines, drafts or assignments can reduce grading time on the final draft or exam because there are fewer errors.

How Can I Create an Inclusive Classroom Environment?

Creating an inclusive classroom environment is essential for student learning for several reasons. First, it helps aid the transition of all students, particularly of underrepresented groups, to college and sets the stage for academic success. Second, it promotes student participation by creating a safe classroom setting. Third, it enhances students' ability to participate in a more plural and global community. Lastly, your approach as a TA serves as a model for encouraging students to be conscientious about how their actions, behaviors, and attitudes can contribute to a more inclusive and welcoming environment on campus and beyond, which the UC Davis Principles of Community affirms.

We recognize that each of us has an obligation to the community of which we have chosen to be a part. We will strive to build a true community of spirit and purpose based on mutual respect and caring. —UC Davis Principles of Community

As such, consider doing the following to create an inclusive classroom environment:

Value student responses and effort. Acknowledge when your students have done a good job on an assignment or an exam, when they have had a great discussion or lab, when they have shown great maturity and depth in analyzing something, or anytime they have done something that impresses you.

Include diverse examples and perspectives Ensure that you are not consistently assuming all your students share similar experiences to yours or to each others. If possible and appropriate, draw from different points of view (e.g., voices of different backgrounds) and varying examples that are not tied to a particular social class, culture, or geographical region.

Lay out participation guidelines at the beginning of the quarter. You may decide to write them yourself and put them in the section syllabus. If you are an experienced instructor, you may decide to brainstorm with your students and have the entire class come up with a list of participation guidelines together. You should refer back to them periodically, especially before a difficult discussion topic or when one of the guidelines have been broken.

Setting up expectations for behavior and communication on the first day of class is key to creating an inclusive environment in your classroom. Invite your students to help in creating norms for the classroom. Hold them accountable to those norms. Most importantly, make sure to model those norms for your students. —Slande Erole, TA, Political Science, TAC 2018-2019

Learn your students' names. This will show your students respect and friendliness. Here are a few strategies for remembering your students' names:

- Use assigned seating and a seating chart.
- Use name tents. Ask students to write their names in large letters on both sides of a folded index card and to keep this card on their desks for the first few classes. Particularly in classes where you want to use students' names frequently, name tents can help everyone in the room become familiar with one another and make it easier for them to address each other directly.
- Use student information index cards. Bring index cards and ask students to write their preferred name, email
 address, why they are taking the class, and anything else you would like to know. Collect these as a tool for
 getting to know your students within the first few weeks. You can also shuffle them and use them to form small
 groups or to call on someone.
- Ask students to say their names before responding.
- Encourage students to address their peers by their name.
- Return homework to students individually so that you can practice remembering names.

Be mindful of your language and behavior and those of your students. Avoid language that is profane, sexist, suggestive, and vulgar in the classroom. Avoid making assumptions or overgeneralizations about who your students are (e.g., dividing the class into "girls" and "boys" based on personal notions of our students' gender). Be conscious of your language when making comments about sensitive issues, such as religious or political beliefs, stereotypes, etc.

Welcome all comments and questions. Positively reinforce students' participation with verbal (e.g., "That's a great question.") and nonverbal cues (e.g., smiling, nodding, eye contact). Also, provide different modes and opportunities for voicing opinions and asking questions so that all students can contribute. The following are a few examples of how to do that:

- Use small group or pair work discussion.
- Alternate between written and verbal responses.
- Have students submit comments and questions anonymously (e.g., on a sheet of paper with no name, through an online survey or poll).
- When asking a question, allow for ample wait time.
- Ask for comments or questions from students who have not contributed or ask for a volunteer from each each
 section of the room. Don't just always call on the students in the front, or those who typically dominate the
 conversation.

Tactfully field incorrect answers. Avoid making a negative comment when a student makes a mistake or answers incorrectly. Instead, acknowledge the student's effort and try to ask guiding questions or provide hints that may help the student arrive at the correct answer. For example, if you are solving a word problem, point out where the student was correct and which step may have led to the mistake. Students should be encouraged to learn how to arrive at an answer or an end product, and not be consumed with getting the right answer or the highest grade.

Include diverse examples and perspectives. Ensure that you are not consistently assuming all your students share similar experiences to yours or to each others. If possible and appropriate, draw from different points of view (e.g., voices of different backgrounds) and varying examples that are not tied to a particular social class, culture, or geographical region.

How Can I Best Support My Students?

Transfer students

Most transfer students at UC Davis come from California Community Colleges, where they completed their general education requirements and are primarily starting their major and minor requirements upon entry. There are 113 California Community Colleges, that provide differing levels of preparation for study at UC Davis. The following are approaches to help support transfer students in your classroom:

Probe for background knowledge. Don't assume that all students in your classes took the same prerequisite coursework at UC Davis, or that they remember everything. Check for background knowledge at the beginning of the quarter so you know where your students stand. At the beginning you may have students write down what prior courses they have taken related to the topic (if any), and give a short diagnostic quiz. Questions that require a written explanation can be particularly informative of a student's prior knowledge and understanding. Use this to inform how you go about teaching concepts in section and/or what supplementary material and resources (extra problem sets, references to online videos or websites, additional handouts, etc.) you may need to provide to students.

Assign groups or pairs. Assigning groups or pairs, and reassigning them periodically, forces students to interact with people they don't already know and develop communication and teamwork skills. Assigning groups is especially beneficial for transfer students in classes where most students have already established a group of friends within their major or minor, helping transfer and international students feel less isolated.

Transfer students have a much shorter orientation than incoming first-year students, and might not have orientation at all if they start in Winter or Spring quarter. As a result, they are often less familiar with campus resources. Combine this with the fast pace of the quarter system and the high expectations of UC Davis, and it's easy for transfer students to fall behind. As TAs, we can help by making our expectations crystal clear and linking our students to appropriate campus resources. —Rachel Nickens, TA, Sociology, TAC 2018-2019

Multilingual Learners

Students who speak multiple languages (also known as English Language Learners (ELLs) or speakers of English as a Secound Language) may include international students who are studying abroad at UC Davis or who are registered as full time undergraduates, and domestic students who may have completed their high school degree in another language or recently moved to the U.S. The best way to determine if your students are multilingual learners is by using on-going, informal assessments that can help you gauge their English writing and speaking abilities, and reading and listening comprehension. The following are approaches to help you communicate clearly and effectively in your classroom:

Avoid highly idiomatic English. Students may miss important information if a phrase is unfamiliar or confusing, which is often the case with idioms (e.g., "once in a blue moon").

Avoid specific U.S. cultural knowledge. Students may feel excluded or be confused by references that they do not know or recognize. If you do refer to U.S. culture, be sure to explain what it is or ask a student in your class to explain and be prepared to give an example.

Provide multiple opportunities to participate in class. Some multilingual speakers may find it intimidating and challenging to speak out loud in front of a class or may not be accustomed to raising their hand and asking questions. Be conscious of your students' comfort levels and offer alternative modes of participation as appropriate. Having students discuss in pairs or small groups before whole-class discussions may help a variety of your students, including speakers of other languages, better process their thoughts before sharing.

Ensure that exams and assignments are clearly written. When writing or proofreading exams and assignments, keep in mind that you are testing for conceptual knowledge, not linguistic knowledge of English.

Be clear about grading and assignment expectations. If an assignment will be graded for grammatical accuracy and mechanics, let your students know ahead of time and refer them to campus resources that can help them improve and edit their writing. There may also be cultural differences regarding plagiarism and proper citation; as such, communicate to your class what plagiarism looks like in the U.S. and what type of citation styles they should be using. Contact Office of Student Support & Judicial Affairs (OSSJA) if you require support for addressing this matter in your classroom, or refer your students to the Student Academic Success Center (SASC) for writing help.

Provide linguistic redundancy. Many students, especially non-native speakers of English, benefit from both seeing and hearing language and key ideas stated in different ways. For example:

- Write or project key points and explain them out loud.
- Provide a list of key terms or concepts at the start of each section/lab.
- Paraphrase key points, instructions, etc.
- When showing a video, turn on closed captioning.

First-year Undergraduates

If you are a TA for a large introductory course (e.g., Psychology 1, Linguistics 1), you will most likely have many first-year undergraduates. You can also look at your class roster on Canvas to identify first-year students.

Ask students what will help them learn. Do they need extra practice problems, more readings, or a special session in office hours to cover a new topic? Many students know what materials/ strategies they can use to succeed from previous classes they have taken, so don't be afraid to ask students what they need. —Sarah Silverman, TA, Entomology, TAC 2016-2018

The following approaches will benefit all students, but will particularly help support first-year undergraduates in your classroom:

Encourage first-year undergraduates to seek help. First-year students may not know that they need help because they've never needed assistance before or have always been successful academically. Invite them to come to office hours or to use other campus resources, such as the Student Academic Success Center (SASC) or departmental resources.

Clarify strategies for learning. First-year students are often accustomed to memorization, and are focused on grades and the "right" answer, so encourage critical thinking and deeper understanding of the material.

See "Campus Resources for TAs and Students" at the end of this guide for a list of available resources at UC Davis **Provide feedback early and often.** The expectations in college are very different from high school, yet first-year students may be unaware of this unless they receive ample feedback prior to their assignments and exams. Be transparent and clear about the expectations that you and the instructor of record have when it comes to attendance, participation, grading, writing quality, assignments, etc.

Pose complex real-life problems. First-year students may use dualistic thinking of "correct" and "incorrect" or anecdotal reasoning of "in my personal experience." By linking the content with real-world issues, students are challenged to think more critically about the topic.

First-generation College Students

First-generation college students are the first in their family to pursue a college degree. The following are approaches to help support first-generation college students:

Be approachable. Students are unlikely to ask for help or seek out advice if they don't feel comfortable talking to you or if they think you don't care. Depending on your personality, you may want to share information about yourself to your students to develop a relationship with them (e.g., what you did over the weekend, something funny that happened to you, how did you become interested in your area).

Be transparent about expectations and hidden knowledge. First-generation college students may lack implicit knowledge about how higher education works. For instance, he/she may not realize that they can seek help during office hours, that papers need to be formatted and cited a particular way, how to research information online or at the library, how to find internships or research opportunities, or how to prepare for graduate or professional school.

Students who have a family and/or community of successful academics are typically better equipped to navigate the unwritten rules of academia. It is our responsibility to deconstruct this inherent privilege so that everyone has an equal opportunity to succeed. One good way to be more inclusive is to be explicit on your syllabus. What, really, will make a student succeed in your class? Be transparent! —Sam Fleischer, TA, Applied Mathematics, TAC 2017-2019

Show that you care about your students' academic success. First-generation college students may not feel academically prepared for the transition from high school or community college to UC Davis due to differing expectations, pressure to do well, greater personal responsibility for one's well-being and academics, homesickness, and/or the lack of a support network. These stresses may make them feel that they don't belong in college or in their chosen major (also known as "stereotype threat"). You can help by checking in with students if you notice their grade is dropping, by encouraging students to see you during office hours, and by communicating resources on campus that can provide academic and emotional support.

Students in Distress

Students in distress may be having a difficult time completing their academic responsibilities due to a number of health or personal problems. Since TAs have the most face-to-face contact with undergraduates, it's important to be aware of and supportive of these students so that they can seek the help that they need to be successful. The following are approaches to help you support students who may show signs of distress:

Reach out to students if you notice poor performance or missed attendance. An e-mail or talking face-to-face with students after class are great ways to let students know that they are falling behind. Remain informative and supportive, not threatening or pushy. You may also offer to meet with them during office hours or to refer them to additional campus resources.

Don't assume that the student is lazy or unmotivated. Students may be in distress for numerous reasons including depression, economic hardship, time management problems, illness or death of a loved one, loss of an important relationship, feelings of loneliness or isolation, bullying, or poor academic performance.

Seek advice from more experienced TAs, the instructor of record, or the UC Davis Student Health & Counseling Services (SHCS). If a student provides you personal information in confidence, be sure to honor that confidence. The only exception is if a student confides in you about something that seriously threatens his or her life, or someone else's. In that case, contact the UC Davis Student Health & Counseling Services (SHCS) immediately.

I often put Student Health and Counseling Services' contact information in my syllabus, reminding students that they offer preventative as well as curative mental health services. Students will often interact more closely with their TAs than any other university instructors, meaning TAs are better positioned to notice students in distress. Making sure they have the resources they need during what can be a very difficult time is critical. —Amanda Modell, TA, American Studies and Gender, Sexuality and Women's Studies, TAC 2014-2016

Difficult Students

Difficult students refer to any individual who says or does something in or outside of class that is disruptive, that prevents other students from being able to learn, and/or that is inappropriate because it makes you or your students uncomfortable. This may include a threat, an offensive remark, or an aggressive gesture or comment. The following are approaches for handling difficult students in your classroom:

Don't let disruptive students take over the class. Students will look to you to ensure that the atmosphere in the classroom is one in which they can concentrate and learn without being distracted by other classmates.

If a disruptive student is impeding others' ability to pay attention, you have a few options:

- Remind the entire class, without calling on anyone specifically, that everyone needs to pay attention/stop texting/ begin the quiz/stop talking, Remind the entire class, without calling on anyone specifically, that everyone needs to pay attention/stop texting/begin the quiz/stop talking, etc.
- Stop talking and look directly at the disruptive student until the behavior stops or walk and stand by them for a few seconds.
- During a break or at the end of class, ask to speak to the student in private. Begin the conversation by asking for the student's perspective on what happened so that you are not antagonising the student. Tell them gently but firmly that his/her behavior must stop.
- Remind your students that the classroom is a learning community.
- If your first requests/warnings aren't heeded and a disruptive student continues to distract others, call the disruptive student by name and ask them to stop their distracting behavior. If the behavior persists, ask (and insist) that he/she leave the classroom.

Seek outside help. If faced with a persistently difficult student or a student who makes you uncomfortable, consult with the instructor of record or contact Office of Student Support & Judicial Affairs (OSSJA) (sja@ucdavis.edu). You can also report a student online at http://sja.ucdavis.edu/reporting-misconduct.html). Students and instructors are expected to follow the UC Davis Academic Code of Conduct. When improper conduct disrupts the class or threatens the safety of others, there are approved courses of action that need to be taken.

Students with Disabilities

At UC Davis, if you have a student with a registered disability, you or the instructor of record will either be contacted by the Student Disability Center (SDC) or the student will provide you with documentation from the SDC describing the necessary accommodations. Instructors, including TAs, are legally obligated to make accommodations and ensure equal access to educational opportunities. However, you may also have students in your class with disabilities who are not registered. The following are approaches to help support students with disabilities:

Inform students about the SDC. Many first-year or transfer students may not be aware that they need to register their disability at the SDC in order to receive accommodations. Make a note in your section/lab syllabus, and make an announcement (via Canvas or in person) as early as possible in the quarter because instructors can only accommodate students with disabilities if they are registered with the SDC. The following is a sample statement that you can include in an email or on your section syllabus: "Talk with me as early in the quarter as possible to explain your needs and discuss any concerns. Solutions that benefit one student can help the whole class, so please let me know any questions or suggestions. Contact the Student Disability Center for more information and to request accommodations: 530-752-3184; http://sdc.ucdavis.edu/."

Plan for difference and treat it as an asset rather than a problem. Students with disabilities have valuable forms of experiential expertise: listen and learn! —Tori White, TA, Comparative Literature, TAC 2016-18

Reach out to the student. If you have been contacted about a student with a disability, it can be both helpful and respectful to e-mail the student before or during the first few days of class to ask what he/she may need from you and the instructor of record in order to have a successful quarter (e.g., copies of the lecture notes and handouts prior to class, where they would like to sit, etc.).

Be mindful of whether all students can participate in your class at all times. While lesson planning, consider what modifications can be made to ensure that any student can participate and benefit equally from the activity or lesson. For example:

- If an activity or assignment requires all of the senses, consider how the activity could be modified depending on the disability. For instance, if students need to move around the room, is there space to do that with a wheelchair? Or how could a visually impaired student complete that activity?
- When showing visuals in class, describe the image without assuming that everyone can see it and be mindful of visual directions (e.g., look up, down). This is also helpful for other students because you are verbally reinforcing the image and you are highlighting what students should notice about the image. When writing or drawing on the board, say out loud what you are writing and drawing.
- Avoid using colors to differentiate information on an image or a chart because some students may be color blind. Instead, use shapes or both colors and shapes.
- When speaking, face the class to help facilitate speech reading, captioning, and sign language interpreting.

Frequently Asked Questions

What should I do if a student approaches me for accommodations due to his/her disability? First, you should ask if the student has registered his/her disability with the SDC. If not, ask them to do so as soon as possible because accommodations cannot be made for students who are not registered, even if they have a medical note. Second, if you are unsure about what you may or may not do or how to go about accommodating the student, ask the instructor of record and/or the SDC. Third, to maintain your student's confidentiality, try to not draw unnecessary attention to a student's disability unless he or she confirms that it is okay.

What should I do if a student makes an inappropriate and offensive comment during class? Part of creating an inclusive classroom environment is modeling how to be respectful, so it's important that you take action and not ignore the behavior, or else it may get worse and potentially affect other students. Depending on the situation, you may want to consider the following measures:

- Acknowledge the comment and explain why it is inappropriate and offensive from an academic standpoint (e.g., lack of evidence, outside the scope of the discussion, illogical reasoning).
- If you established participation guidelines (it is a good idea to do so during your first day of class), point out how that comment violates them. Use and refer to the UCD Principles of Community as part of those guidelines.
- Speak with the student alone after class, but make sure you also take action that addresses what happened with other students in class who heard and experienced it.

Where can I send my multilingual students to get help, or is it my responsibility to help them with English grammar, writing, and/or speaking? Depending on the instructor of record and the course objectives, it may or may not be part of your responsibility as the TA to support their writing and English development. You should speak with the instructor of record to understand your expected responsibilities regarding this issue. Also, you can refer your multilingual students to the Student Academic Success Center (SASC) (2205 Dutton Hall) which offers ESL and writing workshops.

When is it my responsibility to meet the needs of my students and when should I refer them to the instructor of record? Most of the strategies and suggestions provided in this guide are meant for you to incorporate in your classroom or your office hours. However, there may be things out of your control (e.g., curriculum), situations beyond your expertise (e.g., emotional counseling), or accommodations beyond your responsibility (e.g., closed captioning on course materials) that may require support from the instructor of record and other campus organizations. When in doubt about whether or not you should support a student's needs and how to best do so, contact the instructor of record or refer to one of the resources listed under "Campus Resources for TAs and Students" at the end of this guide.

Can I assume that my students will have technology to bring to class? Can I assume that my students will have internet access outside of class? All UC Davis students are expected to have their own computers that can connect to the internet. However, some students may have desktops and not laptops, and not all students may have internet access at their residence. Therefore, if you do decide to do an activity that requires computer access during your class, either 1) Ask all students to bring a laptop, if they have one. Then put students in pairs or small groups to ensure that at least one member has a laptop, or 2) Reserve a computer lab classroom on campus. Also, make the expectation known to your class about when and how you'll post information, assignments, etc. so that students may plan accordingly. You can also point out (in your syllabus or in class) nearby computer stations that students have access to. To find computer labs for your class and/or open computer stations for your students, visit UC Davis Information and Educational Technology: https://computerrooms.ucdavis.edu

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CHAPTER 3: PLANNING LESSONS What is a Lesson Plan? Lesson Planning Steps What is Backward Design? Strategies for Writing an Effective Lesson Plan Frequently Asked Questions

What is a Lesson Plan?

A lesson plan provides a roadmap for the instructor of what students will learn in class and how class time will be used effectively to achieve that learning. An ideal lesson plan describes the learning process in enough detail that someone else could read it and have a picture of the flow of the class.

Typically, a lesson plan includes detailed descriptions of the following:

- Learning outcome(s) of what students will learn during the lesson
- Materials and equipment
- Introduction (review/preview/attention grabber)
- Outline of learning activities and assessments
- Wrap-up/summary
- Pre-class preparation/homework

There are several benefits to preparing a well-thought-out lesson plan before a class. First, you will better manage your time and be more organized, setting a precedent for students. Second, creating a lesson plan will help you articulate your learning outcomes, ensure that you check for student understanding periodically throughout the class, and that you brainstorm possible classroom challenges. Third, you will have a record of your teaching, which is helpful if you teach the class again and finally, you can include them as samples and for in your teaching portfolio.

I try to think of lessons as a mini-adventures. If I want my students to join me on the journey, I have to remind them why we're doing it! Motivating lessons are key for effective instruction. These can come in the form of recalling past concepts, making the current content more relatable and giving previews of the ultimate destination. In that sense, lesson planning is actually more like adventure planning! —Derek Rury, TA, Economics, TAC 2017-2018

By visualizing the class objectives, we ensure that we can get to all of the necessary content, and that the content is organized in a way that works for both the instructor and the students. This includes identifying the goals, how long certain activities will take, and the order and content of the activities. Whether it is a formalized, printed lesson plan or just a blueprint in your head, this step is important to managing a classroom, lab, discussion, or lecture. —Giulia Gallo, TAC Anthropology 2018-2019

Lesson Planning Steps

The following is a list of useful steps to include when writing a lesson plan. Different people may approach these steps in a different order and using an iterative process, it is useful to include all of these steps:

- 1. Define learning outcome(s) and prioritize which are most important. Write concrete and measurable learning outcome(s) that describe what students will learn and be able to do by the end of a specific lesson. For example, By the end of the class, students will be able to discuss the challenges and benefits of using rubrics for grading. There are several benefits to starting with learning outcomes. First, formulating learning outcomes will help you focus what material you will cover during class. Second, learning outcomes ensure we know what type of understanding we are checking for and that the activities we are doing are purposeful and can help students learn what we want. Third, clearly articulated learning outcomes communicate expectations to students about what they should be able to do by the end of the lesson, a class, etc. Students may refer back to these learning outcomes to prepare for exams or projects.
- 2. Decide the assessment(s) you will use to check for student understanding and achievement. After you have written your learning outcome(s), determine how students will demonstrate understanding and accomplishment of the outcomes. For example, returning to the previously mentioned learning outcome (By the end of the class, students will be able to discuss the challenges and benefits of using rubrics for grading), you may employ a one-sentence summary or a pro and con grid in order to ensure that students understand the challenges and benefits. In Chapter 4, we discussed the importance of including formative assessments because they provide you and students with ongoing feedback about their learning.
- 3. Determine the classroom activities that you will use to help students acquire the skills and knowledge needed to successfully demonstrate mastery of the learning outcome(s). Activities should engage learners with the content, with peers, and with you. For example, if you want learners to be able to complete a pro and con grid or write a one-sentence summary about the benefits and challenges of using rubrics for grading by the end of your lesson, you may have students free write on prior experiences grading with and/or without rubrics, practice grading a sample assignment with and without a rubric, or work in small groups to brainstorm benefits and challenges together. It is good practice to plan an extra activity or two in case you finish early.

See Chapter 4 for a detailed discussion about formative assessment

See Chapter 5 for a list of active learning strategies

4. Decide on a logical order of events. Learning requires scaffolding so think about what students need to know and be able to do the first step before moving to the next one step. A popular model that you may consider using is the "I do - we do - you do" model, where you first demonstrate or introduce the process, then work through or solve an example with your students together, providing guidance and feedback, and finally have students complete the task on their own. Oftentimes, we remember the "I do" and "you do" parts, but forget the "we do."

Always begin by knowing your learning environment. What working tools are at your disposal? What are the classroom's spatial dimensions? How are desks organized? Which boards or screens maximize accessibility? Who can you contact in case of a technical emergency? Only by knowing the strengths and the limits of your learning environment can you truly plan a potentially-effective lesson (and back-up plans). —Miguel A. Novoa Cipriani, TA, History, TAC 2018-2019

- 5. Fill in details of activities, such as: How will I introduce and explain the activities? What will students do? What handouts, materials, questions, or problems do I need? How long should each activity and assessment last? What will you do to follow-up at the end of each activity? Adjust times and activities as necessary.
- **6. Check for alignment.** Are the assessments and activities aligned with the learning outcome(s)?
- 7. Consider the diversity of students. Are the outcome(s) achievable by all students? Are there multiple ways for students to engage with the ideas, with their peers, and with you and demonstrate understanding? Are your assessments, activities, and materials accessible to all students?
- 8. Determine what pre-class preparation is needed you and students need to complete in order to prepare and complete for the lesson's classroom activities. What materials (e.g., technology, handouts, etc.) will you need? What information or skills will students need prior to participating in these activities? What homework will prepare students accordingly?
- 9. Develop introduction, transitions, and wrap-up/summary. Introduce the learning outcome(s) of the lesson and of each activity to your students. Use verbal and physical transitions to help students follow along with your lesson. Include a wrap-up at the end of your lesson that summarizes or ties the learning outcome(s) and content together. Write down final thoughts or open questions you would like to leave with the students, or save time for student reflections on the day's lesson. Planning for wrap-ups prevent you from talking superfluously until the time is up.
- 10. Make handouts and gather materials
- 11. (During and after the lesson) Note what went well, what could be improved for next time, what worked as expected, and what you modified during the lesson and why. This will be extremely helpful for improving the lesson and your overall teaching because you will practice identifying and modifying what you should do next time to be more effective (e.g., how to better communicate instructions, which areas are too easy or too difficult for students).

See Chapter 2 for a discussion of who are UC Davis students and strategies for engaging and supporting all learners

> See Chapter 5 for information about presenting infornation effectively

- 12. (After the lesson) Reflect on the class and assess how effective your lesson was. Ask yourself the following questions:
 - How does the class help students learn?
 - Are their opportunities for my students to participate with me, the material, or with each other?
 - How does the activities help meet the learning outcome(s)?
 - Is the class clearly organized?
 - Have I allotted enough time (or too little) for each activity and assessment?
 - Are there clear transitions?
 - Are there opportunities to check for student understanding?

Sometimes I feel the connection between the weekly reading assignment and lectures is unclear and I'm not completely sure about the instructor's expectation for that week. In this case, I talk to the instructor, making sure I set proper goals for the discussion section. It is fine to tell instructors when you need their help to teach better. —Shan (Zoe) Lin, TA, History, TAC 2016-2017

What is Backward Design?

Traditionally, lesson planning starts with the content, which focuses attention and effort on what the instructor will teach and how they will teach it. On the contrary, Backward Design is a learner-centered approach to lesson planning that starts "backwards" from the traditional planning approach. Instead of starting with the material, you begin with writing the learning outcome(s). Then, you determine the assessment that will demonstrate student achievement of the learning outcome(s) and provide feedback to students about their learning. Next, you decide the activities that will help students gain the knowledge and skills necessary to successfully complete the assessment on their own. Finally, you check for alignment by ensuring the assessments and activities will help students achieve the learning outcome(s).

Try asking your students for their expected learning outcomes and what they want to get out of a course. You can design your activities to meet your teaching objectives and the students' learning outcomes. —Sergio Sanchez, TA, Education, TAC 2016-2019

The following illustrates the Backward Design model with examples from multiple disciplines:

	Learning outcome(s) → What should students know, understand, and be able to do?	Assessment → What evidence will demonstrate that students are making progress towards the learning outcomes?	Activity → What exercises will help students develop the skills and knowledge needed to meet your learning outcomes?
STEM example	Students will be able to prove if an algorithm is correct.	Students will complete an exam with word problems and short answers.	Students will work in teams to solve practice problems.
Social Science example	Students will be able to write a concise literature review with a clear argument.	Students will write an annotated bibliography of the sources that will form part of their literature review.	Students will read journal articles and identify the arguments of the literature reviews.
Humanities example	Students will be able to defend an argument in an oral presentation.	Students will write and deliver a persuasive speech.	Students will make a concept map of how to organize their speech.
Alignment How do the assessments and activities help students achieve the learning outcome(s)?			

How do the assessments and activities help students achieve the learning outcome(s)?

Assessments and activities are sometimes interchangeable because some assessments may act as activities that prepare students for the final course assessment. For example, students may write an annotated bibliography as an activity in order to prepare them for completing the final assessment, writing a literature review.

STRATEGIES FOR WRITING AN EFFECTIVE LESSON PLAN

Be aware of the classroom setup. Sequential order of activities and time allotment may depend on your classroom structure. For example, if you need a document projector, but the screen hides the blackboard when it is down, you may need to make a decision about when and whether to lower the projection screen.

Connect the homework with the lesson. Pre-class preparation should serve a purpose in relation to the lesson, so explicitly connect your class with the homework. This will also encourage students to complete the homework prior to class and set the expectation that students are required to come to class prepared.

Do not be restricted by your lesson plan. While it may help with time management and organization, planning every minute can make the class seem overly prescriptive. Instead, be open to discussion and questions which can lead to significant and rich learning moments for students. Some instructors find that detailed lesson planning allows them to be more flexible because they have thought through what is most important and how long activities will take, whereas others prefer to build in time for student questions and unplanned discussion from the beginning.

Draw from previously used lesson plans. You do not have to write new lesson plans for every single class. Oftentimes, colleagues who have taught the course before may have lesson plans for you to modify and adapt to your classroom. Looking at others' lesson plans may also give you good ideas and insight into how they approached teaching certain skills and topics. In addition, after you have taught a course once, you can build on your previous lesson plans.

Think through instructions and guidelines for activities. What do students need to produce by the end of the activity? What are your expectations of them as they are completing the activity? Should they work alone or in groups? If in groups, how will they make groups? How much time do they have? If they are stuck, will you provide them hints or do they need to ask you specific questions? You may want to write out the exact instructions you will say to students in order to be as concise as possible when you are explaining to them what they need to do. By thinking through the procedures ahead of time, you will feel more confident facilitating the activity, you are more likely to anticipate potential problems and questions, and your students will have a more enriching learning experience.

Plan an extra activity (or two). Always include an activity or an assessment at the end of your lesson in case you finish early. This way you do not have to improvise or choose a random exercise because you need to fill the rest of the class time.

Brainstorm options for participation for each activity and assessment. Some students may need alternative modes of participating during activities. For example, if you are planning to have an activity that requires standing and walking and one of your students come to class with a broken leg and cannot walk around the classroom easily, what other options will they have to complete the activity?

Include an agenda to share with students. Summarize your entire lesson plan with a short list of the activities to share with your students. This helps communicate to students what will happen in class, it helps you transition between activities, and manage the time during the discussion section or lab.

Frequently Asked Questions

What if I do not have time to write a lesson plan? Many instructors, regardless of whether they have time or not, will think about what they will discuss prior to entering the classroom, which is similar to the purpose and writing of a lesson plan. As such, re-direct the time you would be spending on thinking about what topics or concepts you will need to cover, and think about what skills and abilities you want students to leave with at the end of the class, in other words, what learning outcome(s) do you expect. Then take a few minutes to make a short agenda of the activities and assessments that align with the learning outcome(s). Investing time and energy into writing a lesson plan will help you be more effi ient in the classroom and throughout the entire course, it will help increase student learning, and will form part of your teaching portfolio. If you teach the class again, you will have less work to do if you have already developed well-thought-out lesson plans.

How detailed should my lesson plan be? A lesson plan should be detailed enough for anyone to read the lesson plan and be able to teach the class as described. However, the level of detail that you include in your lesson plan depends on your own personal style, experience, and need. For beginning instructors or someone teaching a new class, it may be helpful to have very detailed lesson plans to ensure effective and smooth execution until he/she becomes more familiar with teaching and/or the material. Regardless of time and expertise, all lesson plans should ensure there is alignment among learning outcome(s), assessments, and activities.

What if the instructor of record gives me a pre-written lesson plan to follow? First, communicate with your instructor of record to inquire about whether or not you have to stick with the lesson plan exactly as it is written. If so, follow the steps in this chapter to determine if the pre-written lesson plan has all of the different elements of a well-written one, such as learning outcome(s) and assessments, and whether everything is aligned. If needed, write your own learning outcome(s) and/or re-evaluate the order of activities and the instructions. In addition, consider learner diversity and accessibility of the lesson plan. If you do not have to follow the lesson plan, add, delete, and/or modify what you need in order to have something that follows a Backward Design approach as mentioned earlier in this chapter.

What if I do not know what the learning outcome(s) are for my discussion section or lab? Sometimes, instructors may provide each TA with learning outcome(s) for the discussion section or lab. However, if you are not provided with learning outcome(s), write your own and include them in your section/lab syllabus for students. To get started, instructors of record will often have the learning outcome(s) or objectives of their classes written on the syllabus. Think about what students will need to be able to do in your section or lab to to successfully reach the larger class objective. For example, if the course states that students will learn to write a five-paragraph argumentative essay, what do you think students need to be able to do to accomplish that goal? As a result, you may decide that one of the outcomes in your section is for students to be able to defend an argument logically. In order to do that, you may have a lesson outcome where students have to identify weak points of an argument in a sample essay or to write an outline with evidence for and against an argument.

How should I manage my class time? While you may try your best to estimate how much time you need to allot for each activity, there will always be instances when an activity takes more or less time than you anticipate. While you are lesson planning, identify ahead of time what you can cut out from your lesson that would not interfere with helping your students achieve the learning outcome(s). Are there activities that share similar objectives? Is there an activity or an assessment that you could have students do outside of class? Also, plan an extra activity in case you finish early. Lastly, note how long activities run while you are teaching or right afterwards so that you may modify your lesson plan accordingly in the future.

How can I get feedback on my lesson plan? Asking for feedback on your lesson plan is a great way to improve your teaching and to hone your skills in writing effective lesson plans. There are several ways to receive feedback. First, you may ask your colleagues or the instructor of record to provide you with feedback or second, schedule a general teaching consultation with the TA Consultants at the Center for Educational Effectiveness (CEE).

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CHAPTER 4: ASSESSING LEARNING AND GRADING STUDENT WORK

What is the Difference Between Assessmen and Grading?

How Can I Check for Student Understanding?

Creating and Using Rubrics
Steps for Creating a Rubric
Incorporating Formative Assessment Techniques
in Your Classroom

How Can I Grade Students Fairly and Effectivel?

Strategies for Grading Effectively and Fairly
Communicate Assignments and Grading Expectations

Frequently Asked Questions

Strategies for Providing Meaningful Written Feedback

What is the Difference Between Assessment and Gradin?

One of the most common concerns expressed by new TAs is how they will know whether students are learning. The good news is that you do not have to wait until you are engaged in formal "grading" to find out what your students are (or are not) learning. This chapter provides useful strategies for gathering information about your students' learning while there is still time to make adjustments or clarifications that will benefit your students.

At UC Davis, we view assessment as research into learning, so it's important to spend a few minutes clarifying key terms. The more clearly you understand the different purposes and approaches available to you, the more effective you will be at communicating your expectations and documenting students' progress toward meeting your goals for their learning.

Assessment and grading are often conflated, but they are not necessarily interchangeable. Assessment is the process of collecting and using evidence of student learning to provide instructors with information about some aspect of teaching and learning. Using the course-level assessment strategies described below, you will have the information you need about whether you can move forward with a particular topic or activity or whether students need more time to discuss or practice. Many of these tools will also help you to provide timely and useful feedback to students, to use data to assign grades, and to record data related to students' achievement of the course learning outcomes determined by the instructor of record. The assessment tools you select should always be aligned to your course learning outcomes and should yield information to support your teaching and your students' learning.

There are three general functions for assessment within courses: diagnostic, formative, and summative.

Diagnostic assessment takes place prior to instruction. For example, at the beginning of a course or class meeting, it can be useful to gather information about students' prior knowledge. Examples of diagnostic assessments include a summary of what a student knows about the course topic (poll or minute paper) or a concept inventory, both of which measure students' existing content knowledge. Asking students to consider what they already know (or think they know) about a topic also supports metacognitive development.

Formative assessment takes place during instruction, and involves gathering information from and about students and using that data to make adjustments to your teaching and/or the pace of the lesson. You can also use the data to identify students' misunderstandings right away, allowing you to reteach concepts or skills. For example, in a lab setting, ask each person to demonstrate safety procedures using an observation checklist. Or, at the end of a discussion, ask students to write a one-sentence summary of an important take away. If you discover that a majority of the students do not understand an important step or the main objective of the discussion, you can spend instructional time addressing the specific issue. In addition to the list of formative assessment tools listed below, you may consider using homework, drafts of lab reports or essays, and/or problem sets as sources of formative information.

Quick in-class assessment activities can be a really valuable way of checking for student understanding! I often have students work in groups while I walk around the room to quickly gauge how well they are understanding the concepts. —Christy Cahill, TA, Political Science, TAC 2014-2016

Summative assessment provides a snapshot of student learning at a particular point-in-time (usually at the end of a course or program). Data from summative assessment can inform planning for the next term and be included in final grade calculations. As a TA, you may not be responsible for designing summative assessments or calculating grades. However, it is useful to know what summative assessment is planned for the course, and how it aligns with the learning outcomes, so you can help prepare your students to be successful. Common examples of summative data include final exam scores, final grades for papers, projects, and/or presentations.

How Can I Check for Student Understanding?

Checking for understanding is not the same thing as grading students. It is beneficial to you and your students to check understanding periodically and to provide students with feedback on their learning. A variety of tools can help you document your students' knowledge, skills, and/or abilities throughout the quarter and within each class session. Keep in mind that the assessment tools you choose should align with the course learning outcomes for what you (and the instructor of record) want students to learn and to be able to do.

Creating and Using Rubrics

A rubric is a tool that establishes criteria and expectations for a given assignment. Rubrics come in many forms (tables, checklists, etc.) and serve different purposes. Depending on the goals for the course, you and the instructor of record may choose a **holistic** or **analytic rubric**.

If the course uses Canvas, familiarize yourself with the rubric tool. If the instructor of record does not use it, offer to help make one. The system is intuitive and the Canvas support team is great—it's worth the learning curve because students appreciate the clarity of expectations. —Alice Martinic, TA, Nutritional Biology, TAC 2017-2019

Holistic rubrics yield a single score, which represents the whole performance of the assignment. For example, you might articulate the expectations for an "A" paper compared to a "B" and "C" paper in a holistic rubric, and then assign the grades based on how the student work compares to these expectations. They can save time for the grader, but because they only provide general information (and not necessarily specific feedback), it may be difficult for students to know what changes are needed for future assignments.

Analytic rubrics include clear descriptions and criteria of the expected performance. For example, you could use an analytic rubric to specify the required components of a lab report (e.g., methods, results, data tables) and communicate the levels of performance (e.g., exceeds expectations, meets expectations, developing, needs improvement) for each component. Using an analytic rubric will allow you to identify strengths and weaknesses by criteria and provide useful information to students. Analytic rubrics also:

- Speed up the grading process;
- Provide "actionable" feedback, so students can see which criteria they need to improve upon;
- Increase equity in grading; and
- Promote metacognition (student awareness of their own learning).

It's recommended that you make a copy of each student's rubric before handing it back (for possible grade disputes and to track student progress throughout the course).

If your professor does not provide you with a rubric, develop one by either following the steps below or adapting one with these steps in mind.

Steps for Creating a Rubric

- 1. Define the purpose of the assignment.
 - a. Is it to provide feedback?
 - b. Is it to check for understanding?
 - c. Is it to identify errors?
- 2. Define your expectations.
 - a. What is the exact nature of the task students will complete?
 - c. What knowledge, skills, and / or dispositions will students demonstrate?
 - b. What evidence do you need to see to determine whether students have accomplished what you hoped they would accomplish when you created the assignment?
- 3. Identify the criteria the assignment addresses.
 - a. For an essay, the criteria might include: content, organization, language, and conventions.
 - b. For a lab report, the criteria might describe the expectations for each of the required components, e.g., abstract, introduction, methods, materials, results, discussion, and conclusion.
- 4. For each criterion, write a detailed description of expectations for each performance level (e.g., Below expectations, Needs improvement, Meets expectations, Exceeds expectations).
- 5. Determine whether / how to weight the criteria (e.g., Format = 10%; Communication = 20%; Evidence/development = 35%; Organization = 20%; Style & mechanics = 15%).

Incorporate Formative Assessments Into Your Classroom

The following is a list of formative assessment tools useful for gathering information at different points in a course, depending on the question you want to answer. Choosing the right tool depends on the course learning outcomes that the instructor of record has defined, and what you want to learn about your teaching and your students' learning.

These strategies are also useful for increasing student engagement. See Chapter 5 for more about engaging students and promoting participation

Assessing Prior Knowledge, Recall, and Understanding:

- **Minute paper** Ask students to write for a minute or so on a question that you pose. Choose a specific question, or ask them: What is the most significant thing you learned today? Students can submit responses anonymously or for participation credit. This allows you to determine what students think is most important and how that aligns with your goals.
- The muddiest point. Ask students to write what was the "muddiest point," or most unclear concept in the lecture, discussion, presentation, homework, reading, film, etc. They can do this before they come to class for material they have reviewed outside of class, or in the middle or end of class for concepts learned that day. This provides you with feedback about what students find most confusing, and helps students reflect on what they don't understand.

Checking in with your class in creative ways will help to clue you in to what parts of class content are being retained and let you assess their grasp on the material. This can be done with consistent formative assessments. These are now actually my favorite teaching moments, as I can turn problem areas into conversations! —Giulia Gallo, TAC, Anthropology, 2018-2019

• Instant or online polling. If the concepts that you are discussing can be reviewed accurately using multiple choice questions, ask students to respond to questions during class using clickers, anonymous online polls (www.polleverywhere.com or www.socrative.com), or Google Forms. This lets you see how well students understand concepts in real time and provides students with feedback on their understanding when the answer is revealed. Students can also participate in online polls and quizzes before or after class to get feedback on their background knowledge, their preparation for class, or how well they understood material covered in class. For a low-tech version, have students close their eyes and raise their fingers to indicate level of understanding or which number they think the answer is. You may use colored note cards as a way to indicate the answer.

Assessing Skills in Application, Synthesis, and Critical Thinking:

- The one-sentence summary. Ask students to answer the question "who does what to whom, when, where, how, and why?" about a given topic, and then to synthesize their answer into a single informative sentence. This provides feedback about how students can summarize a large amount of information concisely and completely. This works well when there is information that can be summarized in declarative form, such as in historical events, political processes, plots of stories or novels, chemical reactions, and mechanical processes.
- Concept maps (mind maps or diagrams or flowcharts). Students map out how concepts or a process are related and organize them into a framework. This presents a "big picture" view of students' understanding, and can help them make connections between ideas that they have learned on their own and that you have focused on in class. Concept maps can be created by hand or online with tools like, Text 2 Mind Map https://www.text2mindmap.com/.
- Case study. Case studies describe potential scenarios where a decision needs to be made regarding a problem, a patient, etc. Present students with case studies and ask students to think about how they would solve the issue drawing from what has been covered in class or the textbook. You may introduce a topic using a case study and refer back to it throughout your class, assign them for homework, or use them to generate a discussion. Case studies are ideal for building analytical thinking skills and applying content knowledge to real world problems.
- **Guided peer review.** Have students provide feedback to their peers on a draft of an essay, a project proposal, or a lab report. Provide students with a checklist of items or questions that you or the grader will be looking for when they submit their actual assignment so that students can review their peer's work to see if all of those elements are present.
- Pro and con grid. Students jot down a quick list of pros and cons on a particular topic or issue. This requires
 students to search for at least two sides of an issue or claim and weigh the value of competing claims. The
 exercise provides you information on the depth and breadth of students' analytical skills and capacityfor
 objectivity.

Assessing personal learning strategies and progress:

- Learning journals. Students keep journals that detail their thoughts about the class. Journals are turned in several times throughout the course so you can track their development. You can ask students to focus on course knowledge or skills, or on their learning process and personal attitudes and values.
- Exam/Homework Wrappers. Students are given short handouts to complete when their exam is returned to
 them. These post-exam reflections guide students in reviewing their performance, instructor feedback, and
 future exam preparations. Additionally, some assignments could have reflection questions before and after the
 assigned questions or required work.

Assessing Student Learning Outside of the Classroom:

- Online discussion forum. Pose reading or content questions online and ask students to answer and/or provide feedback on what other students have written. You can provide hints along the way and get an idea of how students are thinking about the problem to identify areas that you may need to clarify and review during class. Use the Canvas discussion forum tool or a free online question and answer platform.
- **Ungraded online quizzes.** Prepare short ungraded online quizzes on the reading or lecture to get a better grasp on what your students are struggling with. This can help you identify areas to review during your class and can help students identify for themselves what they are unsure about. Canvas has a Quiz tool, or you can use a free online quiz site such as Quizlet.

How Can I Grade Students Fairly and Effectivel?

One of the main responsibilities of a TA is to grade student work including exams, quizzes, papers, labs, and problem sets. Before grading, you should always speak with the instructor of record to ask about the grading criteria. In some instances, the instructor of record will provide you with a rubric or a set of assignment-specific criteria with their relative importance in relation to the overall grade. This will help you be consistent and efficient when grading student work. If the instructor of record allows you to set criteria for grading, then you may want to develop your own assessment tools for the same reasons. If the instructor of record permits, share these tools with your students to help focus their efforts and to emphasize that you grade in a manner that minimizes subjectivity.

Despite what most of us have been told, a grade is not a complete representation of learning. Keep in mind that, in addition to assessment of student learning, grades often include behavior-related information (e.g., attendance, participation, punctuality).

Set yourself time a soft time limit for grading each assignment. We all have a limited amount of time to evaluate student work and provide feedback. Try to divide that time as evenly as possibly among students. That is not to say that you should ignore students who need more support. Instead of spending extra time on written feedback, set up a one-on-one meeting or connect the student to the appropriate campus resources. —Chris Miller, TA, Animal Biology, TAC 2017-2018

STRATEGIES FOR GRADING EFFECTIVELY AND EFFICIENTLY

Review the grading criteria before you begin.

Grade as anonymously as possible. For example, ask students to write their names on the back of the page.

Skim five or more students' papers or lab reports before you begin grading in earnest. This preliminary reading will give you an idea of the range of answers you will encounter.

Set a maximum time limit for grading each answer, section, or paper. This way no response gets more consideration or scrutiny than another.

Grade all students' responses to one question or section before moving on to another. That way you are familiar with the questions and the answers that you are looking for.

Make stacks of papers containing responses that are of similar quality and then review them for consistency before marking points on the paper.

Grade when you are fresh, taking breaks as necessary. Being sleepy, hungry, or anxious about time does not promote efficiency or fairness.

Return to the first few assignments that you graded to check for consistency. If it's not consistent, fix it!

If you are part of a team of TAs grading an assignment, **hold a "norming session"** to ensure uniform grading standards and marking procedures. Often TAs will divide the grading tasks so that one TA grades all the students' answers to the same question. Grade a few exams or papers together, discussing your evaluations of each question. Develop a rubric together if one doesn't already exist (see above for information about rubrics).

Communicate Assignment and Grading Expectations

Students who understand what is expected of them are better equipped to assess their own mastery, seek assistance as needed, and make progress toward successfully completing an assignment or course. When you explain what you expect ahead of time and provide students with opportunities to ask questions, you may be able to decrease the possibility that a student might dispute her/his grade. By establishing and communicating expectations, you ensure that your evaluation of students' work is based on specific criteria that are aligned to the particular assignment. This clarity promotes consistency in your grading and can help to make grading more efficient. In some cases, the instructor of record will introduce the assignment and expectations to students. However, for assignments specific to your section, it is your responsibility to communicate expectations to students before they begin an assignment.

- Clearly articulate the learning objectives of the assignment before it's due. The percentage weights for grading the various components should reflect those objectives. For example, if the primary goal of an essay is to clearly communicate factual material, creativity should not be heavily weighted.
- Decide in advance the importance of factors such as grammar and spelling and make sure your students know how to access support if they want or need it.
- Whenever possible, include your grading rubric or written criteria so that students know your expectations.
- Include a checklist of what you expect the students to submit, in which format, length, etc.
- Provide examples and/or a model of the assignment in order to familiarize your students with the content and proper format (e.g., lab report, 5-paragraph essay).
- Spend time in class going over the requirements and answering questions. To avoid redundancy, it may be helpful to start a discussion thread on Canvas so that students can post questions and everyone can see your responses.

Students will greatly benefit from understanding how they can improve for the next time. This doesn't mean you need to outline every mistake or provide every single correct answer! Perhaps adding some leading questions to prompt deeper thinking will lead them on the right path. It is also good for students to see what they are doing correctly so that they keep up that method of thinking. Sometimes it's as simple as a few sentences underlined and a 'Correct!' nearby. —Joya Cooley, TA, Chemistry, TAC 2015-2017

Frequently Asked Questions

What should I do if a student complains or disputes his/her grade? Since many TAs are not the instructor of record for the course, students have a right to have your grading of their work reviewed by the instructor. That review process will be at the discretion of the instructor of record, and you should ask them how to handle such requests. Again, it is important to keep all records of student grading and any grading-related communications with the student.

Should I return papers and exams at the beginning or at the end of class? When you return student work depends on whether you plan to review and talk about it. If you intend to review parts of the assignment or exam, then you should allot time during class to do so. If not, you may want to wait until the end of class to return papers and exams since students may become distracted or upset about their grade and be unmotivated to participate during class, or just leave.

STRATEGIES FOR PROVIDING MEANINGFUL WRITTEN FEEDBACK

Make your comments in the margin sparse and legible.

Avoid writing "No!" or marking mistakes with a large red "X." Instead, pose a question that may help students think more critically about their answer.

Distinguish between correcting and commenting. Note errors, but do not fix them for the student. Instead, respond with comments that encourage students to think through the process of revision (e.g., "An early error fouled up subsequent calculations, but the process is correct").

Praise students when appropriate so they know what they did well (e.g., "Good logic" or "Excellent presentation of data"). Link their accomplishments with the course objectives and expectations.

Focus and align your feedback to the learning objectives of the assignment.

Consider writing final comments that include your main observations about the assignment, that provide suggestions for further development, and that explain the grade.

- Begin your end comment by addressing the student by his or her first name.
- Acknowledge the strengths. For instance, "Alex, you do a very nice job connecting the various elements of your argument".
- When offering positive feedback, try to refer to specific examples in the assignment. This aspect of the comment demonstrates that you recognize and support what the student has done well.
- Concentrate on one or two global problems to help the student see where s/he can make the most improvement. Use questions to help direct the student to deeper thinking.
- Offer concrete suggestions for improving the assignment. For instance, "More explanation of the connections between the evidence and your assertions would make this essay stronger. For each example, ask yourself, 'How does this evidence support the point I'm making?'"
- If there is an on-going problem throughout the assignment, refer to it broadly at the end.

Determine if mistakes are individual or for all students. If several students are making similar errors, it may save you time to address them to the whole class either via email, during class time, or on a handout given to students. Invite your students to come to your office hours for additional help. If many of your students are struggling with their writing, refer them to the Student Academic Success Center.

What should I do if I'm having difficulty grading a student's work because it's incomprehensible? In order to avoid bias, you should seek a second opinion on the comprehensibility of the work. Speak with the instructor of record or another TA and ask if they understand what the student is trying to convey. If they agree that the content is not being communicated, then the assignment has not been completed successfully and you may consider grading it as an incomplete assignment. Comment to the student where you were confused and why, and refer them to the Student Academic Success Center (SASC) for further assistance.

How can I keep my own biases out of my grading practices? We all have implicit biases - beliefs about race, religion, gender, sexual orientation, etc. - that we may not be aware of. Practice noticing and exploring any biases you have on an ongoing basis. Consult with the instructor of record or with other colleagues if you are concerned bias may be impacting your teaching practices. If a student brings a concern about bias to your attention, listen supportively, not defensively. Discuss or process the situation with your faculty member, a campus resource, or a trusted friend or mentor.

What do I do with grades? Although most record keeping is now done on computer spreadsheets, it is important to keep paper back-up copies of all your records to protect against computer crashes or stolen laptops. Careful and thorough record keeping also protects both you and the student and makes it easier to handle grade disputes. For example, if a student goes to the instructor of record claiming her D grade was the result of your dislike for her, all the instructor has to do is review the student's grades in the grade book. Ask your instructor of record if s/he has a specific protocol for recording grades. The faculty member may ask you to keep your records on-line through Canvas can access their grades at any time. For help with Canvas, contact Academic Technology Services (ATS).

What is FERPA and how does it apply to my responsibilities as a TA? According to FERPA, every UC Davis staff and faculty member, including TAs, must protect the privacy of paper and electronic records containing confidential student information. Even parents are not allowed to access records unless they have written consent from the student. Without written student consent, grades may not be publicly posted, and papers/exams may not be publicly distributed by methods that disclose confidential information. This includes posting grades outside class/office or distributing papers in class or bins outside classrooms/offices if they contain personally identifiable information. It is illegal to use all or part of a student ID or social security number as an identifier for posting grades/distributing papers. As such, we suggest that you release grades to students on Canvas, use unique identifiers assigned just for your class, or hand back papers/exams directly to the student at the end of class. Do not use email for sharing grades with your students. If you have additional questions or want more details, contact Office of Student Support & Judicial Affairs (OSSJA).

How fast should I grade and return student work? First, you should always check with the instructor of record to see when s/he would like you to finish grading an assignment. If there is no deadline, you should try to grade in a timely fashion so that you can return students' work before the next big assignment or exam so they will have an opportunity to learn from your feedback.

Typically for essays, I sandwich the top two or three items that need improvement (citing specific examples) between two positive aspects of the paper. When I turn back exams, I find it useful to enforce a 24-hour ban on discussing their grade with me so that students have time to let my comments sink in. I always make sure to mark where the student did well, areas they need to work on, and, importantly, how they can improve. —Laurel Richardson, TA, History, TAC 2015-2017

How should I grade group/pair work? If the instructor of record doesn't have a grading criteria or rubric for grading group/pair work, then you should create one that includes specific guidelines of how you will assess their work and whether you will give them a single grade for the whole group, individual grades, and/or both. Make sure to communicate how you will grade group work to students before they begin working on the assignment.

What should I do if a group tells me that one of their classmates did not do their share of the assignment? Before you make any assumptions about who is right or wrong, you should speak to (or email) each member of the team in order to get a better understanding of what may be going on. Sometimes one or two members of the team may be marginalizing other members and not including them in the process for whatever reason. Depending on what is really going on, you may ask each member of the group to identify what they have contributed to the assignment and what they believe the other members have contributed as well. You may also ask students to grade themselves and their teammates at the end of the assignment and tell them that you will use their evaluations to determine the final grade. If you are still struggling with how to handle the issue, speak with your instructor of record, more experienced TAs, or request a consultation with the TA Consultants.

What if I suspect plagiarism or cheating? Handling cheating can be awkward, but your role as a TA is to protect the students who aren't cheating by responding to the students who are (or who you think might be). The policy at Office of Student Support & Judicial Affairs (OSSJA) is to raise students' academic integrity, so reporting plagiarism or other cheating can also help the student develop more ethical habits for college and beyond.

- As a preemptive measure, explain to students what your (or your department's) definition of cheating is. Remind them that you and UC Davis take cheating seriously, and discuss how you (and your department) will handle problems with cheating/plagiarism. Don't assume that "Don't cheat!" will suffice as a discussion. Be prepared to have a frank and specific discussion with your students, as definitions/understandings of plagiarism vary across disciplines and across cultures. Be sure that you include a specific definition of what cheating/plagiarism means in your syllabus and review on the first day of class. Students may be less likely to cheat if they know you have policies addressing the problem and the high cost of the consequences for cheating.
- All suspected cases of plagiarism and cheating must be turned over to Office of Student Support & Judicial Affairs (OSSJA) (http://sja.ucdavis.edu/reporting-misconduct.html). This is usually the responsibility of the instructor of record. Before submitting anything to OSSJA, you should get in touch with the instructor of record. Once OSSJA has received documentation regarding the case, they will make a decision regarding culpability and will recommend a course of action. OSSJA will recommend to the instructor what kind of grade penalty the student should face and will determine if a student should face other penalties such as academic probation or community service. The TA and the instructor do not have to speak with the student about the case; OSSJA handles all communication with the student.
- If you do experience a situation where you suspect a student of cheating, make sure to get all the evidence you can: e-mails, a detailed account of what you saw and/or experienced, another witness, a copy of a plagiarized text or exam, etc.-- and share this with the instructor the instructor or (OSSJA).
- Keep in mind that you shouldn't verbally accuse a student of cheating in front of their peers or in private (even if you feel you have overwhelming evidence). You CANNOT take an exam away from a student in the middle of a test, even if you suspect or witness cheating. You CAN have a student move to a different location in the middle of an exam. Let the student finish the exam and take note of the time of the occurrence or where on their exam you saw the incident occur.

The first time I had to report two students to OSSJA for having identical sections of a lab report was tough. To my surprise, the experience was very positive. OSSJA was helpful and easy to communicate with and we quickly came to a resolution all parties agreed on. It was a learning experience for me as well; now I'm more explicit about course-specific definitions of plagiarism and consider how they may vary with different cultures and experiences. —Alice Martinic, TA, Nutritional Biology, TAC 2017-2019

NOTES

NOTES

CHAPTER 5: Classroom Strategies

How Can I Engage Students and Promote Participation?

Incorporating Active Learning Techniques in the Classroom Strategies for Creating a Positive Classroom Environment Leading a Discussion

Leading a Lab

Presenting Information Effectively

How Can I Manage My Classroom?

How Did My Class Go?

Frequently Asked Questions

Strategies for Managing Difficult Conversations

How Can I Engage Students and Promote Participation?

Your role as a TA is to facilitate learning, so you should organize your section to ensure that students are engaged and participating, and that the learning outcomes are being accomplished. As mentioned in Chapter 2, students learn best when they are engaged with the content, peers, and the instructor; all of which leads to deeper understanding of the material and greater retention. Furthermore, by students participating in class, you and your students receive regular feedback on their learning. This allows you to modify your instruction if they are not learning what you had intended and makes them aware of their own progression as well. Two effective approaches for engaging students and encouraging participation are to: 1) create an inclusive environment and 2) use active learning techniques.



View teaching as communicating with learners. Discover what they want to know and what they already know.

—Jae Wook Jung, TA, Economics, TAC 2014-2016

Incorporating Active Learning Techniques in the Classroom

Active learning is the process whereby students engage in activities, such as writing, reading, discussing, or problem solving, that promote analysis and synthesis of course content as it relates to what you want your students to learn and to be able to do. Compared to passive lecturing, research has shown that active learning increases understanding, retention, and overall enjoyment of the class. The following are a few activities that you can incorporate to promote active learning in your classroom.

At the beginning of class:

Free answer: Call out a question to the class (i.e. "what do you know about WWI?") and ask them to write answers on the board, post-its, poster board, etc. If the class is a large lecture hall, try an online polling system like <u>PollEverywhere</u>, <u>Socrative</u> or use clickers. You should ask questions that promote analysis and synthesis of the material. For example, you may ask students to summarize the reading, to predict how the new topic connects with the previous one, or to connect the new topic with the course objectives.

Connections: Ask students to come up with an anecdote relating the course material to a real-world application, and come to the next class prepared to share with others. In class, have students discuss with a partner. Possibly call on a few students to share their anecdotes with the entire class.

Mood Music: When students arrive to class, play a contemporary song that draws upon themes represented in a text/movie that students were assigned for homework. As students listen to the song, ask them to write down how the themes of the song are similar to or different from the themes of the text/movie they read/saw. Call on several students to share.

Many of the formative assessment techniques mentioned in Chapter 4 can also serve as active learning activities in the classroom

During a lecture/presentation:

Think-pair-share: Stop in the middle of a presentation and ask students a question. Have them think and jot down ideas on their own for a few minutes. Afterwards, ask students to discuss their answers with neighbors. Then have a few pairs share their ideas with the class.

Think-convince-share: A question with several possible answers is posed to the entire class. Students vote on what they believe to be the right answer, and then turn to their neighbors to compare answers and persuade each other to agree on the correct answer. The class votes again and, hopefully, it becomes visible which answer is the correct one.

Use your Listening Ears: Before explaining something, ask students to put their pens down and just listen. Present material for 5-10 minutes, then give students a few minutes to write down the significant points they remember. Afterward, have them discuss those points with a partner or small groups so students can confirm their memory of the important points.

Anytime:

Role-playing: Ask for 2-5 students to role play a scenario or a process related to a concept from class. You may ask them to role play in front of the entire class or in small groups.

Live Debates: Ask 2-3 students to partake in a debate in front of the entire class or in small groups. Allow the debaters time to make their arguments and offer rebuttals. Then ask observing students to vote on which side they agree with more at that moment. Call on a few students to explain why they voted the way they did.

Quartering Lecture: Divide your class into quadrants or sections. Throughout the class period, move to each section of students and engage in a discussion with only that group while other students are required to listen and answer questions and/or be prepared to summarize the main points. It's important to carefully plan for what the other students will be doing while you are only engaging with one section of your class, or else they will be disengaged.

Paraphrasing: Ask students to explain a concept to an everyday person on the street in their own words. Students can explain the concept orally to a neighbor or write it down. Disassemble/Analyze/Assemble (DAA): This practice is sometimes referred to as reverse engineering, product teardown, or product dissection. In small groups, direct students to take apart an object/machine/product, analyze how it is put together, and then reconstruct it.

STRATEGIES FOR CREATING A POSITIVE CLASSROOM ENVIRONMENT

Student engagement requires pushing students outside of their comfort zone. By creating an inclusive, positive learning environment, students will be more willing to take risks and participate in class because they will feel less intimidated by the material, less afraid of making mistakes, more supported by the instructor, and more connected to their classmates. The following are strategies to help you create a positive classroom environment starting on day one.

Build relationships with your students and help them develop relationships with one another with "get-to-know-you" activities on the first day(s) of class. Here are a few examples:

- **Introduce your partner:** Pair students up and give them two minutes to interview each other. You might ask them to share their favorite toothpaste, cartoon, or animal, what they want to be when they 'grow up', why they are taking your class (something beyond "this is required for my General Education (GE), major, minor), etc. At the end of the interview, students take turns introducing their partners to the class.
- Items in common: Randomly place students in groups of three to five with people they do not know. Each group has five to ten minutes to discover the most unique thing(s) that they all have in common. Each group then shares with the rest of the class.
- Two truths and a lie: Each student writes down two truths and a lie about themselves in random order. Then form groups of four to seven students and have each person share the three 'facts' and the group must decide which one is the lie
- **Bingo:** Draw a 5 x 5 square grid on a sheet of paper. In the center space, write 'free,' and in each of the other spaces write an experience that some students in your class are likely to have had (e.g., drink coffee, have a birthday in January, been to San Francisco, speak a language other than English at home, etc.). Give students copies of the bingo cards and instruct them to find another student who has had one of the experiences listed on the card. When they find a student with a matching experience, they should write that person's name down. The first student with five different names signed across, down, or diagonally wins (only four names are necessary if the 'free' space is included in the row). If time permits, ask a few students to share what they found out about their classmates' experiences.

Utilize pair and group work. Small group or pair work is advantageous for several reasons. It allows quieter students to speak up in a more intimate setting, fosters student cooperation, creates an environment where students learn from one another, and will help your students get to know each other. As students become more comfortable with each other and with you, they will be more willing to speak up. Often some of the best participation occurs when the teacher is not part of the discussion.

Here are few ideas for effectively managing group work for groups of 3-5 students:

- Tell students to arrange desks into clusters
- Explicitly tell students that goal is not to get through the activity as fast as possible the goal is to make sure that everyone can explain the answers to the activity.
- Suggest that each student in the group has a role such as recorder, presenter, and manager. If groups are not working effectively together, assign roles to students.
- Tell students how long they will have to work, and what to expect when time is up. Be flexible with time based on how students are progressing.
- Circulate the classroom to check for understanding and to ensure students are on task.

Free Write: Give students a few minutes to think and write their thoughts or answers on paper before asking for volunteers.

Leading a Discussion

Discussion is a teaching tool that can be employed across disciplines, settings, and formats to engage students and to promote additional opportunities to participate and demonstrate understanding. Discussion may include the entire class, small groups, or pairs. For instance, you may start a lab with small group discussions to review the concepts applicable to that day's experiment or end a lab with a class discussion on the real world implications of the results. During section, you may have pairs respond to guiding questions before convening in a whole group discussion about a text, a painting, or a case study. You may have students individually free write prior to a group discussion. The following are a few strategies to help you lead an effective and lively discussion in your classroom.

During discussion sections, our role as TAs is to set the stage for students to express themselves. —Arik Davidyan, TA, Molecular, Cellular, and Integrative Physiology, TAC 2018-2019

Before the discussion:

If there is a participation grade, be clear about how you will grade students and consider using a participation rubric.

Plan guiding questions for the discussion.

- Use both open and closed questions. Open questions have many correct answers. For example, ask, "What things have you heard about genetically engineered foods?" or "What are some requirements of a healthy diet?" Closed questions have only one answer to be correct. Simple closed questions, such as, "How many chromosomes does the normal human body cell contain?" can be a great way to get students warmed up. As students start participating, continue to ask meaningful questions, both open and closed, as appropriate for your subject material.
- Ask questions that elicit different levels of thinking. Begin with questions that require students to recognize or recall information, then, using data elicited by your initial questions, progress to asking questions that require more complex thinking. Ask questions that require students to rearrange information, describe something in their own words, or that require problem solving. Questions that require the student to find similarities and differences, to construct an explanation, to draw an inference, make a prediction, or evaluate options all elicit higher-level thinking. For example, "How is a healthy diet for children different from a healthy diet for adults?" or "How would a rapid switch to genetically engineered corn affect people in different societal groups (farmers, consumers, etc)?"

Prepare students for the discussion. Ask students to respond to questions or to write a short reflection to the reading before class or at the start of class. Individual free writing can also promote discussion and give students an opportunity to think of ideas.

Before we start, I try to give students some time to reflect on the material that they have learned that week. It could be 2 or 5 minutes but I ask them to take out their notes and give it a quick glance. Then I ask them to share what they remember with a neighbor. I think giving the students those few minutes to collect their thoughts and asking them to chat about it prepares them to be open to more discussion later on during the class. —Slande Erole, TA, Political Science, TAC 2018-2019

Rearrange the seating in the classroom if possible. Having students sit in a circle can be a powerful tool for encouraging students to engage with and respond to each other and not just the instructor.

If applicable, **speak with other TAs in the same course** to share materials/resources and to maintain consistency across sections.

During the discussion:

Create a comfortable atmosphere by learning students' names and encouraging them to get acquainted with each other (see the previous set of "Strategies on Creating a Positive Classroom Environment").

Make the goal of the discussion clear. Write a bulleted list of goals on the board to help keep everyone focused.

At the beginning of each class, **remind students where you are in the course and give a short summary** (one or two sentences) of last week's discussion to provide a sense of continuity. You may also have students do this in pairs or have a few students volunteer brief summaries by asking, "What are the major points we covered last time?".

Vary the type of discussion format. Apart from a discussion with the entire class, consider having an online, small group, or pair discussion instead. This will promote discussion overall and give more students an opportunity to participate and demonstrate their knowledge.

Ask follow-up questions that keep the discussion going. Better yet, encourage your students to ask them of each other or build on one another's responses.

Allow for ample wait time. Ask a question, pause, and count to ten silently. Students need time to process before answering. If the question is very lengthy or complex, give them some time to write their answer before asking for a verbal response.

Whenever possible, attribute specific comments to the students who originally made them. This strategy demonstrates that you've been paying attention to the discussion and value each student's contribution.

Encourage non participants. Be aware of students who have participated and ask them personally to add something or ask them to participate in other tasks, such as reading a part of the text. You can call on individual students or say something like, "I'd like to invite those students who have not spoken yet to share their thoughts".

It's easy to think of participation as when students raise their hand to answer a question in class, but there are many ways to participate. Some students are going to be reluctant to speak out in front of a large group, so build in individual, pair, and small-group activities and discussion. —Rachel Nickens, TA, Sociology, TAC 2018-2019

Use the board/document projector/computer to **outline where the discussion has gone**. Structure your notes by using headings, and boxing or underlining the main points. Consider photographing or scanning the notes and emailing or posting them on Canvas for your students to review

At the end of the discussion:

Debrief and do a wrap-up activity to keep students attentive and motivated to listen and participate in the discussion. This may include asking students to help summarize the main points of the discussion.

Check for student understanding and keep students accountable with formative assessments.

Set up the next class. Tell students what questions or issues they should keep in mind and what they need to do to prepare for the next discussion.

See Chapter 4 for strategies for incorporating formative assessment techniques in the classroom

Leading a Lab

Lab sections are designed to develop students' observational and technical skills, introduce fundamental ideas, facilitate critical thinking, allow students to apply ideas from lecture, and provide opportunities for group learning. Oftentimes, the TA's role in the lab is to model activities and to guide students through their hands-on learning experience. Below are strategies to help you organize your lab, motivate your students, and encourage deeper learning

Before the lab:

Establish the specific goals of the lab and how you will evaluate students. What skills will students develop during the lab? What concepts will they be able to practice or apply? How do the goals of this lab relate to other class topics or previous labs? How will you evaluate that students have achieved these goals? Speak with the instructor of record to identify the goals, or you may have to write them yourself.

Get advice from experienced TAs who have taught the lab before and connect with other TAs for the same course. Find out what potential problems you and your students are likely to encounter and how you and your students might best overcome these problems. If applicable, speak with other TAs in the same course to share materials/resources and to maintain consistency across lab sections.

Make sure you are comfortable in the lab before your students get in there. If you have questions, ask a supervisor or an experienced TA. You want your students to feel that you're confident in what they're doing so that they can be confident in what they're doing. —Joya Cooley, TA, Chemistry, TAC 2015-2017

Complete the lab exercises. This will help you anticipate where students may have questions and allow you to become familiar with any equipment and procedures.

Prepare an outline of the lab activities, including how much time each should take. Determine what students should achieve during the lab period and what they can finish on their own following the lab.

Prepare an introduction. What background theory or procedures will students need before they can begin the lab on their own? Do students need all of the information at the beginning of the lab, or can you introduce important ideas at different points throughout the lab? How will you connect the lab with lecture content or with real world applications? You may want to prepare a handout that highlights the key theoretical, procedural, and safety points. (See below on "Strategies for Presenting Information Effectively.")

Communicate with students about any preparation they should do prior to coming to lab (e.g., reading material, pre-lab activities, pre-lab questions, etc.) via Canvas, email, or at the end of the previous lab section.

Prepare questions that you can ask students in order to encourage deeper understanding of the lab activity.

At the beginning of the lab:

Write goals of the lab and outline for the day on the board and leave them there the whole time lab is in session.

Start lab on time. Starting late encourages students to arrive late.

Give a brief introduction to the lab, why the topic is important, how it relates to the lecture, and any real world applications. You might also introduce new methods and terminology and illustrate your points with graphs, drawings and visual examples.

Orient students to any safety issues for the lab. Give students an opportunity to practice with equipment and procedures before using them in potentially dangerous exercises.

Demonstrate any new techniques or methods (to the whole class or in small groups). Let students demonstrate the equipment or set up materials for their peers.

Outline your expectations for their lab work. What information should they include on their lab write up? Will you be looking for their thought process? Should they show their work? Are you looking for complete sentences and clear writing, or do you prefer to see bullets, tables, or sketches? If you will be using a rubric to grade them, give this to them before they begin the lab.

Let students know what you expect for how they will work together. Will you assign groups or let them choose? Do you expect them to help everyone in their group understand the lab activity and concepts before they move on? Help students work effectively in groups by assigning particular tasks to each student in a lab group. Rotate the jobs during the quarter so that everyone has the chance to use equipment, record data, and present to the class. If students are turning in individual work, ask them to write the names of their lab partners on their assignment so you can review their collaboration. (This also helps to make grading more efficient and to determine if all students are doing their own work.)

Coordinate expectations — not just so that students understand what you want them to do, but also so that they know how to collaborate with one another to achieve it. It's often best to assume that students don't know how to work in groups, particularly if their educational experience has primarily revolved around passively listening to their instructors lecture. —Miguel A. Novoa Cipriani, TA, History, TAC 2018-2019

During the lab:

Walk around the lab and divide your time between all lab groups. Be approachable and willing to answer questions, but do not just give students the answers. Try to identify where they are stuck and help them move forward from there by asking questions and encouraging them to help each other. Help students budget their time appropriately by letting them know what they can finish later and what they need to finish during the lab. Instructors tend to focus their time with students who are most demanding or most sociable, so make an effort to distribute your attention equitably.

Encourage deep understanding.

- Bring the whole class together throughout the lab to reinforce key concepts, clarify common points of confusion, and ask questions that require analysis.
 This will help students work efficiently and think deeply about the work that they are doing.
- When you visit a lab group, check in with them by asking them specific questions about how it is going or what they are understanding, rather than just asking if they have any questions. Probe them on their deeper understanding of the work they are doing. For example, ask them why their results might be different than expected, how the procedure they are doing relates to the theory they have learned about in class, or if their answer is reasonable and why.
- Ask students to explain concepts to one another to help them understand (everyone learns more by teaching) and to make sure everyone in the group is understanding before moving on. When you answer a student question, consider first asking the other students in the group what they thought.

Wrap up the lab with a class-wide discussion, rather than allowing students to leave as soon as they are finished. The large group discussion can reinforce the goals for the lab and require students to synthesize their knowledge. Consider asking students to share discoveries, interpretations, or connect the lab with course concepts or real world applications. This discussion will also allow you to identify any problems with the lab so that you can correct them for other sections.

Refer to "Leading a Discussion" earlier in this chapter for more information about facilitating whole class discussion

After the lab:

Make sure that your grading is consistent with other sections and with the course policy.

Give students feedback that will help them improve. Make sure students understand the big issues that will improve their next lab if addressed, and which issues are more minor.

Determine how you will evaluate the lab assignment based on your learning objectives. For example, if the most important goal was for students to apply a new procedure and walk through the process, it may not be so important that they got the answer exactly right. Also consider how you will weigh different components of the assignment. Will you consider presentation (writing, tables, organization) equally to substance (data, results, analysis)? Using a rubric can help to ensure consistency, streamline grading, and provide useful feedback to students.

Assess whether many students missed an important concept. If many students had a similar issue, address it with everyone rather than providing detailed individual feedback over and over again via Canvas, email, or at the start of the next lab.

Review the results of the lab in the next class meeting to reinforce key concepts and address any points of confusion.

See Chapter 4 for strategies for providing written feedback

Presenting Information Effectively

As a TA, you will often prepare and present brief introductory comments or explanations in your own section. These brief introductions can serve to connect ideas from lecture and previous classes, model disciplinary thinking, address student's preconceptions, and elicit student interest in the topic. You may also be asked to give a lecture on a specific topic or to fill in for a faculty member who is out of town. Here are some strategies for organizing and delivering an effective and engaging presentation.

Preparing your presentation:

Decide if a presentation is necessary to meet the learning outcomes of the unit/topic or if an activity can fulfill the learning outcome better than a presentation.

Determine the learning outcomes of your presentation. What questions will be answered by the end of the presentation? What information should students be able to recall, synthesize, and analyze?

When planning your presentation, estimate how much time you will spend on each section of your presentation. Decide which sections you may cut if you run out of time.

Always present the agenda of the day. It establishes clear expectations for you and your students. Agendas usually take a few minutes to create but can have a huge impact on the way your classes are structured. —Sergio Sanchez, TA, Education, TAC 2016-20192016-2019

Refer to "Incorporating Active Learning Techniques in the Classroom" at the begining of this chapter Limit your presentation to no more than 15 minutes or break up your presentation with interactive activities to keep students engaged and to allow time for them to process information. Think of questions or other ways to engage students and check for understanding.

Organizing your presentation:

Introduction

- Provide an agenda that gives an overview of the material you will present.
- **Use an attention grabber**, such as a visual, a comic, a quote, headliners, a short video, an anecdote, etc.
- Contextualize your explanation by stating how it relates to past and future lecture material, laboratory exercises, or to upcoming exams, papers, or projects.
- Communicate to students what you expect them to learn from your explanation as well as how you expect them to use the material (e.g., learning outcomes, questions that will be answered by the end, etc.).
- Provide a historical or current real world problem related to the topic.

See Chapter 4 for a list of formative assessment techniques

• Use a background knowledge probe or poll to assess what students already know about the topic/concept. For example, ask an open question like, "What do you know about the properties of gases?"

Body

Determine the critical components of your explanation that can be developed during the class session.

Place the critical components of your explanation in a logical order, perhaps using one of the following styles: cause and effect, time sequential, topical or thematic, problem and solution, pros and cons, ascending or descending.

Present the same information across different modes.

- Use an example or illustration whenever possible and appropriate.
- If applicable, do a live demonstration.
- Organize information in an easy to read manner (e.g., use a table to organize data, use a list for important terms or concepts).
- Restate an idea or explanation in different ways (e.g., use both academic and informal language).

Provide definitions. Make sure you give clear, concise, and consistent definitions of new and unfamiliar terminology. Also, avoid or explain specialized "jargon." If applicable, identify the Latin roots of terms to help with understanding and memorization.

Make your presentation interactive with one of the active learning techniques listed earlier in this chapter. This gives you and your students a break from passively listening and talking, increases interest, and helps you gauge student understanding and attention throughout your presentation.

Use clear visual and/or verbal transitions and organizers.

- Keep your audience aware of the progress of your explanation by emphasizing its structure with the use of phrases such as "in summary," "with that finished, let's begin," "we've covered X; now let's turn our attention to Y."
- Clearly list or number important concepts or processes.

Summary / Conclusion

Bring together the main points of your presentation in the stated order and come to a conclusion.

Check for student understanding and make students accountable for the content presented with a formative assessment.

Preview upcoming lectures, labs, discussion sections, etc.

Delivering your presentation:

Present the material via multiple modes of instruction. Include verbal, visual, and kinesthetic modes of instruction and explanation.

Use a visual. Be sure to read out loud any text and to explain any visuals. This can help reinforce the content and ensure that visually impaired students and ELLs are not at a disadvantage.

Use handouts for extensive or detailed notes. Distribute handouts just prior to their use to help keep students focused on the current discussion topic.

See Chapter 2 for more information about incorporating different modes of learning

Circulate around the room. By moving around, you will be able to maintain proximity to all students, ensure that everyone can hear you, and draw their attention to what you are saying. If possible, use a presentation clicker so that you can move around. Also, most presentation clickers come with a laser pointer tool which makes referencing something on your slide much easier.

Monitor you body language and your voice. Make eye contact to help students stay engaged in conversation. Wear something comfortable so that it does not affect your movement.

How Can I Manage My Classroom?

Both new and experienced TAs may struggle finding a balance between being firm and respected, yet friendly and approachable at the same time. Maintaining a professional but still personable boundary is best for increasing the effectiveness of what you do as a TA, for avoiding potential conflicts, and, subsequently, for preventing frustration. In order to set the right tone, discuss the instructor of record's and your expectations for the discussion section or lab on the first day of class. If possible, include them in your section syllabus.

When students play a role in developing classroom norms, they are more likely to "buy in." It's worth taking that time early in the quarter to develop shared expectations. —Rachel Nickens, TA, Sociology, TAC 2018-2019

It is also a good idea to communicate expectations that you have for your students in your section and what your students may expect from you. Common questions to consider include the following:

- How should students contact you? If by email, how often will you check and respond?
- What is the late assignment policy?
- What is the attendance policy for your discussion section? What happens if they arrive late? What if they want to leave early?
- What do you expect in terms of participation? Will you cold call?
- What are the participation guidelines or ground rules? Whose responsibility is it to keep the class accountable?
- How do you expect students to prepare for section? If students do not come prepared, how will you hold them accountable?
- What do you expect in regards to technology in the classroom? What will happen if someone's phone goes off or if they are texting during class?
- What do they need to bring to each section or lab?
- What will happen with cheating and plagiarism?
- How and when will announcements be made?
- How much help can you provide for homework, problem sets, essay drafts, etc.?

Refer to Office of Student
Support & Student Judicial
Affairs (OSSJA) or sja@
ucdavis.edu for handling
instances of academic
dishonesty, like cheating
and plagiarism

How Did My Class Go?

After any class, it is always recommended that you reflect and assess how effectively your class went in order to ensure that your teaching met the learning objectives of the unit and the course. This can also be an opportunity to note what worked well, what you modified from your original lesson plan, or what you would like to change so that if you need to teach the lesson again, you will have all of this documented for future reference. Additionally, reflecting on teaching practices will hone your overall teaching ability as you become more aware of how to best manage your classroom, how to support student learning, and how to motivate them.

Here are guiding questions that can help you reflect on your class and your teaching:

- How did my class/lesson help students learn?
- How did my class/lesson meet the learning objectives of the course and/or of the unit?
- Was my class/lesson clearly organized and paced well (e.g., time management, instructions, order of activities, etc.)?
- Were there multiple and varied opportunities for all of my students to participate with the content, with one another, and/or with me?
- Did I check for student understanding?

Jot down a few notes after every lesson! When I go back to use material or activities from previous lesson plans, it is very helpful to see my notes about what worked and what did not. —Lindsay Baltus, TA, English, TAC 2015-2017

To reflect on your teaching in a group setting, check out the Graduate Teaching Community (GTC) or the TA Consultant workshops (CEE). See Chapter 6 details

Frequently Asked Questions

What should I do when students are not coming to class prepared (e.g., not having done the reading)? Here are a few strategies to consider:

- Participation Make it clear to the students that they need to prepare beforehand
 to participate in class and that their grade hinges on this participation (if it does).
- Quizzes Give a short reading quiz every day to encourage preparation. Ask the
 instructor of record if you can tie these quizzes to the course grade.
- Address it directly If it seems to be a continuing problem, ask students why
 they are not doing the reading. Have they been finding it too difficult? Too
 much? You may need to encourage students (especially students new to the
 university system) to come up with reading strategies, such as how to effectively
 annotate a text.
- Reading summary or reflection Ask students to prepare a short summary
 or reflection about the reading to bring to discussion or start with this at the
 beginning of the section. You can collect them to gauge who is and is not reading
 and how well they are understanding the material.
- Cold-call on students starting in the beginning of the quarter to make clear your expectation that they come to class prepared.

STRATEGIES FOR MANAGING DIFFICULT CONVERSATIONS

Depending on the course, you may be challenged with the task of having to present and discuss difficult topics in class. For example, as a sociology TA, you may need to facilitate a conversation about the intersections of race, gender, and social class, which would require you to plan for how to guide the discussion to ensure that it is productive and does not turn excessively heated.

However, regardless of discipline, any TA may find themselves confronted with a difficult situation or with the task of facilitating a heated conversation. For instance, you may be presented with a student that makes an inappropriate comment to you or to their peers. The following strategies can help when a planned or unplanned difficult conversation surfaces.

Clearly define the goals of each discussion. Starting class with a clearly defined objective will shape the discussion and allow you to bring the discussion back to these goals if necessary.

Establish ground rules for discussion, and consider having students establish the ground rules. Possible ground rules include: listen respectfully without interrupting, respect one another's view, criticize ideas not individuals, avoid blame and speculation, and avoid inflammatory language. You can integrate the Principles of Community (http://occr.ucdavis.edu/poc/) into these ground rules as well. If the class calls for a lot of potentially difficult conversations, establish ground rules on the first day of class and refer back to those when needed.

Build structure into a discussion so it is not just free form for students to say anything. For example, assign specific questions for students to discuss in small groups, or assign students to investigate and present different sides of a debate that may be different than their personal views.

Encourage students to think critically about the complexities and ambiguities that often characterize controversial issues, rather than thinking about them as 'black and white'. Talk to students about how to make valid arguments and substantiate claims using evidence, how to analyze assertions and underlying assumptions, and how to consider different perspectives.

Be conscious of and address comments that are inappropriate or demeaning. It can be tempting to just move on and pretend it never happened, but then students think that this behavior is okay and miss the opportunity to learn from their or their classmates' behavior. Follow up privately with the student who made the comment and clarify your expectations for future discussions.

Take the focus off of a student who has made an offensive remark and put it on the table as a general topic by saying something like "Why do you think people may hold these views? Why do those who disagree hold different views?"

Be aware of your own biases and preconceived notions, and encourage students to be aware of theirs as well.

Know what upsets you. Be conscientious of what issues may hit a nerve with you personally and think about how you might deal with it if confronted with such a response in the classroom.

Ask students to step back and reflect on what they might learn from the difficult conversation. This can shift the discussion to a level that helps everyone see what issues were at stake and what caused the difficulty.

Be an active facilitator rather than a passive observer. Intervene throughout the discussion to re-word questions, address misconceptions, ask clarifying and follow-up questions, and make sure everyone has a voice.

Use discussion strategies that require students to listen carefully, such as requiring the next speaker to paraphrase the ideas expressed by the previous speaker.

Call "time outs" to allow tempers to cool. You can use this time to summarize the discussion or ask students to write down their thoughts about the 'hot' issue.

What should I do if a student misses an important deadline? In conjunction with the instructor of record, you should have a well-thought out plan for what should happen if a student misses a deadline. However, sometimes even the clearest rules require exceptions (e.g., a death in the family, an illness). You may have to make a judgment based on what you have experienced with the student previously. You may want to speak with the instructor of record or another experienced TA to see how you should handle the situation. If you suspect fabrication of an excuse, ask for proof (e.g., a doctor's note) and/or consult with Office of Student Support & Judicial Affairs (OSSJA).

I write clear guidelines in my syllabus as to how late assignments and missed tests will be handled, so I have a structure to fall back on in case a student comes to me after missing important deadlines. This allows me to be flexible to a certain extent based on the situation, but also demonstrates to my students upfront that there are processes in place for these types of scenarios! —Giulia Gallo, TAC, Anthropology 2018-2019

Can I accept late assignments? This is up to the instructor of record, who may in turn say it is up to you. You may either: have a formal policy that allows each student to turn in one late paper or be strict about not accepting any late assignments, or have a pre-established grade penalty for late assignments. If your instructor of record leaves the late policy up to you, think through your policy and procedures carefully and communicate them clearly to your students on the first day of class, then administer the policy consistently to all. Ideally, you should have this policy written in your section syllabus so that you can refer them back to it, if needed.

What should I consider if I am teaching controversial or explicit material? First, it is a good idea to work with the instructor of record about the most useful way to present this material. There is a large amount of academic freedom in university settings, but it is also important to make sure that what you're teaching is clearly relevant to the course. Next, it can be helpful to provide a disclaimer in the syllabus at the beginning of the course that controversial or explicit material will be covered during class. You might provide students with the option to speak with you one-on-one about any concerns they have, and you can consider requests for alternate readings or assignments. Lastly, when you're

Controversial materials can result in some of the most powerful and meaningful discussions in your classroom - not only for student comprehension of the subject, but also for learning more about each other. However, it is critical as an instructor be to cognizant of the line between disagreement and disrespect, and to guide the discussion as to not cross that line. —McCage Griffiths, TA, Political Science, TAC 2017-2018

teaching the material, make sure that you set the tone by being professional and mature in how you discuss the topic. See 'Strategies for Managing Difficult Conversations' earlier in this chapter.

Should I allow students to use technology during class? This may depend on whether technology is necessary for learning in your classroom. If you are teaching a foreign language class, it may be helpful for your students to have access to a dictionary online when writing or working on a presentation. Some students have e-textbooks, which may require a device, or some prefer to access online resources during discussion. Some students have an accommodation for a disability that requires the use of a device during class. Nonetheless, technology also has the potential to distract students. You may decide to tell your class that no technology is permitted unless you say so for an assignment or an activity, or you may tell them that they will be asked to leave if they are caught using technology for activities not related to the current class. Another option is to make your class so interactive and interesting that students will not want to use their phones or tablets anyways. Again, whatever you decide, state that clearly (verbally and in your section syllabus) on the first day of section.

NOTES

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CHAPTER 6: BECOMING A MORE EFFECTIVE INSTRUCTOR

How Can I Get Feedback on My Teaching?

How Can I Reflect on My Teaching and Grow as an Instructor?

Developing as an Instructor

Frequently Asked Questions

How Can I Get Feedback on My Teaching?

Teaching, just like learning any other skill, requires guidance and feedback to improve. Obtaining ongoing feedback on your teaching is critical to becoming a better instructor and to promoting student learning and success. There are several ways to receive guidance and feedback on your teaching. First, you can discuss strategies with more experienced TAs in your department or with the Graduate Teaching Community (GTC) (discussed in greater detail below). Second, you can review your end-of-quarter teaching evaluations from your students, or invite student feedback throughout the quarter. Third, you can ask the instructor of record or another TA in your department to observe your class, or you can request a free and confidential consultation from the TA Consultants (TACs).

As part of the Center for Educational Effectiveness (CEE), the TA Consultants (TACs) provide workshops and free and confidential peer-consulting services to their TA and AI (Associate In_) colleagues. Whether you need some quick advice, would like to spend time talking with an experienced TA, or want a new perspective on how your class is going, the TACs can help. The TACs represent a range of backgrounds and disciplines and work with graduate students from across campus. Each TAC has experience in the classroom, is enthusiastic about learning and teaching, and is committed to helping her/his TA colleagues get the most from their TA experiences and develop their teaching skills. TACs strive to meet the needs of each TA with whom they consult by providing feedback, sharing resources, and recommending avenues for further development. That combination may include assisting the TA with pre-class preparation and planning, observing practice sessions, visiting the classroom, talking with their students, and referring the TA to campus resources and reference materials such as books, journals, and handouts.

The types of consultations that the TACs provide include:

Mid-Quarter Inquiry (MQI) - This interview gathers data anonymously from your students midway through the quarter so that you can modify your teaching and better support your students' learning before the course ends.

Video Recording - Watching yourself teach is helpful for seeing how you interact with students, your body language, and your communication skills.

Classroom Observation - Having someone sit alongside your students offers another perspective to your teaching and your classroom.

Presentation Skills - This recorded or unrecorded consultation can be helpful for analyzing and reflecting on how you have organized and delivered your presentation.

Statement of Teaching Philosophy Consultation - Most faculty jobs require a statement of teaching philosophy. This consultation provides you with feedback on the content and structure of your statement, or you can use this consultation as an opportunity to brainstorm ideas about your teaching philosophy.

General Teaching Consultation - You can bring any teaching-related questions, problems, ideas to this consultation for suggestions, feedback, or additional resources.

Visit the Center for Educational Effectiveness website (CEE) for more information about the consultation services that the TA Consultants offer.

Before I became a TAC, I utilized the CEE consultation resources. This experience was invaluable in my teaching by giving me the space to reflect on my current teaching and additional skills to improve. So much so, that even my end of quarter evaluations improved! —Carlyn Peterson, TA, Animal Science, TAC 2018-2019

How Can I Reflect on My Teaching and Grow as an Instructor?

Between research and coursework, you may feel that you have little time to reflect on and hone your teaching skills. However, investing in becoming a more skilled instructor benefits your future career and the UC Davis community in several ways:

- You have a direct impact on the undergraduates that you teach and their learning gains in the course, so how you treat and relate to them will have a lasting impression even after they leave your class. Studies have found that instructor enthusiasm is a central driver of student motivation. Think back to the teachers and mentors who have supported you and how they have influenced your decision to pursue a degree in your discipline and go to graduate school. Imagine being that person for your students!
- The skills of an effective and engaging instructor are transferable to a wide range of positions, including outside of academia. For example, teaching skills are applicable to delivering conference presentations and job talks, to mentoring and supervising individuals, and to organizing and managing projects.
- Teaching and teaching-related employment positions may be an avenue to explore when you enter the competitive academic job market or explore non-traditional academic careers.
- Demonstrating teaching and mentoring experience and excellence will make you more competitive for fellowships, postdocs, and faculty positions. If you end up in a faculty position, investing in your teaching as a graduate student will help that transition.

One of my favorite parts of teaching is the opportunity to constantly reflect on what goes well and what can be improved in my classes, and adapt my future classes accordingly. This ability to reflect, make changes, and improve overall content and student learning is part of what makes an instructor great. Being able to demonstrate this makes us more competitive for future positions. —Carlyn Peterson, TA, Animal Science, TAC 2018-2019

Part of becoming a more effective instructor is taking advantage of professional development opportunities that expand your pedagogical understanding and provide you with additional practice. The following are various workshops, courses, and programs at UC Davis that can help you develop your skills:

Workshops for TAs and AIs

Graduate students can attend workshops led by the TA Consultants throughout the year. Several times a year, the TA Consultants offer a workshop series with a certificate of completion for inclusion on your CV or in your teaching portfolio. Past series have included "Powerful Pedagogy: Using Research Supported Methods to Teach Effectively" and "The Learner-Centered Classroom: How to Engage, Motivate, and Assess Students." Grad Studies also organizes a wide variety of professional development workshops for graduate students, including some related to teaching. Refer to the GradPathways calendar for details (https://gradstudies.ucdavis.edu/calendar/agenda).

Graduate Teaching Community (GTC)

The Graduate Teaching Community (GTC) is an interdisciplinary collaborative group where graduate students and postdocs explore teaching practices, tackle teaching and learning issues in a supportive environment, freely discuss ideas about teaching and developing their own personal teaching style. The GTC meets weekly throughout the year. Your involvement with the group can range from dropping in periodically, to participating regularly, to helping facilitate a meeting with the possibility of earning a teaching certificate.

Seminar on College Teaching

The Seminar on College Teaching is an informative and interactive course to develop essential skills for designing, delivering, and evaluating effective college-level courses. The 2-unit graduate seminar (EDU 398) is taught several times a year and is open to graduate students and postdocs. Topics include: examining how students learn, developing course objectives, designing teaching strategies to meet those objectives, creating meaningful forms of assessment, establishing an inclusive learning environment, developing ways to promote lifelong learning and reflective teaching, and more.

All participants who complete course requirements will earn a certificate of completion that can be included in a teaching portfolio and CV. Other graduate seminars that explore specific topics related to teaching and learning in higher education are offered periodically. These seminars introduce participants to research and best practices and participants develop their own skills as effective college-level instructors. Previous seminar topics have included "Teaching Creative Thinking in the Disciplines," and "Designing Courses for Hybrid and Online Delivery."

A good first step in becoming a better educator is acknowledging that everyone has room to improve, regardless of their previous experience in the classroom. So be curious about what your fellow TAs are doing in their classrooms and experiment with different methods in your own classroom. Also, don't be afraid to schedule a teaching consultation with CEE - we love to talk about teaching! —Sam Fleischer, TA, Applied Mathematics, TAC 2017-2019

TA Consulting Program

TA Consultants (TACs), a multi-disciplinary group of graduate students who share a love of teaching, work as coaches and consultants to their fellow TAs on campus. As a TAC, graduate students participate in regular training and professional development sessions; learn more about teaching and learning in the college classroom; plan and deliver workshops, the campus-wide TA Orientation, and special programs on teaching and learning topics of interest; provide individualized consultations on teaching and teaching improvement; and are awarded a quarterly stipend. The program serves to help graduate students strengthen their teaching skills in a highly collaborative environment. TA Consultant applications open in December; consultants are chosen in Winter Quarter to begin their tenure in Spring Quarter.

See the Center for Educational Effectiveness website (CEE) for information on TA and AI workshops, the Graduate Teaching Community (GTC), the Graduate Seminar on College Teaching, and the TA Consulting Program

The TAC program has been such an invigorating and supportive complement to my graduate school experience. I often leave our meetings feeling so excited to try a new teaching technique....I feel like the TACs are one of my strongest support networks on campus—both personally and professionally. —Christy Cahill, TA, Political Science, TAC 2014-2016

Professors for the Future (PFTF)

Professors for the Future is a year-long competitive fellowship program designed to recognize and develop the leadership skills of outstanding graduate students and postdoctoral scholars who have demonstrated their commitment to professionalism, integrity, and academic service. This unique program, sponsored by Graduate Studies, focuses on the future challenges of graduate education, postdoctoral training, and the academy. PFTF fellows work on projects of their own design to enhance the graduate or postdoctoral experience and professional development of their colleagues. All fellows receive formal training in teaching methods and course design, ethics and professionalism, and participate in monthly roundtable discussions to promote their professional development. Each fellow also receives a \$3000 stipend. Applications open in January. For more information, see: https://gradstudies.ucdavis.edu/professional-development/professors-future

GradPathways

GradPathways is a professional development program designed to help graduate students and postdoctoral scholars succeed at UC Davis and in their chosen career paths. In collaboration with other organizations on campus, GradPathways offers seminars, workshops, and panel discussions related to teaching and mentoring, leadership and management, wellness and life balance, and much more. Go online to see their calendar of events and the other services that they provide: https://gradstudies.ucdavis.edu/professional-development/gradpathways.

Developing as an Instructor

Maximize feedback from students.

- On-going feedback about your teaching is helpful. Consider assessing your teaching with a one-minute paper at the end of a unit or class, or contact the TA Consultants for a Mid-Quarter Inquiry (MQI) to get feedback halfway through the quarter. When the end-of-the-quarter student evaluations arrive, communicate to your students the importance of receiving constructive feedback about your teaching.
- When reading end-of-the-quarter student evaluations, look for trends in what
 you have done well and what needs improvement. Identify one or two themes
 from your students' comments each quarter that you will incorporate into
 your future teaching. Remember, every instructor, faculty or TA, has received
 negative feedback at one point or another.

Your own class is a great source of feedback. Request an MQI from the Center for Educational Effectiveness or create a feedback session with your students on your own. —Sergio Sanchez, TA, Education, TAC 2016-2019

See "Campus Resources for TAs and students" at the end of this guide for a complete list **Explore other teaching and mentoring positions and opportunities.** Apart from what is listed above, ask more experienced TAs and graduate students for additional programs that may interest you. Explore the various student centers, such as the Student Community Center (SCC) and the Women's Resource Center (WRC). Ask your department about mentoring or training new TAs, or becoming a lead TA.

Maintain a teaching journal to reflect on your experience and document your progress. Keeping a teaching journal also allows you track what and how you taught so you can incorporate your ideas into future lesson plans and have them to refer to for your teaching portfolio. This will help you to develop as a reflective practitioner, an important skill for teaching.

Keep a teaching portfolio. A teaching portfolio is a concise, organized narrative that presents your teaching accomplishments and strengths. First, many faculty and teaching-related job applications will call for a teaching portfolio, which may include a CV, sample syllabi, student evaluations, sample assignments and activities, a statement of teaching philosophy, statement on diversity, etc. It will be much easier for you to gather these documents as you are teaching, rather than searching for them when you need to submit an application. Second, organizing these materials will give you an opportunity to reflect on your teaching accomplishments, to consider what you might like to improve, to think about things that you may not have otherwise thought about (e.g., what is my teaching philosophy?), and to plan for other experiences that you would like to add to your teaching portfolio

Explore Scholarship of Teaching and Learning (SOTL). SOTL is research related to pedagogy and higher education, and may include topics ranging from, how to engage students across different contexts (e.g., large STEM classes) to what factors affect student achievement (e.g., stereotype threat). There are many peer-reviewed SOTL journals, including the Journal of Excellence in College Teaching and the International Journal for the Scholarship of Teaching and Learning, just to name a few.

Think about the transferable skills you would like to develop while you are a graduate student and take advantage of opportunities to do so. Refer to the resources previously listed to learn about programs and services on campus where you can develop your teaching skills and connect with other graduate students who are interested in teaching.

Frequently Asked Questions

Who should I ask for support if I need help with my teaching? Depending on what you are struggling with, you may want to speak with the instructor of record for assistance or fellow TAs. Request a consultation with the TACs, who offer an array of services that are meant to help you troubleshoot teaching-related concerns.

I worked with other TAs to create a shared online document where we could track in real-time what was and wasn't working as the week progressed. It helped us maintain consistency between sections, avoid common pitfalls, and keep track of student questions without having a constant stream of unread emails. —Alice Martinic, TA, Nutritional Biology, TAC 2017-2019

How do I balance teaching with research and my personal life? There is no single formula for striking the perfect balance, but here are a few things to consider.

- Schedule time each week for when you will work on teaching-related tasks. Having this in your calendar will help you make time for your teaching responsibilities outside of the time you are actually in class, including preparing questions or presentations, grading student work, or completing lab activities.
- Review the syllabus and plan for grading ahead of time. Grading can be more time consuming than expected. As such, look over the schedule to identify when students will be submitting assignments and taking exams, and plan accordingly. Communicate with the instructor of record about when they expect you to finish grading each assignment.
- Communicate to your students when you will reply to emails so you don't feel obligated to return emails immediately or on the weekends, and your students don't feel ignored.
- Be clear with your office hours. If most students can't make your scheduled office hours, consider changing them so that you don't get complaints or end up having office hours scattered throughout the week.
- Check in regularly with experienced TAs or AIs who have taught the course before for resources and previous lesson plans.
- If possible, request to teach the same course again. The first time you teach a course always takes longer for planning and grading, so if you can repeat a course, you can save time, improve upon the last time that you taught it, and further develop your skills.

What do I do if my advisor tells me that I'm spending too much time on teaching? Sometimes your advisor may not be aware of the expectations for your TAship or of your priorities and career goals. If you plan to pursue a teaching-focused position, remind your advisor that apart from your research, teaching experience and expertise

are essential components of your CV. You may also want to plan how to demonstrate to your advisor that you are moving forward with your research. This may include regular updates (in person or by email) or quarterly writing drafts, whatever is feasible and appropriate for you and your advisor. Ultimately, finishing your dissertation and earning your PhD is necessary if you want to obtain a faculty position or a similar one at the university-level, so your advisor's concerns may be warranted as well. Ongoing communication is essential.

How important are student evaluations? Student evaluations are one way to get feedback on your teaching and evaluate teaching effectiveness. First, feedback from students can help you identify what you are doing well as an instructor and what needs improvement, which can have a significant impact on the next group of students that you teach. Second, student evaluations are an integral component of your teaching portfolio and are used as evidence of teaching excellence. Third, some departments may offer TA-ships to graduate students or rank TAs based on student evaluations. However, keep in mind that student evaluations don't give the whole picture of teaching effectiveness.



Student feedback has helped me grow immensely as an instructor, and students also appreciate knowing that their feedback is taken seriously. —Christy Cahill, TA, Political Science, TAC 2014-2016

What if my student evaluations are negative? First and foremost, don't be discouraged! Student evaluations don't directly correlate with student learning and may reflect other frustrations related to the course. Also, even if students seem dissatisfied, they may have still learned a great deal in your section. If you continue to be distraught over your evaluations, schedule a consultation with a TAC to brainstorm how you may constructively use the feedback provided in your evaluations and how to improve upon them the next time you teach.

Where can I connect with other graduate students who are invested in teaching? We suggest you join the Graduate Teaching Community (GTC) mentioned above and/or attend workshops for TAs run through the Center for Educational Effectiveness (CEE). We also encourage you to start groups in your department where graduate students come together to talk about their teaching.

What other teaching-related positions are available to graduate students at UC Davis? Apart from being a TA, there are other positions that you can hold, such as being a Reader or an Associate Instructor (AI). As a Reader, there are no instructional responsibilities associated with this position, and they generally require very minimal to no contact with students. Readers are responsible for grading assignments and exams. These responsibilities may be split with TAs, depending on the course and the amount of grading required. It is possible for instructors of record to require readers to attend lecture in order to increase familiarity with course content, and these additional hours are included in the requirement for the position. Associate Instructors (AIs) are oftentimes experienced graduate students that are given the opportunity to serve as instructors of record for specific courses. These positions may require a separate application process. It is rare for students in the sciences and engineering to find AI positions, and much more common for students in the social sciences and humanities to teach such courses. There are also more opportunities in all disciplines during summer session for graduate students to hold AI positions. Visit Graduate Studies to learn more about these and other paid positions for graduate students.

ACKNOWLEDGMENTS

"The TA's Guide to Effective Teaching at UC Davis (6th Edition)", was revised by Sarah Silverman, Rachel Nickens and Monica Christina Esqueda, edited by Sharon Knox, and designed by Steven Morse in 2018-2019 with contributions from CEE staff, TA Consulting (TAC) Program Fellows and student assistants.

Many authors contributed to the various sections of this guide, including TAC Fellows from 2001 to the 2018-2019 cohort and CEE staff members. CEE staff contributors include Kem Saichaie, Barbara Mills, and Kara Moloney. We would also like to acknowledge UC Davis units who contributed to this guide including: Academic Technology Services (ATS), the Harassment and Discrimination Assistance and Prevention Program (HDAPP), International and Academic English, Office of Student Support and Judicial Affairs (OSSJA), Graduate Studies, the Student Disability Center (SDC), and the University Library.

Much of the content and organization of this guide, including the supplementary online materials, were heavily informed by the work of others. Below is a list of sources that prominently influenced our thinking as we developed and wrote this guide.

Center for Educational Effectiveness. (2019). Just in Time Teaching. Retrieved from https://cee.ucdavis.edu/resources/jitt

Davis, B.G. (2009). Tools for Teaching (2nd ed.). San Francisco: Jossey-Bass.

Freeland, R. (2007). Collected Wisdom: Strategies & Resources from TAs for TAs. Pittsburg, PA: Carnegie Mellon University, Eberly Center for Teaching Excellence.

Nilson, L.B. (2016) Teaching at its Best: A Research-Based Resource for College Instructors (4th ed.). San Francisco: Jossey-Bass. Past Contributors

Past Contributors

Though updates take place on an annual basis, the TA Guide is built on a strong foundation from past contributors. The first edition of the TA guide was titled, "The Beginning TA's Guide to Instruction at UC Davis", and was compiled and edited by Alexis Blackmer and Beth Deitchman in 2002. The second edition was completed by Mikaela Huntzinger in 2007. The third edition was completed by Mara Evans in 2011 with assistance from the 2010-2012 TACs. The fourth edition was completed by Jamiella Brooks, Cara Harwood Theisen, and Leonard Cross in 2014. The fifth edition was completed by Tracy Quan and Cara Harwood Theisen in 2015.

CAMPUS RESOURCES

Emergency services/campus safety:

http://ucdavis.edu/emergency/emergency-services.html 911 or (530) 752-1230

Resources and contact information for emergencies and campus safety, including emergency preparedness and response, other emergency help, personal safety, campus intervention programs, campus health and counseling services, community servicesTeaching-related Support and Professional Development:

Red Folder

http://redfolder.ucdavis.edu/

A guide for assisting students of concern, including UC Davis and local resources as well as guidelines for responding to students of concern.

Teaching-related support and professional development:

Teaching Assistant Consulting Program (TAC) and the Center for Educational Effectiveness (CEE)

http://cee.ucdavis.edu

Location: 1342 The Grove

(530) 752-6050

One-on-one teaching consultations; mid-quarter inquiries; video recording and classroom observations; help with statements of teaching philosophy; presentation skills and lesson feedback consultations; workshops and classes on teaching and professional development; Graduate Teaching Community; and Scantron test scoring.

Office of Student Support & Student Judicial Affairs (OSSIA)

http://sja.ucdavis.edu/faculty-and-sja.html

Location: 3200 Dutton Hall

(530) 752-1128

Information for instructors about promoting academic integrity, preventing cheating and plagiarism, handling class disruption, helping students in a crisis, what to include in a syllabus; student conduct standards; disciplinary process; report misconduct; student rights and grievances.

Office of Graduate Studies and GradPathways

https://gradstudies.ucdavis.edu/current-students

Location: 250 Mrak Hall (530) 752-0650

Academic services; financial support; employment information; professional development workshops and programs; diversity resources; and academic support.

Academic Technology Services

http://ats.ucdavis.edu

Location: Surge II (530) 752-2133

Canvas support; workshops and forums about teaching with technology; classroom technology support (e.g., media cabinet, projector, podcasting); computer classrooms.

University Library

https://www.lib.ucdavis.edu/

Location: Shields Library, Carlson Health Sciences Library, and Physical Sciences and Engineering Library

Course reserves for textbooks; library instruction session for classes or consultation on a library assignment; guides and tutorials for writing, citing information, using the library, library research; specialized guides in different subject areas.

Emotional support and wellness:

Student Health and Counseling Services (SHCS) a. Student Health and Wellness Center

http://shcs.ucdavis.edu/services/medical.html

Location: 930 Orchard Road

(530) 752-2349

Medical services, including primary care, specialty care, pharmacy, nutrition services, clinical support services, optometry clinic, psychiatry, men and women's health.

b. Counseling Services

http://shcs.ucdavis.edu/services/counseling.html

Location: 219 North Hall

(530) 752-2349

Mental health and psychological services, including individual counseling, group services, community advising network, career counseling, community referrals, eating disorder services.

Red Folder: A Faculty and Staff Guide for Assisting Students of Concern

http://redfolder_ucdavis.edu/

Women's Resource and Research Center (WRRC)

http://wrrc.ucdavis.edu Location: 113 North Hall

(530) 752-3372

Promoting gender equity and social justice; empowering community; additional resources; hate or bias incident reporting resources; violence prevention resources and reporting information.

Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual Resource Center (LGBTQIA RC)

http://lgbtqia.ucdavis.edu/

Location: 1400 Student Community Center

(530) 752-2452

Internships; mental health program resources; peer education; volunteer program; queer mentorship; safe zone; academic retention program; speakers bureau; multiple events; related campus and community organizations; transgender and disability resources; HIV testing; LGBTQIA education.

Cross Cultural Center

http://ccc.ucdavis.edu

Location: First floor - Student Community Center (530) 752-4287

Information about CCC communities, including for graduate and international students; programs that promote diversity; grants; jobs and volunteer programs; reporting hate and bias incidents.

AB540 and Undocumented Student Center

http://undocumented.ucdavis.edu/

Location: 1003 Student Community Center

(530) 752-9538

Undocumented student and financial support; grants; legal advice; emotional and academic support; community outreach; and UC Davis faculty and staff training.

Transfer Reentry Veterans Center (TRV)

 $\underline{http://success.ucdavis.edu/trv/}$

Location: 1210 Dutton Hall

(530) 752-2200

Assist all transfer students (Junior college, community college to UC Davis, UC to UC Davis, out of state to UC Davis), veterans and dependents of veteran students, and reentry students.

WorkLife and Wellness

http://worklife-wellness.ucdavis.edu

Location: Multiple locations

(530) 754-8791

Programs, policies, referrals and education that enable employees and students to be effective at work, school and home. WorkLife encompasses dependent care and family services, health and wellness, financial support, career flexibility and community involvement.

Campus Recreation and Unions (CRU)

http://cru.ucdavis.edu

Location: Multiple locations (ARC, Memorial Union)

(530) 752-5034

Activities and Recreation Center (ARC); gym; group exercises; personal training; climbing wall; indoor track; Memorial Union (MU); aquatics; Band-Uh!; Craft Center; Equestrian Center; Intramural sports; Outdoor Adventures.

Experimental College

http://asucd.ucdavis.edu/exprimental-college/

Location: 347 Memorial Union

(530) 752-1990

Provide an outlet for individuals to share their interests and learn skills in an informal setting by offering courses in Dance, Martial Arts, Yoga and Movement, Holistic Health, Music, Language and more

Academic support for undergraduates:

Student Disability Center (SDC)

http://sdc.ucdavis.edu

Location: 54 Cowell Building

(530)752-3184

Determine eligibility for academic accommodations; provide specialized academic support; request accommodations; notetaker services; mobility assistance.

Student Recruitment & Retention Center (SRRC)

http://srrc.ucdavis.edu

Location: 1100 Student Community Center

(530) 754-6836

Student-run programs for community outreach; academic support; peer mentorships; open study space; volunteer and internship opportunities.

Student Academic Success Center (SASC)

http://success.ucdavis.edu

Location: 111 South Hall and 2205 Dutton Hall

South Hall: (530) 752-4475 Dutton Hall: (530) 752-2013

Educational Opportunity Program: (530) 752-9366

Academic support services in tutoring, retention, study skills, mathematics, science, writing/ESL, Educational Opportunity Program (EOP), Guardian Scholars Program (GSP), Mathematics Diagnostic Testing Project, Re-entry and Transfer Student Services, Veterans Affairs (VA), TRiO Scholars Program, MURALS, International Student Resources, and Pre-Professional and Pre-Graduate Advising

Center for Leadership Learning (CLL)

http://cll.ucdavis.edu

Location: 1350 The Grove (Surge III)

(530) 752-6908

Workshops; certificate programs; one-on-one leadership coaching; opportunities for graduate students to facilitate workshops.

Support for international students and/or multilingual learners:

International & Academic English Program

http://cie.ucdavis.edu/english-programs Location: 1350 The Grove (Surge III)

(530) 752-6799

Provides language courses and summer intensive programs, coordinating with academic advising, and other support.

TOEP (Test of Oral English Proficiency) for prospective international TAs; SPEAK test for prospective international TAs; PAL (Partners in Acquiring Language) program.

Services for International Students and Scholars (SISS)

https://siss.ucdavis.edu/

Location: University House

(530) 752-0864

Assists international students and scholars in maintaining their legal status while in the United States. SISS also provides orientation, assistance, information, and referral to international students, faculty, and researchers regarding financial, personal, cultural, and academic concerns.

Graduate Writing Fellows

https://writing.ucdavis.edu/wac/resources

One-on-one writing consultations; workshops; writing support; reading support; grant support; fellowship support; peer education; collaborative learning.

NOTES

