# Table of contents

Section 1: Your role as an instructional assistant in biology .......................................................... 3

Section 2: Suggestions for effective teaching ................................................................................. 12

Section 3: Ethical behavior and integrity of scholarship ................................................................. 25

Section 4: Recent evaluation forms .............................................................................................. 29
Section 1: Your role as an instructional assistant in biology

An instructional assistant (IA) at the University of California, San Diego is a registered graduate or undergraduate student who serves as an apprentice in teaching under the mentorship of a faculty member. In the Division of Biological Sciences, the instructional assistant program is an important part of our graduate and undergraduate education.

Who are instructional assistants?
Instructional assistants support faculty members with teaching their courses, while learning to teach under the mentorship of faculty members. All graduate and undergraduate students collaborating with faculty members in teaching courses are officially called instructional assistants. Specifically, instructional assistants have defined position titles. It is important to learn this nomenclature to avoid confusion among instructional assistants, administrative staff, and non-UC San Diego professionals.

<table>
<thead>
<tr>
<th>Task</th>
<th>Graduate student</th>
<th>Undergraduate student</th>
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<tbody>
<tr>
<td>Assisting for credit</td>
<td>Graduate instructional apprentice (GIA or TA for credit)</td>
<td>Undergraduate instructional apprentice (UGIA)</td>
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<tr>
<td>Assisting for pay</td>
<td>Teaching Assistant (TA)</td>
<td>Tutor</td>
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<tr>
<td>Grading/Proctoring/Scribing</td>
<td>Reader</td>
<td>n/a</td>
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As instructional assistants under faculty supervision, you may (depending on your specific position title defined above) lead discussion sessions, hold office hours, conduct review sessions, assist instructors in administrative tasks related to the course, help prepare course materials and exams, proctor exams, grade students’ work, maintain records of students’ grades, assist in teaching laboratory sections, and provide guidance to other course instructional assistants. Not all instructional assistants will perform all of these duties. Graduate students will assume leadership roles and will perform at a more independent level than undergraduates. However, you do not have primary responsibilities for determining the content of a course, setting course policy, selecting student assignments, writing examinations, or assigning grades.

Because of your special role in supporting the educational mission of UC San Diego, all instructional assistants must comply with all relevant university regulations, which prohibit sexual harassment, misuse of university property, substance abuse, and any violations of the law. For details, refer to the UC San Diego Policies and Procedures Manual (https://academicaffairs.ucsd.edu/aps/reference/ppm.html).

Time commitment as instructional assistants
The purpose of this teaching apprenticeship is to learn the methodology of teaching biology at the college level, through theory and actual practice in a regularly scheduled course. Both the Division of Biological Sciences and the University of California, San Diego require that all instructional assistants be introduced to the expectations and responsibilities of this position. Instructional assistants in laboratory courses must also complete safety training required by Environmental Health and Safety (EH&S).

Introduction to college-level science teaching
As you engage with your teaching responsibilities in the Division of Biological Sciences for the first time, you must be enrolled in BISP 195 or BGGN 500 and participate in all the professional development
activities associated with these courses. BISP 195 and BGGN 500 deal with the fundamental principles of teaching and learning and on university policies pertinent to the role of instructional assistants. For instructional assistants working with laboratory courses, you will also be required to attend a laboratory-specific training before the beginning of classes or in the first week of classes.

Time spent on your course and related responsibilities
Your responsibilities as instructional assistants start before the beginning of the quarter, when you meet with your course faculty to discuss the course. This discussion may involve course content, the format of the course, and your specific duties as an instructional assistant in the course. In laboratory courses, instructional assistants also need to be fluent in the experiments and methods that they will help to teach, and additional scheduled meeting time is typically necessary before and during the quarter.

Graduate and undergraduate instructional assistants earning academic credit are expected to provide instructional support of up a minimum of 120 hours per quarter. These hours include the BGGN 500 or BISP 195 weekly meetings, meeting with your course faculty prior to the beginning of the quarter, and instructional support during the quarter and finals week. The actual instructional support time may vary from week to week.

Course credit
Graduate students and undergraduate are enrolled in BGGN 500 or BISP 195 respectively for four credit units and are graded on an S/U or P/NP basis respectively. If for any reason you do not attend the weekly BGGN 500 or BISP 195 course meetings, you will earn a grade of U or NP.

Feedback and evaluation for instructional assistants
As instructional assistants, you will receive both formative feedback and summative evaluation. Feedback is intended to help you improve your teaching during the quarter, and evaluation provides information to determine your effectiveness as an instructional assistant. Summative evaluation can also be used as feedback as you continue to improve your teaching after this quarter.

Formative feedback
Graduate instructional assistants in classroom courses will receive feedback from a graduate teaching mentor (commonly known as a “Senior TA”). Graduate teaching mentors will contact you to set up arrangements for an observation and a subsequent consultation. These observations are required, but the results are confidential between you and the graduate teaching mentor, and they are not reported or shared with any additional person.

Summative evaluation
Summative evaluation will be provided to all instructional assistants by your students and course faculty at the end of each quarter. These evaluations are similar Course and Professor Evaluations (CAPE) and are online. (See Section 4 for more details.)

Based on the outcome of student and faculty evaluation, outstanding instructional assistants may be considered for an Excellence in Apprentice College Teaching Award. These awards are presented to graduate students annually during the Divisional Science Retreat. Undergraduates who are chosen for the award will be notified by e-mail and can pick up their award from the USIS office.
On the other hand, if your performance as an instructional assistant is below the communicated expectations of the course faculty, the course faculty will meet with you to discuss the situation and develop a plan for improvement. If improvement is not achieved, the course faculty can notify the Division’s Director for Undergraduate Education, the Faculty Advisor for Instructional Assistants, and the Chair of the Graduate Committee (for graduate instructional assistants). Together, this group will investigate the situation and take appropriate action, which may include dismissal from the instructional assistant position and assignment of a grade of U or NP.

**Your responsibilities as instructional assistants**

As instructional assistants, you support and supplement the teaching efforts of the faculty. Your responsibilities can vary from course to course, and you should discuss with your course faculty to determine specific responsibilities for the course. Typical responsibilities may include the following.

**Teaching discussion sections**

Discussion sections for classroom courses go beyond clearing up confusion from lectures and provide opportunities for collaboration and active learning. In addition to being prepared before section, you should arrive punctually and be available to the students during the entire duration of the session.

**Assisting in teaching laboratory sections**

For laboratory sections, you as an instructional assistant play many important roles. First, you should assure proper laboratory set-up and, if necessary, provide laboratory set-up assistance. Please arrive ahead of the scheduled laboratory section time. During laboratory sections, you should maintain cleanliness and orderliness. Please leave the laboratory clean for the following section and instruct students in cleaning their work areas and instruments before they leave. If you laboratory section is the last one in the day, you should also help with laboratory shut-down and assure that doors are locked.

As an instructional assistant, you should know, model, and enforce safe laboratory procedures. During the first meeting, you should show students the location of the eyewash, safety shower, fire extinguishers, spill kit, and telephone (if available), as well as Laboratory Rules poster. You should also identify any safety hazards and assure that waste is disposed according to safety rules and procedures. Please also minimize the need for repairs by overseeing student use of equipment. Any malfunctions of equipment should be reported to the Undergraduate Laboratory Staff member who supports the class.

Finally, you should **report all injuries**, no matter how minor. Forms are provided in the laboratory classrooms and stockrooms. Student and instructional assistant injuries are reported to the University Laboratory Manager, who will report to the appropriate Divisional authorities.

**Attending lectures**

You are expected to attend all lecture sessions unless specific arrangements have been made with the course faculty. Some laboratory courses are accompanied by a lecture period, and you are also expected to attend all these lecture sessions.

**Attending instructional assistant meetings**

During instructional assistant meetings, you and your course faculty will clarify expectations and responsibilities, discuss the philosophy and structure of the course, and go over course material and common challenges in teaching this material in discussion or laboratory sections. Equally valuable, the
meetings allow you to provide your course faculty with feedback. Therefore, attendance at all instructional assistant meetings is mandatory, unless alternative arrangements have been made. 

**Attending pre-lab sessions**

Instructional assistants in laboratory courses must be able to teach the experimental methods and use the instruments in the course. To ensure that you are prepared for these responsibilities, you must practice all the experiments in pre-lab sessions.

**Holding office hours**

Office hours can be an instructional tool for enhancing learning. For classroom courses, the course faculty will decide if you need to hold office hours, which are typically 1-2 hours per week. Typically for laboratory courses, instructional assistants do not hold separate office hours because you are already readily available during laboratory sessions. However, some course faculty may request that you hold office hours.

Rooms for office hours will not be assigned automatically. Common rooms may be available, and some instructional assistants hold office hours in non-private settings, such as the Coffee Cart at Mandeville. While not inherently wrong, please remember that federal law requires that if a student wishes to discuss grades or other personal issues, you as an instructional assistant must arrange for the conversation to be **private**.

**Holding review sessions**

Review sessions provide students with a big boost in preparation for an upcoming midterm and final exams. Many instructional assistants are asked by your course instructor to take part in or even to lead review sessions in addition to regular sections. (Note: Room reservations for these review sessions can be scheduled by the course faculty or the head instructional assistant for the course.)

**Writing and grading assignments and quizzes**

For classroom courses, many faculty members assign homework, e.g. problem sets, and these assignments are typically graded by instructional assistants. In some cases, instructional assistants participate in writing homework assignments and in providing solutions for the assignments. You may also be asked to prepare or participate in writing quizzes for your sections. This task usually includes providing an answer key, grading the quizzes, and recording grades.

For laboratory courses, instructional assistants typically grade laboratory reports and, in some cases, help students to prepare for oral presentations. You may also participate in writing and grading quizzes.

**Administering and grading exams**

Typically in classroom courses and occasionally in laboratory courses, instructional assistants are responsible for administering and grading exams. You must be available for both the administration and the scoring of exams. You can discuss the dates and time commitment with your course faculty, but exams are frequently scheduled months in advance and typically cannot be moved. Time spent grading exams may range from minimal (e.g. computer-scored, multiple-choice questions) to substantial (e.g. open-ended problems). In some courses, instructional assistants also participate in writing exam questions and answers in collaboration with the course faculty.

**Keeping records**
As an instructional assistant, you are responsible for maintaining grade records for all students in your section. You must make sure that these records are kept confidential in a safe place. If records are stored on a computer, they must be regularly and effectively backed up. There is no excuse for losing these records. Grade records must be kept for three quarters, and the course faculty is responsible for keeping these records. Your responsibility involves handing over all of your records prior to the submission of grades.

All completed assignments, exams, grades, correspondence, and other information about individual students in the class must be kept confidential, unless the student has given explicit written consent to break confidentiality. Papers and examinations must be returned to the students in a way that protects the privacy of the student. For more specific information about UC San Diego grading policies, please refer to https://students.ucsd.edu/academics/exams-grades-transcripts/grades/index.html.

Assigning grades
The course faculty is solely responsible for assigning grades, and only the course faculty has the authority to change students’ grades, including their letter grades. However, instructional assistants play an important role in evaluating student work. For any grade disputes or inquiries, you should refer the student to the course faculty.

Additional responsibilities and conduct
Referring students to appropriate services
For questions outside your area of expertise, especially pertaining to health care, you should refer students to the appropriate office that can help them. Please ask the Undergraduate Laboratory Staff or your course faculty if you are not sure.

Maintaining academic integrity
Academic integrity is a core value of the university. As instructional assistants, you play an important role in promoting and affirming the importance of academic integrity and fostering an educational environment that adheres to the values of academic integrity. Specifically, UC San Diego’s Policy of Integrity of Scholarship states that instructional assistants “shall equitably grade student work in the manner agreed upon with the course instructor. An [instructional assistant] shall not provide a student with any information or collaboration that would aid the student in completing the course in a dishonest manner (e.g. providing access to unauthorized material related to tests, exams, homework).” Please see: http://senate.ucsd.edu/manual/Appendices/Appendix2.pdf.

Instructional assistants are responsible for knowing the instructor's policies regarding cheating, plagiarism, and other forms of academic dishonesty. You are expected to be vigilant while proctoring and grading and do your utmost to discourage cheating. Suspected cheating should be reported immediately to the course faculty. Please see Section 3 for more details.

Maintaining a fair and professional teaching and learning environment
To foster the best possible learning environment, we strive to maintain a climate of fairness and professionalism. Please see Section 3 and online: http://ucsd.edu/explore/about/principles.html.

Addressing professional conflict with your course faculty
If you encounter a professional conflict with your course faculty, and that problem cannot be resolved informally between you and the faculty, it should be brought to the attention of the Faculty Advisor for Instructional Assistants (Dr. Stanley Lo, smlo@ucsd.edu) or the Director for Undergraduate Education (Dr. Laurie Smith, lgsmith@ucsd.edu) as soon as possible. They will mediate the discord by talking to the parties involved, keeping a written record for use by the Director for Undergraduate Education and the Education Committee, should the committee need to step in to help in solving the problem.

**Resources and contacts**

<table>
<thead>
<tr>
<th>If you have ...</th>
<th>Please contact ...</th>
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<tbody>
<tr>
<td>Questions about teaching or challenges that arise in your discussion or laboratory section</td>
<td>Dr. Stanley Lo (York Hall 4070B, <a href="mailto:smlo@ucsd.edu">smlo@ucsd.edu</a>) is the Faculty Advisor for Instructional Assistants. He organizes the instructional assistant program (BGGN 500 and BISP 195) and is available to address questions and concerns. Akana Noto (<a href="mailto:anoto@ucsd.edu">anoto@ucsd.edu</a>) and James Broughton (<a href="mailto:jbrought@ucsd.edu">jbrought@ucsd.edu</a>) are graduate teaching mentors (also referred to as “Senior TAs”). They are advanced Ph.D. students who have extensive experience as instructional assistants.</td>
</tr>
<tr>
<td>Interests in developing your teaching further</td>
<td>Center for Engaged Teaching (Center Hall 307 and 309, <a href="http://ctd.ucsd.edu">http://ctd.ucsd.edu</a>) is a campus-wide resource that supports instructional assistants. Dr. Peter Newbury (<a href="mailto:pnewbury@ucsd.edu">pnewbury@ucsd.edu</a>) is the associate director and conducts workshops for instructional assistants. Martha Stacklin (<a href="mailto:mstacklin@ucsd.edu">mstacklin@ucsd.edu</a>) is a learning skills counselor and the coordinator of the international IA language program. She also offers a public speaking course.</td>
</tr>
<tr>
<td>Administrative questions about being an instructional assistant</td>
<td>You will find information on administrative resources: <a href="http://biology.ucsd.edu/education/undergrad/student-opp/instructional-asst/ta-tutor-ugias.html">http://biology.ucsd.edu/education/undergrad/student-opp/instructional-asst/ta-tutor-ugias.html</a> The Undergraduate Student and Instructional Services (USIS) staff members (<a href="mailto:biota@ucsd.edu">biota@ucsd.edu</a>) manage administrative tasks related to the instructional assistant program. They are a valuable source of information.</td>
</tr>
<tr>
<td>Concerns about the undergraduate and graduate curricula</td>
<td>Dr. Laurie Smith (Natural Sciences Building 6123, <a href="mailto:lgsmith@ucsd.edu">lgsmith@ucsd.edu</a>) is the Director for Undergraduate Education and the Chair of the Education Committee. Please contact Dr. Smith with questions, suggestions, or concerns regarding the undergraduate curriculum. Dr. Jens Lykke-Andersen (Bonner Hall 3218, <a href="mailto:jlykkeandersen@ucsd.edu">jlykkeandersen@ucsd.edu</a>) is the Chair of the Graduate Committee. If you are a graduate student and have</td>
</tr>
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</table>
Your role as an instructional assistant in biology

Concerns about being an instructional assistant or other aspects of your graduate curriculum, please contact Dr. Lykke-Andersen.

Frequently asked questions

Emergencies and student challenges

How can I get help if I need it in a hurry?
If there is a crisis (medical, personal, etc.) in your classroom, immediately phone 911 from an on-campus phone. Alternatively, you can phone 4-HELP from an on-campus phone or 858-534-4357 (same number) from your cell phone. If no on-campus phone is available, call 911 using your cell phone.

What should I do if I have a student with emotional problems?
Please do not try to serve as a therapist for your students, as you can make matters worse. Refer the student to Counseling and Psychological Services (CAPS) at Galbraith Hall, Room 190 (phone: 858-534-3755). A staff of qualified psychologists and counselors provide assistance to students who may be experiencing academic, emotional, personal, marital, familial, or vocational problems. All services, except for specialized testing, are available at no charge. Confidentiality is guaranteed. Sexual Assault and Violence Prevention Resource Center (SARC) is also an office to whom you may refer a student who needs this kind of assistance. They are located in the Student Services Center, Suite 555 (phone: 858-534-5793). To learn more about these topics, come to the Students in Crisis mid-quarter workshop.

What should I do if I have a student with academic problems?
You can try referring the student to OASIS at 858-534-3760. OASIS offers a variety of services intended to help students in their course work. In addition, the individual colleges offer workshops or other assistance with general problems such as test anxiety.

Professional conduct

Where do I go if I am exposed to or witness sexual harassment?
If you witness or learn about a sexual harassment incident, you are required to report this. Inform your course faculty, who is then required to inform the Office of Sexual Harassment Prevention (OSHP): http://blink.ucsd.edu/HR/policies/sexual/OPHD.html. If you are the subject of sexual harassment or a hostile environment, please contact the OSHP office immediately for help, guidance, and support.

Where do I direct a student how has become a victim of sexual assault?
UC San Diego has a Sexual Assault and Violence Prevention Resource Center: https://students.ucsd.edu/well-being/_organizations/sarc/index.html. Be sure that the student is aware of it and encourage the student to get help and support from the resource center.

Where can I report incidents of hate speech or behavior, or similar events?
The UC San Diego Principles of Community (http://ucsd.edu/explore/about/principles.html) forbid derogatory speech or overt bullying of people based on identifying them with any particular group or community. If you witness this kind of behavior, go to http://ophd.ucsd.edu/reportbias.asp. Your report will be taken seriously, and the situation will be investigated. For more information: https://students.ucsd.edu/student-life/involvement/expression/faqs.html.

Who do I talk to when I have a professional conflict with my course faculty?
It is usually best if you can resolve the problem by talking with your course faculty. If you believe that this method will not work, please contact Dr. Stanley Lo (smlo@ucsd.edu) and/or Dr. Laurie Smith (lgsmith@ucsd.edu).

Working with students

**What should I do if a student contacts me about receiving an incomplete?**

If a student asks you about receiving a grade of incomplete, please refer him or her to your course faculty. The Academic Senate has stringent rules regarding the grade of incomplete, and the course faculty is the first person who will need to approve the request. Incomplete grades must be filed by the end of finals week, so encourage the student to contact the course faculty as soon as possible.

**What should I do if a student needs special exam accommodations?**

Please refer the student to the course faculty, who will need to arrange for permitted assistance with exams. Refer to the Disabilities Resources website for more information: [http://disabilities.ucsd.edu/](http://disabilities.ucsd.edu/).

**How can I send extra study material to students in my section?**

The Division does not have funds for photocopying hand-outs. There are options to send emails to students in TED, and you should consult your course faculty for access. Another approach is to get the email addresses of the students who regularly attend your section and send your hand-outs to your students as an email attachment.

**Can I use e-mail to communicate with the students participating in the course in which I serve?**

We encourage you to communicate with students in your section via e-mail. Your course faculty can also use TritonLink and TED to make e-mail announcements to the whole class. However, grades are confidential, so they must be handled carefully. Please leave communications about grades to the course faculty or head instructional assistant.

**Administrative issues related to teaching**

**How do I obtain a copy of the textbook (and/or supplements) for the course?**

Biology Student and Instructional Services is able to provide either a desk copy or a code for an e-book, contingent on availability, that you can use during the quarter as an instructional assistant. Please visit [http://biology.ucsd.edu/education/undergrad/student-opp/instructional-asst/ta-tutor-ugias.html](http://biology.ucsd.edu/education/undergrad/student-opp/instructional-asst/ta-tutor-ugias.html) for textbook reservation instructions. You can use the book only during the quarter when you are working with the course, and you must return the book(s) at the end of the quarter. If you are working with the same course in the next quarter, please check out the book(s) again. We ask that you do not write or highlight in the book(s). If you fail to return the book you will be charged 50% of the cost of a new book, up to $50 per book or supplement.

**How do I get an office?**

Individual offices are not provided instructional assistants. For current information on which rooms are available for office hours and when you can use them, please visit: [http://biology.ucsd.edu/education/undergrad/student-opp/instructional-asst/ta-tutor-ugias.html](http://biology.ucsd.edu/education/undergrad/student-opp/instructional-asst/ta-tutor-ugias.html)

**How can I arrange for audio visual equipment?**

Most classrooms now have a self-service media center. If your section room is lacking basic necessary media, please check with your course faculty and then follow the procedure found at

**Where do I get chalk?**
All classrooms are supposed to have thin white chalk. However, sometimes that chalk may be gone, especially at the end of the day. Rooms never have colored chalk or the fat chalk many students, instructional assistants, and faculty prefer. We highly recommend that you bring your own chalk. Your course faculty's assistant probably has a stock of fat chalk and dry-erase markers.

**How do I change my section meeting time?**
It is not possible to change section meeting times.

**What should I do if classroom scheduling conflicts arise?**
If you schedule a room outside of your normal lecture/laboratory/discussion time, be sure to bring a copy of your email confirmation as proof of your reservation. If your course faculty or the head instructional assistant requests a room for you, ask for a hard-copy of the room confirmation. By doing this, you are ensured that the room assigned to you is yours. If you have repeated room and/or time conflicts with someone from another course, please contact bioscheduling@ucsd.edu.

**How do I reserve a room for a review session or schedule a make-up section?**
Please check first with your course faculty. If he or she agrees that it is a good idea, visit http://biology.ucsd.edu/education/undergrad/student-opp/instructional-asst/ta-tutor-ugias.html and follow the procedures described.

**My evaluations**

**When do I get evaluated and how can I see the results of my evaluations?**
Student evaluations and faculty evaluations take place toward the end of the academic quarter in which you serve as an instructional assistant. The results of these evaluations are available to you online (http://academicaffairs.ucsd.edu/Modules/Evals) after grades have been officially posted for the course.

**What are the Excellence in Apprentice Teaching Awards?**
Each quarter, the Division of Biological Sciences selects three graduate students and three undergraduates to receive outstanding apprentice teaching awards. These selections are based on student and faculty evaluations. Recent evaluation forms are included in Section 4.

**For more information**

**Where and how can I find out more about teaching and serving as an instructional assistant?**
USIS Staff (biota@ucsd.edu) can provide the answers to most administrative questions and concerns about service in the Division of Biological Sciences, and you can ask Dr. Stanley Lo (smlo@ucsd.edu) as well. The Center for Teaching Development (https://ctd.ucsd.edu/) can provide more general information about teaching.
Section 2: Suggestions for effective teaching

Helpful suggestions from recent instructional assistants

Before your section:

- Prepare prepare prepare!
- I found it very helpful to create a lesson plan at the least one day before class. I also found it helpful to walk-through the lesson plan that I created at least once before I presented it in class. This way I was comfortable during section.
- Writing the agenda on the chalkboard before section is really helpful for you and the students to see how the section is progressing. Additionally, making handouts that provide summaries of lectures, but also require the students to answer analysis questions is extremely beneficial.
- I had trouble at first deciding what material to cover during my discussion sections, since often there was more material than I had time to cover in any meaningful way. I felt pressured to cover everything, but eventually I decided to stick to what I found the most confusing (or what a student brought up to me after class). I would then spend the majority of time discussing and de-convoluting that topic, rather than splitting my time up among all the topics. I liked this approach, and I think the students also appreciated it.
- Don’t just do the bare minimum to prepare for discussion. Think about how you will explain things before you are up in front of the students. Sometimes I thought I knew exactly what something was, but in front of my class I couldn't explain it at all! Predict where questions will be asked and try to think through the answers in advance.
- Identifying analogies that relate the information from the class to things that the students are familiar with is better than just repeating information.
- Obviously, you cannot imagine every scenario, but try to think ahead as much as possible! Also, consult with other IAs and the professor. If you can't find a solution, chances are they may have been able to.
- What I thought worked well is tailoring the discussion to the needs of the class – my section had quite a few students interested in pre-health, so I included some biomedical applications of physiology in my examples. One thing the students liked was photos of real anatomical structures (not just drawings or models) that were discussed in the lecture.
- I thought a little bit of humor worked well throughout the quarter. Look for a funny comic strip or a cartoon to accompany a problem set or example problem. If the room is too quiet, it really lightens up the mood.
- I frequently asked my students to use PubMed and Google and challenge themselves to find the latest research/interesting articles relating to the systems we were covering in the physiology class. I started each section by mentioning something interesting that they or I had discovered. I think this helped increase the students’ enjoyment of and passion for physiology.

In your section:

- Your enthusiasm is critical for getting students to participate!
- Taking the time to get to know your students (and their names) really helps a lot in terms of engaging students in discussion and ultimately improves their performance in the class.
- Smile and don’t be too hard on students the first day. This doesn’t mean you slack off or try to be their best buddies, but before the section starts you can chat with your students. For example, you might say “Hi, how was the weekend?” It eases the students into the discussion about class work.
• Treating your students like colleagues instead of like inferior beings makes a huge difference in how receptive they are. I’ve heard from students about other IAs “being on their high horse” and the students really don’t like that. It doesn’t foster a friendly learning environment.

• Bring candy to reward students who participate; it gets students motivated to speak.

• When I had problems getting students to participate in class, breaking them up into groups and having them work on problems together and then reuniting them as an entire class helped a lot!

• Once I organized my students into smaller groups, there was so much more energy. Everyone started talking to each other, and once they all got comfortable with one another, they started participating in the section more. It’s nice to do this at the beginning of the quarter. The more the students became comfortable with one another, the more they participated.

• I think it’s really a good idea for an IA to ask very simple questions first. Once you get students in the habit of saying yes and no, it gets much simpler. So, instead of asking them all too detailed questions, like “what is the mechanism behind…” you can just ask “is this part of the mechanism” and then move on to more detailed questions. This approach warms up students a lot!

• Make it a rule that you will not give answers to questions on the board until students have contributed to the discussion. If no one contributes, then leave that question, and go on to another. I’ve found that as soon as you move to a different question, students will talk about the previous question because they want to know the answers! If you follow this procedure, students learn “Hey, in this discussion I am not getting spoon fed every single thing. I need to be participating.”

• Giving the students index cards and inviting them to write down what they were having the most trouble with in class was a good way to get student feedback.

• I think it is a good idea to make a sign-in sheet at the beginning (or end) of each section. Sometimes if you mess up in section, you need to email the students to let them know. It’s difficult to do that if you don’t know who was there.

During the quarter

• It’s a great idea to email your students after discussion to just outline the key topics that they had trouble with as a group and to provide a question or two that makes them use the information in a new way and/or in a way that requires them to apply the information to a novel situation.

• After the first midterm, I asked the students with the top scores to give me a sentence or two on their study habits, and what they would suggest to other students to help them do well in class. People have told me that they found this helpful.

Being a teacher

First-time teachers may feel more confident about their knowledge of their subject than about their ability to teach, but teaching is a skill that can be learned. Good teachers are not born, but rather, they develop through training, practice, work, and feedback on their teaching strengths and weaknesses. As a new instructional assistant, you may find your first few weeks of teaching challenging, or even difficult. During this phase, you have to make the major adjustment from being a student to being a teacher.

Pre-quarter preparation

Taking the time to prepare for the quarter before classes begin will save you many headaches, reduce anxiety, help make the first day of section or laboratory go smoothly, and decrease the amount of work you will have during the quarter.
Before your first discussion section you should meet with your course faculty along with all the other instructional assistants for the course, so that everyone is clear on his or her responsibilities. The course faculty should brief you on the course structure, objectives, and content. If your course faculty has not set up such a meeting, take the initiative to request one before the first day of class. Here are some questions that you might want to ask at your first meeting with your course faculty.

1. Am I required to:
   - Go to lectures?
   - Conduct discussion sections? How many each week?
   - Have office hours? How many? Are electronic office hours permissible?
   - Conduct review sessions? How many? When? How many hours?
   - Proctor exams?
   - Grade papers? Grade exams?
   - Prepare or submit questions for exams?
   - Provide feedback on draft exam questions?
   - Supervise other instructional assistants?
   - Keep records of _____?

2. Do students sign up for specific discussion sections? If so, how?

3. In my discussion section, should I:
   - Make attendance mandatory or optional?
   - Review class material?
   - Discuss papers?
   - Present new material not covered in lecture?
   - Assign homework discussions, problem sets, or paper analysis?
   - Give quizzes?
   - Devise group projects?

4. Is there a syllabus? Should I go over it in section?

5. How much do exams or projects count toward the final grade? Are the exams already scheduled?

6. Which textbook(s) or additional course material will be used?

7. If there is a website or if the course uses TED, is there a password for instructional assistants?

8. When and where will we have instructional assistant meetings? How will the meetings be structured? Will we discuss grading policies, rules, or strategies at these meetings?

9. What are your policies about cheating?

10. What if I have to miss a class, a section, or a meeting because of an illness or a schedule conflict?

Before your first section

Think about how you want to portray yourself before stepping into the classroom. Some things you may wish to consider include:

- **Appearance:** Students get first impressions of your teaching style and general disposition through attire and physical appearance. It is important to consider how you want to be seen by students and to dress appropriately to fit that image.

- **Language:** The language you use in class also communicates to students the type of relationship you want to establish with them. Do you talk authoritatively, casually (with lots of colloquialisms), or academically (with jargon and neologisms)?

- **Attitude and physical bearing:** Body language is important, as it signifies your excitement (or lack thereof) for teaching and attentiveness to student responses. Instructional assistants who exhibit
interest and dedication have a greater chance of getting students to participate actively in section and to feel excited about course content.

- **Policies:** As an instructional assistant, you can help set the tone for the course, in addition to your section. You can communicate a desire to work with students by having students participate in creating discussion guidelines (http://gsi.berkeley.edu/gsi-guide-contents/discussion-intro/discussion-guidelines/).
- **Ethics:** Keep in mind the ethical principles that should guide your work with students.

**In your first section**

Here are some suggestions for how to prepare for and what to do in the first section.

- In preparing for that first section, ask your course faculty about what he or she wants you to do.
- There is no “best” way to conduct your first section. Some instructional assistants prefer to spend most of the first section on creating an open learning atmosphere and building rapport. However, your course faculty may have planned specific material, so please discuss this with him or her.
- Plan to cover at least some substantive intellectual material during the first class. Try and go beyond mundane administrative details and at least briefly discuss some exciting problems or issues related to the course material. You might introduce an interesting example of the course material to illustrate the kinds of things that students can expect to encounter in section. An important goal is to get your students talking with one another, not just talking to you.
- Introduce yourself and tell a little about interests, and then talk about office hours, when and where you will be available to provide help, and what you plan to do in discussion sections. Say why you are happy to be teaching this class and what you like best about the course material.
- Take index cards to section, hand them out, and ask for useful information about each student: their year in school, their major, their future plans, best e-mail address to use to contact them, etc. You can then use these cards in the early weeks of the class learn their names. During the first few sections, you may also find it useful to ask students to state their names before they make a comment; others have students write their names on pieces of folded paper and put the paper in front of them, so that everyone in the section can learn one another’s name quickly.
- Use an icebreaker to help students meet each other. Have pairs of people interview each other for about five minutes, like speed-dating. Then have them introduce each other.
- If your course faculty has not already done so, work with students in understanding the syllabus and course policies, such as the nature and frequency of exams and papers. Tell them whether attendance or participation in the discussion section will be required and will contribute to their final grade. Most important, let them know that you care about their success.
- Include as many students as possible in class discussions so that all students feel safe from the very first day when speaking in front of the class. Encourage them to react to each other’s ideas.
- Do the reading and assignments for the earliest part of the course. There is no need to blitz through the entire quarter’s work, but do keep up with the class as the quarter progresses.

**Methods and strategies for effective teaching**

As an instructional assistant, you should set their goals based on the instructional style that is most suitable for your own personality. For example, an instructional assistant who relates well one-on-one with people may find it easier and more effective to use small group discussions and conferences with individual students. Remember that discussion and laboratory section time is not meant for lectures.
Enhancing the teaching and learning in a lecture class with discussion sections
Be sure that you know whether you are responsible for introducing new material or if your objective is to review, clarify, and elaborate on material that has already been introduced during lectures. The strength of discussion sections is that they provide an opportunity for collaboration and active learning. Here are some suggestions that can help you achieve a higher level of student participation.

Establish a positive class atmosphere
The atmosphere you create can encourage collaboration and enhance participation. You can foster a positive attitude in your students by:
• Being enthusiastic about section and the subject matter
• Learning students’ names and having them learn one another’s names
• Being a careful listener and treating with respect
• Responding positive to student comments whether they say something correct or incorrect
• Arranging the classroom so that everyone sees everyone else

Establish rapport with your students
• Arrive early and chat with students.
• Find out what excites and concerns students. Early in each class, find out what your students want to get out of that section. Get to know the individual interests of students and refer to them in class when the opportunity arises.
• To build personal contact, you might try inviting each student to come to office hours at least once.
• Make eye contact, and do not focus only on the most responsive students. Try and connect with the less interactive students and bring them into the discussion as well.
• Go out of your way to encourage students who say little during sections. You might try to find out informally why they do not participate.
• Be alert to non-verbal cues of interest or readiness to speak, and call on those who look ready.
• Use different formats to encourage students to participate. Some students will be most engaged in small groups; some enjoy debates, whereas others avoid conflict.

Explain the importance of the section to increase student success
Part of your job will be to convince students that your discussion section is a useful resource. Some will think otherwise and feel that they have fulfilled their obligation to the course by attending the lectures. Even if sections are optional, you can offer them resources that lectures cannot.

Try to allow enough flexibility so that your section will appeal to most of your students’ needs. For example, if most of your students need clarification and review of lecture material, you may lose the more advanced students, but perhaps their concerns can be dealt with during office hours. If most of your students are ready to apply and extend lecture material, you should consider spending at least some time in your sections doing activities that appeal to these students. In that case, you can use office hours to work individually with students who have more fundamental problems. When students realize that you want to conduct a section that will meet their particular needs, attendance and class participation are more likely to be strong.

Adopt realistic expectations
As a new Instructional Apprentice, please do not be too hard on yourself. Just as it is difficult to induce strangers to speak to each other in social settings, you may find it hard to stimulate a lively discussion in
the first section of the quarter. Give yourself and your students at least a few weeks before you judge
the quality of the discussion or the success of your teaching.

Integrate discussion sections with lectures
An instructional assistant who does not attend or does not connect with the lectures cannot effectively
conduct a discussion section. It is thus crucial that you attend all lectures and follow them as carefully as
you can to identify areas that may give your students difficulty and that you may need to address in
section. The same advice holds for course reading assignments: unless you read carefully, you cannot
answer questions or clear up confusion that may stem from the reading.

Prepare for every discussion section
The more time you spend thinking about and preparing for a discussion section, the more successful it is
likely to be. A safe rule is to remember that you are or have recently been a student who is in the same
boat as your students. How would you react to what you are saying? Would you understand it? Are you
making sense to yourself?

Ask yourself (and maybe your course faculty as well):
• When should I be showing students how to do something, and when should I encourage them to try
  it themselves?
• When should I respond to a student question (give information), and when should I encourage other
  students to respond (give opportunity for students to practice skills)?
• When should I review the important concepts orally, and when should I use handouts?
• If I need to show students a lot of formulas or graphs, should I derive or draw them during class or
  should I prepare handouts and discuss them myself?
• When should I rely on my own expertise, and when should I seek outside sources?

Engage students in discussion sections
• Group discussion: This method is a good way to stimulate student participation. Pose a provocative
  question, and then allow the students to carry on the discussion. You can moderate the discussion,
  clarify materials as needed, and eventually summarize the students’ contribution.
• The question-and-answer method: Begin each discussion section with a few questions relating to
  past material and then tie that material into the more recently covered topics. Alternatively, start
  with simple questions that require students to give informational answers. Gradually progress to
  questions that require the explanation and application of concepts and principles.
• Small-group problem solving: Group a few students according to the types of problems they wish to
  solve or and ask them to solve the problems as a team.
• Play devil’s advocate to prompt students to get involved in or animated about class discussion. Even
  if you agree with students’ arguments about a certain topic, challenge them with the most cogent
  argument or question against their position. This approach can often stimulate a good debate.
• If your course faculty provides problem sets, let your students know that you plan to use them as a
  basis for discussion in your section, but that you will just give out the answers. You can also write
  your own questions (a task that may be harder than you might think).
• Ask each student to bring a one-page summary of that week’s readings or assignments. This
  approach can help to ensure that students keep up with the work, rather than relying on you to tell
  them what they need to know. Alternatively, you might encourage each student to hand in a
  question or problem at the beginning of section, quickly scan the questions, and make them the
basis for part of your section. This method provides students with a means of making their areas of difficulty known to you, and it also allows you to diagnose major areas of difficulty when similar problems are raised by a number of students.

Enhancing the teaching and learning in laboratory sections
Laboratory teaching policies vary greatly among courses. However, a few guidelines are generally useful for instructional assistants. Your role in most laboratory sections is to provide direction and assistance and to serve as a reference for students as they conduct their own work.

On a more personal level, laboratory courses offer students an opportunity to become engaged in and to gain a stronger affinity for biology. In addition, they encourage the often-neglected social aspects of learning. Laboratory work allows time for more interaction among students and between students and instructors than is possible in lectures or even in large discussion sections.

Preparing for the laboratory
Be prepared. You will feel more relaxed and confident if you are not frantically setting up the laboratory as students are streaming through the door. Several key actions can help to assure this:

• Make sure in advance that you are aware of your technical responsibilities. Talk with your course faculty and the support staff about these issues.
• Conduct the entire experiment yourself in advance even if you have recently taken the course as a student. Many course faculty require that you perform all lab experiments in pre-laboratory sessions. Different experiments present unique challenges. You should be familiar with the tricky aspects of each experiment before class. Do not cut short the time necessary for this preparation.
• Perform all calculations for the lab in advance and keep them handy for aiding students. Repeatedly miscalculating a formula confuses your students and reduces their respect for you.
• Re-familiarize yourself with the subject you will be teaching in the laboratory. You may need to read the course text or reference books to review!
• Arrive early and write a brief outline of the day’s activities on the board. This outline will serve as a reference during your introduction and can help focus student attention during the lab.
• Make sure that all necessary equipment and supplies are ready. Nothing turns off student enthusiasm faster than having to wait while you frantically search for a critical piece of equipment or try to track down supplies.
• If asked by your course faculty, prepare a brief introduction to the laboratory. The content will vary but may include an outline of the activities for the day, the rationale or purpose, and clarification of any potentially confusing concepts.
• Grade tests or laboratory reports carefully and as soon as you can. By returning work promptly, students will have more time for review and improve.

Conducting a laboratory session
• Learn students’ names as quickly as possible. They will respond to you better if you acknowledge them personally.
• Start every laboratory session on time.
• At the first session of the quarter, clearly present the goals of the course, a preview of the activities, dates of exams and field trips (if applicable), grading and attendance policies, supplies required and where to find them, and how to contact you (via e-mail). It also helps to tell students about your special area of interest and research within the field.
• Set the tone for the quarter by being friendly, but firm, and communicate your interest in making the laboratory an enjoyable learning experience.
• Inform your students of safety hazards and enforce laboratory safety rules. You are responsible for student safety, and it is up to you to require that your students use appropriate safety equipment.
• Introduce the activities for each laboratory session but be brief.
• Demonstrate any tricky techniques and point out the location of special materials. Gather the class close for this, and encourage questions.
• Assess students’ preparation. You might ask them to explain the required techniques or answer key questions, which helps you gauge how to help them during the session.
• Make it a point to talk directly with each student to determine whether he or she understands the procedure. Ask thought-questions about the purpose of procedures or how the experiment might be applied in other circumstances. You must take the initiative here.
• If you wish to make a salient point or to clarify a procedure during the middle of lab, first attract the attention of the entire class.
• Never fake the answer to a question. Instead, admit that you do not know something, and promise that you will look it up or ask another instructional assistant, the laboratory course staff, or your course faculty. Students will respect you for being honest and will trust the correct answers that you give. In fact, it is great to get students to think along with you and to answer their own questions using appropriate references and diagrams. Help your students to become independent learners.
• Instruct students in detail about the proper format of laboratory reports. If you are specific, you can help students to think clearly about their experiments, and their reports are likely to be more useful for their learning.

The art of asking questions
As an instructional assistant, you will formulate questions for a variety of reasons. As you formulate questions, decide whether you are more interested in eliciting specific answers or in stimulating general intellectual inquiry. This decision will greatly affect the content of student discussions and how much flexibility you can have in letting student answers take their own shape.

Types of questions
Your students may need to be able to approach your subject matter at different levels of complexity. Sometimes you may be satisfied that a student has simply memorized a set of facts. At other times, you may expect more sophisticated reasoning.

In 1956, Benjamin Bloom organized the development of a system or taxonomy for classifying educational goals according to a hierarchy of intellectual skills. This system is still in use and has been revised in 2001. The Bloom’s taxonomy consists of six broad categories of cognitive reasoning: remember, understand, apply, analyze, evaluate, and create. There are many resources online related to Bloom’s taxonomy, e.g. http://epltt.coe.uga.edu/index.php?title=Bloom%27s_Taxonomy. Consider how the learning objectives in your course fit into this structure.

Formulating questions
The way in which you state your questions strongly affects their effectiveness.
• Avoid ambiguous questions. It helps to consider how you would frame a corresponding written question. When you ask a question, you will use words such as what, how, and why. When you formulate an oral question, think of how you would write an equivalent exam question.
• Consider closed (yes and no) vs. open questions. For example, compare the question “Is carbon monoxide considered a pollutant?” with “Why is carbon monoxide considered a pollutant?”

• Avoid double-barreled questions. Questions that pose two problems simultaneously may be confusing, so think before you use them. For example, the question “What is the difference between fission and fusion, and how is electrical power generated from each of these reactions?” is actually a three-in-one question. Would it be more effective if you broke it into sub-questions and then asked students to compare the two processes?

**Asking questioning and responding to students**

The manner in which you ask questions and treat responses is as important as formulating them.

• **Wait-time:** When you ask a question, allow time for your students to think about it and to formulate an answer. This often requires more time than you and students think. These periods of silence may be uncomfortable for you and new to some students; letting them know at the beginning of the quarter that you plan to do this can eliminate the strain both for you and for them.

• **Distribute questions among students so that many are brought into participation.** You may decide to choose from among volunteers, but you might also feel free to call upon students who are not volunteering as long as you do it carefully.

• **Try to avoid repeatedly calling on the first student ready to reply and encourage participation from all students.** Consider establishing a pattern of asking questions of individual students, but explicitly giving them the right to pass without fear of embarrassment. Students may appreciate instructional assistants who include them in a discussion by directly asking them questions or encourage them to participate in other ways.

• **Reinforce responses.** You may reinforce responses with verbal affirmation (e.g. good! excellent! etc.) and with nonverbal encouragement (e.g. smile, nod). You may also reinforce a student’s response by repeating the response. Support your students. If an answer is completely incorrect, you might encourage the same student to rephrase or to attempt it again. Try to provide an atmosphere in which students feel safe to offer tentative or partial answers and encourage them in their attempts to elaborate or qualify. If a student needs assistance in completing an answer, ask if another student can build on the discussion, rather than jumping in yourself.

• **Never ridicule an answer.** If you embarrass students, you punish the act of responding, as well as the response, and everyone in the room may become silent for fear of receiving the same treatment.

• **If a student’s question indicates that he/she has not learned materials previously covered, you might consider working with him/her privately after class.**

• **Encourage debate.** When you are confronted with divergent answers to a question, it is particularly helpful to get students to talk with one another about the topic. For example, when two students have each devised synthetic routes to a compound, a debate between the two on the preferred route is going to be a valuable learning experience for them and for the class.

**Getting the most out of office hours**

At the first class meeting, tell your students the location and times during which you will be available for consultation. If you must change or cancel office hours due to an emergency, be sure that you announce the change effectively in advance. Do not fail to show up.

**Some things to keep in mind during an office hour:**

• **Address individual problems.** As the quarter progresses and you become more familiar with your students, office hours can be used with increasing effectiveness to address individual learning needs.
problems. For instance, you will likely teach a few shy students who consistently do well on written assignments, but who may be reticent in discussions. In office hours, you can meet individually with these students and encourage them to speak more in class by expressing your enthusiasm for their work and urging them to share their good ideas with the rest of the section.

- **Fairness, respect, and awareness:** In meeting with students, try to create a strong sense that you will treat them fairly and without favoritism. If you are approached by a student with serious personal problems, refer that person to Counseling and Psych Services (CAPS). Even though you may want to help your students, don't allow yourself to be put in the position of surrogate parent or therapist; the creation of a dependency relationship could be harmful to you and to the student. Please be sensitive and refer these students without delay to CAPS.
- **Students may be critical of a course or a faculty member but feel uneasy voicing their criticism directly to the professor involved.** If you believe that students’ criticism is valid and constructive and that it could be used to improve the course, you would help both the students in the course and the faculty by politely conveying the criticism. If you do decide to convey any critical comments, make sure you protect the student’s anonymity. As an instructional assistant, you are in a sensitive position and should respect the confidences of both faculty and students.

**Getting feedback**

Asking students for feedback about your teaching and their learning will help you become a better teacher. In addition, students will get the impression that you are interested in their progress. Here are some ideas to consider.

You could ask questions near the end of a section to gauge how students are doing:

- Did you get what you came for today? If yes, what did you get? If no, what was missing? If not sure, please explain.
- What are you least sure about at the end of this discussion section?
- What percent of the confusion was due to:
  - Unclear presentation of instructor in charge of the course?
  - Lack of opportunity to ask question?
  - The student’s own lack of preparation?
  - The student’s own lack of participation in the classroom discussion?
  - Other reasons? If so, what?

Halfway through the quarter, you could give students a questionnaire, but before you hand out a questionnaire to get feedback from the students, make sure that you examine your goals in gathering students’ impressions. Different goals imply and require different types of questions. And remember that if you ask questions, you have to be prepared to deal with the answers, whatever they may be.

Identifying your goals first makes choosing questions appropriate for your goal(s) easier. For example, do you want:

- Feedback about classroom events or teacher behavior?
- Students’ perceptions of their achievement of the course goals?
- Students’ own evaluation of the effectiveness of different aspects of the course?
- Students’ comments on their own behavior or thinking in the course?
- Students’ overall satisfaction with the course?
You could also directly ask students on how the discussion or laboratory section is going:
- What about this discussion or laboratory section is helping you learn?
- What can I do differently to help you learn better?
- What can you as students do differently to help you learn better?

**Grades and grading**
You must constantly try to be fair, consistent, and reasonable and to maintain a grading standard you can defend if challenged. Grading guidelines for the course should be explained clearly to the students registered for the course at the start of instruction. Again, the course faculty may do this, but if he or she does not do it, ask the course faculty what the students should know about grading and then pass that information on.

**Responsibility for assigning grades**
Only the course faculty has the authority to assign final grades, but that grade generally is based on scores determined by instructional assistants. Exams and papers provide feedback to your students and communicate to them what they understand and what they need to check on. It can affect their performance on future exams in the course and how well they do in future courses. In addition, you are, directly or indirectly, determining your students’ final letter grades that will be on their transcripts.

**You must take this responsibility seriously.** Grade carefully and thoughtfully; pay attention to details. Do not wait until the last minute and then dash through it haphazardly. Do not grade when you are tired, and be sure that you grade in an environment that promotes your very best efforts. If you approach grading as a mindless chore, you will be cheating your students. Before you begin the task of grading, thoroughly discuss with your course faculty the grading standards and grading rubric. If the course faculty does not initiate the discussion, be sure that you do.

Students sometimes wish to have a grade reconsidered. The faculty member in charge of the course sets the policy with regard to regrading exams or papers; be sure that you know the course policy. It is possible that instructional assistant receives the authority from your course faculty to change a grade on a test or paper that you graded. Any grading dispute should be brought to the attention of course faculty. He or she has final responsibility for the conduct of the course, and it is only he or she that has the authority to adjudicate conflicts about grading.

**Grade records**
Keep accurate and confidential records of your evaluations of each student’s performance throughout the course. At the end of the quarter or when you are asked, provide a copy to the faculty member in charge of the course, and retain your records for three quarters. University policy requires that unclaimed examination papers be kept for one quarter after the class is over.

**Grading strategies**
Make sure that you have a good answer key or rubric and that you understand it.
- In a large course, skim several exams quickly without assigning any grades. Before you begin grading, you will get an overview of the general performance and the range of students’ responses.
- Read the exams without looking at the students’ names. It is a part of your job not to bias your grading by carrying over your personal perceptions or opinions of individual students as you grade.
• Determine if there is more than one correct response for any of the questions. Make sure that you understand the instructor’s answers before you begin grading, and that the instructor has indicated the point value of each question and each part of a question clearly.

• Choose examples of exams to serve as anchors or standards. Identify exams that are excellent, good, adequate, and poor.

• Decide in advance if certain incorrect answers merit partial credit.

• If you are responsible for grading an entire exam, rather than just a few questions, grade your assigned exams question by question, rather than grading all questions for a single student.

• If you can do so efficiently, write comments on students’ exams. Write brief notes on strengths and weaknesses to indicate what students have done well and where they need to improve.

• Determine the correspondence between scores and grades prior to grading exams. You should decide what level of the performance merits a given letter grade independent of how well your class performs on the test. For example, the test is worth 50 points and the top score is 30, does that mean that students who have a score of 30 will have earned an “A” merely because there is no better score on the test?

The method by which exams are graded is up to the course faculty, but here are some ideas. Typically, large lecture classes will have many instructional assistants. Ask how your course assures consistency and fairness in the grading process.

• You should review the scoring criteria and model answers prepared by the course faculty. You could then meet as a group (ideally with the faculty) to discuss the answers to each question. Decide how many points will be awarded for which types of answers.

• For essay questions, you could establish two- or three person teams for each essay question. To establish consistency (and if time permits), each team could get 8-10 exams, and each team member should grade these exams independently. The grades should then be compared, the discrepancies discussed, and a consensus reached. After that, each team member can grade independently, keeping in mind the consensus reached by the group. If any team member is unsure about a particular exam, that exam should be passed to another team member for an opinion.

Here are some typical policies governing grading, but be sure to check with your course faculty, so you know the specific policies for your course.

• Grading criteria: Standards should be explicit and uniform.

• Partial credit: It can be a useful compromise. Determine how you will award partial credit points and then be consistent. Check with your professor for help in determining how to distribute points.

• No double jeopardy: Do not subtract points multiple times for the same mistake.

How you mark papers or exams can greatly reduce the chance that students will be tempted to cheat by changing answers and then requesting that their exam be regarded.

• Clearly circle each answer in red, leaving very little space between the words or calculations and the red line.

• Mark through all blank spaces to prevent students from adding material.

• Draw a thin red line through words that could readily be changed to transform a wrong answer into a correct answer.

• If students are allowed to use the backs of exam pages, mark a big X through blank spaces on the back of every exam sheet to indicate it has been checked and nothing was written.
• Initial papers you corrected to indicate who graded, and/or use different colors of ink for different graders.
• If your professor agrees, announce that only exams written in ink can be submitted for regrading. Not all professors have this policy, so be sure to check with your course faculty.

Regrades
Here are some typical policies for handling students’ requests that their exams be regraded, but be sure to check with your course faculty so you know the specific policies for your course.
• Requests for re-grading should be submitted in writing.
• Clearly state the date by which regrades must be submitted, e.g. two weeks after the day when graded exams were made available.

Miscellaneous issues related to grading
Keep in mind the right to privacy. Make sure that you discuss with your course faculty how exams will be returned. Typically exams will be handed out in class, in sections, or at specific times and locations. Leaving exams outside the faculty member’s door may break Federal privacy laws. Exam-return policies should be established at the beginning of the quarter and clearly conveyed to the students.

In laboratory courses, you will often be asked to provide an evaluation of each of their students. Listed below are some of the criteria that might be taken into account:
• Did the student arrive at each lab session on time and prepared?
• Did the student manage lab techniques carefully and skillfully?
• Did the student THINK before asking questions?
• Did the student work well independently and with other students?
• Was the student able to adapt to unforeseen procedural changes?
• Did the student maintain a neat and orderly workspace?
• Did the student adhere to safe lab practices?
• Was the student conscientious about keeping a detailed notebook, working problems, and generally applying good scientific procedures?
Section 3: Ethical behavior and integrity of scholarship

Ethical principles and behavior
Appendix V, Part II, of the University of California Manual of Academic Senate (http://www.universityofcalifornia.edu/senate/) describes faculty responsibilities, ethical principles, and types of unacceptable behavior. Instructional assistants are also expected to adhere to these standards of conduct as well.

As teachers, it is the responsibility of professors and instructional assistants to:
- Encourage the free pursuit of learning in his/her students
- Hold before them the best scholarly standards of his/her discipline
- Demonstrate respect for all students as individuals
- Adhere to his/her proper role as intellectual guide and counselor
- Make every reasonable effort to foster academic integrity
- Respect the confidential nature of the relationship between professor and student
- Avoid any exploitation of students for the instructor’s private advantage
- Protect their academic freedom

All educators are obligated to act in a professional manner and to follow the ethical principles that all university teachers, including instructional assistants, must practice. This obligation prohibits:
- Discriminating against any student on political grounds or for reasons of race, religion, gender, sexual orientation, or ethnic origin, or for any other arbitrary or personal reason.
- Failing to meet the responsibilities of instruction; in particular:
  - Arbitrarily denying access to instruction;
  - Injecting a significant amount of material unrelated to the course;
  - Without a legitimate reason failing (1) to adhere to the rules governing faculty behavior in the conduct of courses, (2) to meet with classes as scheduled, (3) to keep office hours as required, or (4) to hold examinations as scheduled;
  - Evaluating student work based on criteria that do not directly reflect performance in the course;
  - Delaying the evaluation of student work beyond reasonable expectations.
- For an instructional assistant, ignoring or refusing to follow the instructions of the faculty member in charge of the course.
- Discussing the academic work of a student with anyone other than the faculty member in charge of the course and the other Instructional Apprentices working in the course.
- For an instructional assistant, criticizing the course, the instructor or the other instructional assistants in the presence of students. In addition, it is unprofessional for a professor to publicly criticize instructional assistant or faculty colleagues in the presence of students.
- Exploiting students for private advantage.
- Humiliating students.

Decisions made by instructional assistants have a significant effect on their students’ grades. You must therefore be especially careful not to abuse this power. You are obligated, as a condition of your position, to evaluate student work as objectively and as fairly as possible. In particular:
- You cannot be paid by their students for out-of-class tutoring, because such students could automatically receive preferential treatment by you. There are no exceptions.
• You must avoid romantic involvement with students in your class. Such involvement makes objective evaluation difficult and may also raise questions of hostile environment and sexual harassment. If you are already in a relationship with a student who wants to take the course you are teaching (whether as a very close friend or as a significant other), you must notify your course faculty of the situation and together you can work out appropriate measures.

What is sexual harassment and how can you prevent it?
Definition of sexual harassment
ALL teachers at UC San Diego (professors and instructional assistants) must receive training in how to recognize and how to prevent sexual harassment. Sexual harassment is a specific type of discrimination that is illegal under federal and state law and under UC San Diego policy. It is defined as unwelcome conduct of a sexual nature that is so severe or pervasive that it creates a hostile environment for a reasonable person. Determining whether particular conduct constitutes sexual harassment depends on the specific features of the situation. Sexual harassment may occur between persons who have different amounts of power or between peers. Although the stereotype is generally of a male harassing a female, females can harass a male, or a male or female can harass a person of the same gender. Harassment based on sexual orientation, gender identity discrimination, and gender stereotyping is also prohibited.

Sexual harassment may include verbal, visual or physical conduct. Examples include:
• Direct propositions of a sexual nature;
• Sexual innuendos and other seductive behavior, including pressure for sexual activity such as repeated, unwanted requests for dates, and repeated inappropriate personal comments, staring, or touching;
• Direct or implied threats that submission to sexual advances will be a condition of employment, promotion, grades, etc.;
• Unnecessary or unwanted touching, patting, massaging, hugging or brushing against a person’s body, impeding or blocking movements or other unwanted conduct of a physical nature;
• Remarks of a sexual nature about a person’s clothing or body;
• Unwelcome and inappropriate letters, telephone calls, e-mail, or other communications or gifts.

All first-time instructional assistants at UC San Diego must complete an online training course and provide a certificate of completion to confirm their participation in the course. The URL for the course is: http://training.newmedialearning.com/psh/ucsd/. The Office of the Prevention of Harassment and Discrimination is located at 201 University Center. Call 858-534-8298 or email ophd@ucsd.edu. The deadline for complying with this training requirement will be announced by email. At the end of the online training, print out and sign the certificate of completion, and bring it to the initial half-day orientation or turn it in to the receptionist in the Undergraduate Student and Instructional Services office on the ground floor of Pacific Hall.

Consensual relationships
In some circumstances, consensual romantic or sexual relationships are of concern to UC San Diego. There is an inherent conflict of interest if an individual exercises direct supervisory, evaluation, instructional, and/or advising responsibilities, or participates in hiring, retention, promotion, or award decisions on behalf of UC San Diego, of someone with whom he or she has a romantic or sexual relationship. In cases where any such relationship either has begun or is on-going, UC San Diego requires that effective steps be taken to ensure that the evaluation or supervision of the student or employee is
unbiased, i.e. that it is independent of the consensual romantic or sexual relationship. Proactive, preventive measures must be taken to avoid ethical conflicts.

The UC Regents have approved a system-wide faculty-student relationship policy that states, “Whenever a faculty member is responsible for academic supervision of a student, a personal relationship between them of a romantic or sexual nature, even if consensual, is inappropriate. Any such relationship jeopardizes the integrity of the educational process.” It is misconduct for any faculty member or instructional assistant to engage in romantic or sexual relationships with students for whom he or she has, or should expect to have in the future, academic, instructional, evaluative, or supervisory responsibility.

**Campus resources**
If you or someone you know has a question about sexual harassment, please contact the Office for the Prevention of Harassment and Discrimination (OPHD). You can leave a confidential voicemail at (858) 534-8298, email us at ophd@ucsd.edu or visit us at 201 University Center on the main campus at the corner of Gilman and Myers. OPHD office hours are Monday through Friday 8:00 am to 4:30 pm.

**Academic integrity**
UC San Diego has a clear policy on the Integrity of Scholarship. Please see: http://senate.ucsd.edu/manual/Appendices/Appendix2.pdf.

The policy states that “Integrity of scholarship is essential for an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind. Instructors, for their part, will exercise care in planning and supervising academic work, so that honest effort will be upheld. The UC San Diego Policy on Integrity of Scholarship (herein the “Policy”) states the general rules and procedures associated with student integrity of scholarship. This Policy applies to undergraduate and graduate students enrolled in a UC San Diego course.”

UC San Diego created the Academic Integrity Office to support faculty, instructional assistants, students, and staff in upholding the integrity of scholarship at UC San Diego: https://students.ucsd.edu/academics/academic-integrity/policy.html.

It is the responsibilities of faculty and instructional assistants to communicate the academic integrity expectations to the students and to address any violations. The next two sections contain advice on helping to PREVENT cheating both during and after exams.

**Preventing cheating during exams**
Before the exam, check with your course faculty to learn his or her policies and then follow them to the letter. You may be able to suggest additional practical measures that your course faculty will adopt and follow in the future.

- Proctor actively during an exam. Walk around the room and notice what the students are doing. Students can be very innovative when cheating, and detecting some strategies may be challenging. Some students cheat by (1) outright copying from neighbors; (2) consulting notes on slips of paper, sleeves, desk tops, the inside of hats, material written on body parts, etc.; (3) sharing calculators
(which have memories); or (4) even exchanging exam papers. Make sure students wearing hats remove them so you can see where their eyes are focused. The hoods of hooded sweatshirts or “hoodies” should be off the head and on the shoulders.

- If you suspect a student of cheating, first stand nearby and make sure the student knows you are watching him or her. If that doesn’t stop what you think is cheating, enlist the aid of the faculty member. You can try making a general announcement reminding the class to keep their eyes on their own papers, but ask yourself how effective you think it will be.

- Learn the course policy concerning students who look at others’ exams. For example, you can move the suspected cheater to a new location where he/she can be more closely watched. Just politely, but firmly, ask the student to move to the location of your choice. Take note of the students who were within the suspect’s view so you can later compare the papers of those involved.

- On closed-book exams, be sure that all notes and books are put away where they cannot be seen or alternatively, they might be left at the front of the classroom.

- Proctors can also ensure that no outsider takes an exam for another student. The simplest way to prevent it is to announce in advance that picture IDs will be checked when exams are handed in and then actually checking them carefully and obviously.

- Restroom visits pose a problem. Discuss with your course faculty whether restroom trips will be allowed, and if not be sure to warn students in advance. If restroom trips will be allowed, they should be chaperoned, and the restrooms closest to the test room should be checked once the exam starts to ensure that no notes or texts have been stashed there.

Preventing cheating in laboratory courses
Laboratory reports offer many opportunities for cheating. Groups of students may find it convenient to work together on laboratory reports, and unless your course faculty has made it clear to the students that laboratory reports must be each student’s own work, you cannot fairly judge this practice to be improper. Be sure that expectations are made clear from the start. In general, all students are required to do the laboratory work and to fully understand their own reports. Always consult with your course faculty if you have any concerns about cheating.

For more information, please go to the Office of Academic Integrity (https://students.ucsd.edu/academics/academic-integrity/index.html). You can also find a variety of information about academic integrity at UC San Diego by consulting the ethics website (https://ethics.ucsd.edu), and under Education and Training, click on the link Academic Integrity.
Section 4: Recent evaluation forms

Student evaluations
Your students will also be asked to submit a summative evaluation of your performance as an instructional assistant through the campus ASES system. The system will notify you via UCSD email when the evaluations are active so you can invite students to participate. Once final grades are posted, you will be able to view a summary of the evaluations at the link provided in the email message. Please note that, in the interest of protecting student privacy, the campus will not provide a summary report for you if three or fewer evaluations are collected. Watch your UCSD email for more information.

The following items are rated from strongly agree to strongly disagree (except items 12-15).
1. The Instructional assistant was well organized and prepared for class.
2. The Instructional assistant consistently arrived at lecture, section/lab, office hours and exams on time.
3. The Instructional assistant presented course material clearly and answered questions accurately in class.
4. The Instructional assistant helped develop my thinking skills on the subject.
5. Feedback from the Instructional assistant on assignments, exams and/or papers was helpful and constructive.
6. The Instructional assistant's explanations were appropriate, being neither too complicated nor too simple.
7. The Instructional assistant answered questions clearly and effectively, helping students to make connections among the course readings, assignments, and lectures.
8. The Instructional assistant was genuinely interested in and enthusiastic about teaching.
9. The Instructional assistant was accessible to students outside of class (office hours, e-mail, etc.).
10. The Instructional assistant effectively connected the section/lab exercises with the material covered in lecture.
11. The Instructional assistant was effective in supporting, implementing, explaining and enforcing Lab Safety policies and procedures.
12. In terms of communication skills, did the Instructional assistant demonstrate any of the following? Check all that apply: no issues, too quiet, too loud, too fast, too slow, poor grammar and/or English language skills, used filler words such as “um”, other.
13. I would recommend this Instructional assistant to other students.

The following items are open-ended, free-response questions.
14. Please describe this person's greatest strengths as an Instructional assistant.
15. Please describe this person's greatest weaknesses as an Instructional assistant.

Faculty evaluation
At the end of the quarter, your course faculty will evaluate your work based on the following criteria. You will be able to view the evaluation after the quarter is over by using the ASES system. Please check your UCSD email regularly for more information.

1. How organized and prepared for class was your instructional assistant?
2. Did your Instructional assistant arrive at lecture, lab, office hours and exams on time?
3. How clearly did your Instructional assistant present material?
4. How actively did your Instructional assistant participate in meetings?
5. How effective was the Instructional assistant at following instructions and completing tasks on time?
6. How effective was the Instructional assistant at providing feedback about student performance in the course?
7. How effective was the Instructional assistant at maintaining any required paperwork (quizzes, grades, etc.) and providing it when asked?
8. How genuinely interested and enthusiastic was your Instructional assistant about teaching?
9. How effective was the Instructional assistant in supporting, implementing, explaining and enforcing Lab Safety policies and procedures?
10. Do you have any other comments to add to your evaluation? Please provide any additional constructive comments