Biology & Chemistry Tutor Training
FALL 2021

❖ CLAS WELCOME & ORIENTATION ❖ VIA ZOOM
WED 9/22, 10-11:30 am (New Tutors only)
  o Introduction to CLAS staff, programs, policies & tutor union
  o Zoom Link: https://ucsb.zoom.us/meeting/register/tZcsc--tpjIjGtRlsmYbc3_dqhGuxtBl6wnv

❖ TRAINING SESSION 1 ❖
WED 9/22, 1-4 pm
SRB 3270
  o Intro to responsibilities

❖ TRAINING SESSION 2 ❖
SAT 9/25, 1-5:30 pm
BLDG 300 RM 101
  o Info on teaching strategies

❖ TRAINING SESSION 3 ❖
FRI 10/1, 3-4 pm
SRB 3270
  o First week follow-up

❖ TRAINING SESSION 4 ❖
TBA
  o Fall Quarter wrap-up

On Campus (In-Person) Training Sessions

At CLAS, Learning is our middle name!
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**Quarter:** Fall  
**Year:** 2021  
**CLAS:** Campus Learning Assistance Services
CLAS STAFF

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TUTOR RESOURCES

Tutor Handbook - posted online
CLAS Tutor Resource page - Link
Study Skills Handouts - Link
Mentors and their materials!
CLAS Locations
CLAS Services are available to supplement your learning!

- **Group Tutorial Sessions** include videos, worksheets & quizzes. Sign up and participate to review major course concepts, practice concept applications and get your questions answered. Both in-person & asynchronous online session options are available for most courses.

- **Drop-in/Study Hall Sessions** allow opportunities to practice problem solving, ask questions and/or see what other students are working on. In-person & zoom sessions will both be available.

At **CLAS**, Learning is our middle name!

Learn more at: clas.ucsb.edu
Sign up at myclas.sa.ucsb.edu
CLAS Mission

At CLAS, learning is our middle name:

• we help students understand course concepts;
• we engage students in the learning process;
• we guide students toward discovering solutions to problems;
• we encourage students to become independent thinkers & life long learners.

A Tutor’s Role

Tutor as Advocate/Tutor as Midwife

When Plato first used the metaphor of midwifery to describe education, he linked tutors to their role as advocates for students. The tutor is not a lecturer, nor a grader; instead the tutor is one who draws out (e ducare) and helps give birth to what the student has gestated. The success of a tutorial depends on the relationship the tutor establishes with the student. Collaborative problem solving works only when the tutor and student share the responsibility for the learning.

This means that the tutor resists “giving answers.” Being directive upsets the balance of power in a tutorial by establishing the tutor as the center of the learning process and pushes the student deeper into passivity and dependency. The tutor who gives the student her idea or solution is like the cow bird who lays its egg in the songbird’s nest. All the energy of the tutorial goes into supporting the birth of the tutor’s idea. Although the student may receive an ”A” in the course, the student will have been diminished by the experience. What inflates the tutor deflates the student.

The tutor can foster independent learning by
• letting students do what they can for themselves
• recognizing & praising any step they take toward independence
• refusing to let students credit the tutor with their success
Characteristics of Great Tutors

COMMUNICATION
• Puts information across in a clear, understandable manner
• Capable of reducing knowledge to its simplest components
• Reinforces major points with meaningful examples
• Ties information together
• Answers questions freely & completely
• Relates theories, principles & concepts to practical applications

COMMAND OF THE SUBJECT MATTER
• Knowledgeable in the content area
• Current & up-to-date in the field
• Attends lectures regularly & reads ahead of the class
• Knows material well enough to emphasize the most important aspects

ORGANIZATION
• Plans ahead for the tutoring session’s activities
• Comes to the tutorial ready to deal with the topic
• Uses class time effectively & efficiently
• Highlights main ideas
• Summarizes to aid learning & retention

INTERACTIVE TEACHING SKILLS
• Helps students answer their own questions
• Uses directed questioning and “wait time” techniques
• Uses student reaction & feedback to improve and guide actions
• Has patience & understanding for the beginning student
• Senses when the class does not understand
• Praises success to motivate future learning

CREATIVITY & FLEXIBILITY
• Uses a variety of presentation styles & methods
• Changes approach to meet new situations
• Works with different students distinctly & individually
• Tries new ideas & techniques periodically
• Open to student suggestions on content & methods

PASSION & COMMITMENT
• Excited about teaching
• Sincere interest in the subject matter
• Makes learning a pleasurable experience
• Presents in ways which are interesting & involving
• Uses enthusiasm to improve student attitudes toward the subject matter
• Accepts criticism & suggestions as positive signs for change
• Always looking for new & better ways to teach
• Shares the best ideas with colleagues for their improvements
TUTOR RESPONSIBILITIES

• Communication
• Group & Drop-in Tutoring
• Timesheets & Paperwork
• Timekeeping & Payroll
• Appropriate Attitudes, Behaviors & Etiquette
• Professional Ethics
Communication

With CLAS Staff

*Check your email often (at least twice daily) for vital messages & updates*

*You need to let us know anything regarding...*

• Any schedule changes
• Cancellations or Tardiness
• Problems with your online technology

With Professors

• Initial introductions and continued dialogue are important
• Be an effective and diplomatic CLAS ambassador

With Students

*Be clear & thorough....*

• Regarding cancellations & other changes
• Regarding CLAS policies
• Regarding Professor & course policies
For Group & Drop-in Cancellations:

**Unplanned:** If you are sick call 893-3269 and leave a message ASAP. **DO NOT RELY ON EMAIL!**

**Planned:** Fill out and submit the proper form in advance.

**NOTE INSTRUCTIONS:**

**PLAN AHEAD!**

**FILL OUT DROP-IN AREA AS NEEDED**

**~SIGN POSTED BY CLAS~**

**NOTE:** CLAS will also automatically email your students when there is a cancellation.
Tutoring Responsibilities & Guidelines

Group & Drop-in Tutorials

General tasks:
- Provide clarity & support on difficult concepts & problems
- Provide applicable problem solving & learning skills strategies
- Provide a friendly & comfortable learning environment
- Conduct Review Sessions as needed

Prep & Organization
- Remain apprised of course content, progress & emphasis... attend lectures, check out course mentor’s materials
- Prepare problems, quizzes, discussion outlines before group sessions
- Allow for student participation

Tutoring Don’ts—Some things a tutor should never do:
- Violate the professor’s policies
- Take the place of the professor or the professor’s lecture
- Complete the student’s homework or assist on an exam
- Try to rescue students that haven’t been attending lecture or studying regularly

Administrative Tasks:
- For groups: Take attendance every time; add new students to your roster & mark students excused on your roster as necessary. For drop-in: Fill out your work log when you complete sessions.
- Turn in timesheets on time, completely & correctly filled out
- Fill out your Kronos timecard accurately and on time
Group Tutorials

- Group Timesheets are also Rosters. Rosters are printed every other Monday and placed in the front office bin for pick up.

- When new students join a group (after rosters have already been printed) you must add their name & perm number to the roster yourself. Students should **NOT** write on your group timesheet!

- If you run out of space for student names, do **NOT** write on the back… use a blank roster to continue data.

- New students should have a Verification Form as proof of enrollment. [*They can show you on their phone]*

- Discourage “crashing”: All students should enroll officially in the CLAS computer system.

- Be sure to take roll during every session.

- Students can be dropped from the group if they have 2 consecutive or 3 total unexcused absences during the quarter.

- Mentors will be checking group timesheets and making drops as appropriate.

- If a student has an excused absence place an “E” in the box, so we know not to drop them.

- Dropping students is especially important when groups are full, since it allows other students to officially enroll.

- Dropped students must **re-enroll in person** at CLAS if they want to attend the group they were dropped from.

- If zero students attend a scheduled group meeting note this as a No Show w/ “NS” on the timesheet.
### Bio-Chem Tutor TIMESHEET & WORK LOG

**Tutor Name (Print):** Mary Tutor  
**Tutor Signature:** Mary Tutor

For work study: I hereby certify the accuracy of this record of hours worked in a satisfactory manner.

**INSTRUCTIONS:**
- Enter information for each shift or review session as soon as possible after completion.
- Enter shift times and hours worked rounded to the nearest 0.25 hour.
- Enter Drop-in/classroom under location for in-person sessions; enter “Zoom” for online sessions.
- Enter the number of students assisted; if no students attend the session, enter zero.
- Turn in completed timesheet/log to your CLAS mentor at the end of the pay period.
- Start a new timesheet/log for each pay period.

#### DROP-IN HOURS

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<tr>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
<th>HOURS WORKED</th>
<th>LOCATION</th>
<th>NUM STUDENTS ASSISTED</th>
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#### REVIEW SESSION HOURS

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<th>REVIEW END TIME</th>
<th>HOURS WORKED</th>
<th>LOCATION OF REVIEW</th>
<th>NUM STUDENTS ATTENDED</th>
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**Drop-in**

- Fill out your shift information on your work log form as soon as possible after completing your session.
- Make sure to include:
  - Shift times & Hours worked
  - Location (room number vs. Zoom)
  - Number of students assisted
- For in-person drop-in sessions be sure to have students sign in on the computer in SRB 3274 before you assist them with course work.

**Review Sessions**

- Review Session portion of the work log/timesheet is used when a tutor combines multiple groups into one large session (in-person or online).
- Log must include:
  - Tutor name & signature
  - Date & Time
  - Total hours (Maximum length 2 hours)
  - Number of students that attended
- Review Sessions are optional & subject to approval; submission of a Request Form to the coordinator is required.
- Rooms for in-person reviews are requested via the form and require at least one week advance notice.
- Online reviews are conducted on zoom using your recurring drop-in link.
- Turn in timesheet/work log to your mentor on the timesheet due date along with your group roster/timesheets.
- New timesheet/logs will be placed in the roster bin along with the new group rosters.
Review Session Request & Reservation:

- Use the appropriate form
  - Write neatly
  - Include course and professor’s name
  - Double check your date—be accurate!
- Complete & submit to Amy in advance
  - Make requests a week in advance
  - Place requests in the envelope on Amy’s door or submit via email
- Check your Confirmation Sheet
  - You will be notified via e-mail that your request has been approved & filled
  - Be sure to double check your confirmation for any potential changes made by Campus Scheduling
- The confirmation sheet has information regarding who to contact if your room is locked
- Note: Reserving rooms & holding sessions on holidays is not allowed
Timesheets & Paperwork

**Timesheet Summary**

- It is essential to collect attendance data for all students who attend CLAS sessions
- Accuracy is important
- Review Session Request forms should be filled out completely & accurately and submitted on time.
- Timesheets are all turned in to your mentor every other FRIDAY. *(Corresponds to the end of the biweekly pay period)*
- Tutors who do not submit timesheets on time or submit them with incorrect information risk delaying the payroll dates

**A Note about Confidentiality:**

- Student perm numbers, phone numbers, addresses & schedules are confidential
- In Group Tutorials roll is taken verbally or on paper other than official timesheets in order to protect confidentiality
- Tutor phone numbers & other personal data are also confidential and therefore will not be released to students without permission
Timekeeping & Payroll

• An Online electronic system (Kronos) will be used to track hours worked for payroll.
• Tutors will enter hours worked each week including groups, drop-in, training meetings and lecture attendance.
  • Select the correct pay rate under the transfer column
    - **Group rate** (higher amount) for group sessions & review sessions
    - **Individual rate** (lower amount) for all other tasks/sessions
  • Regular hours = group & drop-in hours → no comment required
  • Other hours = training, reviews, lecture attendance → comment required
  • For Lecture attendance: 50 minute lecture is entered as 1.0 hours; 75 minute lecture is entered as 1.5 hours

• At the end of each bi-weekly pay period tutors finish entering their hours worked and approve their timecards by that Saturday.
  *Please do this on time!!!*

• Paychecks are issued bimonthly on every other Wednesday. You will receive your paycheck through the mail or via direct deposit.
Attitudes & Behaviors

**Guidelines for working with students & colleagues:**

- Use active listening skills & constructive criticism
- Respect other people’s time: Be on time, leave notice if you’re going to be late; end sessions on time
- Be honest: Tell students if you don’t know the answer to a question
- Use courtesy & diplomacy when interacting with professors: Heed their requests & suggestions... Remember it’s their class!

Setting up a comfortable environment is even more important when tutoring online. Just asking a simple question like “How are you?” or “How are your classes going?” can help you to make a connection with your students, setting them at ease. Patience and kindness go a long way!

Online Etiquette

**Guidelines for working online during Drop-in**

- While on the clock, your must be present at your device and ready to accept students at all time.
- Set your Zoom to make sound when new participants want to join your meetings to help keep your alert and aware.
- Minimize distractions during your sessions
  - Silence your phones and other devices with notifications. Do not play music or ambient sounds. Close doors and windows.
  - Do not eat (drinking water is okay).
  - **Be mindful of what is in view of your webcam.** Keep your surroundings as clear from distracting personal items as possible, especially of anything that could be perceived as inappropriate for a workplace environment.
Professional Ethics

As a representative of CLAS, tutors are expected to exhibit professionalism in both attitude and conduct. In general, any behavior that makes a student or colleague uncomfortable probably violates CLAS (and University) policies.

The following policies and guideline about specific issues and situations aim to ensure that CLAS staff and students using CLAS services treat each other and CLAS equipment with respect:

**PHOTOCOPYING**
Tutors may use photocopy machines for CLAS related material only. Students are not permitted to use these machines and should be referred to photocopy facilities in the library or Ucen if they need to make copies. Tutors are encouraged to keep copying to a minimum and reduce and use double-sided copies as much as possible.

**Note that currently student staff are not allowed to use CLAS machines—consult your mentor if you need copies**

**COMPUTER USE**
Computers, including internet access and E-mail accounts, should be used primarily for legitimate CLAS business. Do not download and print internet files that are not CLAS related. CLAS computers & printers are not for accessing and printing personal homework assignments or other materials that are not directly related to CLAS. Under no circumstances is internet access to be used for accessing or receiving inappropriate material (i.e. material that is disparaging, vulgar, obscene, or otherwise reasonably understood to be objectionable).

**PRIVATE TUTORING & PRIVATE ENTERPRISE**
Private tutoring presents a potential for conflict of interest with the university and as such CLAS staff & tutors may not make any private tutoring referrals or use their position to solicit business for private tutoring. Any private tutoring or related activities must take place outside of CLAS time in non-university locations and not utilize CLAS resources such as computers, copiers, handouts, office supplies or equipment.

Violation of these policies will lead to dismissal from CLAS.

**ALCOHOL & DRUGS**
As stated in the University policy on substance abuse, the University recognizes drug and alcohol dependency as treatable conditions and offers educational and counseling assistance to employees and students to aid them in dealing with the problems associated with substance abuse. Employees and students, however, are prohibited from the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance and/or alcohol in the workplace, on University premises, at University activities, or on University time. CLAS policy, in keeping with this University policy, strictly forbids the serving of alcohol and/or controlled substances to students by tutors on or off campus, during or after working hours.

**SEXUAL HARASSMENT**
Federal, state, and local law as well as University policy prohibit sexual harassment, defined as unwelcome conduct of a sexual nature, or demeaning, aggressive or hostile conduct targeting a person because of his/her gender that unreasonably interferes with learning or work. This conduct can be physical, verbal, or visual and constitutes sexual harassment when there are situations of “Quid Pro Quo”, “Hostile and Intimidating Environment” or “Preferential Treatment”.

Before making any comments or gestures which might be construed as offensive, tutors should consider both the individual(s) to whom the comments are directed as well as in whose presence the comments are made.

**DIVERSITY**
In support of the University’s twin goals of excellence and diversity, CLAS policy prohibits any discrimination on the basis of gender, race, ethnicity, socio-economic status, age, sexual orientation, or disability.
TEACHING TECHNIQUES

• The Socratic Method
• Learning & Learning Styles; Study Skills
• Problem Solving Techniques
• Preparation & Lesson Planning
• Online Tutoring
THE SOCRATIC METHOD

A teaching tactic for fostering critical thinking where the focus is on asking questions, not giving answers.

Enhances student learning by:
- Reinforcing understanding
- Correcting misunderstanding
- Providing feedback
THE SOCRATIC METHOD

When applying the Socratic Method the questioner should:

• Keep the discussion focused & stimulate discussion with probing questions
• Periodically summarize what has and has not been dealt with or resolved
• Draw as many students as possible into the discussion

Asking questions promotes participation in the pursuit of knowledge, but the wrong approach can hamper this.

Some blocks to effective questioning include the following poor question types:

• Yes/no questions (be more specific)
• Ambiguous questions (be clear, not rambling)
• Leading or railroading questions
• Compound questions with too many factors at once (ask one straightforward question at a time)

Other blocks to effective questioning & interaction include:

• Not allowing students sufficient time to process the question asked (use “Wait-time” which is allowing at least 5-10 seconds for students to respond. Harder questions may require longer wait-time)
• Acknowledging correct answers too quickly and ending contemplation of the question for the rest of the group (ask for other responses, redirect the question to another student, ask others to build on previous comments)
• Not acknowledging responses and dignifying errors (you want to emphasize that making errors is not a reflection of self-worth and that making mistakes is a valuable part of the learning process)

In general a questioner will want to employ the following during the course of the session to encourage participation:

• Acknowledge all responses as a contribution regardless of accuracy (Make sure each student comment is greeted with some gesture: a smile, a nod, or something verbal such as “good” or “I see what you mean”)
• Show that you’re are pleased when you get a response…any response
• Look for chances to give positive feedback and praise
• Guide the student toward the correct answer (don’t just point out incorrectness)
• Look for chances to refer back to earlier answers & contributions and weave them into the current discussion
• Make sure complete correct answers are eventually provided
THE SOCRATIC METHOD

How the questioner proceeds with the discussion of course depends on the responses given by students. Note the following situations and techniques.

When students provide right answers during discussion keep in mind the following:
- A right answer must be correct and complete
- If the student is fishing for an answer, get a commitment before you respond
- It’s appropriate to praise students for correct answers (be sincere!)

When students provide the wrong answers be sure to do the following:
- Correct student’s work without being discouraging
- Never make fun of any answer
- Resist the urge to respond to errors by saying “No” or “Wrong” (this can discourage participation and squelch enthusiasm; focus on what is needed rather than what is lacking)
- Give clues and hints to help lead the student to discover the answer
- If the answer is partially right, but incomplete, redirect the question to other students to build on the initial answer
- Dignify an erroneous response by indicating what question the answer is correct for and then clarify why it is not correct for the question you asked (“That would be correct if X were true, but this is different because of Y” or “I can see why you might think that because the terms are easy to confuse, but keep in mind we are talking about Z right now”)

If students don’t answer at all you can try the following:
- Calmly ask the question again. Be encouraging
- Give a hint &/or ask a different question that will lead to the same answer
- Don’t make an issue of the resistance to answer (be patient, but persistent)
- Have students think out loud or look up answers rather than say or do nothing
How do students learn? Here's a visual breakdown of what is generally retained:

- Passive Modes
  - Lecture (5%)
  - Reading (10%)
  - Audio Visual (20%)
  - Demonstration (30%)
  - Discussion Group (50%)

- Active Modes
  - Practice By Doing (75%)
  - Teaching Others (90%)

- Confucius
  - I hear and I forget.
  - I see and I remember.
  - I do and I understand.

- Benjamin Franklin
  - Tell me and I forget
  - Teach me and I remember
  - Involve me and I learn.
What about Learning Styles?

Different people have different approaches....

3 Major Styles or Preferences

- Be aware of the different styles (Visual, Auditory, Physical) when tutoring
- In general it is best to have a well-rounded tutorial presentation incorporating multiple styles
- Say it, write it on the board, diagram it and demonstrate it!

Visual

Visual learners will typically retain more information when they can see something that graphically depicts what they are trying to learn. Visual learners should study using visual aids whenever possible. Flash cards, pictures, drawings – anything that will give them a visual memory.

Auditory

Auditory learners will retain more information when they hear something. For auditory learners the best way to learn is to hear something... over and over. Use a tape recorder. Read out loud. Have a friend quiz them orally.

Physical

Physical learners will retain information when they use the “hands-on” approach – like labs and demonstrations.
STUDY SKILLS

• Integrate study & test taking tips into your sessions where possible...especially for freshmen

• Be prepared to help freshmen with basic math or using their calculator

• Note that CLAS offers workshops and individual appointments for Study Skills. Schedules are available online.

• Links to handouts on learning strategies for students

Intro Biology Information - Learning & Study Skills (google.com)
TEACHING PROBLEM SOLVING

Most math & sciences courses tutored at CLAS are problem based, so being able to teach good problem solving strategies is important

- Explain why the problem is interesting, important or relevant
- Teach how to derive formulas & identify their parts
- Use a step by step approach by asking small questions along the way (Guided Practice)
- Ask students to suggest a proposed method for solving when you begin...“How should I start this problem?”
- Consider demonstrating how to solve the problem 2 different ways
- Allow sufficient practice: follow up with problems for students to try on their own (Independent Practice)
TUTORIAL SESSION PREPARATION

• **Attend Lectures**
  - Take note of vocabulary & specific notation used...be consistent with the professor
  - Be thinking about what questions students may have on the material presented in lecture

• **Provide Visuals**
  - Use drawings & diagrams to help convey information
  - Use props if appropriate...molecular models are helpful for some chemistry topics

• **Be Creative**
  - Use analogies, mnemonics and real life examples to aid explanations

• **Think on your Feet**
  - Be flexible... if what you are doing is not going well improvise as needed

LESSON PLAN COMPONENTS

• **Motivation:**
  - Why are we learning this? What's the "big picture"?

• **Objectives:**
  - What are the goals for today's session?

• **Guided Practice**
  - The actual teaching part where students are engaged by you
  - Know your audience: go at the student’s pace, keep in mind different learning styles

• **Independent Practice**
  - Opportunity for students to try material on their own

• **Closure**
  - Point out what was achieved and what still needs to be worked on; indicate what topics will be covered next time
Online Tutoring Guidelines

When starting your Zoom tutoring session:

- Open any documents that you might need to reference (periodic table, SRP table, practice tests, etc.), so they are readily available on your desktop.
- Click the “start this meeting” button in zoom. (Optimally you will want to join the meeting 5 minutes in advance to get set up)
- Click on manage participants - Unmute everyone or change settings to whatever your preferences may be.
- Choose “Enter Chime” so you will know when students are waiting.
- Share the whiteboard.
- Add a welcome greeting to your whiteboard if you wish

During your Zoom tutoring session:

- Allow students to enter from the waiting room on the Manage Participants function.
- Students might not know how to share a question so you’ll have to walk them through that - if they do share their question then you can annotate on their share - if they don’t share you can annotate on the whiteboard.
- Use the Zoom Annotate feature to demo something, point to something, or take a note for the student. (Sometimes the bar is hidden and you need to hover towards the top of the screen by the meeting ID.)
- If the student has a complex problem or question, you can ask them to screen share a copy of it.
- NOTE: Screen share is automatically turned off for participants. Once you know it is a valid student, you can turn it back on. Try Clicking Security!
- Click on the end meeting button when your session is over.
During your Zoom tutoring session:

- Use the Zoom Annotate feature to demo something, point to something, or take a note for the student. Sometimes the bar is hidden and you need to hover towards the top of the screen by the meeting ID.

- **Click Annotate!**

- **Annotation Tools**
During your Zoom tutoring session:

- If the student has a complex problem or question, you can ask them to screen share a copy of it.

- NOTE: Screen share is automatically turned off for participants. Once you know it is a valid student, you can turn it back on. Try Clicking Security!
HAPPY TUTORING!

Good luck this quarter and don’t forget to ask for help when you need it!

Your Coordinator and Mentors are here to support you and ensure your success.