Teaching Assistant Handbook
For 100-Level Chemistry Courses

This handbook provides information on the most common first-year undergraduate Chemistry course policies. Any of the policies and methods described below, however, may be superseded by those of the course instructor. Adhere to the syllabus for any course you are a TA for.

Last Updated 18 March 2026

"Being a teacher is an important task—one of the most important in our society today."
—Carl-Henrik Heldin

"The mediocre teacher tells. The good teacher explains.
The superior teaches demonstrates. The great teacher inspires."

--William Arthur Ward

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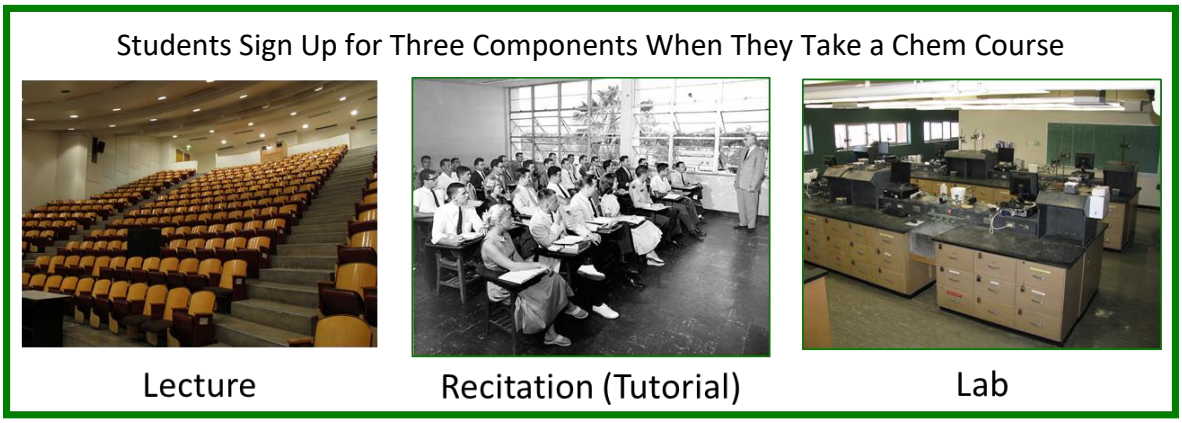
Course Structure

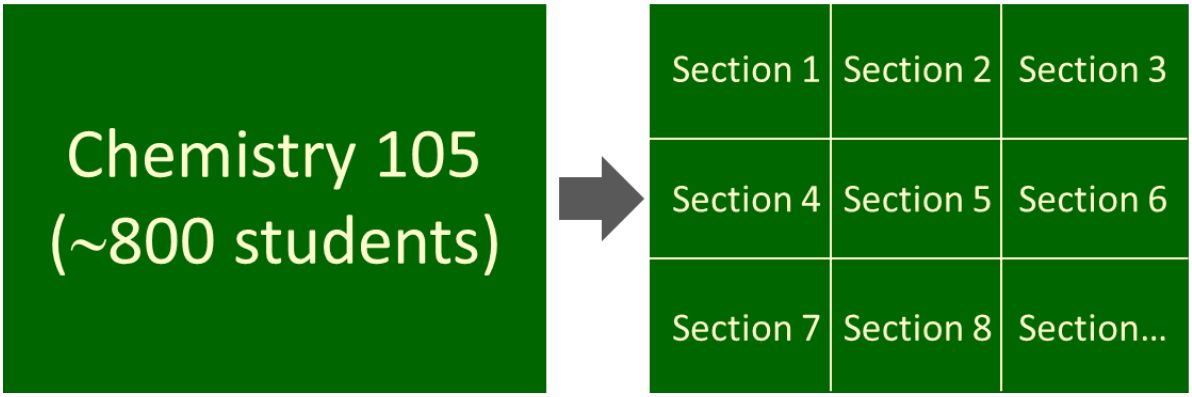
Before we talk about the TA job itself, let's talk about how the chemistry courses at WSU are organized. This will help you better understand what your students will be doing and what your own role is.

Students sign up for three course-components when they take a chemistry course:

1. A lecture that meets for an hour three times a week.
2. A recitation (tutorial) session that meets for an hour once a week. This is a time for them to go over and better understand the lecture material.
3. A lab period that meets for 2-3 hours once a week (right after recitation). The experiments they do will help them learn about chemistry and also about science experiments in general.



As many as 900 students might take one of our courses in a semester. That's a lot of people to try and cram into one lab room, so we break the course up into sections of 24 students each. Students meet as a section for recitation and lab. If you are a graduate student, you'll get two of these sections to look after. If you're an undergraduate student, you'll get one section.



Lab Report Structure

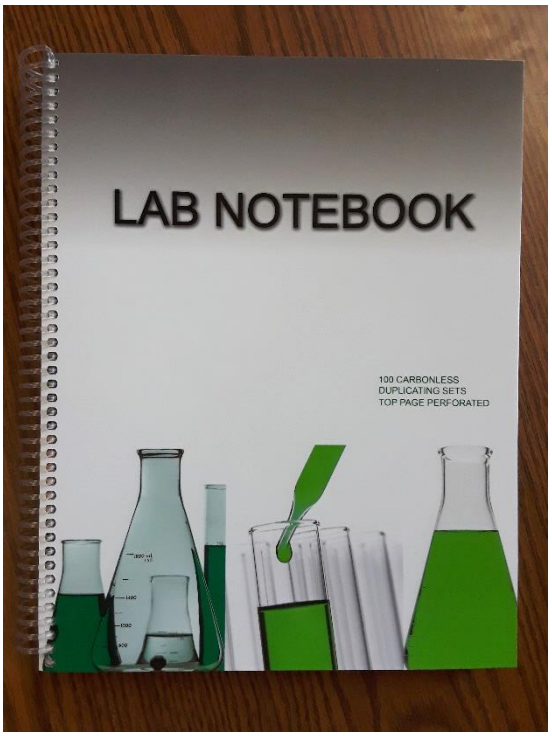
Each experiment your students perform will have a report associated with it that consists of three sections:

1. A Pre-lab. This could take the form of a quiz you will administer during tutorial, or a summary of the experiment they will perform.
2. Data due at the end of lab
3. Post-lab due the following week

Data

Your students will record their data, in pen, in a carbon-copy notebook. This must be a *carbon-copy* book; a "regular" notebook without copy pages won't do. They can buy one from someone in 319 if they need it.

A carbon-copy notebook. They'll need one of these



As a general rule, we expect their "data" to include a record of what they did as they performed their experiment, including equipment they used, as they performed their experiment. Data also includes descriptions of all the reagents they used, solution concentrations, and all measurements and observations they made.

When they're done experimenting for the day, sign the bottom of their data pages and collect their data pages. They have to submit these pages before they leave the lab room. If they don't get these pages into you before they leave lab, they cannot receive any credit for them.

Signing data pages isn't just about verifying the student was in lab and performed the experiment. This is also when you will look at their station to make sure it's clean and tidy (more info on that below).

Post-Lab

The post-lab is where your students perform calculations on their numbers, report their results, and answer various questions about their experiment. This assignment will be administered and submitted online.

Post-lab assignments generally follow the same formula. The students are first asked to perform calculations (if the experiment requires them), and answer a few questions.

TA Job Overview

Main Duties

Your job as a TA primarily consists of four things. You have to:

1. **Help your students out during recitation/tutorial**. For the most part you'll answer questions they have on the course material. Some instructors will give you worksheets or other exercises for your students to do. Recitations are scheduled for 50 minutes and you are obliged to hold them for that time.
2. **Get your students through lab**. Answer any questions your students have about their experiment, enforce the safety rules, and make sure the room is clean when you're done.
3. **Grade your students' lab reports.** And do it promptly. Your students rely on the feedback you give them to improve, so it's important you get their reports graded and back to them on-time.
4. **Hold office hours** where you meet with the students on a more individualized basis. "Office hours" is something of a misnomer; you'll actually meet with them in Troy 305 rather than your office. Since office hours are in the same room for all the courses, you will end up helping people from other sections, and even from different courses. If you are not familiar enough with another course's material to assist a student in that course you can ask another TA for help, but don't ignore a student just because they're in a different course from yours.

Graduate student TAs get two sections to look after for the duration of a semester. Since each section meets once a week and you have two of them, you'll host two recitation sessions and two lab sessions a week. You will also have two section's worth of reports to grade most weeks. You'll hold two hours of office hours (in Troy 305) each week.

If you're an undergraduate student, you'll get one section to look after. That's one recitation, one lab, and one section's worth of papers to grade each week. You will hold one hour of office hours.

Other Duties

Besides the main things just covered, you will also:

1. **Proctor exams**. We have three mid-terms and one final. The mid-terms are always at 6:00 PM on a Thursday. You'll have to be here at 5:30 to help setup for them. If you are assigned to a course that does not meet for lab during exam week, you will be expected to spend your lab time assisting with exam preparation and administration.
2. **Attend meetings**. We have these at 5:00 every Monday. We will talk about what you're going to do in recitation that week, what you need to know for lab, and miscellaneous course-related news.
3. **Attend lecture**. Do you really remember *everything* you learned in your first year undergraduate chemistry course? If not, lecture is a great place to review it. You may also be needed to help hand out papers, help the students with their laptops and tablets (they'll need these for in-class activities), and help students with in-class problem solving exercises delivered by the instructor.

TA Duties and Safety Rule Enforcement

Here's a summary of the biggest things we want to see our TAs doing in each of the duties we just outlined; our expectations, if you will. Besides these, there are other rules and information you need to know that are explained elsewhere in this manual, but *if you do nothing else do these*:

Tutorial

1. Check that your students have completed their pre-lab assignment. There's more information on how to do this below in the "Lab Structure and Grading" section.
2. Show up on time.
3. Understand the material well enough to help your students out.
4. Some instructors will give you some specific things they want you to do or go over. They may give you a worksheet for you to help your students with, but this can vary by course.
5. Don't end tutorial early. You can't start lab before your tutorial's end time. Students who do not attend tutorial cannot attend lab.

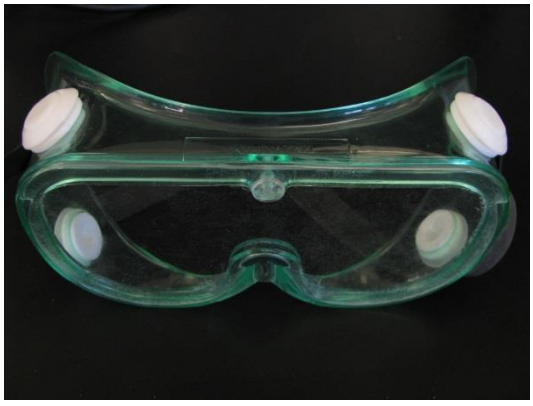
Lab

The lab part has a few facets, mostly relating to safety and room upkeep.

1. Keep the dress code enforced

Chem students have to wear goggles and gloves *at all times* when they're in their lab room—even when they're done experimenting—they must wear a lab coat, and the rest of their clothing must cover the entirety of their legs and feet. This is for "wet" labs; if they're doing a worksheet or anything without glassware, they can wear pretty much whatever they want. You have to make sure your students wear their goggles and adhere to the dress code.

Keep in mind TAs must adhere to the dress code themselves.



They have to keep their goggles on Always

They must be covered by their PPE as shown here

What if my students aren't dressed right?

If you have a student whose clothing doesn't cover them like it should, we can let them borrow a lab coat on a one-time basis from the stockroom. Otherwise, they will have to either (1) go home and change, (2) arrange for someone to bring them appropriate clothing, (3) drop that week's lab. If they elect to either go and change or have someone bring them clothes, they don't get extra lab time; they will only have whatever time is remaining to collect the data they need.

What if my students don't have goggles?

If they need goggles send them to Nikki Clark in 319A, she can sell them a pair (that's *sell*, not *loan*; they'll need cash). GCS will also sell these in 318 or 319 the first couple weeks of the course. We also have a limited supply of them in the lab room they can borrow, but these are on a first-come-first served basis.

What if my students are wearing safety glasses instead of goggles?

They need *goggles*, not glasses. If they don't have goggles, see the answer to the last question.

This rule also applies to you, the TA. If you need goggles, we will supply you with them (you don't have to buy your own).

What if my students won't keep their goggles on in lab?

Now we come to one of the most common "trouble-areas" you'll have to watch out for: students who don't keep their goggles on. **First**, give them a gentle warning or reminder. **Second**, give them a sterner warning, one that lets them know they'll lose points if you see their goggles off again. **Third**, take a course point off their lab report[1]. **Fourth**, if they still don't get the message, tell them to leave.

If your student has a hard time wearing them because they're fogging up, we have some anti-fogging stuff they can apply in the stockroom.

What if a student burns or cuts themselves?

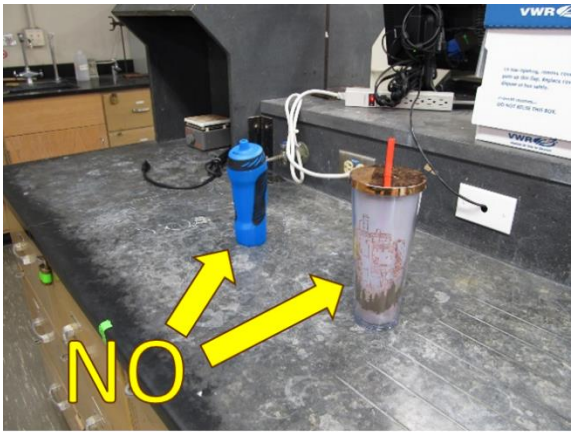
Assist the student with first-aid—there are first aid kits in the lab rooms, make sure you know where these are!—and contact the stockroom or lab supervisor. We have to fill out an accident report form when this happens.

If the student is in a life-threatening situation, call 911.

[1] Lab reports are generally out of 20 or 25 points, and there's usually something like 1000 points in the whole class, so one point won't be enough to break them. It will get their attention, though, like you want it to.

2. **<u>Don't let them have any food or drink—including water bottles—in lab.</u>**

It's OK if they keep their water bottles in their backpacks, but we want them out of sight.



3. **<u>Keep the place clean and upkept</u>**

Student Stations and Drawers

When your students are done, you'll need to sign the last page of their data and collect it before they leave. Use this time to look in their equipment drawer and make sure everything is neat and tidy. *You must make sure every piece of glassware is clean and free of any chemical residues*. This is important because these drawers are shared between about 8 different people/sections.

Our student drawers have placemats in them to show where most things should go and, more importantly, to help you and the student know whether anything's missing.

Besides checking the drawers, make sure hotplates are <u>unplugged</u> before the student leaves.

Main Fume Hood

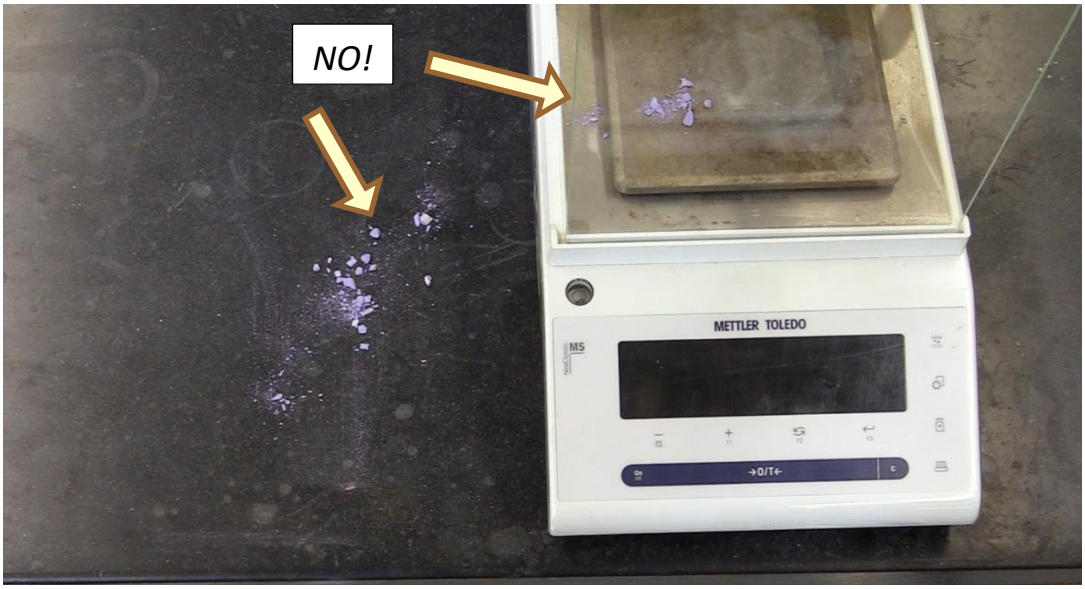
Make sure reagents are replenished, waste is disposed of, and lids are properly secured (screwed down) on everything at the end of your lab period. Also check for any reagent spills and get them cleaned up. Finally, don't leave any pieces of glassware, pipettes, or other pieces of equipment in the hood. You don't even have to clean the hood up yourself—you can "volunteer" a student to do it for you.

You can't leave your hood like this!

Make sure the waste is taken out at the end of your lab period regardless of fill level. Make sure reagent containers are filled to half-full or more and have them refilled if they are not.

Balance Area

Both the balances and the area around them must be completely clean at the end of your lab period



What if a student breaks a piece of glassware?

If a student breaks a piece of glassware, first make sure all the broken pieces are swept up. These must go into the glass waste, never in the trash. Then, fill out a replenishment ticket for that piece, and send the student to the stockroom to replace the missing piece. You can also sent a student to the stockroom with a ticket to replace a missing piece of glassware.

What if my lab room runs out of gloves, paper towels, or other consumables?

Tickets are also used to replace other pieces of equipment or consumables such as gloves or paper towels. Fill one of these out and send a student to the stockroom to retrieve what your room needs.

Who exactly cleans the lab room?

You the TA are in charge of making sure the reagents are replenished, the waste taken out, and all the lab surfaces (benchtops, hood, etcetera) are clean. However, this does not mean that you yourself have to do all the cleaning. Your students will be assigned to make sure these are done. Different instructors have different protocols for making these assignments, so check with them for how this will be done.

4. Be present and ready to answer your students' questions

Teaching labs cannot be unsupervised. If you have to leave the lab for any reason, contact the supervisor or another TA to step in and supervise. This will ensure an authority figure will be present to immediately tend to any accidents should one occur. If something is needed from the stock room, send a student to take care of it; don't go yourself.

We'll give you all the information we can to make you smart enough to answer your students' questions and help them get through lab. Each experiment has a document (on the course webpage) that will tell you about the theory behind that experiment and its procedure; if you read this document, you'll know 92%-96% of everything you need to. For the rest, we'll supply you with TA notes each week. And if you run into something you don't know, you can always ask the lab supervisor or stockroom manager.

Grades and Grading

Get grades for each experiment entered in the course website no more than one week after your students performed that experiment (one week after the post-lab is due). There's a section below on how to enter grades into a course webpage below. For the grading itself, we'll give you keys that will tell you how many points things are worth.

Halfway through the semester and near the semester's end, the course instructor will give you a grade entry deadline for mid-term and final grades respectively. If you have become sufficiently behind in your grading that it will not be possible for you to meet these deadlines, contact the course instructor as soon as possible. Don't try to meet the deadline by averaging scores from previous reports or by any other sort of grade forgery.

Grades cannot be posted or disclosed over unsecured channels, such as a phone or an e-mail account other than a WSU account. Graded material needs to be handed back directly to the student it belongs to; it cannot be handed back in any way that would allow any other student to see it (as by placing it in a stack and passing the stack around). It also cannot be given to a roommate or friend. Do not show student grades or work to another student, yours or otherwise. Do not discuss students in open areas or use names when talking about their performance and grades.

Grading Questions You Might Have

How promptly do I have to grade my student's work?

Get grades for each experiment entered in the course website no more than one week after your students performed that experiment. And remember, your grading doesn't "count" unless you get the grades entered.

My student's answers don't exactly match the key. What do I do?

Unless the question only calls for a one-word answer (which is very rare), there's a good chance what your students write won't look just like the answer on the key. In this case, what exactly is worth full, partial, or no credit will be up to you. We will sometimes try to help you by letting you know what kinds of responses are worth partial credit, but it simply isn't practical to anticipate every such answer your students may produce. As a general rule, your average lab score should run around 75%, give or take a few %. If your averages end up higher than this, grade more strictly. If they're lower than this, be more generous.

My student's work is disorganized and/or hard to follow. How should I handle this?

Each grading key gives some points for neatness and format. If you have trouble reading your students work because it's messy and/or disorganized, subtract as many of these as you feel is warranted. If it's so bad you can't find some things we assign points to, take those points off as well.

Some of my students didn't understand what they were supposed to do. Should I give them a pass?

Whenever a student does something incorrectly, such as not taking measurement right or messing up their calculations, it's usually because they didn't read the experiment's background and/or the appendices that describe how to use the equipment. That's not an acceptable excuse for incorrect information in their report.

Having said that, if do you come across an instruction that's ambiguous or confusing, please let someone know so we can correct it. If we have reason to believe a student missed something because they didn't understand an instruction, we can work something out grading-wise.

How detailed do my grading comments have to be and how many should I make?

This is at your discretion, but do include at least some comments for everything you grade. Working with numbers, significant figures, and units is a prominent aspect of this course, so definitely let the students know if they lost points for insufficient significant figures and/or missing units.

Coming back to the last question, if a student missed something because they didn't read the background, it may be a good idea to say something like "read the background" in your comments.

One or more of my students has missed two or more labs. What do I tell them?

Student can miss two labs for any reason without it affecting their grade. They can miss a third without failing the course, but this third lab will count against their grade. If you have a student who misses two or three labs, notify them by sending them one of the two following emails. Notify the course instructor if any of your students miss three or more labs.

Two Missed Labs

Hello,

I noticed that you have missed 2 post-lab report submissions. You should be aware that this is the maximum amount of free lab drops available for the semester. Additional missed submissions will negatively impact your

grade or jeopardize your ability to pass this course. Please refer to the section in the syllabus regarding missed lab report submissions. If you have any questions, please let me know.

Three Missed Labs NOTE: notify the course instructor if any of your students has missed three labs.

Hello,

I see that you have missed 3 post-lab report submissions. You should be aware that you have exceeded the maximum amount of free lab drops available for the semester. The policy (stated in the syllabus) is that a 3rd missed lab report submission counts as a zero in the gradebook. Please refer to the section in the syllabus regarding missed lab report submissions and the consequences of missing another. If you have any questions, it is vital that you make an appointment with your professor.

Office Hours

1. Understand the material well enough to help your students out.
2. Help students from other courses. Maybe you'll have the knowledge you need to do this, maybe you won't, but never brush off a student just because they're in a different course from the one you're assigned to. You'll be in the same room with other TAs that can help you or the student.

Proctoring Exams

All teaching assistants are required to help proctor all exams, including the final. You will distribute exams, proctor the exam for the entirety of the time period allowed, and collect the exams when your students are done. We'll give you a more detailed list of proctoring instructions to follow when the time comes. Follow them.

Weekly Meetings

1. Show up on time
2. Depending on the course, you'll get a sheet of instructions sometime before the meeting (usually sometime the week before). Read these before the meeting.

Attend Lecture

1. Attend Lecture. Be ready to assist students with online problem-solving exercises.

Expectations for Continued Employment

As a paid employee of the Chemistry Department, you are expected to meet all the expectations and diligently execute all the various duties we've outlined so far. Each instance of not meeting our expectations will be noted in our records. If you're a graduate student, this will include a documented report that will be sent to the Director of General Chemistry, the Laboratory Supervisor, the Associate Chair for Graduate Studies, the Graduate Coordinator, and your Faculty PI. Three occurrences of not meeting our expectations will be considered as grounds for termination in the current semester of employment by the Department as a TA, or for refusal of employment in future semesters. TA behaviors that are considered to be "not meeting expectations" include:

- Missing tutorial, laboratory, or office hours without notifying the lab supervisor or course professor. If you plan to be absent, it is *your* responsibility to find a substitute to fill in for you. If you unexpectedly fall ill, inform the lab supervisor or gen chem secretary immediately.
- Falling behind in post-lab report grading by more than two weeks
- Missing TA meeting without notifying the lab supervisor or course professor
- Missing a class exam without notifying the lab supervisor or course professor
- Committing safety violations in the laboratory
- Not enforcing safety regulations for students in the laboratory
- Failing to maintain lab cleanliness, or restocking glassware and reagents at the end of lab
- Failure to actively supervise students in the laboratory
- Engaging in an intimate relationship with a student (dating). *This is strictly forbidden*.

We will have you sign a contract at the beginning of the semester that will, in essence, say you will meet all our expectations and understand the consequences of not doing so.

Keep in mind your funding as a graduate student may depend on your ability to retain your TA position.

Course Webpages

As of the Fall 2021 semester, we use **Canvas** for our Learning Management System (LMSs, the thing that acts as the courses' webpages) to host course content, including lab assignments.

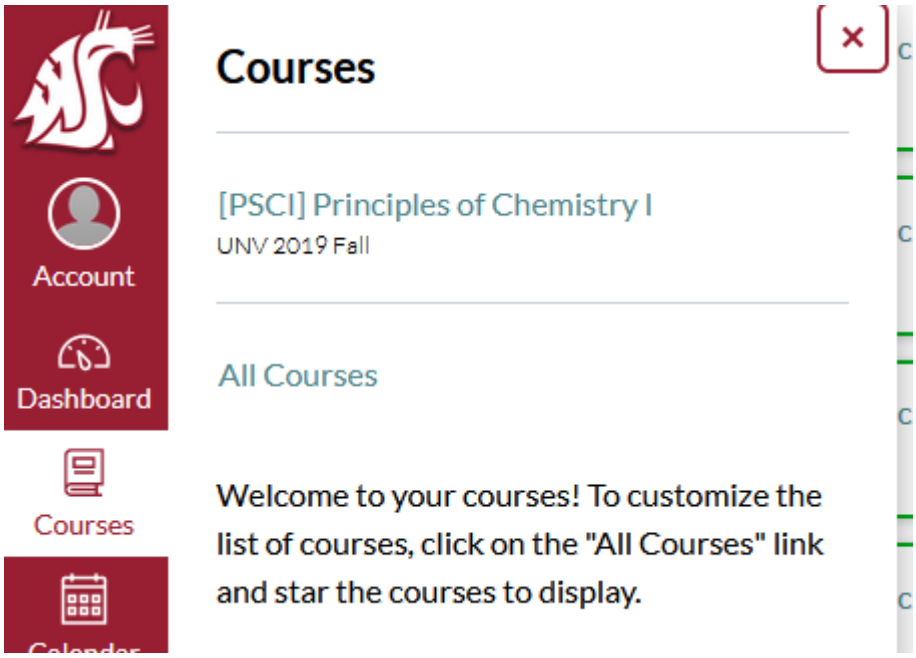
Grading In Canvas

Where Stuff Is

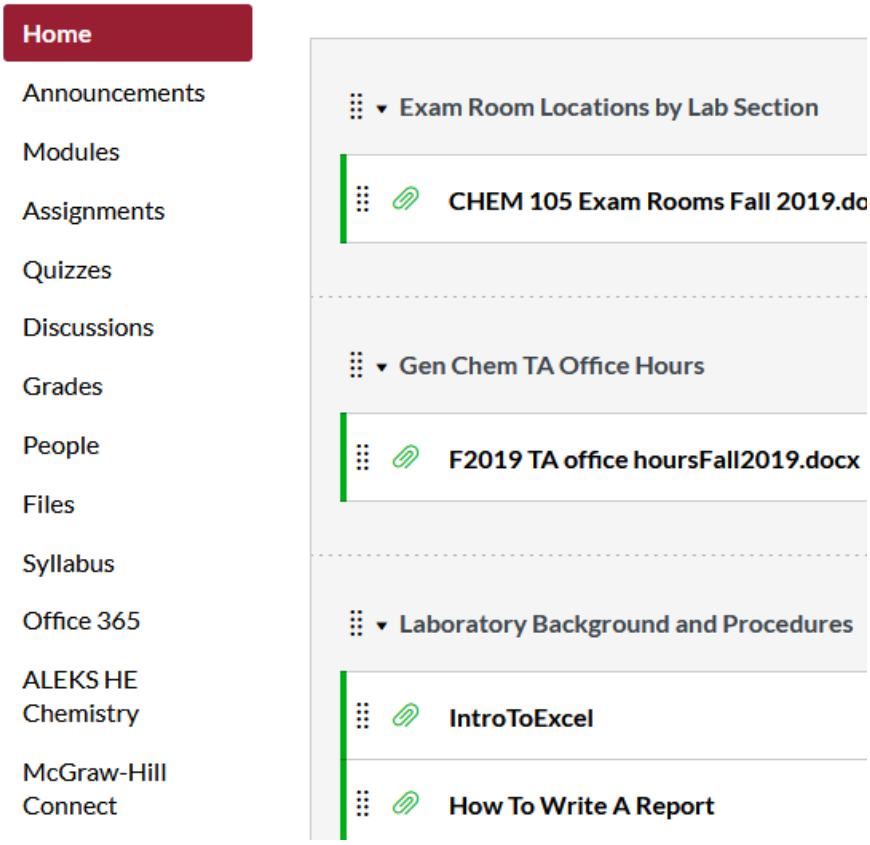
First, go to the following webpage and log-in to Canvas:

https://canvas.wsu.edu

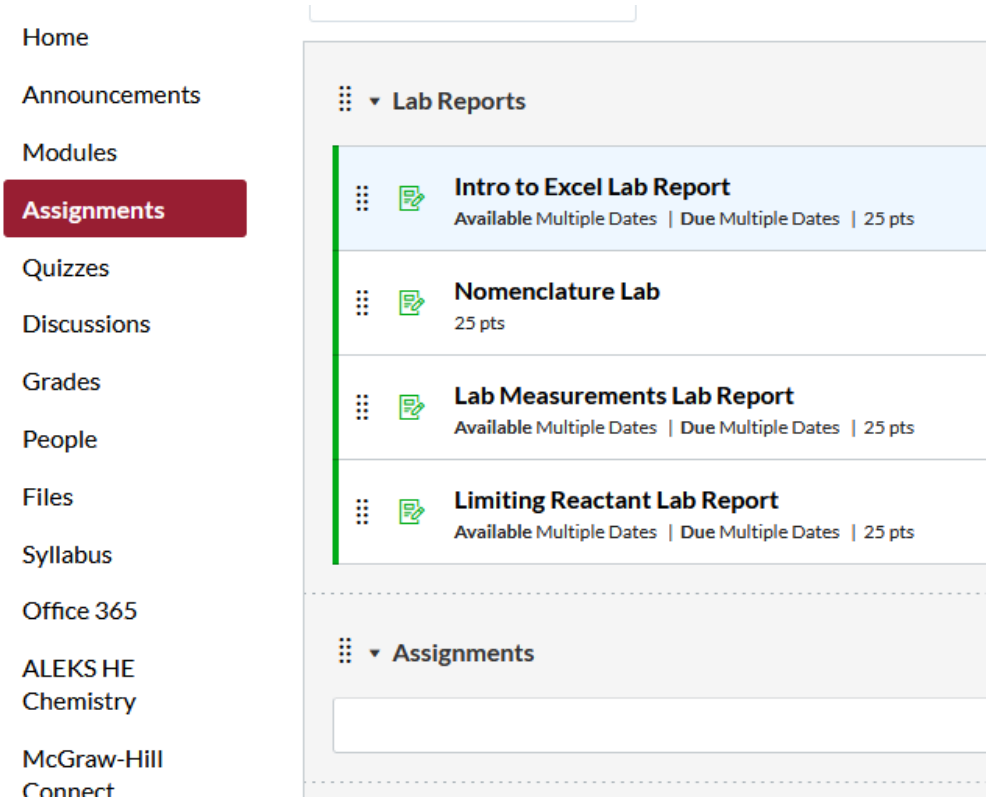
Once you've logged in, go into "Courses" on the left side of the page. A window will appear with the courses you are registered for in it. Select the Chem course you're TAing for.



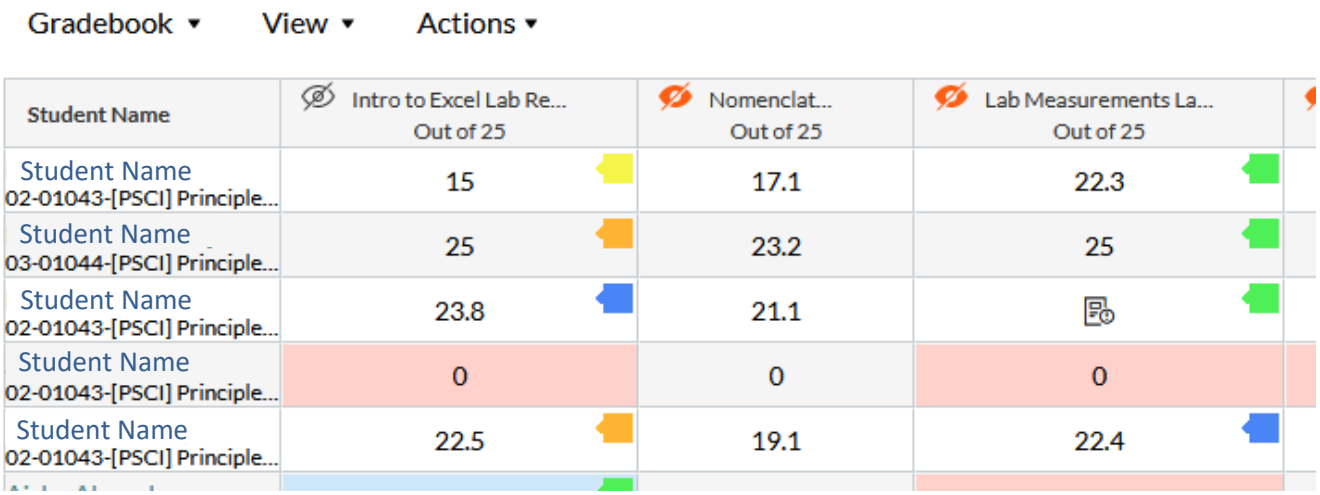
You will be taken to the course's homepage. From here you can access things like the assignments your students have to complete (this include lab reports), the gradebook, and assorted documents you and your students will need. Some documents, such as the lab procedures, can be accessed right from the home page.



If you select the **Assignments** link, you will be taken to where the post-lab assignments instructions are. These are the questions your students have to address for their post-lab assignments.



If you click on **Grades** you'll be taken to the course gradebook. It will look something like this:



Individual assignments appear in columns, students in rows. The number in each box is the number of points a student received for an assignment. The icon that looks like a document with an exclamation point in a circle next to it means a student has submitted work for that assignment, but it has not been graded yet.

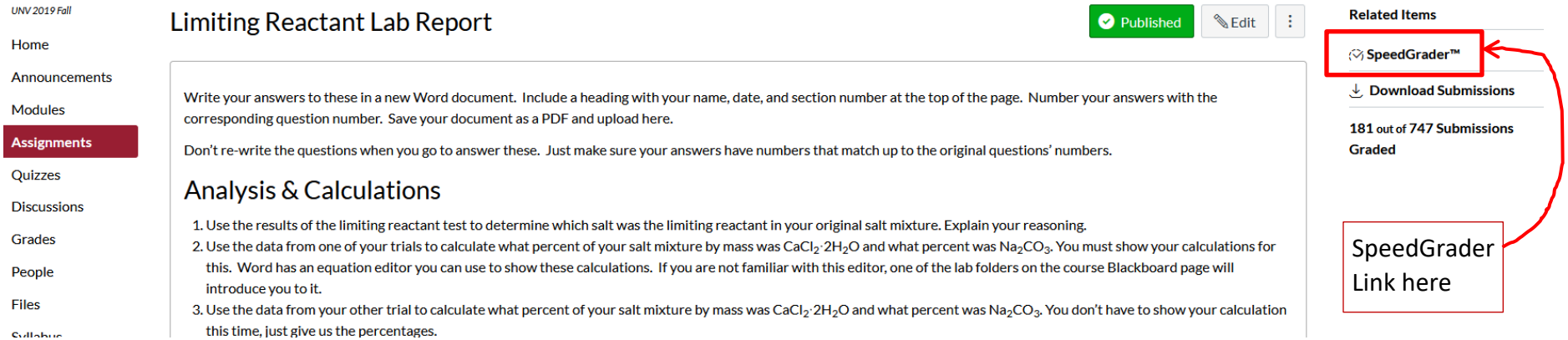
The colored flags to the right of the numbers in each box tell you what the work's Unicheck (the plagiarism checker) originality percentage range is; in other words, it tells you how likely it is the student submitted plagiarized work.

- Blue = 0% Similarity. There is no chance they copied or had their work copied from someone else.
- Green = 1-24%, meaning the similarity is small and insubstantial. You can safely ignore green flags.
- Yellow = 25-49%, or a medium level. Their work may or may not have been copied. At this range any similarity is more likely to have been falsely flagged than not, but keep your eyes open.
- Orange = 50-74%. There is a high likelihood the student copied someone else's work or someone else copied theirs. With rare exceptions, check these manually (more on this below). What would an exception be? It's not unusual for multiple submission for the Chem 105 Intro to Excel exercise to be orange flagged, even though these submissions were not plagiarized.
- Red = 75-100%. There is a very high likelihood the student copied someone else's work (or had their own copied). Definitely check these.

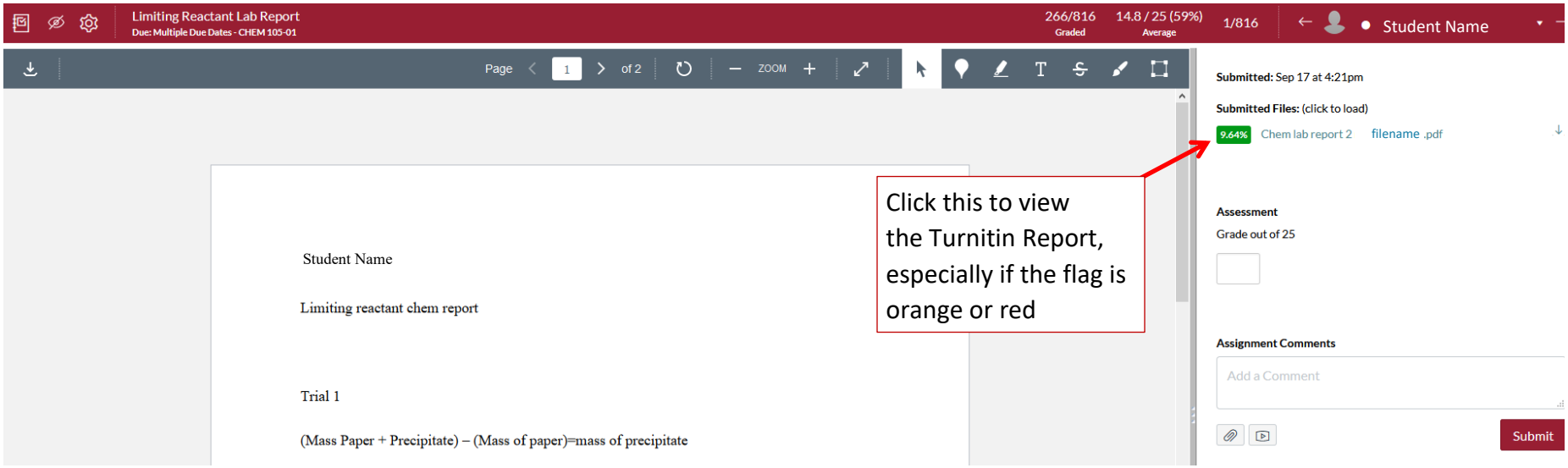
If you do see an orange or red flag, don't automatically assume the work was plagiarized. The check software isn't foolproof, and two reports that are very similar because of the nature of the assignment (like the Excel exercise) will be flagged with these colors when they are really OK. To manually compare two pieces of work for yourself, see below.

Grading in Canvas: Method One

Probably the easiest way to access your students' work and grade is to access SpeedGrader via the Assignments area. Starting from the home page, go into Assignments and select the one you want to grade. If you did this for the Limiting Reactant lab, you would see a screen that looks like this:



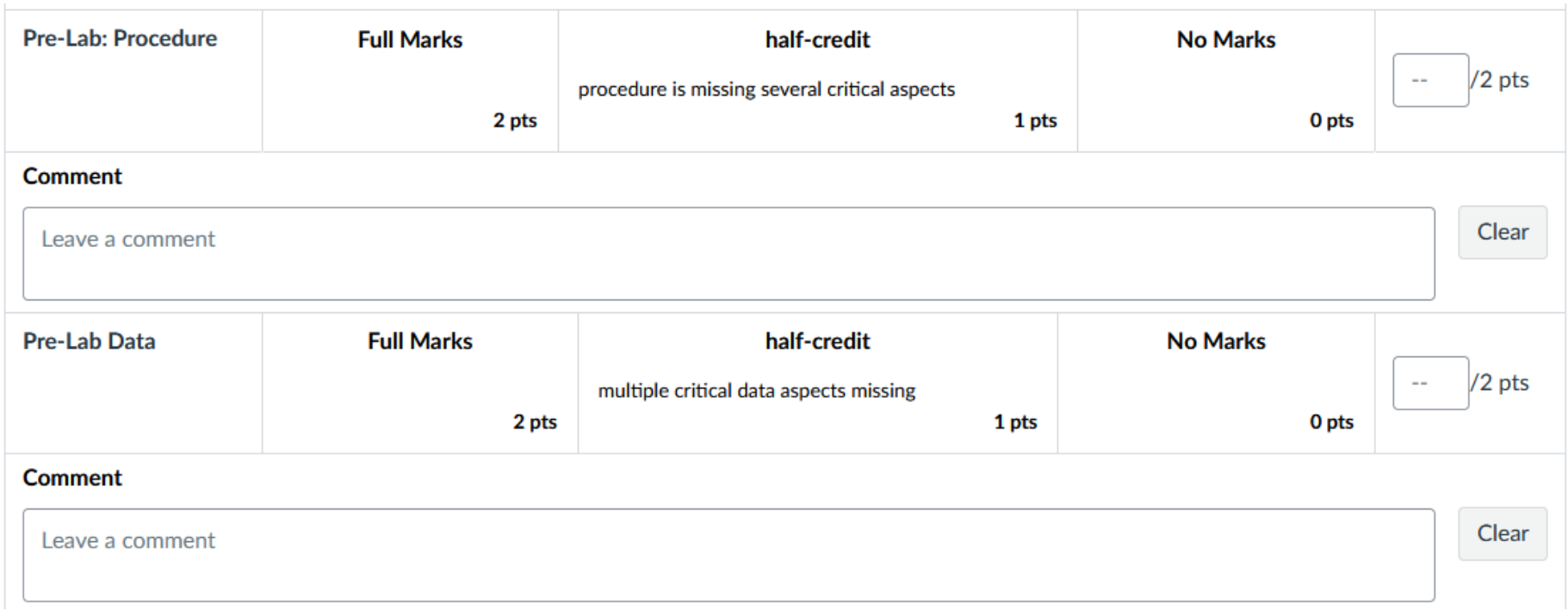
Click on the SpeedGrader link on the right side of the screen and you'll be taken to your first student's report for that assignment. The page will look something like this:



To view the work's Unicheck similarity report, click on the colored flag. You will be taken to a page that highlights what was similar and to what it was similar to.

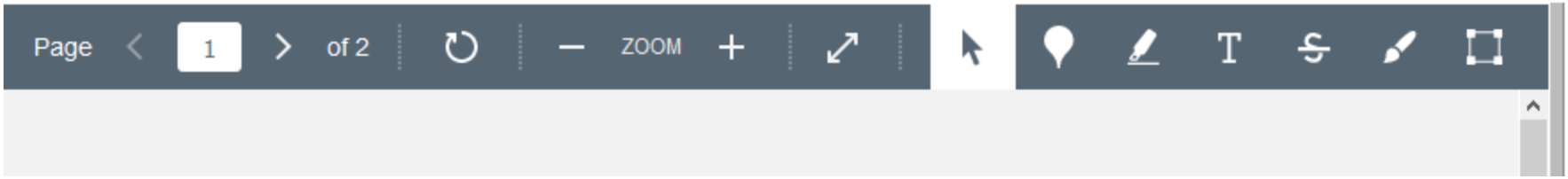
Grading With Rubrics

Many of our courses have grading rubrics built right into the learning management system (LMS) Canvas. Below is a sample of what these look like. In most cases, we provide you with a guideline for what a "half" or "partial" credit answer is. Depending on how effectively your student addressed each topic, you can use these to assign full, partial, or no credit to any given question/topic by clicking on the appropriate box. You can also leave custom comments in the boxes below each section.



Grading With Annotation Tools

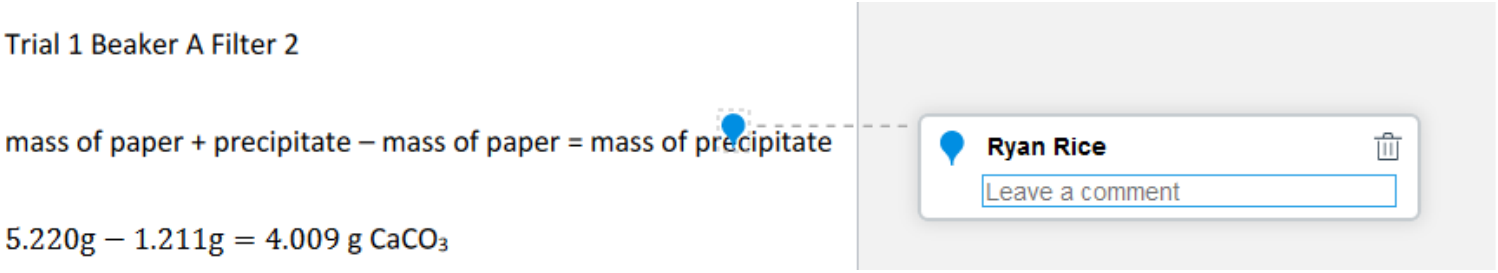
If you are in a course that does not use rubrics, you will have to use the grading tools to annotate your students' work (give the student notes, tell them what they did wrong, what they need to do next time, etc.). Different tools can be used to add text, highlight sections of student text, strikeout sections of student text, etc.



What The Tools Do

Point Annotation: 

Use this tool to make a comment in a specific point on the document. If you select it and then click on part of their work, you'll get something that looks like this. Put your comment in the "Leave a comment" box.

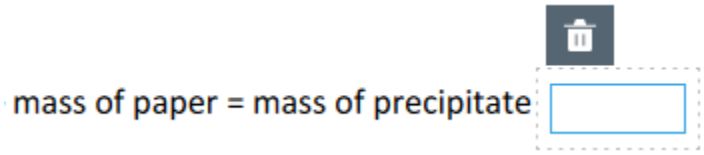


Highlight Annotation: 

Use this to highlight parts of your students' text (like this). Options for different highlight colors appear in the top-left part of the screen when you select this tool.

Freetext Annotation: 

For putting text boxes you can write in anywhere in your student's document. If, for example, you wanted to add some text after the phrase "mass of precipitate," you could put a text box right after that phrase like so:



The trashcan above the text box is for deleting it.

Strikethrough: 

Lets you strike out part of a student's text (~~like this~~). Striking out text automatically gives you the option to add a comment to say why you struck it out.

Freedraw: 

Use this one to draw lines or circles or moustaches or whatever you need to. Like the Strikethrough tool, you are automatically given the option to add a comment to anything to draw.

Area annotation: 

This tool is similar to the Point Annotation tool, but lets you draw a box around the area the annotation comment is associated with. You could, for example, use it to draw a box around a whole paragraph to tell the student your comments apply to that paragraph, rather than just one part of it.

When you're done marking up the work, put the student's grade in the grade box—their whole grade for the whole experiment, including what they received for the pre-lab, data, and post-lab—add any additional comments you need to, and click the Submit button on the right side of the screen. If you want to download an annotated copy of the work you marked up, use the "Download annotated PDF" button at the top-left of the screen.

Download annotated PDF button 

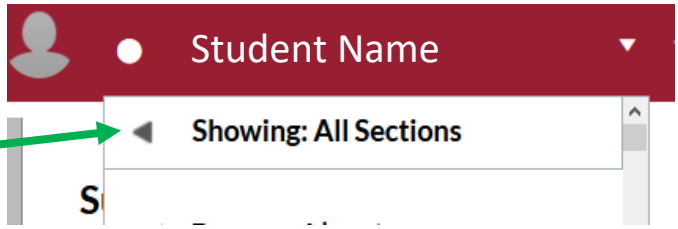
Now I want to view another student's work

To view another student's work, use the front and back arrows at the top-right corner of the screen:

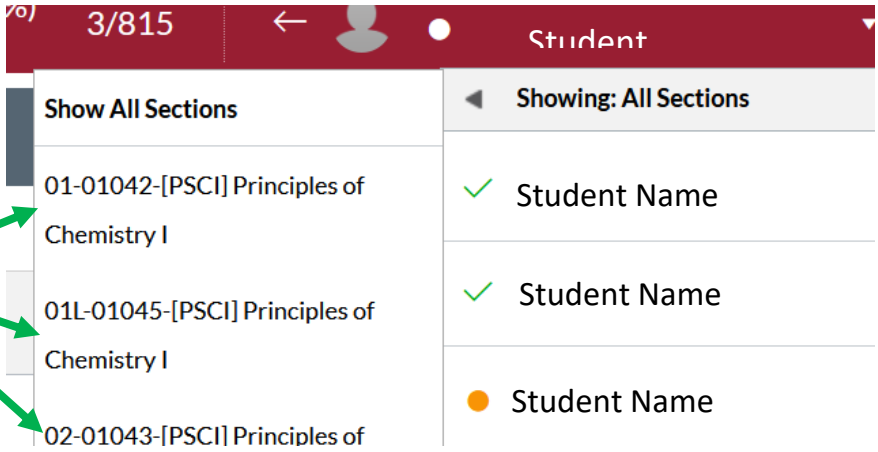
I only want to see one section at a time in SpeedGrader

If you want to filter the reports you can view by section, first click on the triangle next to the right arrow in the upper-right part of the screen. You'll get a pull-down menu. Once you have it, mouse-over the part that says "Showing: All Sections" and you'll get options to view a particular section.

Mouse-over

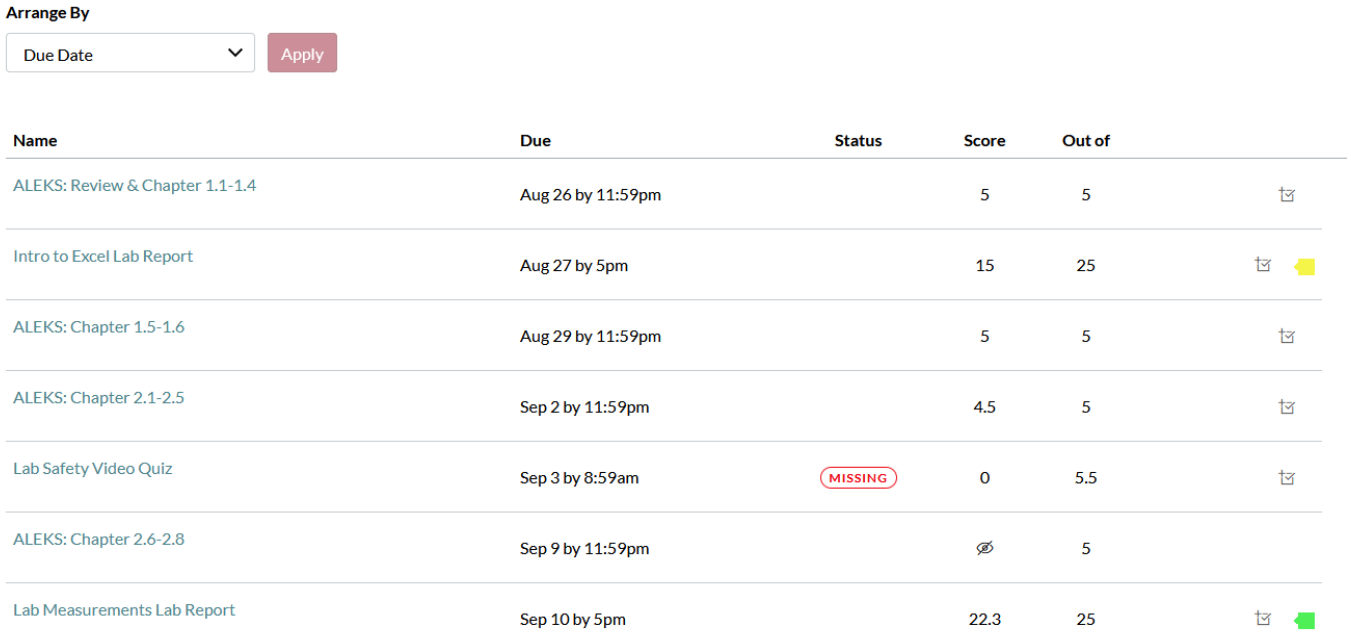


. . . and you can select whatever section you want to see reports from.



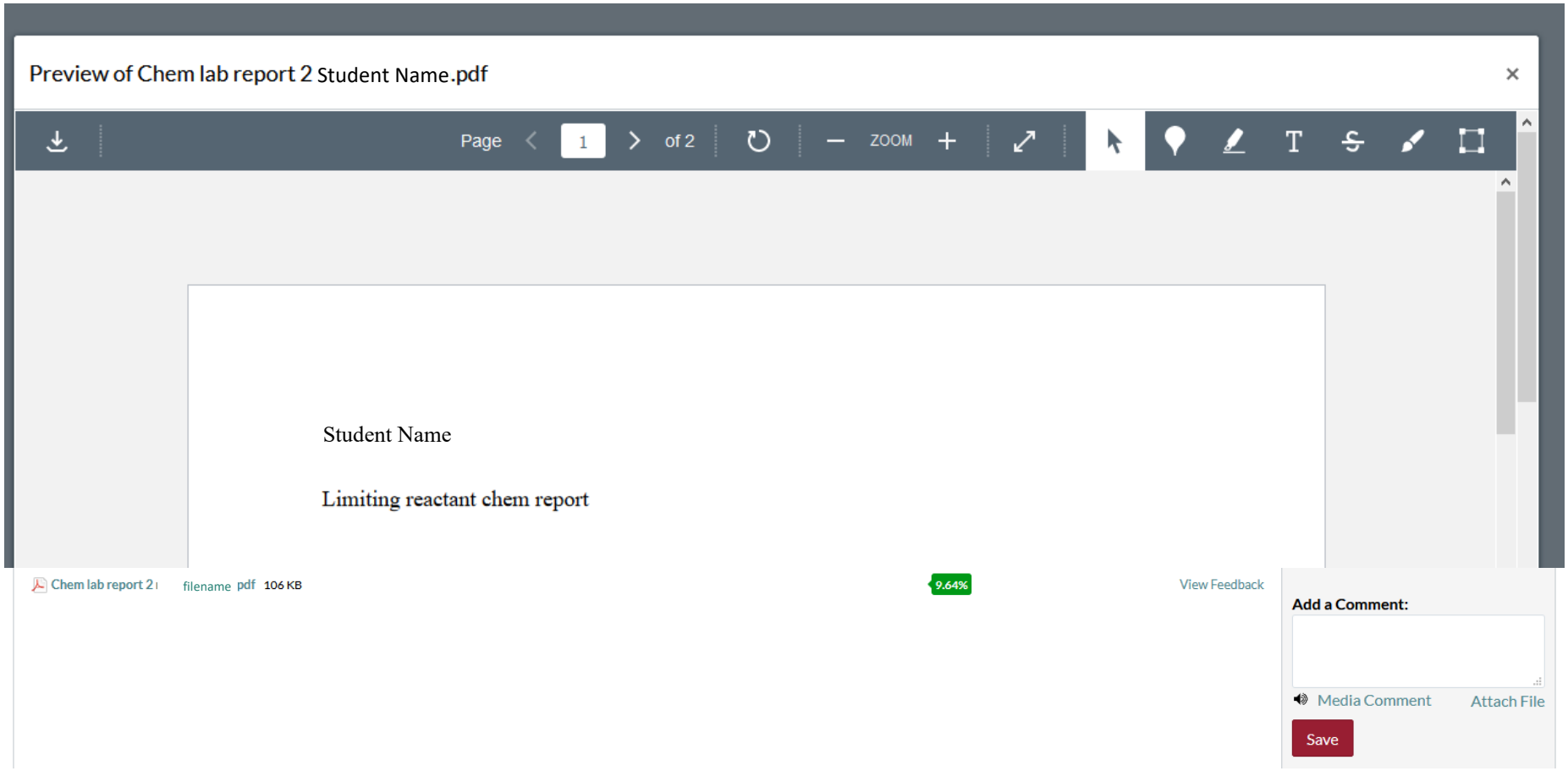
Grading in Canvas: Method Two

You can also access your students work via the gradebook. Go there and click on the name of a student whose work you want to grade. You'll be taken to a new page that looks like this:



Individual submissions for each assignment appear on the left side of the page. For submissions involving a pdf (like a lab report), clicking on one of these will take you to another page like this. Again, you can view the Unicheck similarity report by clicking on the colored flag.

To view and annotate the student's work from this page, click on the "View Feedback" link on the right side of the screen, which is to the right of the plagerism check flag. You will see a preview of the student's work, and the markup tools (same ones as before) will appear above it. When you're done annotating the work, put the student's grade in the grade box add any additional comments you need to, and click the Save button on the right side of the screen



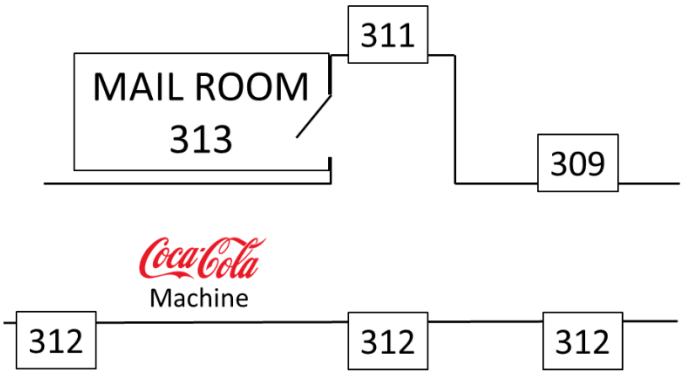
Important Places You'll Need to Know About

Undergraduate Chemistry Office: Fulmer 319A

The person who occupies this office, Nikki Clark, administers various things like the rooms you hold recitation in and where the exams are held. Students can also go to this office if they need to buy goggles. You can also drop by here to get white board markers and pens if you need them.

TA Mail Room, Fulmer 313

The room where we'll give you your TA mail (grading keys, worksheets, etc.) is in 313, which is on a tiny hallway off the main hallway on the third floor



Laboratory Supervisor Office: Fulmer 309

Although your supervisor is the instructor of the course you are assigned to, you can contact the laboratory supervisor, Ryan Rice, in Fulmer Hall 309 anytime if you have questions about the lab you're doing. If you're already in lab and you have a question or something goes wrong, send a student to fetch him; don't leave your lab room unattended.

Tutorial Rooms

These are held all over campus (there are not enough room in Fulmer to hold them all here). Check your course's lab schedule sheet for where yours are.

Lab Rooms

All of our undergraduate chemistry lab rooms are on the second and third floors of Fulmer Hall. Again, the schedule sheet will tell you where yours are.

Office Hour Room: Troy 305

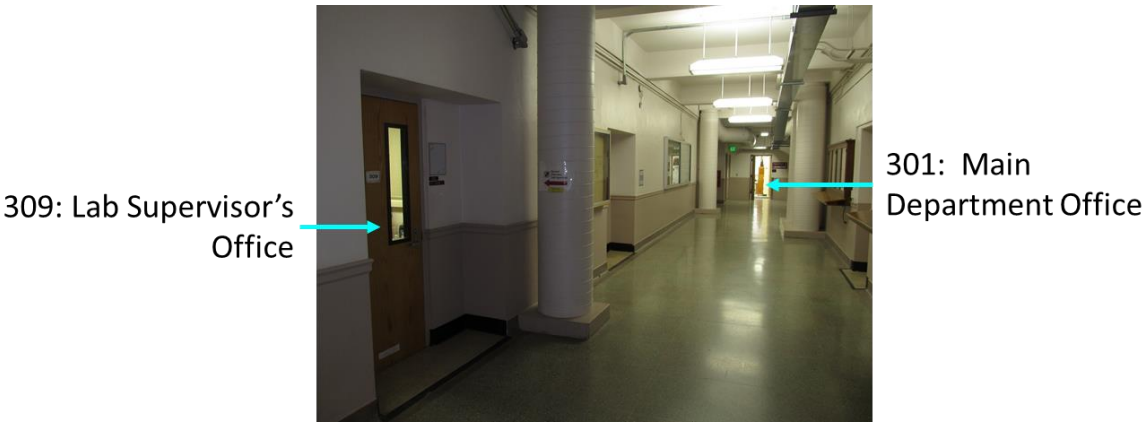
Troy 305 (the building adjacent to Fulmer Hall on College Ave) is the office hour room for the 100-level courses (101, 105, etc.).

Main Storeroom: Fulmer 23

This room is in the basement of Fulmer. If you're a Chemistry graduate student, you'll go here for reagents and supplies for your research lab (not your TA labs). If you need goggles for your TA lab, you can come here to get them.

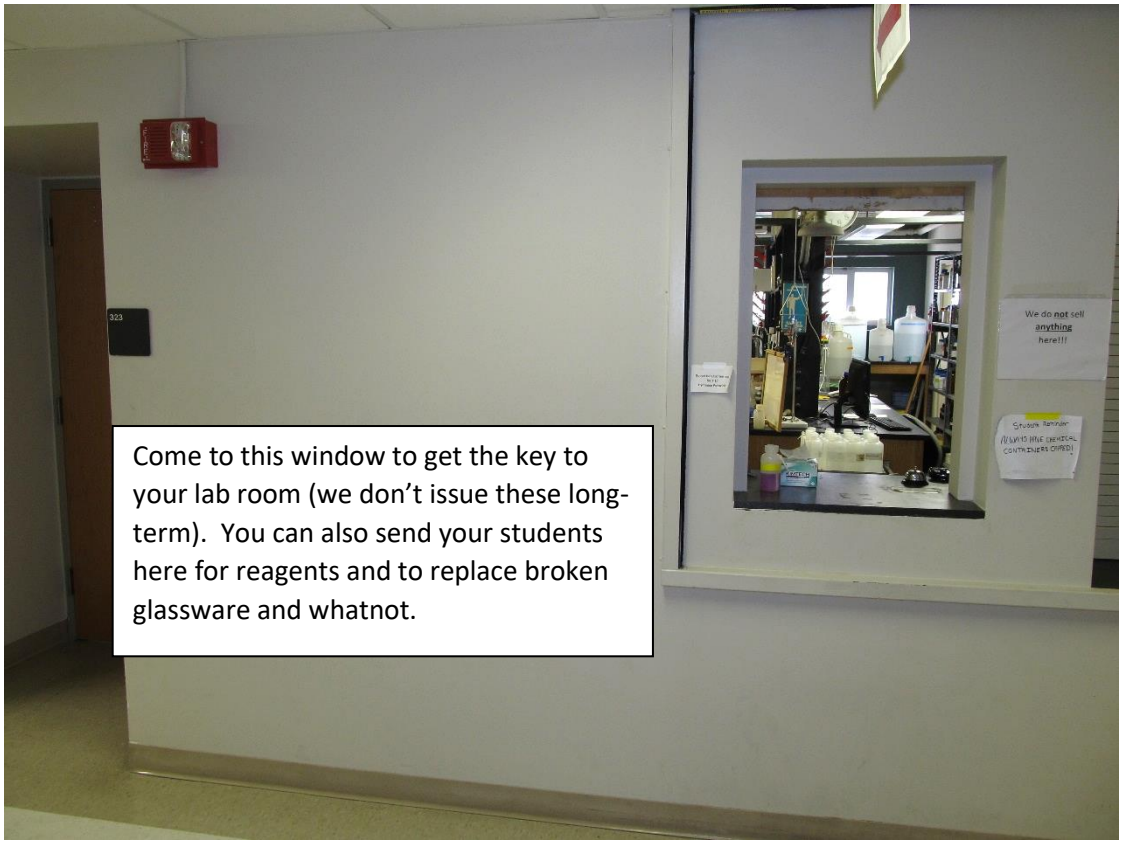
Main Office, Department of Chemistry: Fulmer 301

If you need to talk to the Graduate Academic Coordinator, get keys for your research lab room and/or the mailroom, report a problem with the building talk to someone about your paycheck, or purchase things for your research lab, this is the place to go.



Third Floor Stockroom: Fulmer 323

This is where all the reagents are prepped and distributed for the Chemistry 101, 105, and 106 courses. If you are assigned to one of these courses, you will come here to get the key to open your lab room (we don't issue these keys to you) and return the key when you're done with lab. If you need something from here during lab (supplies, reagents), send a student to the window to get them; don't do it yourself (you need to be in lab watching your students). Your students will also come here to replace glassware if they break it, to replenish reagents, and to dispose of waste.



Come to this window to get the key to your lab room (we don't issue these long-term). You can also send your students here for reagents and to replace broken glassware and whatnot.

Fourth Floor Stockroom: Fulmer 435

Reagents for Chemistry 102, 104, and 345 are prepared and distributed from the fourth-floor stockroom, 435. If you are assigned to one of these courses, you will come here to obtain the key to your room, replenish reagents, etcetera. As for the third-floor stockroom, you (or your student) will go to its window for service rather than the stockroom itself.

Lab Safety Contract

Copies of this will be provided for your students to sign.

GENERAL RULES

1. Complete pre-lab assignments and read experiment procedures before entering the laboratory. Bring only necessary materials to the work area.
2. Work areas must be always kept clean and tidy. All backpacks, coats, and other personal items must be stored away from benches, fume hoods, all chemicals, and out of aisles.
3. Do not attempt lab work if you are taking medication that could interfere with your safety.
4. Consumption of any type of food/drink or application of cosmetics is prohibited.
5. Keep objects away from face while in lab. Hands are to be washed with soap and water after performing all experiments.
6. No laptops, cell phones, radios, MP3 players, and/or headphones are allowed in lab.
7. Be alert and always proceed with caution when in the lab, no playing around.
8. If you do not understand the direction or part of a procedure, ask your teacher to clarify.
9. Only experiments that are authorized by the course instructor may be performed.
10. Only work in designated area assigned to you.
11. Do not move the equipment/glassware.
12. All work surfaces and apparatus are to be cleaned and returned to proper location by the student at the end of each experiment.
13. Chemicals and equipment are NOT to leave the laboratory unless their removal has been authorized by the supervising authority.
14. All chemical waste (solid or liquid) must be properly disposed of in their labeled container. Waste containers are not to be over filled.
15. Sink areas are to be used only for water and solutions that are permitted by your teacher. No mixing chemicals in sink.
16. Fume hood sashes are to be closed when not in use, do not open further than 18" mark when in use, and do not stick head in hood area.

PERSONAL PROTECTIVE EQUIPMENT

1. Approved chemical splash goggles must be always worn when in the lab - *no exceptions*.
2. Replace contact lenses with prescription glasses.
3. Lab coats are required for all courses. Clothing must cover all parts of the legs and feet. Shoes must be closed-toed and completely cover the foot. NO sandals.
4. Long hair, hanging items (jewelry, hoodie strings etc.), and loose clothes must be secured.
5. Gloves are mandatory and available for use when needed. They must be removed before leaving the lab. Do not handle personal items, such as pens, with gloves on.

HANDLING CHEMICALS

1. All chemicals in the lab are to be considered dangerous and used with caution.
2. Chemicals may only be smelled via the "wafting" method and only after this method has been demonstrated by your teacher.
3. Labels on the reagent/chemical bottles must be checked thoroughly prior to use or transfer.
4. All reagent bottles and waste containers must be capped when not in use.
5. Flammable solvents must not be used near a flame.
6. Acids and other chemicals must be properly secured prior to transport from one part of the lab to another.
7. Your teacher must be promptly notified of any spills so they can direct cleanup.

HANDLING GLASSWARE AND EQUIPMENT

1. Use the dustpan and broom provided to clean up any broken glass; never handle with your hands.
2. Place all broken glass in the container designated for this purpose and work with the stockroom to replace the broken item.
3. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.
4. Unplug hotplates when they are not in use.
5. Report damaged electrical equipment immediately (e.g., exposed wires).
6. Do not use a piece of equipment until the instructor demonstrates how.

ACCIDENTS AND INJURIES

1. Report any accident (spill, breakage, etc.), injury (cut, burn, etc.), or fires to your teacher immediately.
2. If a chemical splashes in your eye(s) or on your skin, immediately flush with running
3. water from the eyewash station or safety shower for at least 20 minutes. Notify your teacher immediately.
4. Know the location of the first aid kit, eyewash station, safety shower, chemical spill kit and fire extinguisher.

EMERGENCY PROCEDURES

In the event of a fire alarm (a continuous sounding bell) while you are working in the laboratory, immediately turn off any Bunsen burners or hotplates you are using and leave the building by the shortest route as designated by your teacher. DO NOT use the elevators. Proceed to the appropriate meeting site with your teacher. You must remain with your teacher until you have been dismissed by supervising personnel.

In the event of a serious injury or illness, immediately turn off any burners or hotplates and evacuate to the hallway until supervising personnel give you additional instructions. DO NOT leave until you have been dismissed by supervising personnel.

Fulmer Hall Evacuation Map

If the fire alarm sounds, evacuate your class through the nearest exit and have them proceed to the evacuation points. The figure below indicates where to gather after evacuation.