

Handbook for General Chemistry Lecture

Teaching Assistants

Fall 2004

Welcome to a new semester of being a T.A. for the Chemistry Department. The compiled information will assist you with questions that you may have.

For more useful information, please see:
www.cm.utexas.edu/graduate/gradhints.html

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CHEMISTRY UNDERGRADUATE COURSE OFFICE, WELCH 2.212 CONTACT INFORMATION & SERVICES

This office is generally closed for office staff meeting on Mondays from 8:00 to 9:00 am. During this time you are welcome to access the office but we will be unable to answer your questions.

Contact Information

- Shari Mallory Email: smallory@mail.utexas.edu
- Sandra Godfrey Email: sandy@mail.utexas.edu
- Greg Browning Email: g.browning@mail.utexas.edu

Welch 2.212 - (512) 471-4983 or (512) 471-1567
Office is open 7:30 AM – 5 PM

General Information

- Supplies are kept in Welch 2.212 (file cabinet closest to scanner room)
 - Paper
 - Pens/Pencils
 - Dry Board Markers/Erasers
 - Need something else? (Request other class supplies through Shari Mallory)
- A telephone is available in copier room.
- Two computers are available for use, one in the scanner room and one in the copier room. (People needing to use the scanner have first priority for the scanner room computer.) On the computer desktop please set up a folder for your class labeled with professor's name and semester.
- Mailboxes provided for each class for use by Professor and T.A. These are located near the copier.
- Course textbooks can be checked out from office staff. (These must be checked in at the end of the semester.)

Office Hour Rooms and Room Reservations

- T.A. office hours are generally held in cubicles in the Welch 1.300 hallway.
- Sign up for your office hours on the forms on a clipboard in Welch 2.212. These are located on the bar in front of Sandra's desk. Please use only pencil!
- Reserving other rooms for office hours or review sessions:
 - Most rooms are reserved through Room Scheduling. We will reserve these rooms for you. Please fill out the form on the clipboard on the bar in front of Sandra's desk and allow 24 hours for room reservation.
 - Some other departmental rooms are available and may be reserved through the Chairman's Office.

Downloading and Printing Class Rosters

The information in this section has been copied from the UT website for your convenience.

Authorization

Before a TA can download a course roster, the instructor for the course must authorize them to do so. You will need to provide the professor with your EID.

If you are the instructor of record of a class, you may use [Add/Remove TA](#) to authorize substitutes for downloading class rosters.

At the (class roster download homepage):

1. Click on the 'Add/Remove TA' link under Request Forms in the left navigation bar.
2. At the CLIPs Menu page, click the unique number for which you would like to authorize the TA.
3. At the next page, click the 'authorize assistants' link located in the left navigation bar under Instructor Info.
4. Enter the UT EID of your TA, ensure that the CLIPs box is selected, and click the 'Update Authorization' button.
5. Repeat steps 2 through 4 for each TA you would like to authorize.
Administrative staff may not add or remove TAs. The TA's ability to download class rosters expires at the end of each semester.

Printing Photo Class Rosters

The three keys to successfully printing photo rosters are:

1. Minimize page margins,
2. Choose landscape page orientation, and
3. Delete page headers and footers.

Though your computer setup and procedures may differ slightly, it may be instructive for you to see how these steps are accomplished in our office:

PC

Internet Explorer 6 or newer

_ To minimize page margins, select **Page Setup** from the **File** menu, and delete the numbers in the top, bottom, left, and right margin boxes.

_ To select landscape orientation, type **Ctrl-P** to print, click the **Layout** tab, select **Landscape**, then click the **Apply** button.

_ To delete page headers and footers, select **Page Setup** from the **File** menu, and delete everything from the **Header** and **Footer** boxes.

PC

Netscape Navigator 7.02 or newer

_ To minimize page margins, select **Page Setup** from the **File** menu, click the **Margins and Header/Footer** tab and delete the numbers in the top, bottom, left, and right margin boxes.

_ To select landscape orientation, type **Ctrl-P** to print, click on the **Properties** button, and select **Landscape**.

_ To delete page headers and footers, select **Page Setup** from the **File** menu, click the **Margins and Header/Footer** tab and change all header/footer settings to **Blank**.

Mac

Internet Explorer 5.0 or newer

_ You cannot minimize page margins. Instead, type **Command-P** to print, select **Internet Explorer** from the **General** drop down menu, and ensure that **Print Images** and **Shrink Pages to Fit** are selected.

_ To select landscape orientation, select **Page Setup** from the **File** menu and click the **Landscape** button.

_ To delete page headers and footers, select **Print** from the **File** menu, select **Internet Explorer** from the **General** drop down menu, and ensure that **Headers and Footers** is deselected.

Mac

Netscape Navigator 7.02 or newer

_ You cannot minimize page margins. Instead, select **Print Preview** from the **File** menu, select **Shrink to fit** from the **Scale** pulldown menu.

_ To select landscape orientation, select **Print Preview** from the **File** menu and click the **Landscape** button.

_ You cannot control page headers and footers.

Using the Natural Sciences On-Line Homework System

Setting up a homework server account:

- Go to hw.utexas.edu/hw.html, click “OK”.
- For “departmental phone number” use the undergraduate office number, 471-1567.
- The “instructor’s instructions”, accessible through button 5.2 “view documentation” are brief and helpful.
- To log onto your account once created, use the URL hw.utexas.edu/fm
- First thing you are forced to do: button 2.7 “set up or modify grading”. This is easily changed later, so if you are unsure of the exact number of assignments, you can put something in now and fix it later. Note: Most people choose “do NOT use negative points on bubble sheet assignment” but this is not the default setting – unless you want to penalize wrong answer with negative points, you will have to click the correct box when setting up your grading.

Getting students signed up:

- This is discussed in the instructor’s instructions (button 5.2).
- It is good to encourage students to read the student instructions, especially the parts on how to enter numerical answers and on the positive/negative scoring system. If you are not using negative points for bubble-sheet assignments (quizzes and exams) make sure to let them know this prior to the first bubble sheet assignment.
- Options for 10-digit student ID numbers used on the homework server:
 - Allow them to make up their own number. Suggesting they use a 10-digit phone number works well.
 - Advantages: Easy to remember, unless they forget which phone number they used.
 - Disadvantages: This number will not be on their ID card, so they could theoretically fill out a scantron for someone else since you cannot verify their ID number.
 - Have them use the number on their ID card – the last 10 numbers of the 16 digit number. (It is printed with 6 digits, a space, and then the unique 10-digit ID number.
 - Advantages: You can verify the ID # they bubbled in matches the one on their ID card.
 - Disadvantages: This number will change if they get a new ID card. If this happens UNDER NO CIRCUMSTANCES should they change their ID number in the homework server. Changing their ID number can cause many of their previous quiz and exam grades to disappear. Right after they sign up for the homework server, encourage them to write this ID number in their course notes, on the back of your calculator, or somewhere else where they will have access to it during each class. If they get a new ID card, they should still use their old ID number on the scantrons. It is good to explain this to them, as many students will not realize the new card has a different number and will just start using that new number, causing bubbling errors.

Purging and locking the roster (after the first homework assignment)

- It is a good idea after the first homework assignment or two (sometime after the twelfth class day) to purge the homework server roster. (This keeps students from setting up two accounts – one to figure out the correct answers and one their real name to enter the correct answers for a grade.) To do this, download your official course roster (link from registrar's page: <http://www.utexas.edu/student/registrar/>) and download a list of all students signed up on your homework server account using button 3.4. Compare the two and use button 3.7 to delete any students not on the official course roster. Note that you can undelete students using button 3.8 if you make a mistake.
- Once you have purged the roster, use button 3.9 to lock enrollment – no more students can add themselves to your course.
- You can use button 3.6 to add student to your class once enrollment is locked.

Finding problems for use on assignments

- We will print each professor a copy of the homework server books applicable to their class prior to the beginning of the semester. When you are through with these books, please drop them into the container in the undergraduate office for shredding. There is also a reference copy of each book kept for use in the undergraduate office. Additionally, you view all of the homework service books in pdf format using button 5.2.
- Problems are categorized:
 - Wording-variable: different problems have randomized changes. For example, one student's version might ask him to identify the formula for aluminum oxide and another student would be asked to identify the formula for magnesium chloride. After creating the assignment, it is a good idea to check several versions to make sure all versions are error-free and fair for your students. (Use the "print assignment" button to print different versions of assignments.)
 - Normal: all versions of these problems are essentially identical but the numbers will change for each student. (One student may be asked to find the number of moles in 5 g of NaCl and another would be asked about the moles in 8 g NaCl.)
 - Fixed: all versions of these problems are identical.
- Numerical questions (ones that require a student to enter an actual answer rather than choosing one of a selection of possible answers) can be used on bubble sheet assignments. On the preview version created during the process of creating the assignment, the question will still show up without answer choices. Once the assignment is posted, the system will create 10 possible answer choices for the student to choose from. Due to the method the system uses to create these answer choices, a few numerical problems cannot be converted to multiple-choice. If you happen to choose one of these problems for a bubble sheet assignment, you will be informed that it will not work during the create assignment sequence and you will need to choose an alternate problem.

Creating an Assignment – Preview and Post

If you want to create and proof the assignment and then post it at a later time, make sure to click through until the last page (which you can post from) before you leave the "create assignment" sequence or log off the system. Once you do this, the question numbers will be saved and will still be present when you log back on at a later time. The points per problem will NOT be saved and must be entered right before posting the assignment.

Button 1.1 *Create an Assignment*

Page 1: Select the assignment to create, choose “type problem names”

Page 2: Enter the problem names, one per line. A blank space will be read by the computer as a space or an underscore, so you do not need to type the underscores.

Possible problems you may encounter after you enter these:

- Numerical problems that are not convertible to multiple-choice: You will just have to choose a new problem.
- Problems that do not exist in the database. One of several things can account for this:
 - You mistyped the name. They are case-sensitive
 - The problem has really been deleted.
 - The problem was deleted because it was a duplicate of another database problem. You can find the new problem name by going to the URL <https://hw.utexas.edu/bur/mergedDups.html>. This list can be sorted using the buttons at the top of each column.
 - The problem was renamed. You can check this using the “map of renamed problems” under button 5.2.

Page 3: Blank

Page 4: Blank

Page 5:

- _ Select the Due date:
 - _ For homework assignments, choose the correct due date and time for the assignment
 - _ For bubble-sheet assignments: To ensure they don’t get the answers ahead of time select and so you get a chance to look at the scores and statistics before the students can see them, it is often a good idea to choose a day in the future – perhaps Dec 31 of this year. You will just want to make sure to change this to the actual due time when you are ready for the students to see the results.
- _ Type a preamble. Any announcements you would like to appear on the first page.
- _ Choose any cover sheet you would like included. It is usually not necessary to provide a periodic table with the printout since there is one on the back of the scantrons.
- _ Select a preview format and version. (Usually instructor format. Version 1 is the default, but often good to preview a different version to catch mistakes in wording variable problems.)
- _ For homework assignment, you can specify the order of problems if desired.

Page 6:

- _ Print a preview version and work through everything to make sure everything is all right. Don’t just glance over the explanations to verify it is worked correctly – the explanations are new and often have mistakes.
- _ Set the points.
- _ Select the day of the week for the due date.
- _ POST the assignment. After an assignment has been posted only the due date and points can be changed – you cannot fix a mistake in a problem or add new problems to the assignment.

What to do if you find a problem with a mistake

You have two main options:

- If the mistake is something vital to the problem (for example, a problem with no correct answer), you should report the problem as dysfunctional using button 4.4. This immediately removes the problem from use for all instructors, so be very sure about this before you report the problem. If you would really like to use the problem, you can email Patsy McDonald (patsymc@physics.utexas.edu) and she may be able to fix it for you quickly.
- If the problem can be used but has an error that should be fixed (formatting, incorrect explanation, etc.) don't report it as dysfunctional, but email Patsy McDonald (patsymc@physics.utexas.edu) about the error.

What to do if you or your professor would like to write your own problems

Email the problems to Patsy McDonald (patsymc@physics.utexas.edu). It is good to give her at least a week to work on these, but she can sometimes get them done more quickly if needed. An explanation is not required to enter the problem, but Patsy would appreciate it if you would include one. Make sure to provide her with a name for the problem (preferably something that indicates the problem topic: "Stoic 001", "Molarity 002"), and which chapter/section of the database they should place the problem in. (Note that database chapter/section numbers will be different from the textbook chapter/section numbers. The front of each database problem book lists the database table of contents.) The students entering the problems are generally computer science students, not chemistry students, so make sure the problems you send don't depend on them interpreting what you want added - make them very clear. Once they are entered, make sure to proof the questions carefully.

Creating an assignment with questions NOT in the database

If your professor wants to make up your own single-version quiz without the hassle of entering new problems but would like to be able to grade it with the homework server system:

- Create an assignment using button 1.1 and entering the appropriate number of blank "dummy" questions. You can use the same question more than once if needed.
- Questions with 5 answer choices: Sparks quiz a, Sparks quiz b, ... Sparks quiz e
- Questions with 10 answer choices: Sparks 10blank 001, Sparks 10blank 002, ...Sparks 10blank 005
- Post the assignment, choose a version, and print a copy of the answer key using button 1.2.
- Write your quiz, making sure to put the appropriate version number at the top and to put the correct answer in the space the computer thinks is the correct answer for that question (according to your printout of the dummy questions for that version).
- You may want to post a copy of your quiz on the webpage since all students will see on the homework server when they check the answer key will be blank questions.

Printing Assignments

Button 1.2 Print an Assignment

Page 1: Select the assignment to be printed.

Page 2: Select the version numbers to be printed. The printer server programs can only handle up to a certain size file, so you will have to print this in batches of about 75-100 copies per batch. (First do 101 to 200 and then do 201 to 300, etc.) Select postscript format and 'all questions.'

Page 3: Select Postscript. Save the file to a disk or computer. Rename it something better than what is given. (Ex: Sparks304kE1_1of4.ps) Do this for every batch of version numbers that you have.

Upload the files to the printer server. (Really a physics computer that puts in all the special commands to staple each test appropriately.)

- Go to <http://hwpr1.ph.utexas.edu/>
- Pick "Stapled (Exams or Homework)" choice listed under chemistry
- You'll be prompted for a login name and password. Get these from the course professor. If your professor does not have an account they should contact Paul McCord (pmccord@mail.utexas.edu). For emergency printing needs in the meantime see Greg Browning in the Undergraduate Course Office.
- Click "browse" and locate your postscript file on your computer or disk.
- Click "print"
- File will start uploading
- Halfway during the upload you'll be prompted again for the name and password. Enter them again and continue
- Once it uploads you will get a new screen stating such and can then upload the rest of the files and quit.

Verify that the files uploaded successfully.

- Go back to the page you started at (<http://hwpr1.ph.utexas.edu/>) and click to view contents of the printer queues.
- You should see your files in the queue. They will be taken off as they are printed.
- Email Irene Castillo Alonzo (irene.c.a@mail.utexas.edu) in central duplicating with the following information:
 1. What you have sent: number of files and their names.
 2. Number of copies printed. (For example: We need only one copy of each file printed. This equals ~438 individual multipage exams total.)
 3. Date and time they are needed.
 4. Delivery address (Wel 2.212)
 5. Your contact information – phone and email.
- Irene's phone number is 471-1615 in case you need to check on your files or have problems.

Grading assignments and fixing bubbling errors

1. Scan the bubble sheets using the scanner and scanning software in the undergraduate office. (If you receive a scantron late, you can manually add the students answer later using button 2.12.) Talk to Greg Browning in the Undergraduate Course Office for instructions on using the scanner.
2. Use button 4.5 to upload the bubble sheet file.
3. Use button 2.1 to grade the assignment.
4. Use button 2.11 to view statistical plots. The "X" file will show the overall average and the "q" file will show the "by question" statistics. This file can be useful to identify any possible

grading or answer key problems. (The questions are number by the order they appear on version 1. You can find the question name associated with each number using button 1.12 – “map between problem names and question numbers.”)

5. Use button 2.17 (cheating control) to identify any two or more students with the same version number. If you printed these through University Duplicating with the methods listed here, you should not have duplicate version numbers. If more than one student bubbles the same version number, you can ask both to bring you their original copy of the exam so you can figure out who had the real copy. Usually these are bubbling errors but every semester there is at least one student who tries to cheat this way.
6. Use button 2.15 to find bubble sheet errors (misbubbling of version number or ID number). It is easiest to print these before you go to the “fix bubble errors” page.
7. Use button 2.12 to fix bubble sheet errors.
8. Download the student grades spreadsheet and save on a secure disk or computer after each major assignment as back-up in case of system failure

What to do if you find a mistake in the answer key or problem AFTER grading

Aside from correcting grades on a student-by-student basis, the main two options are to kill the problem (make it worth zero points) using button 1.6 or to give all students 100% credit for that problem using button 2.6.

Other Useful Homework Server Functions

Button 1.12: Map between problem names and question numbers

Button 2.3: Semester grades, one student. Shows all grades for the semester for that student.

Depending on your course’s grading scheme, the overall grades shown at the bottom of the page may or may not be correct.

Button 2.5: Assignment grades, one student. You can use this to see what the scanner read for each question for that student and what the right answer was for that question.

Button 3.3: Get info one student. Use this to find email addresses, UT EID, etc.

Button 3.12: Post emergency bulletin to your students. This allows you to post a message that will appear on the first screen they see when they log onto the system.

Downloading and Submitting grades

- Use button 2.2 to download grades in spreadsheet format.
- Use button 3.4 to download student information in spreadsheet format.
- You can use cut-and-paste or the vlookup function in Excel to match the EID to the correct student name/ID number. This EID is needed in the spreadsheet to submit the grades electronically via spreadsheet.

EXAMS

Preparing for the exam day

Before the exam (and preferably the day before, not just the hour before in case of any problems you might discover):

- Check that the appropriate number of test copies have arrived. Your professor may appreciate an email to let him/her know that the tests have arrived.
- Prepare the exams in one box per exam room, and label accordingly. Things typically included in each box:
 - “Exam in Progress. Do not enter until this sign is removed” signs for each door to each room. (4 for Welch 2.224, 2 for Wel 1.308, you will need to check on the others.)
 - “No ID” sheet
 - Exams (make sure to have the right number in each box and label which box goes to which room.)
 - Scantrons
 - A few extra pencils.
 - Scratch Paper (If approved by the Professor)
 - Extra calculators if your professor likes to provide these. These must be checked out from Greg in the Undergraduate Course Office.

During the exam

- Proctors: You will likely have other TA proctors to help proctor the exam as well as undergraduate proctors. During the exam either you or the professor, is in charge of these proctors. Don’t hesitate to ask them to help you or give them specific tasks. They should be up, moving around, helping monitor the classroom. Please let the undergraduate course office know if you have any concerns about the proctors or if you feel you need more or less proctors to adequately cover the exam.
- If you suspect cheating:
 - Collect any evidence (cheat sheets, programmable calculator with notes in it, etc.) You do have the right to keep this evidence while the case is being made with Student Judicial Services. Additionally, the screen of a programmable calculator can be copied on a Xerox machine.
 - If you believe the student is looking off another student’s paper, feel free to politely ask the student to move to a new seat. Alternately, you can get someone else to watch too, and then ask the student to move to a new seat. If you are certain they are cheating, get both students names so you can compare their scantrons later.
 - In any case, you MUST let the student finish the exam!

Procedure for Make-up, Extended Time and other Exams:

- Leave the exam to be given in the “To Be Taken” blue file in file cabinet near Scanner Room..
 - _ Fill out the “Early Exam Information Sheet” (orange form) provided by the Undergraduate Course Office and attach to front of the exam. Makes sure that all relevant information is included. (Examples: date, length of time given, type of exam, instructions saying they can take or if they should leave the exam copy, and if scratch paper is allowed.
 - _ Please fill out “Make Up Exam T.A./Professor” contact form each time exams are to be taken in our office.

- Students will be required to sign in/sign out and leave all personal items outside of exam room. Students will be allowed to take in calculators, pens and pencils, unless you leave other instructions.
- If there will be more than 2 students at one time, the T.A. should inform the Undergraduate Course Office Staff and we will reserve the Chairman’s Office conference room to accommodate the extra students.
- After the exam has been taken the exam will be filed for the professor or T.A. in the “Exams Completed” alphabetized folder.

After the exam (or any time you hand out an assignment or other papers)

- Please make sure someone walks around the classroom and pick up any excess copies. These can cause confusion when students from later classes come in and think they are handouts for their course.
- Clean up after the exam is essential
 - Return carts
 - Provide Shari with three copies of the exam for office files
 - Empty boxes of exams, pencils, and unused scantrons and put these in their appropriate locations.
 - Gather exams from students that took exams in the Undergraduate Course Office from file.
 - If students with extra times are not finished, the T.A. can retrieve their exam later from the drawer where they are filed.
- Procedures for storing scantrons
 - After scanning a blue cover sheet (available near scanner) should be placed on top for identifying class and exam number. Scantrons should be stored in a box in the scanner room labeled with the professor name, course, and semester.

FINAL EXAM INFORMATION

This information has been copied here from the UT website for your convenience. The Office of the Registrar schedules final exams in both university-controlled (general purpose) and departmental classrooms at the request of the academic departments. The complete final exam schedule is then distributed to Custodial Services prior to the start of exam days. Custodial Services is responsible for unlocking university-controlled rooms as needed for finals. It is the responsibility of the department to arrange for unlocking departmental classrooms. Although the failure rate of this complicated system is very small, it is a serious problem when a locked door prevents access to even one final exam.

What can you do to reduce the risk of this problem?

1. Check your room assignments for final exams today. Even if you already know the time and place for your exam, please check the web site at: <http://utdirect.utexas.edu/rgexam/getyys.WBX> to confirm the information. We highly recommend that you visit the room prior to exam day. If you have a question about your final exam room assignment, contact the course scheduler in your department (for chemistry Undergraduate Course Office staff) or the Office of the Registrar scheduling office at 475-7600.
2. If you are not sure if your assigned room is departmental or university-controlled, ask your department scheduler or check the technology classroom database at https://www.engr.utexas.edu/classrooms/search_form.cfm. All university-controlled rooms are in this database and will be noted as scheduled by the Office of the Registrar. Custodial Services will have keys to all university-controlled rooms. Do not lock a university-controlled room behind you after the exam.
3. If you have been assigned a departmental room and do not have a key to this room, please discuss this with your department scheduler. Custodians do not have keys to all departmental rooms. For security reasons, the department itself must arrange for some rooms to be unlocked for final exams, and the scheduler should give you information about what to do in the event the room is inadvertently re-locked by the previous user.

What can you do if you have a problem?

1. Arrive at your exam room at least 30 minutes before the exam begins. If your room is not unlocked, contact Custodial Services at 471-5072. If this phone is not answered, contact the Physical Plant trouble line at 471-2020.
2. Scheduling has established a room scheduling trouble line. This phone number, 475-7503, will be answered by Scheduling staff during all final exam sessions and the half hour before each session. We will be prepared to assist you with contacts and alternative testing locations in the event of a problem, but we do not have keys to classrooms. This phone number will also be answered any class day, 8:00am-12:00noon and 1:00-5:00pm.
3. The University Police Department will send an officer to assist you in a serious emergency; but, depending on circumstances, unlocking a door might not be their highest priority. Please do not count on their immediate response.

4. Record these telephone numbers:

Scheduling Trouble Line, 475-7503

Custodial Services, 471-5072

Physical Plant Trouble Line, 471-2020

University Police Dept, 471-4441

Office of the Registrar, Current Scheduling, 475-7600 (M-F, 8:30am-4:30pm)

MEDIA TRAINING FOR MULTI-MEDIA CLASSROOMS

*URL Website – Instructions:

<http://www.utexas.edu/academic/cit/services/training/techclassrooms/>.

*Key and password for the console to be given to T.A.'s by Undergraduate Course Office staff.