

UCSD DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

M.S. GRADUATE STUDENT HANDBOOK

2007-2008

September 2007

Welcome to UCSD and the Department of Chemistry and Biochemistry!

We have prepared this handbook and several orientation activities to answer many of the questions you may have about your M.S. and about being a graduate student. We hope you find graduate studies and the continuing pursuit of your education to be challenging and rewarding.

Sincerely,
Douglas Magde, M.S. Faculty Adviser
Daniel Donoghue, Chair, Graduate Affairs Committee

Contact List and Resources—see Table of Contents or <http://www-chem.ucsd.edu/academic/staresources.cfm>

Graduate Student Lounge: 3rd Floor of Urey Hall Addition

- Access to a computer, refrigerator, microwave, and couch.
- Code for the Keypad is in your orientation packet—please keep this top secret.
- Grads are responsible for keeping the lounge clean and picked-up.
- Report any problems (e.g., broken computer) to Student Affairs Office, 4-4856 or 4-6871.

Mail boxes for First-Year Grads: 1st Floor Lobby of Urey Hall

- Please use only for business mail.
- After you officially join a lab you will start receiving mail at the lab mail code.

Email Accounts

- Please understand that this is one of the primary means of communication with our 230+ graduate students. You must take responsibility for reading your email on a daily basis.
- Problems: Contact chemhelp@chem.ucsd.edu; 534-0209; 2210 Urey Hall
- PAC (Personal Access Code): The Personal Access code and Personal Identification Code (PID) are required to enroll through TritonLink. The PAC code should have been mailed to you by the Office of Graduate Studies and Research. If you did not receive your PAC code, please visit the Registrar's Office with a photo ID to retrieve your code.

Address, Phone, or Email Changes: TWO Places

- Notify the MS Coordinator (4-4856)
- Update your student profile in TritonLink (<http://tritonlink.ucsd.edu>)

Campus ID Card: 201 University Center, 8:00 AM -4:30 PM

Parking & Bus Passes: Gilman Parking Structure; 534-4223; <http://parking.ucsd.edu>

- Once you have your Campus ID Card (see next item up), you may get a bus pass and/or a campus parking permit from the Parking Office.

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ACADEMIC CALENDAR

DEPARTMENT COLLOQUIUM, SEMINARS, AND THESIS DEFENSES

<http://www-chem.ucsd.edu/seminars/seminars.cfm>

ENROLLMENT AND REGISTRATION

WATCH SCHEDULE OF CLASSES ON TRITON LINK FOR CHANGES TO THESE DATES!

<http://www.ogs.ucsd.edu/>
<http://blink.ucsd.edu/Blink/External/Topics/Policy/0,1162,18433,00.html>

UCSD ACADEMIC AND ADMINISTRATIVE HOLIDAYS

<https://tritonlink.ucsd.edu>

WHOM TO KNOW AND WHERE TO GO FOR INFORMATION

The people listed below are ready, willing, and able to provide information and assistance. Information from the department, Dean's office, and campus is usually sent via email. The chair of each committee appears in italics. Campus phone numbers are (858) 534-xxxx or (858) 822-xxxx; from a campus phone, only the last five digits need to be dialed.

Department Chair: Robert E. Continetti, 2040 Urey Hall Annex, 4-5489, recontin@ucsd.edu

Vice Chair for Graduate Education: TBA

Graduate Affairs Committee: See Student Benefits, Representatives, and Organizations section for more information.

Daniel Donoghue, Urey Hall 6102, 4-2167, ddonoghue@ucsd.edu

David Hendrickson, Pacific Hall 4100A, 4-5580, dhendrickson@ucsd.edu

Judy Kim, Urey Hall Addition, 4-8080, judyk@ucsd.edu

Vice Chair for Graduate Education, TBA

Mike Burkart, PacHall 6100D, mburkart@ucsd.edu

Gouri Ghosh, NSB 3103, gghosh@ucsd.edu

Staff Rep: TBA

Student Reps: To be selected by graduate students

M.S. Faculty Adviser: Doug Magde, B100 A Pacific Hall, 4-3199, dmagde@ucsd.edu

Graduate Student Affairs Staff, 4010 York Hall:

Student Affairs Director: Irene Jacobo, 4-0780, ihjacob@ucsd.edu

MS Program Coordinator: Gail McNabb, 4-2263, gmcnabb@ucsd.edu

Financial Support:

Policies and Fellowships: Irene Jacobo, 4-0780, ihjacob@ucsd.edu

Grad Payroll: Jackie Johnson, x2-1824, jyjohnso@chem.ucsd.edu

Fellowships binder and bulletin boards, Student Affairs Office, 4010 York Hall

OGS Web Site: <http://www.ogs.ucsd.edu/financialinfo.html>

TA Assignments, 4010 York Hall:

Student Affairs Director: Irene Jacobo, 4-0780, ihjacob@ucsd.edu

TA Coordinator: Gail McNabb, 4-2263, gmcnabb@ucsd.edu

English Language Proficiency Examination:

James Whitesell, 6100E Pacific Hall, 4-5870, jwhitesell@ucsd.edu

John Weare, 3258 Urey Hall, 4-3286, jweare@ucsd.edu

Job Placement and Industrial Relations Resources:

Coordinator: Pam Murphy, 4-6871, pmurphy@ucsd.edu

Bulletin boards and Jobs binder, Student Affairs Office, 4010 York Hall

Career Services Center, Emily Burke, Graduate Student Career Advisor, 4-0141,

eburke@ucsd.edu; www-csc.ucsd.edu

Department World Wide Web Home Page: www-chem.ucsd.edu

Office of Graduate Studies (OGS):

Admissions and Dean's offices: 518 & 520 Eleanor Roosevelt College

Web Site (includes link to Graduate Student Association): www.ogs.ucsd.edu

TritonLink:<http://tritonlink.ucsd.edu>

STUDENT BENEFITS, REPRESENTATIVES, AND ORGANIZATIONS

UCSD offers a wide variety of organizations for development of your academic, career, political, religious, and recreational interests. For a comprehensive listing, see www-chem.ucsd.edu/Academic/staresources.html. Here are just a few:

GRADUATE AFFAIRS COMMITTEE AND STUDENT REPRESENTATIVES

The Graduate Affairs Committee reviews all issues pertaining to the UCSD Ph.D. program, the SDSU-UCSD Joint Doctoral Program, and the M.S. program. At the beginning of each Fall quarter, students elect two representatives to the Departmental Graduate Affairs Committee. Student representatives attend committee meetings and voice the opinions and concerns of their cohort on matters that are related to the graduate program but that are not of a confidential nature about personnel.

CHEMISTRY GRADUATE STUDENT ASSOCIATION

The goals of the Chemistry Graduate Student Association are to enhance the graduate school experience and to increase interactions between students and faculty in the department. The CGSA acts as a liaison between the graduate students, staff and faculty of the department. It organizes social events for the department, sponsors academic activities, and provides feedback to the faculty regarding the graduate program.

GRADUATE STUDENT ASSOCIATION (GSA)

<http://gsa.ucsd.edu/>
Student Center A, Room 132, 534-6504
Office Hours: M-F 8:30-4:30
gsa@ucsd.edu

The GSA is the official student government representing graduate and professional students. It is comprised of two or more representatives from each department and an internally elected executive board that leads bimonthly meetings. Functions of the GSA include allocation of the graduate student activity fee, the appointment of graduate students to campus-wide committees, and the sponsorship of academic and social events. Graduate students in the Department of Chemistry and Biochemistry elect two regular members and one to two alternate GSA representatives at the beginning of each Fall quarter.

PSYCHOLOGICAL AND COUNSELING SERVICES

<http://psychservices.ucsd.edu/>
190 Galbraith Hall, 534-3755
Office hours: M-F 8:00-12:00 & 1:00-4:30

A staff of well-qualified psychologists and counselors provide assistance to students who may be experiencing academic, emotional, personal, marital, family or vocational problems. Individual and group counseling, psychotherapy, marriage or relationship counseling, sex therapy, family therapy, behavioral and hypnotic techniques are available. Individual counseling and psychotherapy are offered within the context of a short-term model. All services with the exception of specialized testing are available at no charge. Services are offered at all five college locations as well as the main center. Confidentiality is assured.

HEALTH AND DENTAL COVERAGE

<http://studenthealth.ucsd.edu/>
Student Health Center, 534-8089
Location: Student Health Service is located on Library Walk, west of the Price Center, south of Geisel Library.
Office hours: M-F 8:00-4:30, W 9:00-4:30

The Student Health Center provides primary care without charge during the academic year for all students who are enrolled and whose fees are paid. Summer Health Coverage and dental coverage has varied year-to-year; check with the Student Health Center for current information. Premiums for the Graduate Student Health Insurance Plan (SHIP) are paid as part of registration fees. This is a comprehensive group health plan mandatory for all graduate students. Students who have health insurance benefits equal to or better than those provided by SHIP may be waived from the SHIP requirement by following the procedures at the following URL: <http://studenthealth.ucsd.edu/content/insurance/shipwaiver.aspx?nav=40>

UCSD CROSS CULTURAL CENTER

<http://ccc.ucsd.edu/>

University Center 510, 534-9689

Location: The CCC is located between the Literature Building and Visual Arts Facility, off Lyman Lane on the UCSD Campus.

Office Hours: M-F 8-4:30

The CCC offers programs and services specifically designed to reflect UCSD's commitment to excellence, scholarship, and community through cross-cultural interactions. The center's focus areas include: faculty, staff, and student exchanges, educational material and resources, student outreach and retention activities, speakers, film series, community outreach, support and discussion groups, and leadership development.

WOMEN'S CENTER

orpheus.ucsd.edu/women

University Center 407, 822-0074

Office Hours: M-TH 9-5:30, F 9-3

The Women's Center provides education and support on gender issues affecting UCSD students, faculty, staff, and the community. The Center aims to advance women's intellectual, professional, and personal goals, and to increase awareness of the issues affecting women and men of diverse backgrounds and experiences. It offers quiet spaces for study and meetings, support groups and workshops, and children's play and care space (parent must arrange for supervision of their children at all times).

CAREER SERVICES CENTER

<http://career.ucsd.edu/>

University Center, 534-3750

Office Hours: M, T & TH 8-4:30, W 8:00-7:00, F 8:00-2:00

The Career Services Center helps UCSD students and alumni achieve their career goals through a variety of programs and resources including: career advising, on-line job listings, workshops, job fairs, special events and extensive reference rooms. Especially for Graduate Students URL: <http://career.ucsd.edu/sa/gettingstartPgsop.shtml>

ENROLLMENT AND REGISTRATION PROCEDURES

AVOID LATE PENALTIES AND TAX WITHHOLDINGS!

All students must pay fees. Fees are somewhat reduced for those who are registered in six or less units. Students who are not California residents must also pay tuition. Quarterly rates for fees and tuition are on TritonLink.

Students are responsible for knowing the deadlines for enrollment, registration, leaves of absence, and withdrawals. The student pays any fees or tax withholdings assessed as a result of missing deadlines. Deadlines for Fall, Winter, and Spring quarters are listed in the UCSD Schedule of Classes on TritonLink (see below). The first quarter in the graduate program, students must meet the Registrar's enrollment and registration deadlines for new graduate students; in subsequent quarters, the deadlines are those for continuing graduate students. TritonLink is used to enroll in classes.

Students are officially registered at UCSD when they have enrolled in classes AND paid all required fees and tuition each quarter. Students who do not register are considered withdrawn from the program unless they are on an approved leave of absence (see below). In Fall, Winter, and Spring quarters, there is a \$50 penalty for enrolling late and a \$50 penalty for paying fees late, which means students could be assessed up to \$100 in late penalties. Additionally, students who do not register by the deadline during the academic year may be subject to up to 8.95% tax withholding from each stipend payment that quarter.

TRITONLINK AND WEB-REG

tritonlink.ucsd.edu

All students should be familiar with the TritonLink Web site! From here they can access the quarterly UCSD Schedule of Classes, plan a course schedule, enroll in classes, add and drop classes, and change units or grading options. They can also look up grades, check enrollment and registration status, check billing statements, pull up unofficial or order official transcripts, and access a directory of UCSD students. Many other options are available, and more are in the planning stages.

To access TritonLink, each student must use a Personal Access Code (PAC). PACs are either mailed to students by the Office of Graduate Studies and Research or can be retrieved from the Registrar's Office with a photo ID. The PAC code does not change during a student's residency. If you forget or lose your PAC number, you must go to the Registrar in person with a photo ID in order to obtain a new one.

ENROLLING IN CLASSES FOR FALL, WINTER, AND SPRING

M.S. students consult with their First-Year or Thesis Adviser about what courses are recommended and required. The Academic Policies and Degree Requirements section outlines program expectations. TritonLink is used to enroll in classes (see above). The quarterly UCSD Schedule of Classes lists all courses offered within a quarter. It is listed on TritonLink. The UCSD General Catalog (www.ucsd.edu/catalog) has descriptions of the courses. ***Currently there is not an official summer quarter. Therefore, summer may not count toward the three-quarter residency requirement for the M.S.*** Thesis students normally are expected to continue their research during the summer months.

PAYING FEES

Central Cashier's Office:
401 University Center, 534-3725
Office Hours: 8:30-4:00

Other Student Business Services Units
201 University Center, 534-7537
Office Hours: 8:00-4:30

Each student is issued a billing statement by the Student Business Services Office. The statement reflects all debits and credits related to registration, housing, and other University services. Billing statements are mailed to students after they enroll and periodically throughout the year. Students who enroll just prior to the enrollment deadline may go to the Central Cashier to pay fees without waiting for a billing statement to be issued; the important thing is to pay by the deadline. If the Department is paying fees or tuition directly to the University, a credit will appear on the billing statement. Students are responsible for paying all other fees and tuition by the payment deadline. Acceptable payment methods include check, cash, or money order and should be made payable to the Regents of the University of California. Payment can be made at the Central Cashier's Office in person or by using the drop box. In addition, students now have the option to make payments online with an e-check. Billing and fee statements are also available online for students to check their account activity. For more information on fee payments check the Schedule of Classes on TritonLink. Fee Deferment and Loans: Students who wish to defer fee or loan payments should contact Jackie Johnson 2-1824 at the Student Affairs Office.

ACADEMIC POLICIES AND FINANCIAL SUPPORT POLICIES

ACADEMIC STANDING

To maintain good academic standing, a student must:

- Be registered at UCSD, or be on official leave of absence (see below).
- Maintain a minimum overall GPA of 3.0 or higher in coursework.
- Not accumulate more than a total of eight units of unsatisfactory grades overall.
- Make satisfactory progress in their course program of study and, if applicable, thesis project (see Time to Degree below).
- Satisfactorily complete a minimum of 20 units of upper-division or graduate coursework every three quarters. M.S. students may enroll part-time (11 units or less) after obtaining approval from the department and from OGSR.

Students who do not maintain these standards may be placed on probation by the Department and by the Dean of Graduate Studies or may be dismissed from the program. Any financial support is contingent upon maintaining good academic standing.

TIME TO DEGREE

Full-time students in the Comprehensive Exam (Coursework) plan normally complete their degree in three quarters. Those in the Thesis (Research) plan may need four to six quarters, depending on the nature of their research project.

FINANCIAL SUPPORT

There is no support guarantee with the M.S. program. Typically, M.S. students are paid on TA funds the quarter they fulfill the academic teaching requirement (see Graduate Student Teaching section of this handbook). Most TA's are appointed at 42% workload, and are paid a 42% TA salary. In addition, a large portion of fees is paid by the University. Students are responsible for payment of the balance of fees and out-of-state tuition (if applicable). We normally can provide M.S. students with paid TAs for additional quarters.

For students in the Thesis (Research) plan, any potential research assistantships will depend on their advisers. Our Web site lists job openings at UCSD and in local industry (<http://chem-admin.ucsd.edu/Pers/Jobs>). There are limited fellowships for M.S. students from various organizations. Students Financial Aid may be able to offer loans. See the Whom to Know and Where to Go for Information page of this handbook.

LEAVES OF ABSENCE AND WITHDRAWALS

Contact the Chemistry and Biochemistry M.S. Coordinator about policies and procedures for going on leave of absence or to withdraw from the program. Students who file for a leave or withdraw *after* classes begin will be responsible for paying fees according to the chart in the *Refund and Grading Information* section in the *Schedule of Classes*.

DEGREE REQUIREMENTS

COURSE PROGRAM

Our M.S. program is designed to give you maximum flexibility. Specific unit requirements are found on the next few pages. Professor Doug Magde, the M.S. Faculty Adviser, is available to help you choose courses. Graduate courses (200 series and 500) are usually taken, although upper-division (numbered 100-199) courses may sometimes be appropriate. **Lower-division courses (numbered 1-99) do not count toward the M.S. or toward the 12-unit minimum for full-time status.** Courses from other departments (e.g., Biology, Physics, Mathematics, School of Medicine, and Scripps Institution of Oceanography) may be taken and counted as "in the major" if they relate to the major field of chemistry. Either the M.S. Faculty Adviser or the Chair of the Graduate Affairs committee must approve them. To request approval, please contact the Chemistry and Biochemistry M.S. Coordinator.

GRADING

Graduate level courses have two grading options: letter grade (e.g., A, B) and satisfactory/unsatisfactory (S/U). ***M.S. students must take all courses for a letter grade unless the course is offered S/U only.***

TRANSFER COURSEWORK

Students may transfer up to eight quarter units of coursework to fulfill M.S. requirements. To petition for transfer units, you will need (1) an official transcript listing the relevant course(s), and (2) a letter from the college's Dean stating the courses and units were NOT used toward a degree at their institution. Bring these materials to the Chemistry and Biochemistry M.S. Coordinator in the Student Affairs Office who will assist you with the rest of the petition process.

RESIDENCY AND FULL TIME STATUS

The UCSD residency requirement for all M.S. students is three quarters, at least one of which must follow Advancement to Candidacy. M.S. students are typically expected to maintain full-time status by enrolling in a minimum of 12 units each quarter of their residency as a graduate student. The Department and OGSR must approve any requests to study part-time. Note that fees are not reduced until enrollment is for six units or less.

ADVANCEMENT TO CANDIDACY FOR THE MASTER OF SCIENCE

The quarter a student enrolls in the final units needed to complete their 36 unit requirements, they are eligible to Advance to Candidacy for the M.S. At that time, they should contact the Chemistry and Biochemistry M.S. Coordinator. Their *Application for Candidacy for the Master of Science* is reviewed to be sure that it is accurate and that degree requirements have been met. The form is then submitted to the Office of Graduate Studies (OGS). The absolute deadline for the form to arrive at OGS is the Friday of the second full week of classes in the quarter the student plans to graduate.

DEGREE CONFERRAL

In addition to Advancement to Candidacy, students must either complete a thesis (Plan I) or pass a comprehensive exam (Plan II). More information on the thesis and exam are found below, under the degree requirements for each plan. A *Final Report* form must be signed by the Department and OGS; for Plan I students, the Librarian must also sign. Students also file a *Degree and Diploma Application* and an *Alumni Information Sheet*, available in the Student Affairs Office.

PLAN I, THESIS (RESEARCH) REQUIREMENTS

Purpose: To prepare students for research careers or for doctoral or professional studies; emphasis is on research.

Advancement to Candidacy

The deadline to file the paperwork to Advance to Candidacy is the end of the second week of the quarter the MS degree will be conferred. The final units needed to advance may be in-progress the quarter the paperwork is filed. At the time the paperwork is filed, the Thesis Committee must be named (see below). These are the unit and grade requirements for advancing:

- REQUIRED Complete a minimum of 36 units. Note the following stipulations.
1. Lower-division courses may not be applied to the degree.
 2. A maximum of 12 units upper-division courses may not be applied
 3. A maximum of 4 units of non-thesis research (Chem 297 or 298) may be applied
 4. Chem 250 is the ONLY seminar that may be applied. However, students are strongly encouraged to enroll in seminars in their field.
 5. Chem 251 (Group meeting) may not be applied. However, students are strongly encouraged to enroll in it.
- REQUIRED Achieve a minimum overall GPA of 3.0.
1. All courses must be taken for a letter grade unless offered S/U only.
 2. Minimum 8 units letter-graded (A, B, etc.) courses, of which 6 or more must be graduate level.
- REQUIRED Complete a minimum of 14 units of graduate level chemistry courses that are not seminar (except Chem 250) or research. Usually fulfilled with at least 8 units of lecture courses, Chem 500, and possibly Chem 250.
- REQUIRED Complete a minimum of 18 units of Thesis Research (Chem 299). Maximum of 24 units of Thesis Research (Chem 299) may count toward the 36 unit total.
- REQUIRED Complete a minimum of 4 units of Teaching Assistantship Seminar (Chem 500). Students may enroll in more than 6 units of Chem 500, but a maximum of 6 units may be applied toward their degree.

Conferral: Successful oral thesis defense and written thesis accepted by the Department and University.

Thesis

Information covering thesis preparation is contained in the publication *Instructions for the Preparation and Submission of Doctoral Dissertations and Masters' Theses*, which is available on the OGS Web site at www.ogsr.ucsd.edu. A thesis committee is nominated by the Thesis Adviser and approved by the Department and OGS. It consists of at least three faculty: (1) the Thesis Adviser, (2) a faculty from the Department of Chemistry and Biochemistry familiar with the student's research area, and (3) a faculty member from either this or another department whose research is in an area different from that of the thesis. The committee is named at the same time the student files the Advancement to Candidacy for M.S. paperwork (see previous page). Students present and defend their thesis to this committee. Students should distribute a draft of their thesis to committee members at least two weeks prior to the defense. At that time, they should also make an appointment with OGS for a preliminary review of the thesis. A student graduates after the thesis has been defended, signed off by their committee, Department, and OGS, and filed with the University Archivist.

PLAN II, COMPREHENSIVE EXAM (COURSEWORK)

Purpose: To prepare students for doctoral or professional studies; emphasis is on coursework.

Advancement to Candidacy

The deadline to file the paperwork to Advance to Candidacy is the end of the second week of the quarter the MS degree will be conferred. The final units needed to advance may be in-progress the quarter the paperwork is filed. These are the unit and grade requirements for advancing:

- REQUIRED Complete a minimum of 36 units. Note the following stipulations:
1. Lower-division courses may *not* be applied towards the degree.
 2. A maximum of 12 units upper-division coursework may be applied.
- REQUIRED: Achieve a minimum overall GPA of 3.0.
1. All courses must be taken for a letter grade unless offered S/U only.
 2. Complete a minimum of 16 units of letter-graded (A, B, etc.) courses.
- REQUIRED: Complete a minimum of 24 units of graduate-level coursework. Note the following stipulations:
1. A minimum of 14 units of Chemistry graduate level courses required. Courses taken outside of the department must be approved by the Graduate Affairs Committee.
 2. A maximum of 4 units of non-thesis research (Chem 297 or 298) may be applied.
 3. Chem 250 is the ONLY seminar that may be applied. However, students are strongly encouraged to enroll in seminars in their field.
 4. Chem 251 and Chem 299 may not be applied.
 5. Chem 500 (see below) may be applied.
- REQUIRED Complete a minimum of 4 units of Teaching Assistantship Seminar (Chem 500). Students may enroll in more than 6 units of Chem 500, but a maximum of 6 units may be applied toward their degree.

Conferral: Successful completion of a comprehensive chemical knowledge examination.

Comprehensive Chemical Knowledge Examination

The purpose of this requirement is to confirm that students have achieved an advanced understanding of, and a comprehensive training in, the chemical sciences. The tests cover a wide range of material, so that students will have a chance to show what they have learned. The department administers the standardized American Chemical Society exams in biochemistry and inorganic, organic, physical and analytical chemistry. Students must pass three of the five exams in order to graduate.

Only the three highest scoring exams are considered. Therefore, students are free to choose to take three, four or five of the exams. Students may take one of the exams in any quarter prior to their graduating quarter. (Students who choose to do this and do not pass the exam may retake it in their graduating quarter. However, they should remember that only *one* exam may be repeated.) The other two to four exams must be taken the quarter a student intends to graduate. Each exam is 50-70 multiple-choice questions, and students have approximately two hours to complete each exam. Exam booklets contain a periodic table, if needed. Students may use a basic calculator. Scratch paper is provided. Exams are given during Orientation, the first or second week of Winter quarter, and the end of Spring quarter. Students must contact the M.S. Coordinator at least a week before the exams are given to give notice as to which exam(s) will be taken.

There is a minimum cut-off score for each exam. A sum total of points must be earned that is higher than the sum of the three minimum scores. The number of points needed to hit the minimum varies by test as well as by version of the test. For this reason, we assign results of "Fail", "Marginal", and "Pass" for each exam. If a student scores below the minimum cut-off for the test taken, the result is a "Fail". A score at or within a couple points above the minimum cut-off is considered "Marginal". A "Pass" is given for higher scores. To successfully complete the Comprehensive Examination requirement, the minimum result needed is one Marginal and two Passes. Of course, we hope all students would aim for three Passes. When students do not pass the Comprehensive Examination requirement the first round, they are allowed to re-take *one* exam in which a "Marginal" or "Fail" was earned. However, students must wait until the following quarter to re-take an exam, as testing dates are only offered once a quarter. Students may also take exams not previously taken at this time.

For students who choose to take an exam in a quarter prior to their graduating quarter, the best strategy is to take it in the area that they are most likely to pass (e.g., the area in which they had the most training as an undergraduate). ***We urge students to include appropriate coursework in their M.S. studies as preparation for the exams.*** Review only what was once known well before trying to learn anything new. Questions on the exams may seem tricky if one is not exactly sure of how concepts are used. We suggest a review of undergraduate class notes and the following books, or their equivalents:

Biochemistry by Lehninger or by Stryer
Inorganic Chemistry by Huheey or by Douglas, McDaniel, & Alexander
Organic Chemistry by Brown & Foote or by Vollhardt & Schore
Physical Chemistry by Levine or by Atkins
Fundamentals of Analytical Chemistry by Skoog, West & Holler

Good preparation for parts of the inorganic and physical Chemistry exams may also be found in reviewing a strong general chemistry text. One example is “Chemistry” by Jones and Atkins.

PROFESSIONAL CONDUCT AND RESPONSIBILITY

Professional conduct and responsibility is expected of all students. Most students enter the graduate program with a solid grounding in these areas. However, they are often faced with new situations. The Department and University realize that professional growth is a part of graduate training, and they have developed written materials and informational forums to educate students about guidelines and policies. This training begins during Orientation and continues throughout a student's residency. Some of the most relevant Web sites are listed below.

If a student is ever in doubt about policies or appropriate behavior, the first step is to ask for guidance from an adviser, the Vice Chair for Education, the Graduate Affairs Committee, or the Dean's Office. Cases of misconduct are reviewed by the Graduate Affairs Committee, and possibly also by the Dean's Office, for action that may include up to dismissal from the University.

One of the expectations of professional conduct and responsibility is that students are prompt, reliable, and prepared for meetings, examinations, TA sections, and all other activities required as part of the graduate program. The only person authorized to approve an absence is the person in charge of the activity, such as the course instructor for TA duties. They should be contacted as far in advance as possible for approval of the absence and for making alternative plans to fulfill the requirement.

UCSD Notices are sent by email and also posted at adminrecords.ucsd.edu/index.html

Student Conduct Handbook: ugr8.ucsd.edu/judicial/22_00.html

Email: <http://www.ucop.edu/ucophome/policies/email/email.html>

Environmental Health and Safety: www-ehs.ucsd.edu/

Suspicious Mail: <http://adminrecords.ucsd.edu/Notices/1995/1995-01-17-1.html>

General Policies Governing Graduate Studies: 2007-2008 General Catalog, <http://www.ucsd.edu/catalog>

UCSD Integrity of Scholarship Policies: 2007-2008 General Catalog, <http://www.ucsd.edu/catalog>

Integrity of Research: <http://www.ucop.edu/research/policies/ucpols.html>

All students are encouraged to attend courses on ethics in science; students supported on training grants are required to attend. Watch for email announcements about these courses.

Sexual Harassment: <http://oshpp.ucsd.edu/>

TA Handbook: Hardcopy distributed at the departmental TA Training Seminar

Workplace Violence: <http://adminrecords.ucsd.edu/notices/1996/1996-08-29-2.html>

Principles of Community: <http://www.ucsd.edu/principles/>

GRADUATE STUDENT TEACHING

ACADEMIC TEACHING REQUIREMENT

All M.S. students are required to successfully complete one quarter of teaching (Chem 500) to fulfill academic requirements. Course loads should be planned keeping in mind the quarter of teaching. Some students teach additional quarters beyond the academic requirement as a means of financial support. Preferences for TA assignments are requested via the Web during specified dates prior to the quarter of teaching: <https://chem-admin.ucsd.edu/Acad/Instruc/Classes/TA/index.shtml>. **Students are usually assigned to a lab course the first time they TA.**

Students enroll in four units of Chemistry 500 for a Satisfactory/Unsatisfactory (S/U) grade during *each* quarter they teach. A maximum of six units of Chem 500 may be applied to the total unit (36) requirement for the M.S. The first quarter they TA, students must attend the TA Training Seminar portion of Chem 500 (see Schedule of Classes). Performance standards, responsibilities, and duties of TAs are covered at the TA Training Seminar portion and are in the *TA Handbook*. They are also briefly described on the above referenced Web site. The TA Training Seminar is designed to provide training on the fundamentals of teaching as well as other useful information and techniques for becoming an effective TA. In the unlikely event that a U is earned in Chemistry 500, the teaching assignment must be repeated and a grade of S earned in order to fulfill academic degree requirements.

ENGLISH LANGUAGE PROFICIENCY REQUIREMENT

As part of the eligibility requirements for being a TA, all students whose native language is not English are required to take and pass an English Language Proficiency Examination. Students first take a Pre-examination and then the English Language Proficiency Examination.

Pre-examination (for MS students who begin studies in Fall quarter)

During Fall Orientation, students take an oral Pre-examination with a linguist from the UCSD Center for Teaching Development. Based on the results of the Pre-examination, there are three possible outcomes:

- The student earns a Pass on the English Language Proficiency Examination (see below);
- The student is scheduled to take the English Language Proficiency Examination later during Orientation;
- The student is placed in an English and Communication class (see below) and does not take the English Language Proficiency Examination until the end of Fall quarter.

English Language Proficiency Examination

Two Department faculty and a linguist from the Center for Teaching Development give this oral exam. There are three possible outcomes:

- Students who earn a full Pass have met the English Language Proficiency Requirement and are eligible to TA. However, sometimes they are asked to attend an English and Communication class (see below).
- Students with a Provisional Pass have not met the proficiency requirement. Students will be told what they must do to earn a full Pass. This may include continuing the English Class (see below), taking the Proficiency Examination again, and TAing in the upcoming quarter (teaching evaluations will be taken into consideration in the grading of their Proficiency Examination).
- Students with a Fail have not met the proficiency requirement and are not eligible to TA. They must attend an English class (see below) in the upcoming quarter. In the eighth week of the quarter, they take the Proficiency Examination again.

English and Communication Class

A Learning Resource Specialist from the Center for Teaching Development teaches the English class. This specialized English class meets three hours each week. The class is provided free of charge by the University as a service to students. Students do not enroll in it for units. Sometimes students in this class also participate in a TA mentoring experience. See www-ctd.ucsd.edu for additional information.