

UCSD DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

DOCTORAL STUDENT HANDBOOK

2008-2009

September, 2008

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 being a graduate student. We hope you find graduate studies and the continuing pursuit of your education to be challenging and rewarding.

Sincerely,
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

- The code is top secret -- please see your packet.
- Grads are responsible for keeping the lounge clean and picked-up.
- Report any problems (e.g., broken computer) to the Student Affairs Office, x4-6871 or x4-4856.
- If the lounge is out of paper or toner, come to the Student Affairs Office for more supplies.

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 250+ graduate students. You must take responsibility for reading your email on a daily basis.
- Problems: Contact UCSD Academic Computing Services (ACS) Technical assistance: 858-534-4060, acs-consult@ucsd.edu

Personal Access Codes (PAC)

- Grads with U.S. address were mailed directly to their permanent address.
- If you did not receive your PAC, go to the Registrar's Office with a photo ID to obtain.

Address, Phone, or Email Changes: TWO Places

- Notify the Doctoral Program Coordinator (4-6871)
- 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

www-chem.ucsd.edu/Seminars/

BIOCHEMISTRY ROTATION PROGRAM

First Rotation	Monday, Sept.17 –Friday, Oct. 12
Second Rotation	Monday, Oct. 15 – Friday, Nov. 9
Third Rotation	Monday, Nov. 12 – Friday, Dec. 7
Adviser Choice/Winter Rotation	Friday, Dec. 7

INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY CONSULTATION PROGRAM

Consultation Choices	Friday, Sept. 28
Signed Consultation Form	Friday, Oct. 19
Adviser Choice	Friday, Oct. 20 – Friday Nov. 30

ENROLLMENT AND REGISTRATION

<http://ogs.ucsd.edu>

<http://tritonlink.ucsd.edu>

UCSD ACADEMIC AND ADMINISTRATIVE HOLIDAYS

<http://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 Continetti, 2050 Urey Hall Annex, 4-5489, rcontinetti@ucsd.edu

Vice Chair for Graduate Education: TBA

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

Daniel Donoghue, 6114 Urey Hall, 4-2463, ddonoghue@ucsd.edu
David Hendrickson, 4100A Pacific Hall, 4-5580, dhendrickson@ucsd.edu
Judy Kim, 3040B Urey Hall Annex, 4-8080, judyk@ucsd.edu
Vice Chair for Graduate Education, TBA
Jerry Yang, 6100C Pacific Hall, 4-6006, jerryyang@ucsd.edu
Staff Rep: TBA
Student Reps: To be selected by graduate students

First-Year Advisers:

Organic: *Mike Burkart*, 6100D Pacific Hall, 4-5673, mburkart@ucsd.edu
Biochemistry: Terunaga Nakagawa, 4322 Natural Sciences Building, 4-2974, nakagawa@ucsd.edu
Alexander Hoffman, 3328 Natural Sciences Building, 2-4670, ahoffmann@ucsd.edu
Inorganic: F. Akif Tezcan, 6218 Urey Hall, 4-5598, tezcan@ucsd.edu
Analytical: Kim Prather, 3020C Urey Hall Annex, 2-5312, kprather@ucsd.edu
Physical: Michael Tauber, 3050A Urey Hall Annex, 4-7334, mtauber@ucsd.edu

English Language Proficiency Examination:

James Whitesell, 6100E Pacific Hall, 4-5870, jwhitesell@ucsd.edu
Ulrich Muller, 5218 Urey Hall, 4-0212, ufmuller@ucsd.edu

Graduate Student Affairs Staff, 4010 York Hall:

Student Affairs Director: Irene Jacobo, 4-0780, ihjacob@ucsd.edu
Doctoral Program Coordinator: Pam Murphy, 4-6871, pmurphy@ucsd.edu

Financial Support:

Policies and Fellowships: Irene Jacobo, 4-0780, ihjacob@ucsd.edu
Grad Payroll: [Iris Vazquez](mailto:Iris.Vazquez@ucsd.edu), x2-1824, ivazquez@ucsd.edu
Fellowships binder and bulletin boards, Student Affairs Office, 4010 York Hall
OGS Web Site: <http://www.ogs.ucsd.edu/financialinfo/index.htm>

Deleted: Jackie Johnson

Deleted: jyjohno

Deleted: chem.

TA Assignments, 4010 York Hall:

Student Affairs Director: Irene Jacobo, 4-0780, ihjacob@ucsd.edu
TA Coordinator: [Alejandro Vasquez](mailto:Alejandro.Vasquez@ucsd.edu), 4-2263, alvasquez@ucsd.edu

Deleted: Gail McNabb

Deleted: gmcnabb

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 University Center
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 found by going to Tritonlink and clicking on Health Fee Waiver.

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

<http://women.ucsd.edu>

Student Center West Building 290

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!

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 and possibly Summer Session may be subject to up to 8.95% tax withholding from each stipend payment that quarter (see Financial Support section).

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 distributed to incoming students during advising hours of Orientation or are put in the Orientation folder. 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

MS students consult with the Thesis Adviser (Thesis Plan students) and/or MS Faculty 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. 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: 8:00-4:00

Other Student Business Services Units
201 University Center, 822-4SBS(4727)
Office Hours: 8:00-4:30, except Thurs. 10:00-4:30

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 at the Student Affairs Office.

ACADEMIC POLICIES AND TIME LIMITS

ACADEMIC STANDING

To maintain good academic standing, a student must:

- Be registered in 12 units of upper-division or graduate level coursework at UCSD, or be on official leave of absence (see below).
- Maintain a minimum overall GPA of 3.0 or higher coursework.
- Not accumulate more than a total of eight units of unsatisfactory grades overall.
- Make satisfactory progress in their program of study and thesis project (see Time Limits below).

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. Financial support is contingent upon maintaining good academic standing.

TIME LIMITS

Campus policy has established maximum time limits for advancement to candidacy, for financial support, and for the total quarters registered. The UCSD Dean of Graduate Studies enforces these limits. The Department of Chemistry and Biochemistry has set and enforces earlier time limits for advancement to candidacy and financial support.

	Campus	Department
Advancement to candidacy	4 years	3 years
Financial support	6 1/3 years	4-5 years*
Registration	7 1/3 years	*

*See Progress to Degree and also Financial Support sections for details.

DIVISION TRANSFER POLICY

The feasibility of transferring from one division to another (e.g., from biochemistry to another division) depends on the availability of research positions within the groups and other factors. Requirements of the doctoral program affected by a division transfer are the Placement Examinations, courses taken, timing of TA assignments, and the composition of the Departmental Examination and Doctoral Thesis Committees. Students wishing to transfer to another division should contact Irene Jacobo at 40780, ihjacob@ucsd.edu.

LEAVES OF ABSENCE AND WITHDRAWALS

Contact the Doctoral Program Coordinator (4-6871) 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

BY YEAR

Programs of study are tailored to the needs of individual students, based on their prior training and research interests. Progress to degree is generally similar for all students. During the first year, students take courses, begin their teaching apprenticeships, choose research advisers, and embark on their thesis research. Beginning the first summer, the emphasis is on research, although courses of special interest may be taken throughout a student's residency. In the second year, there is a Departmental Examination, which includes critical discussion of a recent research article. In the third year, students advance to candidacy for the doctorate by defending the topic, preliminary findings, and future research plans for their dissertation. Subsequent years focus on thesis research and writing the dissertation.

COURSE PROGRAM

An individualized course program is designed for each student in conjunction with the adviser. Course work may be prescribed by the First-Year or Thesis Adviser based on results of the Placement Examinations and the student's research concentration. The Department has two specific course requirements: Chem 250, Seminar in Chemistry, and Chem 500, Teaching Apprenticeship.

Students should take into account their teaching schedule and duties when planning their course program (see Graduate Student Teaching). Likewise, those opting to earn a M.S. while studying for the Ph.D. should be aware of the requirements for that degree and should plan accordingly (see Master's Degree).

- 1. All students must enroll in a minimum of 12 units each quarter to qualify for financial support and to be in good academic standing.** If courses or units are dropped, others must be added to maintain the minimum 12 units required to remain in good academic standing. Graduate courses (200 and 500 series) are usually taken. Upper-division courses (100 series) are often appropriate or necessary to remedy deficiencies noted on Placement Examinations. ***Lower-division courses (numbered 1-99) do NOT count toward the 12 unit minimum.***
- 2. To meet the units requirements in item 1 above, first-year students must follow these guidelines:**
 - Students normally enroll for 4 courses of 4 units each in Fall quarter.
 - Chemistry 500 (Teaching, 4 units) counts toward the units requirement.
 - Chemistry 250 (First-Year Seminar, 2 units, Spring quarter only) is required. This is a seminar course in which students present brief seminars based on their first-year research experience or on a literature topic. It is the only seminar course that counts towards the 12-unit minimum per quarter in the first year.
 - Students are encouraged to enroll in the seminar courses (e.g., Chemistry 227, 251, 293, 294, 295, or 296). However, these courses do not count toward the 12-unit per quarter minimum in the first year.
 - Biochemistry students: Chemistry 298 (Rotation) units are limited to 1-4 per quarter. Students may not enroll in Chemistry 299 (Research) until a Thesis Adviser has been approved (see Rotation Program section). During the first year, Chemistry 299 is limited to 4 units per quarter and Chemistry 251 is limited to 2 units per quarter.
 - Analytical, Inorganic, Organic, and Physical Chemistry students: A maximum of 4 units of Chemistry 297 (Non-thesis Research) may be earned when students spend a full quarter in one or more labs while deciding on a Thesis Adviser. Students may not enroll in Chemistry 299 (Research) until a Thesis Adviser has been approved (see Consultation Program Section). During the first year, Chemistry 299 is limited to a maximum of 8 units and Chemistry 251 to a maximum of 4 units.
 - Advisers must approve any changes to a course program, including adds, drops, unit changes, and grading option changes.
- 3. Courses from other departments (e.g., Biology, Physics, Mathematics, School of Medicine, and Scripps Institution of Oceanography) may be taken.** This may be particularly valuable in making contacts with faculty outside the Department for the Doctoral Committee.

GRADING

Graduate level courses at UCSD have two grading options: letter (e.g., A, B, C, D, and F) and S/U (satisfactory and unsatisfactory). First year students must take all courses for a letter grade unless the course is offered S/U only. ***Students who have not advanced to candidacy for the doctorate must take all courses within the Department for a letter grade, with the exceptions of Chemistry 500 and courses that are offered S/U only.***

MASTER'S DEGREE

The Comprehensive Exam (Coursework) M.S. in Chemistry is optional, and interested students must apply for it. Students who wish to pursue this degree normally take the bulk of the required coursework during their first year and receive the degree after passing the Departmental Examination in the second year. Students will be given the needed paperwork and status report of M.S. units at the time of their Departmental Examination. The latest we recommend a student earn the Master's degree is the quarter in which they advance to candidacy for the Ph.D.

Students who already have a Master's degree from UCSD or who already have a Master's degree in Chemistry, Biochemistry, or a related field from another institution are not eligible. Transfer units are acceptable as outlined in the 2008-2009 UCSD General Catalog and as approved by the Graduate Affairs Committee.

Requirements for the Plan II Comprehensive Exam (Coursework) Master's Degree

1. Advancement to Candidacy for M.S.

The deadline to file the paperwork to Advance to Candidacy is the end of the second week of the quarter *prior* to MS degree conferral. 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.

2. Successfully complete the Departmental Examination.

PLACEMENT EXAMINATIONS

The purposes of the Placement Examinations are to assist with academic advising and to assure that students have the breadth and level of competence needed for graduate studies in the chemical sciences. These written examinations cover undergraduate course material and are given in biochemistry and in inorganic, organic, physical and analytical chemistry. By the end of Spring quarter of the first year, students must show proficiency in at least three of the five areas, including the one of their specialization.

Incoming students are mailed information about what materials to review and the best strategies for studying for these tests. All five examinations are given the first two days of Orientation. The First-Year Advisers review the examination results and develop a prescribed course plan for each student who would benefit from additional training in one or more of the five areas. Students must pass their prescribed course(s) with grades of B or higher. It may take more than one quarter to become proficient in an area, depending on a student's educational background.

ACADEMIC AND THESIS ADVISERS

FIRST-YEAR ADVISERS

In each of the main disciplines of biochemistry and inorganic, organic, and physical chemistry (analytical chemistry is a subdivision of physical chemistry), there is one or more faculty named as the First-Year Adviser for new students. The First-Year Advisers mentor students until they have a Thesis Adviser. They meet with students during Orientation to tell them the results of their Placement Examinations, to plot out a program of course study for the upcoming year, and to begin guiding the student in the choice of a Thesis Adviser. First-Year Advisers remain the contact for issues related to the Placement Examination(s) even after a Thesis Adviser is named.

CHOOSING A THESIS ADVISER

Most of a student's efforts in graduate school are directed toward research for the dissertation, and selection of a Thesis Adviser is of utmost importance. To assist students with this critical decision, there are First-Year Advisers, the Rotation and Consultation Programs (see below), and a series of research talks by the entire faculty during Orientation. Familiarity with the faculty is invaluable when choosing a Thesis Advisor and a Doctoral Committee, when seeking advice on a new technique or new research direction, and when arranging for letters of recommendation and job referrals. Students are encouraged to be very proactive in the Thesis Adviser selection process. Students can learn more about specific faculty by taking their courses, by seeking them out at seminars and colloquia, or by visiting them in their office/lab. They can also learn about research groups by talking to graduate students and postdoctoral fellows.

THESIS ADVISER APPROVAL PROCESS

Council (Chair of the Department and four faculty, one from each division) makes final approval on Thesis Adviser choices. Students are not considered to have joined a group until Council approval is received.

When matching students with advisers, preferences of both students and faculty are considered. Every effort is made to place students with the Thesis Adviser of their choice. Constraints include acceptance by the faculty, availability of financial support, and limitation on group size. First-Year Advisers coordinate the adviser selection process. Thesis Advisers choices are subject to final approval by the Department Council and Chair. Students must have a Thesis Adviser by the end of Spring quarter to remain in good academic standing and to continue in the program.

The Thesis Adviser must be a regular faculty member of the University of California or an Adjunct Faculty member in the Department of Chemistry and Biochemistry. According to UCSD policy, if the Thesis Adviser is an Adjunct Faculty, a regular UCSD faculty must be appointed as Co-Chair. Co-Chairs are normally from our Department.

Students interested in research projects outside of the Department should talk to their First-Year Adviser and senior faculty in their discipline about possibilities. The First-Year Adviser must approve Rotations or Consultations in other departments. Selection of a Thesis Adviser in another department requires approval by the Graduate Affairs Committee and Department Chair. *Moreover, there are different policies governing financial support (see Financial Support).* The topic of the dissertation must be sufficiently chemical or biochemical as determined by the Department of Chemistry and Biochemistry. A Chemistry and Biochemistry faculty must be named as Co-Chair of the Doctoral Committee. The Co-Chair takes an active role in monitoring the progress of the student and facilitating interactions with the Department. Non-departmental faculty must be the functional Thesis Adviser and may not be an intermediary. Under no circumstances are students permitted to select a Thesis Adviser who does not hold an appropriate UCSD appointment. A maximum of two Chemistry and Biochemistry students will be permitted to work in any single lab outside the Department at the same time.

ROTATION PROGRAM FOR BIOCHEMISTRY STUDENTS

<i>First Rotation</i>	<i>Monday, Sept.17 – Friday, Oct. 12</i>
<i>Second Rotation</i>	<i>Monday, Oct. 15 – Friday, Nov. 9</i>
<i>Third Rotation</i>	<i>Monday, Nov. 12 – Friday, Dec 7</i>
<i>Adviser Choice or Winter Rotation Request</i>	<i>Friday, Dec. 7</i>

The Rotation Program is designed to assist new students with choosing a research adviser by giving them first-hand laboratory experiences. There are three rotation periods of four weeks each during the Fall quarter. Biochemistry students participate in at least three rotations before deciding on a Thesis Adviser. Only one of the first three rotations may be with a faculty from another department, and the rotation must be approved by the First-Year Adviser.

Students receive credit for rotations by enrolling in Chemistry 298 (Special Study in Chemistry) for one to four units. The grading option is S/U only, and a grade of S is required to maintain good academic standing. Faculty write an evaluation for each student rotation, and this evaluation is kept on file in the Department. Students spend at least eight hours a week carrying out an assigned project and meet weekly with the faculty members.

Rotation assignments match student preferences whenever possible and are based upon student preferences, faculty preferences, and the number of rotation spaces available in a lab. Assignments for the first rotation will be announced by email on Wednesday, September 12, 2008. For the second and third rotations, students should talk to various faculty about their research and ask the faculty for permission to rotate in the laboratory before turning in their rotation request to the First-Year Adviser. After students receive their rotation assignment(s), and before the rotation period begins, they need to contact the faculty to make scheduling arrangements. By the end of the third rotation period, each student submits to the First-Year Adviser either a list of acceptable Thesis Advisers, ranked in order of preference, or a list of additional rotation choices for Winter quarter. In late December or early January, each First-Year Adviser interfaces with faculty, students, and other First-Year Advisers to finalize the choices that will go forward to the Chair and Council for approval. First-Year Advisers continue to work with students and oversee Rotation until all students have a Thesis Adviser that has been approved by Council.

CONSULTATION PROGRAM FOR INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY STUDENTS

Consultation Choices
Signed Consultation Form
Adviser Choice

Friday, Sept. 28
Friday, Oct. 19
Friday, Oct. 19 – Friday, Nov. 30

The Consultation Program is an informal method for students to explore research opportunities. During the consultation itself, the student and prospective adviser discuss research projects available, the student's expectations of the role of the Thesis Adviser, the adviser's expectations of the student, and the number of openings available in the group. Some faculty in these areas will consider a student's request to rotate; arrangements for the rotation are made between the faculty and the student. The First-Year Adviser should be informed of these arrangements (if any) by Friday, September 28. Students should talk to at least four faculty members. Each faculty consulted signs the Consultation Form, which is submitted to the Student Affairs Office (York Hall 4010) by Friday, October 19, 2008. Students may submit their Advisor Choice anytime between October 19 and November 30, 2008. To submit their choices, they email their First-Year Adviser a list of up to three names of prospective Thesis Advisers. In late December or early January, each First-Year Adviser interfaces with faculty, students, and other First-Year Advisers to finalize the choices that will go forward to the Chair and Council for approval. First-Year Advisers continue to work with students and oversee Consultation until all students have a Thesis Adviser that has been approved by Council.

Students who will spend a full quarter working in one or more faculty labs while choosing a Thesis Adviser may enroll in Chem 297. This non-thesis research course may be taken one time.

DEPARTMENTAL EXAMINATION, ADVANCEMENT TO CANDIDACY, AND DOCTORAL DISSERTATION

PROGRESS TO DEGREE

A student making good academic progress must pass the Departmental Examination before the end of the second year of graduate work (sixth quarter) and the Qualifying Examination before the end of the third year of graduate work (ninth quarter). In practice, students take the Departmental Examination in the fifth quarter because there may be a need to remedy deficiencies in the sixth quarter. Important information about the policies and procedures of these examinations is emailed to students in the Fall quarters of their second and third years. A well-prepared student may, in special cases, take either examination a quarter early. Past experience has clearly shown that students who wait until the last possible date to complete an exam do not fare as well as the average. Biochemistry students are expected to graduate in their fifth year and students in other areas in the fourth year. Extensions to time limits must be approved by the Graduate Affairs Office and possibly by the Dean's Office of Graduate Studies. See Financial Support sections for information on support limits.

DEPARTMENTAL EXAMINATION

The Departmental Examination is an oral exam consisting of a critical analysis of one or more recent journal articles. The purpose of the examination is to evaluate a student's progress in their graduate training overall, but especially in their particular field of study.

In Fall quarter of their second year, students are assigned a Departmental Examination Committee consisting of three Departmental faculty: two from the student's area (one of whom serves as chair) and one from outside the student's area. This committee serves as the beginnings of the Doctoral Committee. It is selected by the Graduate Affairs Committee, in consultation with the Thesis Adviser and other faculty in the student's research area.

Two weeks before the examination, the student is assigned a published paper chosen by the committee chair in consultation with the Thesis Adviser. During the examination, the student summarizes and answers questions concerning the paper and its relation to the student's field of study and research. The student may also be asked to briefly summarize progress on their research project.

DOCTORAL COMMITTEE

The role of the Doctoral Committee is to provide a student with mentoring and guidance and to evaluate their progress toward the degree. They conduct the Qualifying Examination, supervise and sign on the dissertation, write annual evaluations of a student's progress, and administer the Doctoral Defense. As Chair of the Doctoral Committee, the Thesis Adviser takes the lead role. A Doctoral Committee must be approved by the Department and by the Office of Graduate Studies at least two weeks before the Qualifying Examination.

The Doctoral Committee, by University regulation, must have a minimum of five members. Generally, there are three or four faculty from within the Department of Chemistry and Biochemistry (at least one from outside the student's division) and one or two faculty from another department. At least one committee member must be a tenured faculty from outside the Department. Normally, all three faculty from the Department Examination Committee continue to serve on the Doctoral Committee. If the Thesis Adviser is an Adjunct Faculty, a tenured UCSD faculty must be appointed as Co-Chair (see Academic and Thesis Advisers, page 13). There are other restrictions on committee members, and the Student Affairs Office will provide more detailed information to students in the Fall quarter of the third year.

ADVANCEMENT TO CANDIDACY AND QUALIFYING EXAMINATION

To advance to candidacy for the doctoral degree, students must pass an oral Qualifying Examination. The topic for the examination is the student's proposed thesis project. Students present their thesis research, both accomplished and planned, to their Doctoral Committee.

FINISHING UP: DOCTORAL DEFENSE AND DISSERTATION

A student graduates after the thesis has been defended, signed off by their Doctoral Committee, and filed with the University Librarian. This is a time for celebration!

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: 2008-2009 General Catalog, <http://www.ucsd.edu/catalog>

UCSD Integrity of Scholarship Policies: 2008-2009 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

UCSD doctoral students are required to successfully complete four quarters of teaching across a variety of courses in their first year two years of study. Biochemistry students normally TA Winter and Spring of the first year, Fall of the second year, and Winter of the second year. Other students normally TA Fall, Winter, and Spring in the first year and Fall in the second year. Some students teach additional quarters beyond the academic four quarter requirement, as a means of financial support. Course loads should be planned keeping in mind the quarters of teaching. See Training and Development below for information about Chemistry 500. Preferences for TA assignments are requested via the Web during specified dates prior to the quarter of teaching: chem-admin.ucsd.edu/Acad/Instruc/Classes/TA. Exceptions to TA requirements and policies require Graduate Affairs approval.

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 Chemistry 500 may be applied toward the total units (36) requirement of the optional M.S. (see Masters Degree). 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 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

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.

Doctoral students who do not earn a Pass on the Proficiency Examination by the end of Spring quarter of their first year of graduate study are reviewed by the Graduate Affairs Committee and may be dismissed from the program.

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.

FINANCIAL SUPPORT

The basic policy is that all students in good academic standing receive the same support package: (a) the minimum annual base stipend; (b) full payment of fees for Fall, Winter, and Spring quarters; and, (c) full payment of non-California resident tuition in all years for non-citizens and in only the first academic year for U.S. citizens and immigrants. Biochemistry students are expected to complete the Ph.D. in five years and students in other disciplines in four years. Approvals by the Thesis Adviser and Department are required for support beyond these limits. The UCSD support time limit is 6 1/3 years; extensions require approval of not only the Thesis Adviser and the Department, but also of the UCSD Graduate Council.

There are three common sources of financial support: teaching assistantships (TA), graduate student research (GSR), and fellowships. First-year students who are not supported on fellowships normally receive TA support for Fall, Winter, and Spring quarters of their first academic year. The normal source of subsequent support is GSR appointments financed by faculty research grants. In view of the variety of funding sources, each with its own rules and guidelines, the monthly stipend may vary somewhat, but the total annual stipend will remain the same. Different funding sources may affect taxable income, federal withholding exemptions, and loan eligibility.

All students are strongly encouraged to apply for fellowships. Fellowships not only provide an important career honor to list on a resume, but they also secure support for future years. Fellowships are sponsored by a variety of sources including the Department, campus, federal agencies, and industry. Information on fellowships is provided by the Department, the Office of Graduate Studies, and on the Web (<http://ogs.ucsd.edu/fellowships/resources.htm>). Fellowships are supplemented to match or, in some instances, to exceed the Department's base stipend.

STIPEND

The annual base stipend is reviewed each Fall quarter and cost of living adjustments are made regularly. Student stipends are not considered to be a "salary" for services rendered, and are awarded regardless of TA duties, research activities, or course work.

FEES AND TUITION

The Department usually arranges for fees and tuition to be paid directly to the University. However, in some instances, the fee and/or tuition amount might be included in the monthly paycheck (in addition to the stipend); in these cases, the student is responsible for paying the University.

STUDENT RESPONSIBILITIES

- It is important for eligible students to establish California residency before the start of their second academic year, if they do not want to pay tuition costs. Information about establishing residency is available on the Web at <http://registrar.ucsd.edu/ver2/info/residency/nonres.html>.
- Students who register late and/or for too few units are responsible for paying the financial consequences, which may include UCSD late penalty fees, an extra 8.95% tax withholdings on their stipend, or both. Students do not want to miss these important deadlines!
- Students must contact the Graduate Support Coordinator, Jackie Johnson, well in advance of any changes that may affect their source of support.
- GSHIP Summer health coverage and dental coverage tends to vary year to year. Sometimes, students may need to purchase dental coverage or Summer health insurance from their own funds.

STUDENTS WORKING OUTSIDE THE DEPARTMENT

- The Department of Chemistry and Biochemistry's guarantees of support described above do not apply to students who choose to work for a Thesis Adviser outside of the Department. However, students working outside the department are not paid a higher stipend than those working in the Department. Choosing a non-Department Thesis Adviser does not change the teaching requirements, as it is unrelated to support. Students should carefully consider these issues when choosing a Thesis Adviser.
- Typically students may not be employed for additional support beyond the Department standard. Students must obtain departmental approval before accepting other campus employment; contact Irene Jacobo at 4-0780 for more information.

I acknowledge receipt and understanding of the above policies.

Student Last Name, First Initial	Signature	Date
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