# Graduate Student Handbook

## Master of Science in Biology Program

### Department of Biological Science

### California State University Fullerton

***Updated 22 Sep 2014***

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# I. Information for New and Beginning Graduate Students

**Master of Science in Biology at CSU Fullerton: Training Tomorrow's Scientists, Practitioners and Educators**

This is an incredible time to be a biologist. Every day, new research discoveries are made, from the level of single molecules to whole ecosystems. A Master's degree in biology allows you to contribute to this research, to share this knowledge through teaching, or to apply it in public service or private industry. Many of our students use their M.S. as a stepping stone to doctoral or health professions programs. Others enter the workforce immediately in fields as diverse as biotechnology, government service, environmental consulting and teaching. The CSU Fullerton Master of Science degree in Biology is a rigorous, research-based program that can be completed in two to three years and that prepares you for a variety of careers in exciting and competitive fields.

Our program is distinctive in offering a strong, research-focused and thesis-based M.S. degree with graduate students working closely with their faculty mentor from the first day of their entry into the program. Our diverse faculty conduct research at all levels of biological organization reflecting the five areas of study available within the program. The faculty is supported by grants and contracts from foundations and governmental agencies and with their students use state-of-the-art-equipment in their laboratories. For field research, the region has an incredible variety of accessible habitats including deserts, mountains, shrublands, wetlands, rocky coasts, kelp forests and offshore islands. The many academic institutions, biotechnology laboratories, consulting firms and government agencies in the area offer a rich intellectual and career environment for students engaged in M.S. research.

**Admission Requirements**

Applicants seeking admission to the M.S. Program in Biology must have: a B.S. or B.A. degree in biology or related field from an accredited college or university; a GPA of 3.0 in all biology or biology-related courses (e.g., biochemistry); and a GPA of 2.5 in the last 60 semester units of coursework, and in all supporting coursework in chemistry, physics and mathematics. Students must submit the scores of one of the following: Graduate Record Examination (GRE) General test, Medical College Admission Test (MCAT), or Dental Admission Test (DAT). No absolute score is required for admission, but scores are used in the evaluation procedure. Applicants must also submit two letters of recommendation from professors, job supervisors, or other individuals familiar with the applicant's skills and qualifications for graduate-level work. To be admitted to the program, a student must be accepted by a full-time member of the graduate faculty in Biology who agrees to serve as the student's thesis adviser. For more information, visit our website at www.fullerton.edu/biology/grads.

**Degree Requirements**

The Graduate Study Plan (GSP) for the M.S. in Biology includes 30 units of adviser-approved graduate work; at least one-half of the total units must be at the 500-level. All GSPs must include the following:

BIOL500 A and B Professional Aspects of Biology (2 units)
BIOL580D Biology Colloquium (1 unit)
BIOL598 Thesis (1-6 units)
BIOL599 Independent Graduate Research (1-6 units)

At least two graduate seminars (BIOL505T, BIOL517T, BIOL520T)
At least 9 units of coursework in their research area
In addition, the student must complete a thesis covering a research problem that is acceptable to the adviser and thesis committee, a final oral defense of the thesis, and a public presentation of the thesis research.

**Faculty Research Areas**

**1. Ecology and Evolutionary Biology**

This M.S. degree area allows students to gain experience in the research methods used to study the evolution and ecology of organisms found in terrestrial, freshwater and coastal ecosystems. Research is conducted on individual organisms, populations, communities and ecosystems, using statistical modeling, modern laboratory facilities and cutting-edge technologies and approaches in both the laboratory and field. Faculty members offer courses and active research experiences in taxonomy and phylogeny, vertebrate and invertebrate ecology, evolutionary ecology, biogeography, behavioral ecology, plant ecology, and conservation biology. Much of this research is conducted in the diverse natural environments of southern California, including research on threatened and endangered species and human impacts on these environments.

*Graduate faculty in ecology and evolutionary biology*: Joel Abraham, Jennifer Burnaford, Joshua Der, Douglas Eernisse, William Hoese, Michael Horn, William Presch, Darren Sandquist, Jochen Schenk, Parvin Shahrestani, Paul Stapp, Christopher Tracy, Sean Walker, and Ryan Walter.

**2. Marine Biology**

This M.S. degree area is designed to provide students with contemporary research skills and expertise in the study of marine organisms and ecosystems. Research in this area ranges from studies of the physiological and behavioral studies of individual organisms, to the phylogeography and evolution of marine taxa, to the conservation and management of coastal habitats and communities. In addition to our state-of-the art laboratory facilities, including an on-site saltwater aquarium system, students take advantage of the proximity of coastal marine habitats, ranging from wetlands and estuaries, rocky intertidal reefs, sandy shores, kelp forests, and soft-bottom systems to human-made harbors. Access to laboratory space in Los Angeles Harbor and use of several ocean-going vessels are provided through our affiliation with the CSU Ocean Studies Institute and the Southern California Marine Institute, which in turn provides opportunities for use of laboratory and living space at the University of Southern California's Wrigley Institute for Environmental Studies on Santa Catalina Island.

*Graduate faculty in marine biology*: Jennifer Burnaford, Kathryn Dickson, Douglas Eernisse, Kristy Forsgren, Michael Horn, Misty Paig-Tran, and Danielle Zacherl.

**3. Cell and Developmental Biology**

This M.S. degree area provides students with the opportunity to study animal and plant development, microbiology, cell signaling pathways, cytoskeleton dynamics, fertilization processes, cancer biology, stem cell biology, and neurobiology. Research is conducted at the level of the individual organism and at the cellular and molecular level. Campus facilities include modern laboratories with state-of-the-art instrumentation, in addition to facilities for animal and plant growth, mammalian tissue culture, and several types of microscopy, including confocal and both transmission and scanning electron microscopy. Most faculty members in this area participate in the Center for Applied Biotechnology Studies.

*Graduate faculty in cell and developmental biology*: Katie Brennan, Merri Lynn Casem, Esther Chen, Math Cuajungco, Kathryn Dickson, Alison Miyamoto and Nilay Patel.

**4. Molecular Biology and Biotechnology**

This M.S. degree area is designed for students seeking to develop skills and expertise to conduct molecular research using cutting-edge technologies to solve basic research problems relevant to genetics, medicine, agriculture and the environment. Emphasis is placed on molecular research in prokaryotic and eukaryotic organisms under the close guidance of a faculty mentor. Research areas include: environmental microbiology, bacterial virulence, pathogenesis, regulation of gene expression, plant environmental stress, and genetic recombination using the latest techniques in molecular biology, bioinformatics, gene manipulation and biotechnology. Most faculty members in this area participate in the Center for Applied Biotechnology Studies.

*Graduate faculty in molecular biology and biotechnology*: Esther Chen, Amybeth Cohen, Math Cuajungco, Joshua Der Veronica Jimenez Ortiz, Hope Johnson, Nikolas Nikolaidis, Nilay Patel, Maria Soledad Ramirez, Melanie Sacco, Parvin Shahrestani, Marcelo Tolmasky, and Ryan Walter.

**5. Biology Pedagogy Research**

This M.S. degree area is designed to produce graduates with an interdisciplinary background in biology and pedagogical research. Our students gain advanced expertise in a biological discipline as well as in educational theory and research methodologies. Graduates of our program are broadly trained in teaching and research processes and go on to Ph.D. programs or careers as community college instructors or K-12 teachers.

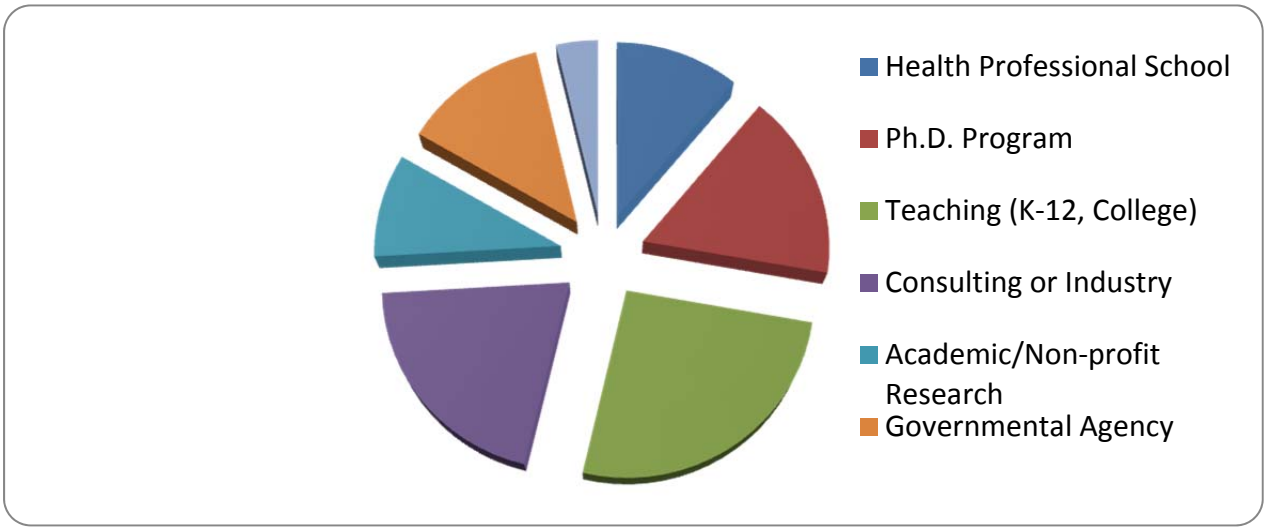
*Graduate faculty in biology pedagogy research*: Joel Abraham, Merri Lynn Casem, William Hoese, and Sean Walker.

**Financial Support**

The Department of Biological Science offers teaching associate and graduate assistant positions to virtually all of our graduate students. Grant-supported research assistantships may also be available. These positions and assistantships provide a basic salary that helps to meet the costs of a graduate education. In addition, a number of small scholarships are available each year. Non-resident tuition and fee waivers may be available for some out-of-state and foreign students. For additional information about financial aid, contact the Office of Financial Aid at (657) 278-3125 or www.fullerton.edu/financialaid/.

**Careers of Recent M.S. Biology Alumni**

Most of our M.S. graduates enter Ph.D. or health-professional programs, become primary or secondary teachers or college instructors, or take positions in industry, consulting or governmental agencies. [See diagram below.]




**For More Information**

To learn more about our Master of Science Program in Biology, contact the Biology Graduate Adviser by email at BioGradAdv@fullerton.edu or by calling the Biology department office at (657) 278-3614. You are also welcome to visit our department located in McCarthy Hall (MH) 282, or to write to: Biology Graduate Adviser, Department of Biological Science, California State University, Fullerton, 800 North State College Blvd., Fullerton, CA 92834-6850. Our website is www.fullerton.edu/biology/grads/.

## B. Frequently Asked Questions (FAQs)

- **How do I get keys?**
- **Will I have office space and a desk?**
- **How do I get work-related mail?**
- **Do I have an email account?**
- **How do I make photocopies and send faxes?**
- **Who are the primary departmental support staff and what are their roles in the department that pertain to graduate students?**
- **What other common resources and facilities are available in the department for graduate students?**
- **I was accepted into the graduate program with conditions. What does this mean?**
- **I've been awarded a teaching assistantship (TA). What is involved?**
- **What is BIOL500A/B?**
- **What is BIOL500C?**
- **What is BIOL500D and why is it required?**
- **What are variable unit courses (BIOL580/599/598) and how do I sign up for them?**
- **How many units should I take each semester?**
- **What funds are available to support my research?**
- **I heard that I need laboratory safety training to teach and work in a lab. How do I do this?**
- **I would like to use a departmental vehicle for my field research. How do I do this?**
- **My research will likely involve live, vertebrate animals or human subjects. Are there special policies and guidelines that I should know about?**
- **Can I borrow journals from the Pollak Library?**
- **What is the Biology Graduate Student Club (BGSC)?**
- **What other departments, offices and organizations should I know about?**

**How do I get keys?**
*Within a week of arriving on campus, ask your thesis adviser (or teaching supervisor) to submit a request for keys for you. This is done by completing a pink form (both top and bottom parts), which is located in the wall file near MH282A. Normally, you will be assigned a key to the outside door to the building (MH and/or DBH), a key to the department office, and key(s) to your research lab and office space. TAs may also be given keys to teaching labs. The form must be signed by a faculty member and submitted to Karen Lau. You must pick up your keys at University Police Department.*

**Will I have office space and a desk?**
*Many faculty members provide desk and work space for students in their research labs. All teaching assistants will have access to a desk, e.g. in the Graduate Student Office MH-328, where they can hold office hours with their students. If you are not a TA, desk space may be available elsewhere; ask your adviser or the Department Administrative Coordinator.*

**How do I get work-related mail?**
*Graduate students will usually have a mailbox in the Biology department office (MH-282). Mailboxes are organized into full-time faculty, staff, part-time faculty and graduate students, by the color of the name tag. Graduate students are further divided into TAs, GAs and students without department positions. Mail is delivered and picked up once a day, usually between 8-9 a.m. Off-campus mail must have a department mailing label and be placed in the blue mailbag. On-campus/intercampus mail is placed in manila envelopes in the wooden slot. Departmental mailing labels, envelopes and letterhead should be used for official departmental business only.*

**Will I have a university email account?**
*All registered students will have a university email account on the university server (csu.fullerton.edu) which will be assigned to you.* ***You should set it up as soon as possible and use this email account for all university-related business.*** *In addition, TAs will be given a faculty account to be used primarily for teaching-related correspondence (you will lose this account when you are not a TA or GA). The university has a wireless network that can be accessed via your student or faculty (TA) account. Information on accessing the wireless network is available at http://www.fullerton.edu/it/services/Networks/faq/wireless.asp.*

**How do I make photocopies and send faxes?**
*There are 2 photocopiers in MH-282. They are primarily dedicated to supporting teaching, office administration and faculty research, and require entry of a 4-digit code. TAs may be given a code for the courses they teach. Graduate students can make copies for their own personal/research purposes (ask Ernestine or Jeanne for the cost per page). Jeanne can assign you an account and access code, but the balance must be paid each semester.*

*The photocopier in MH282E is also a FAX machine and scanner. You can send personal faxes but must record all the information in the log (burgundy binder) near the machine, including the account to which the FAX should be billed. Personal faxes are billed at a rate of $1 per page. Instructions for using the fax machine are in the front of the burgundy binder.*

**Who are the primary departmental support staff and what are their roles in the department that pertain to graduate students?**

*Biology Graduate Adviser (biogradadv@fullerton.edu)*
- *<u>not</u> staff, but a full-time faculty member who coordinates the M.S. in Biology*
- *may change between semesters; check in the department office*
- *often teaches BIOL500A/B; signs many departmental forms*

*Karen Lau (MH-282; X2461, klau@fullerton.edu)*
- *serves as Department Administrative Coordinator*
- *along with Biology Graduate Adviser, coordinates graduate program*
- *hires and schedules GAs, TAs and part-time instructors*
- *handles salmon forms for enrollment in BIOL580/598/599*
- *handles key requests*

*Jeanne Crawford (MH-282; X4227, jcrawford@fullerton.edu)*
- *handles incoming graduate applications*
- *schedules Biology classrooms, e.g. MH282-A, MH-289*

*- responsible for correspondence and postings of department seminars*
*- receives completed forms related to academic field trips*
*- orders textbooks and IT-related requests*

*Ernestine Hood (MH-282; X4234, ehood@fullerton.edu)*
*- assigns TA work space in MH 328*
*- schedules teaching evaluations*

*Dayna Melton (MH-377; X2780, dmelton@fullerton.edu)*
*- oversees operations of Stockroom, including purchasing supplies*
*- oversees budget and dispersion of state funds, including departmental research funds awarded to students*

*Michele Garden (MH-310; X5543, mgarden@fullerton.edu)*
*- Instructional Support Technician for non-majors general biology courses*
*- oversees use and checkout of departmental vehicles and driver's training*

*Dawn Hendricks (MH-310; X2703, dhendricks@fullerton.edu)*
*- Instructional Support Technician for BIOL171, 274*

*Trung Nguyen (MH-319A; X2460, trnguyen@fullerton.edu)*
*- IT support for classroom and research laboratory computers*
*- manages departmental servers*

*Vincent Nguyen (MH-354A; X4096, vknguyen@fullerton.edu)*
*- Instructional Support Technician for BIOL172, 202, 273 and 302*

*Irene Ecarma-Robinson (MH-354A; X2130, iecarma@fullerton.edu)*
*- Instructional Support Technician for BIOL172, 362 and 424*

*John Luong (MH-003A); X2463, jluong@fullerton.edu)*
*- maintenance and repair of department equipment*
*- helps design and build research tools and equipment*
*- serves as the Department Safety Coordinator*

*Ed Read (Greenhouse Complex; X2766, eread@fullerton.edu)*
*- manages operations and maintenance of department greenhouse*
*- provides plants used in some courses*

*Steve Karl (MH-013; X2565, skarl@fullerton.edu)*
*- supervises use of confocal, electron and fluorescence microscopes*
*- repairs and maintains teaching and research microscopes*
*- assists with set-up of physiology labs*

*John Chappell (MH-513A; X5388, jchappell@fullerton.edu)*
*- oversees all laboratory animal care and use, including use of animal rooms*
*- responsible for vertebrate and marine animals used in courses*
*- serves on university Institutional Animal Care and Use Committee*

**What other common resources and facilities are available in the department for graduate students?**

*Office supplies (MH-282 locked cabinets; available to TAs/GAs)*
*Ice machines (located in MH-385 and DBH-161A)*
*Dry ice (DBH-143)*
*Liquid nitrogen (DBH-143, DBH-161A; contact Beena Matthews in Chemistry X3509)*
*Autoclaves (MH-385, DBH-143, DBH-172; contact Dayna Melton for use)*
*Poster Printing Room (MH-385A)*
*Stockroom (MH-377; Dayna Melton)*
*Greenhouse Complex*
    *Greenhouse Facilities (contact Ed Read)*
    *Marine Storage Shed (contact Danielle Zacherl)*
    *Storage containers for field gear*
*Herbarium (MH-229; contact Jochen Schenk)*
*Vertebrate and Invertebrate Teaching Collections (MH-207 complex; MH-237; contact Paul Stapp or Sean Walker, respectively)*
*Conference Room (MH-282A; contact Jeanne Crawford to schedule)*
*Computer Laboratory (MH-289; contact Jeanne Crawford to schedule)*
*Numerous Animal Rooms and Facilities in MH and DBH (contact John Chappell)*

**I was accepted into the graduate program with conditions. What does this mean?**
*Many of our students enter the program lacking one or more of the key requirements for admission in the program. Sometimes scores on the GRE or a comparable exam are considered too low. In other cases, a student's GPA is low or he/she is missing coursework that is deemed by the evaluation committee to be important preparatory work for entry into the program. In such cases, the Biology Graduate Adviser will indicate these conditions on the acceptance letter and describe what must be done to remove them. Conditions must be removed within 1 or, at most, 2 semesters of entry into the program and must be removed for a student to attain "classified" standing. Failure to meet these conditions in the specified time period may result in a hold being placed on your registration, administrative probation and ultimately disqualification from the program.*

**I've been awarded a teaching assistantship. What is involved?**
*Teaching and graduate assistantships (TAs, GAs) are available to students who have met their conditions of admission and are qualified to work in courses for which assistants are needed. When you applied for admission, you were asked to list some of the courses that you were interested in teaching. The department makes every attempt to have TAs and GAs work in their area of specialty or in non-majors courses such as BIOL101. TAs are assigned to courses based on the needs of the department, requests by full-time faculty, and the requests of TAs. If there is a course you would like to teach and you are qualified, contact the faculty member in charge to see if there are any openings, and request the course when you receive the survey towards the end of the semester. Note that your thesis adviser will have to approve your teaching assignment each semester to ensure that your total workload is not too heavy.*

*Expectations of TAs and GAs vary among courses and instructors. Many courses have written statements of expectations, including specific policies for participating in lectures, grading, handling student issues, etc. Most courses with large enrollments have mandatory weekly*

*TA/GA prep meetings, and have lab coordinators (staff), with whom you will sometimes work closely to prepare for lab.*

**What is BIOL500A/B?**
*BIOL500A and BIOL500B (Professional Aspects of Biology) are 2 courses taught back-to-back, usually on Mondays, that serve several important functions. First, they introduce new students to the department and its policies pertaining to graduate students. Second, it is the primary mechanism by which students develop their Study Plan (a list of courses that the student will take during their program, which must be approved at the end of BIOL500A/B to attain "classified" standing) and their Research Proposal. Third, it helps students develop professional skills, including using library resources, writing research proposals, and giving oral and poster presentations (it also meets the university writing requirement). Finally, it helps students forge peer relationships that they can depend on throughout their program.*

*New M.S. students enroll in BIOL500A and BIOL500B in their first or second semester on campus, usually as specified in their acceptance letter. Note that a maximum of 9 units taken prior to being "classified", i.e., prior to successful completion of BIOL500A/B, can be counted toward your Study Plan, so it is important to complete BIOL500A/B as soon as possible.*

**What is BIOL500C?**
*BIOL500C is Professional Aspects of Biology: Teaching Effectiveness. All TAs must have completed or be concurrently enrolled in BIOL500C to teach in the department. BIOL500C meets on Thursday and Friday the week before instruction begins for a given term. At that time, students will also receive training in laboratory safety from Environmental Health and Instructional Safety, which is required of all instructors.*

**What is BIOL580D and why is it required?**
*Effective Fall 2009, all graduate students in the M.S. Program in Biology must enroll in and pass, with a grade of B or better, 1 unit of BIOL580D Biology Colloquium once during their program. Students attend weekly department seminars, with topics ranging widely from biochemistry, cellular and molecular biology, to evolution, ecosystem science and conservation biology, and are required to write short synopses and read scholarly papers related to a subset of the seminars they attend. Students are expected to take BIOL580D early in their program, when they would benefit most from exposure to the diverse and multidisciplinary nature of biology, and will help them develop a sense of departmental citizenship and collegiality. They should also attend department seminars when they are not enrolled in BIOL580D.*

**What are variable-unit courses (BIOL580/598/599) and how do I sign up for them?**
*Most graduate students enroll in one or more of the variable-unit courses each semester that they are taking classes or doing research. These courses allow students to earn credit for work related to your graduate studies and allow your thesis adviser and the department to get credit for the time and resources that they dedicate to you each semester. Enrollment in at least one of the variable-unit courses (usually BIOL599) is required to work in a lab and to use a departmental vehicle for research purposes. It also makes students eligible for departmental research funds. BIOL580 is used by many faculty members to give credit for a student's participation in lab and individual meetings, library-based research or writing, or presentation of a paper or poster at a scientific meeting. Students can only count a maximum of 1 unit of BIOL580 on their Study Plans, which must be graded using the traditional scale (A-F). Many*

*students take BIOL580 each semester and, except for the 1 unit that they may have on their Study Plans, BIOL580 can be taken Credit/No Credit (CR/NC). BIOL598 Thesis is intended to be taken by students during the completion of their theses, after the 1st Committee Meeting and normally during their final semesters in the program.*

*You must meet with your adviser each semester to discuss which courses to take and for how many units (as per the University catalog, a maximum of 3 units of each course can be taken in a given semester), and for BIOL580, whether to take the course CR/NC. Before you can enroll online, you must first complete a Graduate Student Advising Form (salmon-colored) available in the department office, which must be signed by the thesis adviser and the Biology Graduate Adviser. For BIOL599, you must also complete an outline of research work to be done during the upcoming semester. You will be given a permit to enroll, which must be done online no later than the end of the first 2 weeks of the semester. Be sure to use the correct course schedule number associated with your thesis adviser.* ***The Graduate Student Advising Form must be completed and signed to remove your registration hold for all courses.*** *If you plan to take 400-level courses, you should register as early as possible because these courses may fill up quickly with undergraduates.*

*IMPORTANT: You cannot enroll in more units of BIOL598 than are on your Study Plan and cannot enroll in more than 6 units of BIOL598 during your graduate program. Effective Fall 2011, students also cannot take more than a total of 8 units of BIOL580 and 12 units of BIOL599. Consider these limits carefully when planning your coursework each semester.*

**How many units should I take each semester?**
*The number of units you take will be determined in consultation with your thesis adviser and is based on the courses on your Study Plan and the type and amount of work you are doing toward your research.* ***Note that all graduate students must be advised by their thesis advisers, using the same Graduate Student Advising Form used for enrolling in variable-unit courses, prior to enrollment each semester to remove a registration hold.*** *The minimum number of units you must take to maintain continuous enrollment is 1 unit.*

*When you have completed all of the units listed on your Study Plan; successfully completed your research and your 1st and 2nd committee meetings; have applied for graduation; and have only to complete your thesis and defense, you may enroll in GRAD(Graduate Studies)700 through Extended Education (see pp. 34-35 for procedures). This option is designed to allow students who have left campus to maintain continuous enrollment status without paying full fees. Students enrolled in GRAD700 in this way have no university benefits except library privileges, and usually will not be eligible for teaching assistantships or other departmental support. Enrollment in GRAD700 must be approved by your thesis adviser and the Biology Graduate Adviser.*

**What funds are available to support my research?**
*Your thesis adviser and the more senior graduate students in your lab and the department will be the best sources of information on grants, scholarships and other funding opportunities available to support research in your discipline. Websites of the Office of Financial Aid (http://www.fullerton.edu/financialaid/scholar/scholarships_default.htm) and the College of Natural Sciences and Mathematics (http://nsm.fullerton.edu/) provide information on scholarships and aid programs at the college and university level. Most applications are due in early Spring semester.* ***Note that if you qualify and plan to apply for U.S. Federal Financial***

***Aid, you should submit your completed FAFSA by 1 March for priority access to both grants and loans for the coming year.***

*In most semesters, the department often makes available limited funds ($150-200) to support student research. Requests for short proposals for these funds are solicited in the middle of the semester from the Biology Graduate Adviser. Awarded funds are administered by Dayna Melton.*

*The College of Natural Sciences and Mathematics InterClub Council coordinates the allocation of student body-generated funds (ASI) for graduate student travel, especially to present papers at scientific meetings. ASI also awards small grants (up to $450) to students that can be used for research supplies; applications are due in Fall semester. Contact one of the Biology Graduate Student Club (BGSC) officers for more information on how to apply.*

**I heard that I need laboratory safety training to teach and work in a lab. How do I do this?**
*All students working in laboratories or in the field, and all teaching associates, are required to attend a laboratory safety training course taught by Environmental Health and Instructional Safety. New students who are TAs will receive this training during BIOL500C. Other sessions are held during the semester. Look for poster announcements or contact Cari Elofson in EHIS (X8673) for dates of other training sessions.*

**I would like to use a departmental vehicle for my field research. How do I do this?**
*The department has specific policies and procedures regarding the use of its departmental vehicles, and for taking field trips, which includes independent research conducted by graduate students. These procedures are outlined in 2 separate documents that are available on the departmental website:*

- *Policy on Departmental Vehicle Use*
- *Guidelines and Procedures for Academic Field Trips*

*To drive a vehicle on university business, you must be a state employee (TA or GA) or registered as a Volunteer. You also must have all the necessary paperwork (several forms) on file with Michele Garden. To use your own vehicle on state business, you must also complete an Authorization to Use Private Vehicle Form. If you plan to drive unsupervised, e.g. for your research, you must also be enrolled in BIOL599. Additional forms are required for course-related field trips. If you plan to travel for research or course field trips often, you should complete the necessary paperwork with Michele as soon as possible upon arriving on campus. See those documents for more information.*

*Departmental vehicles are reserved by signing them out in the Stockroom (we hope to move to an electronic calendar sign-out soon). You must be approved as a driver to use a vehicle. You must give your contact information and list your and your thesis adviser's name on the sign-out sheet. Be sure you read and understand the policies regarding reserving and using the vehicles.*

**My research likely involves live vertebrate animals or human subjects. Are there special policies and guidelines that I should know about?**
*If your M.S. thesis research involves human participants or live, vertebrate animals, you must obtain the proper approval for their use based on federal regulations and University policy. Before conducting the research, the project must have received approval from the Institutional*

*Review Board (IRB) for human participants or the Institutional Animal Care and Use Committee (IACUC) for live, vertebrate animals. If you plan to use human participants or animal subjects in your research, first check with your thesis adviser to find out if he or she has already received approval for your work. If not, you can find valuable information the IRB or IACUC application process and the forms you will need at http://ogcerv.fullerton.edu, under Rules and Regulations. If you have further questions, please contact the Office of Grants and Contracts in CP-205 (X2106).*

**Can I borrow journals from the Pollak Library?**

*The Pollak Library has a wide range of academic journals, many of which are available online (see the library website: http://library.fullerton.edu/). There also are a variety of searchable databases through the library, as well as the ILIAD and LINK+ inter-library loan programs for borrowing materials from other institutions. To make photocopies at the library, you must purchase a copy card and use their temperamental copy machines. Copies are also more expensive than in the departmental office. Anyone with a CSUF Faculty/Staff ID can check out journals for 24 hours; this is done at the Periodicals Desk on the 2nd floor. Faculty can also authorize, by proxy, students who are not faculty/staff to check out journals by completing a "proxy authorization form" available from the Circulation Desk on the 1st floor.*

**What is the Biology Graduate Student Club (BGSC)?**

*The Biology Graduate Student Club is a student organization that serves graduate students in the Department of Biological Science by hosting seminar speakers, coordinating social events, running the snack shop in MH-280, and increasing communication between students and other members of the department. Contact one of the officers for more information about the club, events, and how to become involved.*

**What other departments, offices and organizations should I know about?**

*Graduate Studies Office (X2618)*
*Office of Financial Aid (X3125)*
*Office of Grants and Contracts (X2106)*
*Auxiliary Services Corporation (X3415)*
*Office of Environmental Health and Instructional Safety (X2733)*
*NSM InterClub Council*
*Titan Student Union and Associated Students of CSUF, Incorporated (ASI)*
*Student Health and Counseling Center (including CAPS, X2800)*

## C. Policy of Good Standing

Graduate students must remain in good standing throughout their M.S. degree program. To be in good standing, a graduate student must:

1. Be in compliance with the "Graduate Academic Standards" listed in the University Catalog. Requirements include:
    a. Maintaining a grade-point average of at least 3.0 (B) in coursework on the Graduate Study Plan (GSP) and in all 400- and 500-level courses attempted as a graduate student. A student also must earn a minimum grade of C (2.0) in each course listed on his/her GSP.
    b. Repeating a course in which an unsatisfactory grade (less than C) was received no more than once.
    c. Making timely progress in completing the coursework portion of the GSP within 5 years (7 years if a petition to the Graduate Studies Office is approved), starting with the earliest course listed on the GSP. After this time limit, courses on the GSP may become outdated and the student will have to either replace outdated courses with new ones or petition to validate outdated courses (a maximum of 9 units can be validated; petition form available from Graduate Studies Office).
    d. Maintaining continuous enrollment except by approved Leave of Absence.
    e. Demonstrating a level of professional competence commensurate with the standards of Biological Science in all teaching and research activities (also see 2 below).
    f. Not engaging in Academic Dishonesty (see "University Regulations" in the Catalog).
    g. Not engaging in inappropriate behavior as defined in the catalog under "Student Conduct".

2. Be in compliance with the standards of the Master of Biology Program (these may be more restrictive than University policies). Requirements include:
    a. Satisfying the conditions for admission to the Master's Program.
    b. Achieving classified status (by submitting a signed GSP to the Graduate Studies Office) within 2 semesters of entering the program.
    c. Completing the graduate writing requirement (by earning a grade of B or better in BIOL500A/B) within 2 semesters of entering the program.
    d. Maintaining a productive working relationship with a thesis adviser, including timely progress on the research project that is satisfactory to the thesis adviser and thesis committee.

If a student fails to maintain these standards, the Biology Graduate Adviser will recommend that the Office of Graduate Studies place the student on Academic and/or Administrative-Academic Probation, which could lead to disqualification from the program (consult Graduate Studies http://www.fullerton.edu/graduate/currentstudents/academicstandards.html for policies and procedures). Any student on probation must meet with the Biology Graduate Program Adviser before being allowed to register for classes the following semester.

## D. M.S. in Biology Program Overview

Although each student's degree program will be different, there are several key milestones shared by all students in the M.S. in Biology Program. The following pages describe the process of completing a **Graduate Study Plan** (GSP; pp. 16-17), which is the list of courses to be taken. Completion of the GSP is required to attain **"classified"** standing. For most students, this will be accomplished as part of the requirements of **BIOL500A/B** during the first or second semester in residence. In these courses, you will also develop a draft of your **Research Proposal**, which will serve as the framework for your thesis research. As described on the following pages (pp. 18-33), you will have at least 2 **Thesis Committee Meetings**, where you will discuss your research plan and your progress. Your degree program will culminate in your preparing a **written Thesis**, having an **oral Thesis Defense** before your adviser and committee, and giving a public **Oral Presentation** on your thesis research. The entire process is designed to take ~2 years, but many students take longer, often because they underestimate the time required to complete a research project and write a thesis. **It is your responsibility to maintain steady progress on research, including holding committee meetings, to keep track of coursework requirements on your GSP, and to remain in good standing (p. 14) in both the program and university.**

The timeline below is intended as an approximate guide to meeting these milestones, based on deadlines in the Graduate Thesis Committee and Thesis Guidelines below. Another timeline (pp. 28-29) lays out the final steps toward completing your degree. The timeline below is anchored on the semester you take BIOL500A/B because several key events are associated with completion of these courses. The plan here describes a student who enters the program in Fall semester and takes BIOL500A/B their first term; students who take BIOL500A/B in their second semester would modify their plan accordingly. Coursework, including variable-unit courses, is usually taken throughout the program, depending on a student's GSP.

| **Term** | **Event** | **Outcomes** |
|---|---|---|
| Semester 1 | BIOL500A/B | Study Plan, Research Proposal, Thesis Committee formed, "classified" status |
| Semester 2 | 1st Thesis Committee Meeting | Research |
| *Summer 1* | | *Research* |
| Semester 3 | | Research |
| Semester 4* | 2nd Thesis Committee Meeting | Research/ Data Analysis/ Thesis Writing |
| *Summer 2* | | *Research/ Data Analysis/ Thesis Writing* |
| Semester 5 | Thesis Defense and Presentation | Degree program completed |
| Semester 6* | | |

*** Regardless of when you complete BIOL500A/B, you must have your 1st Committee Meeting by your 4th semester in residence and your 2nd Committee Meeting by your 6th semester in residence or risk administrative academic probation and disqualification.**

## E. Graduate Study Plan

**Guidelines and Procedures:** Every student is to prepare a Graduate Study Plan (GSP) during BIOL500A/B and submit the form for approval before 13 units of coursework have been completed (see form on next page). Students fill in the GREEN draft form, obtain the signature of their thesis adviser, and submit it to the instructor of BIOL500A/B for approval. List the 3 (or more) members of your thesis committee on the form (be sure that they have agreed to serve on your committee before listing them on the form). Their signatures will be required on the final copy to be submitted to the Graduate Studies Office. The approved copy is then submitted to the Department Administrative Coordinator, who will prepare the official document (on white paper) and circulate it among your committee members. When you have completed all conditions of admission (e.g. coursework, GRE scores), the Graduate Program Adviser signs the final GSP and then sends it to the Graduate Studies Office. Once the Graduate Studies Office reviews and approves the GSP, you become a "classified" graduate student. You may not graduate from a CSUF Master's degree program unless classified standing has been achieved.

**Checklist for completion of the Graduate Study Plan:**

- ✓ Have you decided on your GSP courses after careful consultation with your thesis adviser, including consideration of when courses will be offered?
- ✓ Does your GSP list the courses that best prepare you for your thesis research and professional development?
- ✓ Do you have a total of 30 units, of which at least half (15) are at the 500-level?
- ✓ Does your GSP include BIOL500A and 500B, which meet the Graduate Writing Requirement?
- ✓ Have you listed at least 2 seminar courses, e.g. BIOL505T, 517T, or 520T (6 units)? Additional seminar courses can be used to meet the 30-unit requirement.
- ✓ Have you listed BIOL580D Biology Colloquium, which is usually taken during your 1st year? No more than 1 unit of BIOL580 (elective) may be listed on your GSP.
- ✓ Did you list some BIOL598 and 599 units without exceeding the maximum number of units allowed (6 each) for these 2 courses? [Note: You **cannot** enroll in more than the number of units of BIOL598 listed on your GSP during your time as a graduate student at CSUF. Effective Fall 2011, you may enroll in a maximum of 8 units of BIOL580 and 12 units of BIOL599 during your program. Only units (and grades) listed on your GSP will be counted toward your degree.]

**Note:** Your GSP will list any conditions of acceptance that must be met before you can be "classified" (these were indicated on your acceptance letter). It is your responsibility to meet these conditions by the deadlines listed (usually within 2 semesters of admittance), and to keep your thesis adviser and committee informed of the status of these conditions.

# CALIFORNIA STATE UNIVERSITY, FULLERTON

**Department of Biological Science**
College of Natural Sciences & Mathematics
McCarthy Hall-282
800 N. State College Blvd., Fullerton, CA 92831 / T 657-278-3614 / F 657-278-3426 / http://biology.fullerton.edu

**Study Plan** **Master of Science in Biology**

Name _____ CWID _____ Date _____
Address _____ Home Phone _____
_____ ZIP _____ Work Phone _____
E-mail Address _____

The following preclassification requirements have been met:

1. BA ☐ BS ☐ Other ☐ from _____ Month/Year _____
2. ☐ An undergraduate major in Biology OR
   ☐ Related area at California State University, Fullerton or other accredited institution.
   Related Major: _____
3. ☐ Minimum GPA of 3.0 in Biology courses and 2.5 in undergraduate supporting courses (Chemistry, Math, Physics) OR
   ☐ Deficiency(ies) removed by meeting the Condition(s) of Admission as specified in the acceptance letter: _____
4. Acceptance by a thesis adviser.
5. Satisfactory scores (a) GRE : V ____ Q____ A____ OR (b) MCAT ___ OR (c) DAT ____
6. Two letters of recommendation.
7. Writing Requirement has been met by Biology 500A,B.

Signed _____ Date _____
**Biology** Graduate Program Adviser

**ALL STATE AND UNIVERSITY REQUIREMENTS ARE TO BE MET INCLUDING FIVE-YEAR LIMIT**

| *Study Plan Requirements* | *Units* | *Grade* | *Sem/Yr* | *Comments* |
|---|---|---|---|---|
| ***REQUIRED COURSES:*** | | | | |
| BIOL 500A, B Professional Aspects of Biology | 1,1 | | | |
| BIOL 580D Biology Colloquium | 1 | | | |
| ***GRADUATE SEMINARS*** (6 units) | | | | |
| | | | | |
| | | | | |
| **400/500 level courses** (minimum of 9 units; maximum 1 units of BIOL 580) | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| ***BIOL 598 THESIS*** | | | | |
| (1-6 units) ( ) | | | | |
| ***BIOL 599 INDEPENDENT GRAD RESEARCH*** | | | | |
| (1-6 units) ( ) | | | | |
| TOTAL UNITS REQUIRED | 30 | | (Minimum one-half 500-level) | |

CLASSIFIED STANDING recommended by committee (prerequisites met and Study Plan approved):
Faculty Thesis Adviser _____ Date _____
Members _____
**Biology** Graduate Program Adviser _____ Date _____
Reviewed in Graduate Office by _____ Date _____
CLASSIFIED GRADUATE STANDING _____ Date _____
Associate Vice President, Academic Programs

PC 3/4/10 Rec'd Graduate Studies Office: Copies Sent:

# II. Graduate Thesis Committee and Thesis Guidelines

**(effective Fall 2005; approved 5/20/05; last revised 2/1/2011)**

## A. Guidelines for the First Thesis Committee Meeting

The **purpose** of the first committee meeting is for the student to present and discuss his/her proposal for the thesis research project, and to obtain agreement from the committee that it is a reasonable thesis project to pursue. The meeting should be designed to ensure the soundness and feasibility of the thesis research design and ideally will provide the opportunity for the student to make necessary changes in the direction of the research in its early stages. It also is an opportunity for the committee to outline the expectations for completion of the thesis project and the student's degree program.

The **outcome** of the meeting will be approval of the proposal as presented or committee recommendations for modifications, which, if substantive, may require an additional committee meeting.

**It is expected that the first committee meeting will occur in the semester after the student has completed BIOL500A/B (Professional Aspects of Biology)**. Barring unforeseen circumstances, the student shall have his/her first committee meeting no later than the end of the 4th semester. If a student does not complete this requirement, he/she may be placed on administrative academic probation and may be disqualified from the MS program after 1 semester on probation.

1. Selecting your Thesis Committee and Preparing for the First Committee Meeting:

The student shall have selected his/her committee members in consultation with the thesis adviser and obtained consent of the committee members to serve. The committee shall consist of the thesis adviser plus a minimum of 2 additional CSUF faculty members, at least 1 of which must be from the Department of Biological Science. Additional committee members (usually only 1) can be added at the adviser's discretion. This member may be external to the Department or to the University.

The student shall obtain permission from his/her adviser before scheduling the first committee meeting.

Normally, the student will have successfully completed BIOL500A/B, will have an approved Study Plan, and the thesis proposal produced in BIOL500A/B will have been revised and expanded. The thesis proposal prepared for the first committee meeting will follow BIOL500A/B proposal guidelines. [Note: The format for thesis research proposals can be found on our website www.fullerton.edu/biology/grads/.]

A copy of the adviser-approved thesis proposal should be given to all committee members **2 weeks** before the first committee meeting.

The student will prepare an oral presentation (~15-30 minutes) and review this presentation with the thesis adviser prior to the meeting. It is expected that each committee member will critically

read the thesis proposal prior to the meeting. If a committee member finds major problems with the proposal, he/she should attempt to discuss these with the adviser and student before the meeting.

The student is responsible for scheduling the meeting (place and time), and the adviser will guide the student in how to go about scheduling this meeting. There is no expectation that the student will provide refreshments for the committee.

2. The First Committee Meeting:

The meeting will begin with an oral presentation (~15-30 minutes) on the proposed research by the student. Questions from the committee will focus on the proposed research, experimental design, and the conceptual background relevant to the thesis project. The student should be able to establish that the project is feasible and that he/she is prepared to undertake the project successfully.

The committee members also will review the Study Plan and, if necessary, suggest changes.

The first committee meeting should last no more than 2 hours. It will conclude with an agreement between the adviser, committee members, and student regarding the proposal, determined by consensus of the committee. The outcome and committee recommendations will be recorded on the appropriate form. The possible outcomes are:

a. Project approval by committee (the proposal represents an appropriate and feasible/realistic project to obtain a M.S. thesis);

b. Project approval by committee with modifications of the thesis proposal, not requiring a second meeting; or

c. Substantive modifications of thesis proposal requiring an additional committee meeting.

The thesis adviser will (a) summarize the recommendations of the committee on the form and return the form to the Biology Department Administrative Coordinator who will record the outcome and place the form in the student's file; (b) discuss with the student the recommendations of the committee and how to implement them; and (c) ensure that the student has an action plan for completing the research.

3. After the First Committee Meeting:

Once the proposal is approved by the committee, the thesis adviser will monitor the student's progress to ensure satisfactory progress towards the degree and help solve any problems encountered. If substantive modifications were required at the first committee meeting (see outcome 3 above), the adviser should ensure that the student makes them in a timely fashion so that a revised proposal can be presented to the committee for approval.

If, after consultation with the thesis adviser, the student and adviser decide that the proposed thesis project is not feasible, modifications to the project will have to be made. Depending on

the magnitude of the changes, they should be discussed with committee members and/or the student must schedule another committee meeting to present and discuss the new project.

## B. Change of Adviser and Replacement/Addition of Committee Members

If a student wishes to change his/her thesis adviser or committee members, the student should first discuss this with the thesis adviser. If there is an irresolvable conflict, the student also should discuss the situation with the Biology Graduate Adviser. If a student decides to change advisers, he/she must (a) find a new adviser who agrees to serve and (b) repeat the procedures for the first committee meeting. The Biology Graduate Adviser (or his/her designee) will serve as the student's interim adviser and assist the student in identifying a new adviser. A memo from the Graduate Adviser noting the change in adviser should be added to the student's file. If a student cannot find a new adviser within 1 academic semester (summer not included) after changing advisers, the student will be subject to removal from the graduate program.

If a committee member is to be added or replaced by another after the first committee meeting, the student shall first obtain the thesis adviser's approval of the need for addition or replacement and then the adviser's approval of the new committee member. The student shall first ensure that any committee member to be replaced is notified and then obtain consent from the new committee member to serve. The new committee member should then be supplied with a copy of the approved thesis proposal. The student should either meet with the committee member to discuss the proposed thesis research or convene another committee meeting depending on the wishes of the new committee member.

For any changes to the composition of the thesis committee, the Study Plan must be revised and the revised form must be signed by the thesis adviser and Biology Graduate Adviser (form is available from the Administrative Coordinator). A copy of the revised Study Plan will be placed in the student's file and sent to the Graduate Studies Office.

## C. Guidelines for the Second Thesis Committee Meeting

The **purpose** of the second committee meeting is for the student to present the data gathered and progress made for the thesis project to date, and to obtain agreement from the committee (1) that research plans for the remaining parts of the project are appropriate and feasible, and (2) for an approximate timeline for finishing and defending the thesis. The meeting will provide the opportunity for the student to make necessary changes and will be an opportunity for the committee to outline the expectations for the completion and oral defense of the written thesis.

The **outcome** of the meeting will be approval of the progress report, thesis research plan, and approximate timeline as presented, or committee recommendations for modifications. If major modifications are recommended, or if research progress has been insufficient as determined by the consensus of the committee, then an additional committee meeting may be required with the same purpose as that of the second committee meeting.

**It is expected that the second committee meeting will occur by the 3rd semester after the student has completed BIOL500A/B**. Barring unforeseen circumstances, it is expected that the

student will have his/her second committee meeting prior to the end of the 6th semester after entering the program. If a student does not complete this requirement, he/she risks being placed on administrative probation and may be disqualified from the M.S. program after 1 semester on probation. Because of the amount of time required for data analysis and thesis writing (see Timeline in Part E. below), the second committee meeting should not occur in the same semester as the thesis defense, or late in the spring semester if a summer thesis defense is planned.

1. Preparing for the Second Committee Meeting:

The student shall obtain permission from his/her adviser before scheduling the second committee meeting.

Normally, the student will have made substantial progress with the research plan agreed upon during the previous committee meeting and will have collected a substantial amount of data. The student will prepare a thesis progress report of at least 2 pages in length plus appended data tables or figures as appropriate. This progress report should include a brief review of the conceptual background, hypotheses and rationale, experimental design, materials and methods, and results to date. The student should also prepare an expected timeline for completion of the thesis research. A copy of the adviser-approved thesis progress report and timeline for completion should be given to all committee members **2 weeks** before the meeting.

The student will prepare an oral presentation (~15-30 minute) focusing on the data collected to date and will review this presentation with the thesis adviser prior to the meeting. It is expected that each committee member will critically read the thesis progress report prior to the meeting. If a committee member finds major problems with the thesis progress report, he/she should attempt to discuss these with the adviser and student before the meeting.

The student is responsible for scheduling the meeting (place and time). There is no expectation that the student will provide refreshments for the committee.

2. The Second Committee Meeting:

The meeting should begin with an oral presentation (~15-30 minute) by the student on the research that has been completed to date and the plan to complete the thesis project. Questions from the committee should focus on the research progress, methods, and data analysis. The student should review the research progress that has been made and be able to discuss plans for the remaining research and data analysis.

The committee members will review the timeline for finishing the degree, progress made on the research and the Study Plan and, if necessary, suggest changes to be made.

The committee will outline the expectations for the completion of the thesis project, oral defense of the written thesis, and the public presentation, and will discuss the format and potential subject areas for the oral defense. The area of concentration for the thesis defense will be identified. This will focus on the area of the thesis research but also will encompass related subject matter.

The second committee meeting should last no more than 2 hours. It will conclude with an agreement between the adviser, committee members, and student regarding the remaining research plan and approximate timeline for finishing the thesis, determined by consensus of the committee. The outcome and committee recommendations will be recorded on the appropriate form. **The possible outcomes are**:

a. Approval by the committee of the thesis project and plans for the project's completion, including the projected timeline;

b. Approval by the committee of the thesis project and the plans for its completion with minor modifications (including a revision of the timeline), but not requiring an additional committee meeting; or

c. Substantive modifications of the thesis research plan requiring additional and substantial data gathering or major modifications in methods of data analysis. Such modifications will require a revision of the plan for completion, including the projected timeline, and an additional committee meeting.

The thesis adviser will (a) summarize the recommendations of the committee on the form and return the form to the Biology Department Administrative Coordinator who will record the outcome and place the form in the student's file; (b) discuss with the student the recommendations of the committee and how to implement them; and (c) ensure that the student has an action plan for completing the research, including a timeline for completion.

3. After the Second Committee Meeting:

Once the research plan and timeline have been approved by the committee, the thesis adviser will monitor the student's work to ensure satisfactory progress towards the degree and help solve any problems encountered. If modifications in the research plan were required at the second committee meeting, the Adviser should ensure that the student makes them in a timely fashion.

If, after consultation with the thesis adviser, the student and adviser decide that the research plan that was approved at the second committee meeting is not feasible, modifications in the project and/or in the timeline will have to be made. Depending on the magnitude of the changes, they should be discussed with the committee and/or the student must schedule another committee meeting to present and discuss the modifications to the project and/or the timeline.

**Assuming that the student has made good progress toward his/her degree, the student should officially file for a Graduation Check (forms available at Admissions and Records LH-114). This must be completed several months in advance of the expected graduation date (usually early January for spring or summer graduation; early August for winter).**

## D. Guidelines for the Thesis Defense and Public Presentation

The **purpose** of the thesis defense and the public presentation is for the student to demonstrate his/her competency on the subject matter of the thesis and to fulfill university requirements for a culminating experience for the M.S. degree. University requirements specify that each graduate program is to include a final evaluation or culminating experience that marks the end of the program. In Biology, the culminating experience consists of the following:

a. Completion of a research thesis acceptable to the adviser and committee;

b. Satisfactory performance on an oral examination commonly known as the thesis defense; and

c. A public presentation of the thesis.

At this time, the student should check to ensure that he/she has officially filed for the expected date of graduation (submitted graduation check paperwork) and that his/her study plan is complete and no outstanding grades (e.g., SP, RP, or I) remain.

Preparing for the Thesis Defense:

By the second committee meeting, the student and his/her committee will have identified an area of concentration that will serve as the basis for the thesis defense. This area will be centered on the thesis research but also will encompass related subject matter as determined by the thesis committee. The student should discuss how to prepare for the defense and the public presentation with his/her adviser. It is especially important that the student prepare for the thesis defense so that he/she can demonstrate the extent of his/her knowledge and understanding of the area of concentration.

There will be 2 routes (A and B) for completing the Thesis Defense and Public Presentation. The route selected will be at the discretion of the adviser, in consultation with the student. Regardless of the route chosen, **it is the responsibility of the student to submit an electronic copy of the completed Thesis Defense and Oral Presentation Notice Form (p. 33), with the title of the defense and the scheduled date, time and location, to the Department Administrative Coordinator at least 5 working days prior to the date of the defense or presentation.** An electronic copy of this form is available from the Coordinator.

### 1. Route A: Combined Public Presentation and Defense

The student will work with his/her adviser to produce a complete and nearly final draft of the thesis. This final draft is to contain all thesis sections and is to be prepared according to university thesis guidelines (see Graduate Thesis Regulations Student Handbook, available in the Graduate Studies Office). Once a complete final draft is nearly finished, the student should arrange with his/her adviser and committee to schedule the thesis defense. A 3- to 4-hour time block should be scheduled for the public presentation (1 hour) and defense (2-3 hours in duration).

Students should realize that producing a complete and nearly final draft of the thesis is a time-consuming process (see Section E below). Hence, students should plan well in advance and allocate sufficient time to complete this important phase of the graduate program. Different advisers will have different standards for determining whether a thesis draft is of sufficient quality to be nearly final and to be passed on to the student's thesis committee. Each student should work closely with his/her thesis adviser to ensure that these standards are met.

For Route A, the student will ordinarily first make a public presentation, field questions from the audience, and then undergo questioning by the thesis committee on the thesis and the area of concentration during the thesis defense examination. **All thesis defenses are to be scheduled during the normal course of the Fall and Spring semesters.** Students should realize that the deadline for submitting the final copy of the completed thesis to the Graduate Studies Office comes early in the semester. Extraordinary circumstances might dictate the need for the presentation and defense to take place during intersession or the summer. Scheduling during these periods is at the complete discretion of the adviser and committee members, and **students should not expect to complete this final step in the thesis process during intersession or summer.**

Once the presentation and defense are scheduled, the student should provide his/her committee members with an adviser-approved, complete, nearly final draft of the thesis **2 weeks** prior to the presentation/defense date. The student should then use the 2 weeks prior to the defense to study and prepare for the public presentation and the defense of the area of concentration.

Route A - Public Presentation:

The public presentation is to take place only when the thesis is considered to be complete and in nearly final form. Ordinarily, this means that each committee member will have had the opportunity to review at least 1 earlier draft of the thesis prior to the near-final draft that is to be distributed to the committee **2 weeks** prior to the defense. The student should be sure to work closely with any committee member who identified significant issues during review of earlier thesis drafts while developing the final thesis copy. **The expectation is that the completed thesis will either be signed by the adviser and committee members prior to or shortly after the presentation/defense.** Hence, the student will have very little time to respond to comments and suggestions for revision from committee members following the presentation/defense. This will ordinarily require that the student is able to dedicate much of his/her time during the days following the presentation/defense to produce a final acceptable copy of the thesis. The expectation is that any revisions suggested by committee members following the presentation/defense will be minor.

The presentation is to be scheduled for 1 hour, although the length of the presentation may vary. The expected duration of the presentation is 30 to 45 minutes. Following the presentation, members of the audience will be provided the opportunity to ask questions about the thesis work. The thesis presentation should be geared for a more general audience but should contain the complete substance of the thesis work. The adviser and all committee members are expected to attend the public presentation. There is no expectation that the student will provide refreshments for the presentation.

Route A - Thesis Defense:

The thesis defense is normally to take place immediately following the public presentation. Because the public presentation has occurred, ordinarily the student will not be asked to make a second presentation at the defense; whether a presentation is to be made at the thesis defense will be at the adviser's discretion.

Students will be asked questions during the defense mostly about topics related to the thesis and the agreed upon area of concentration. Questions on topics outside these areas, however, are not inappropriate, although it is understood that the student may be less well prepared in areas other than those targeted for the defense.

The expected time for the defense is 2-3 hours, although some defenses may either end prior to 3 hours or exceed this time limit at the discretion of the adviser and the committee members. There is no expectation that the student will provide refreshments for the defense.

Route A - Outcomes of the Presentation and Thesis Defense:

Satisfactory performance on the presentation and thesis defense will be determined by consensus by the adviser and committee members. The criterion for deeming the performance satisfactory will be that the student demonstrated adequate expertise in the area of concentration and all relevant facets of the thesis research and was able to make a clear public presentation of his/her thesis work.

If the performance on the presentation or the defense is determined to be unsatisfactory, the student will be given the opportunity to repeat whichever activity was found to be deficient. If the student should fail to make a satisfactory public presentation or perform unsatisfactorily on the thesis defense examination a second time, he/she will be placed on administrative probation and disqualified from the program (i.e., he/she will not be allowed to complete the degree). Students will have the opportunity to petition the Biology Graduate Advancement Committee for the opportunity to complete the presentation or defense a third and final time.

The thesis adviser will complete a goldenrod form, signed by each committee member, indicating the outcomes of the presentation and the thesis defense. The form will be returned to the Biology Department Administrative Coordinator who will record the outcomes and place the form in the student's file. Satisfactory performance indicates that the student is ready to finalize the thesis. If the student performance on the presentation or defense is deemed to be unsatisfactory, this will be noted and a tentative timeline will be decided within which the student should repeat these activities. The adviser and committee members will inform the student of identified deficiencies in his/her presentation or defense performance. These deficiencies are to be summarized by the adviser and recorded on the form.

**2. Route B: Separation of Defense and Public Presentation**

The student will work with his/her adviser to produce a complete "draft" of the thesis. This "draft" is to contain all thesis sections, including the discussion, and is to be prepared according to university thesis guidelines (see Graduate Thesis Regulations Student Handbook, available in

the Graduate Studies Office), although completion of the following sections is not required at this time: acknowledgements, table of contents, list of tables and list of figures. Once a complete draft is nearly finished, the student should arrange with his/her adviser and committee to schedule the thesis defense. A 3-hour time block should be scheduled for the defense, which should be 2-3 hours in duration.

Students should realize that producing a complete thesis draft of sufficient quality to schedule the defense is a time-consuming process (see Section E below). Hence, students should plan well in advance and allocate sufficient time to complete this important phase of the graduate program. Different advisers will have different standards for determining whether a thesis draft is of sufficient quality to be passed on to the student's thesis committee. Each student should work closely with his/her thesis adviser to ensure that these standards are met and that the defense can be scheduled.

**All thesis defenses are to be scheduled during the normal course of the Fall and Spring semesters.** Students should realize that the deadline for submitting the completed thesis to the Graduate Office comes early in the semester. Extraordinary circumstances might dictate the need for the defense (and presentation) to take place during intersession or the summer. Scheduling during these periods is at the complete discretion of the adviser and committee members, and **students should not expect to complete the thesis process during intersession or summer.**

Once the defense is scheduled, the student should provide his/her committee members with an adviser-approved, draft of the thesis **2 weeks** prior to the defense date. The student should then use the 2 weeks prior to the defense to study and prepare for the defense of the area of concentration.

Route B - Thesis Defense:

The thesis defense is to take place prior to the public presentation. Under all but the most extraordinary of circumstances, there should be a least 1 day between the defense and the public presentation (i.e., the defense could take place 1 day and the presentation on the next).

The defense is to begin with a presentation by the student, the length of which is to be determined by the adviser in consideration of the wishes of the committee. Because a public presentation of the thesis will follow, some defense presentations may be as short as 15 minutes; others may be as long as 45 minutes.

Students will be asked questions during the defense mostly about topics related to the thesis and the agreed upon area of concentration. Questions on topics outside these areas, however, are not inappropriate, although it is understood that the student may be less well prepared in areas other than those targeted for the defense.

The expected time for the defense is 3 hours, although some defenses may either end prior to 3 hours or exceed this time limit at the discretion of the adviser and the committee members.

The adviser and committee members are to provide students with their comments on the written thesis draft either before or at the time of the thesis defense. Any serious deficiencies or issues should be clearly identified at this time.

There is no expectation that the student will provide refreshments for the defense.

Route B - Outcome of the Thesis Defense:

Satisfactory performance on the thesis defense will be determined by consensus by the adviser and committee members. The criterion for deeming the performance satisfactory will be that the student demonstrated adequate expertise in the area of concentration and all relevant facets of the thesis research.

If the performance on the defense is determined to be unsatisfactory, the student will be given the opportunity to repeat the defense, with a timeline decided by the thesis committee. If the student fails the defense a second time, he/she will be placed on administrative probation and disqualified from the program (i.e., he/she will not be allowed to complete the degree). Students will have the opportunity to petition the Biology Graduate Advancement Committee for the opportunity to take the defense a third time.

The thesis adviser will complete a goldenrod form indicating the outcome of the thesis defense, which will be signed by each committee member. The form will be returned to the Biology Department Administrative Coordinator who will record the outcome and place the form in the student's file. Satisfactory performance indicates that the student is ready to finalize the thesis and to schedule the public presentation. If the student performance on the presentation or defense is deemed to be unsatisfactory, this will be noted and a tentative timeline will be decided within which the student should repeat these activities. The adviser and committee members will inform the student of identified deficiencies in his/her defense performance. These deficiencies are to be summarized by the adviser and recorded on the form.

Route B - Public Presentation:

The public presentation should normally take place within 1 semester of the thesis defense and preferably no later than 3 weeks following the defense. The expectation is that the completed thesis will be signed by the adviser and committee members prior to the public presentation. Hence, the student will normally have only a short time between the defense and the public presentation to complete work on the thesis. This will ordinarily require that the student is able to dedicate much of his/her time during this period to producing a revised and acceptable copy of the thesis. **The revised thesis should be given to each committee member at least 3 days prior to the public presentation.** While developing the final thesis copy, the student should be sure to work closely with any committee member who identified a significant issue during review of thesis drafts. This "final" copy of the thesis should carry the adviser's signature and be deemed acceptable by the adviser for meeting the requirements for the final thesis product. The expectation is that any revisions suggested by committee members at this reading will be minor.

The public presentation is to be scheduled for 1 hour, although the length of the presentation may vary. The expected duration of the presentation is 30 to 45 minutes and will be followed by questions from the audience. This presentation should be geared for a more general audience

than the presentation at the thesis defense. The adviser and all committee members are expected to attend the public presentation. There is no expectation that the student will provide refreshments.

## E. Final Steps Toward The Degree and Projected Timeline

Following a successful public presentation and thesis defense, the student should have in hand a copy of the thesis signed and approved by his/her adviser and committee members. Multiple copies of the cover page, on paper suitable for binding, should be signed. The student should ensure that the thesis is submitted to the thesis reader in the Graduate Studies Office in the required format (see Graduate Thesis Regulations Student Handbook, available in the Graduate Studies Office) and by the deadline specified by the university. It is the student's responsibility to ensure that the thesis is completed with proper formatting and that its contents are accurate.

The reader will review the thesis for formatting and return it to the student to make any necessary revisions. The student will return it the Graduate Studies Office for final approval. After the thesis is approved by the Graduate Studies Office, he/she will deliver a final, signed copy to the Titan Bookstore for binding, archiving on microfilm and abstracting, by the deadline specified by the university (typically, the last day of finals week). At this time, the student shall prepare a final, hard-bound copy of the thesis for his/her thesis adviser and also provide 1 complete, final copy to each of the other committee members. Copies to be supplied to committee members may be hard- or spiral-bound. Hard-bound copies can be made relatively inexpensively through the Center for Oral and Public History (657-278-3580) on the 3rd floor of the Pollak Library. Lastly, the student should provide his/her thesis adviser and the Department Administrative Coordinator with an electronic pdf copy of the complete and signed thesis, which will be made available through the departmental website.

Projected Timeline for Final Stages

This timeline is provided so that students can be made fully aware of the time ordinarily required to complete the final steps of the graduate program. This timeline is applicable for either the Fall or Spring semester. It assumes that the student has already had his/her second committee meeting in the previous semester.

**Prior to start of semester: The student should file an Application for a Graduation Check (forms available at Admissions and Records LH-114), which must be completed several months in advance of the expected graduation date (usually early January for spring or summer graduation; early August for winter graduation).**

**4th Week of the Semester** – Student's final thesis draft is to be given to the thesis adviser. This draft will, of course, represent previous interchanges between the adviser and student. However, this final draft is to represent the complete thesis and should be in a near-final state from the student's perspective.

**8th Week of the Semester** – Final, adviser-approved thesis draft is to be circulated to the student's committee members. This draft is to represent what the student and his/her

adviser believe to be a near-final draft of the thesis. [NOTE: IF THIS DEADLINE IS NOT MET, THE STUDENT'S GRADUATION SHOULD RE-SCHEDULED FOR THE FOLLOWING SEMESTER.]

**10th Week of the Semester** – The presentation and defense (Route A) or defense (Route B) should take place by this time. For students taking Route B, the defense might take place earlier in the semester pending the availability of a complete, adviser-approved final draft of the thesis for circulation to committee members. For Route B, once the defense has been successfully completed, the presentation may be given up to the 15th week of the semester.

**12th Week of the Semester** – The final, adviser-approved copy of the thesis should be circulated to committee members for signature.

**13th Week of the Semester** – The final, formatted and bookstore-ready copy of the thesis (with signed thesis title page) is to be turned in to the Thesis Reader in the Graduate Studies Office by the published deadline.

**16th Week of the Semester (finals week)** – The final thesis (printed on high-quality paper) is to be turned in to the Bookstore. When available, final bound thesis copies are to be distributed by the student to the thesis adviser and the committee members, and a pdf version is to be sent via email to the thesis adviser and Department Administrative Coordinator (Karen Lau).

## F. Checklists

### 1. First Committee Meeting

a. Select Committee Members with Adviser consultation ☐

b. Develop the Study Plan with Adviser consultation ☐

c. Schedule the First Committee Meeting with Adviser's permission ☐

d. Submit a Revised (following BIOL500A/B), Adviser-approved Thesis Proposal to the Committee Members 2 weeks in advance of the scheduled Committee Meeting ☐

e. Prepare the Oral Presentation with Adviser Consultation ☐

f. Complete First Committee Meeting Form indicating meeting outcomes ☐

### 2. Second Committee Meeting

a. Schedule the Second Committee Meeting with Adviser's permission ☐

b. Submit a Written Thesis Progress Report, approved by the Thesis Adviser, to the Committee Members 2 weeks in advance of the scheduled Committee Meeting ☐

c. Prepare Oral Presentation with Adviser consultation ☐

d. Identify Area of Concentration for the Thesis Defense ☐

e. Select Route A or B for the Thesis Defense ☐

f. Complete Second Committee Meeting Form indicating meeting outcome ☐

**3. Thesis Defense and Public Presentation**

**ROUTE A: Thesis Defense and Public Presentation (same day as Thesis Defense)**

a. Check that a Graduation Check (with correct graduation date) has been filed ☐

b. Ensure that Study Plan is complete and any SP, RP, or I Grades are/will be changed ☐

c. Submit a draft of the Thesis to the Thesis Adviser ☐

d. Schedule the Thesis Defense and Public Presentation with Adviser's permission ☐

e. Submit a revised draft of the Thesis, approved by the Thesis Adviser, to Committee Members 2 Weeks in advance of the scheduled Defense and Presentation. ☐

f. Obtain comments from Committee Members on the revised Thesis draft ☐

g. Prepare for the Thesis Defense of the areas of concentration ☐

h. Prepare the Public Presentation with Adviser consultation ☐

i. Prepare a revised, final Thesis, approved by the Thesis Adviser, to Committee Members 3 days in advance of the Public Presentation ☐

j. Complete the Defense and Public Presentation ☐

k. Complete the Thesis Defense/Public Presentation Form, indicating outcome ☐

l. Secure Signatures of the Adviser and Thesis Committee Members on the Thesis ☐

**ROUTE B: Thesis Defense (prior to Public Presentation, which is held on a future date)**

a. Check that a Graduation Check (with correct graduation date) has been filed ☐

b. Ensure that Study Plan is complete and any SP, RP, or I Grades are/will be changed ☐

c. Schedule the Thesis Defense with Adviser's permission ☐

d. Submit a complete draft of the Thesis, approved by the Thesis Adviser, to the Committee Members 2 weeks in advance of the scheduled Thesis Defense ☐

e. Prepare for the Thesis Defense, including background reading in the areas of concentration and an oral presentation for the Thesis Defense, both with Thesis Adviser consultation ☐

f. Obtain comments from Committee Members on the Thesis draft ☐

g. Complete Defense and submit the Thesis Defense/Public Presentation Form, indicating outcome ☐

Public Presentation (same semester as, preferably within 3 weeks of, the Thesis Defense)

h. Submit a revised, final draft of the Thesis to the Thesis Adviser ☐

i. Schedule the Public Presentation with Adviser's permission ☐

j. Submit a revised, final thesis, approved by the Thesis Adviser, to the Committee Members 3 days in advance of the presentation ☐

k. Secure signatures of the Adviser and Thesis Committee Members on the Thesis ☐

l. Complete the Public Presentation ☐

m. Complete the Thesis Defense/Public Presentation Form indicating outcome ☐

**4. Submitting the final Thesis**

a. Final formatting and submission of the Thesis to the Graduate Studies Reader ☐

b. Respond to formatting and other issues raised by the Reader ☐

c. Final submission of completed Thesis to Bookstore. **Be sure to review the copyright agreement with your Thesis Adviser to be sure that you have selected the Publishing Option (p. 4) that best reflects any need to delay the availability of the full text on-line of your thesis (an embargo of 1-2 yr may be necessary if your thesis work is sensitive)** ☐

d. Submit Thesis for binding for copies for the Thesis Adviser, Committee and Department ☐

e. Deliver hard-bound Thesis copies to the Thesis adviser and Committee Members (spiral-bound adequate for committee) and electronic pdf copy to Thesis Adviser and Department Administrative Coordinator. ☐

## G. Thesis Defense and Public Presentation Notice Form

(*Complete an electronic version of this form, available from Karen Lau via e-mail)*

Dear Biology Graduate Student:

The Department of Biological Science requires that an announcement of your thesis defense be distributed to the Biology full-time faculty a minimum of **5 business days prior to** the date of your defense.

You are expected to make your arrangements, and then to provide complete information about your thesis defense to Karen Lau so she can prepare the formal announcement notice. You may submit your request to Karen either on paper or via e-mail, but you must use this department form.

**PLEASE COMPLETE THE SPACES BELOW**

| | |
|---|---|
| **Today's Date** | |
| **YOUR FULL NAME**<br>***Please print if handwritten*** | |

***Please include your full middle name***

| | | |
|---|---|---|
| **TYPE OF DEFENSE (check one)**<br>**Route A:** | **Public Presentation, followed immediately by Thesis Defense (not public) on the <u>same</u> day** | |
| **Route B:** | **Thesis Defense (not open to public), followed by Public Presentation on a <u>different</u> day** | |

| |
|---|
| ***Exact title of thesis, include caps, italics, etc.*** |

| | | | |
|---|---|---|---|
| **Route A** | | **Route B, Part 1.** | |
| **Day and Date** | | **Day and Date** | |
| **Time of Defense** | | **Time of Defense** | |
| **Bldg / Room #** | | **Bldg / Room #** | |
| | | **Route B, Part 2.** | |
| | | **Day and Date** | |
| | | **Time of Presentation** | |
| | | **Bldg / Room #** | |

| | |
|---|---|
| **Thesis Adviser** | |
| **Committee Member** | |
| **Committee Member** | |
| **Committee Member** | |

**rev. 10/26/2011**

## H. GRAD700 Enrollment and Leave of Absence Policies
**(February 2000; revised 2/1/2011)**

In addition to remaining in Good Standing (p. 13), graduate students must maintain continuous enrollment during their tenure in the Master's program at CSU Fullerton. This requirement means that, once a student is admitted to the Biology Department's graduate program, he/she cannot drop out for a semester without officially obtaining a leave of absence from the University. Students enroll through regular university registration procedures and pay listed graduate student fees while completing courses required for the Study Plan and while working on and completing their thesis.

### GRAD700

A student may elect to enroll in GRAD700 through regular registration or through Extended Education when he/she is in the very final stages of producing his/her written thesis. This procedure allows the student to maintain continuous enrollment while completing the final phases of our graduate program. If enrollment in GRAD700 is through regular university registration procedures, the student will pay full fees and receive all student benefits. If, however, enrollment is through Extended Education (UEE), the student will pay a reduced fee and **receive no university benefits other than library privileges.** The principal advantage of enrolling in GRAD700 is financial because enrollment costs are less than those required for regular university registration. The Extended Education route is the most common form of GRAD700 enrollment by Biology graduate students.

NOTE: International students (on visas) who graduate in Summer terms are required to maintain continuous enrollment over the summer of their graduation. GRAD700 through UEE is one mechanism for doing this. Please contact the Office of International Education and Exchange for more information.

### Considerations for Enrolling in GRAD700

Enrollment in GRAD700 is not automatic and requires both departmental and university approval. Moreover, enrollment in GRAD700 through Extended Education assumes that the student is no longer a user of departmental and university resources, including supplies, equipment, and services. THIS MEANS THAT GRADUATE STUDENTS ENROLLED IN GRAD700 THROUGH EXTENDED EDUCATION ARE NOT ELIGIBLE TO RECEIVE DEPARTMENTAL SUPPORT FOR SUPPLIES, MATERIALS, AND SERVICES.

### Conditions for GRAD700 Enrollment

Students are expected to understand fully the conditions required for GRAD700 enrollment before submitting the form for departmental approval. For students enrolling in GRAD700 through Extended Education, the student should consult the enrollment request form to determine if he/she is eligible. To be eligible for GRAD700 (through either regular university registration procedures or Extended Education), the following conditions must be met to obtain departmental approval:

1) **Study Plan**. Students must have received credit for all coursework required for the Study Plan including BIOL500A/B (meets Graduate Writing Requirement), and all BIOL580, 598, and 599 units. This means that letter grades must have been received for all courses except BIOL580, 598, and 599 for which RP grades may have been assigned. Incomplete grades given

for courses listed on the study plan should be completed before enrolling in GRAD700, but a student may request exemption from this requirement with the approval of his/her thesis adviser. NOTE: If a student has exceeded the time limit for graduation (5 or 7 years), he/she will need to validate outdated courses on their Study Plan or take additional courses to replace outdated ones. If a course on the Study Plan is no longer valid, the student can no longer qualify for GRAD700 enrollment until outdated courses are validated or replaced with new courses.

2) **Laboratory and Field Work**. All thesis laboratory or field work must be completed (i.e., the student is not collecting data in the lab or field in support of his/her thesis research) and the Second Committee meeting should be completed or scheduled. The only exception to this condition would occur if the student is off-campus and engaged in the final stages of data collection.

3) **Use of Facilities**. Access to departmental or university services and facilities (e.g., computers, lab equipment, field gear) is not required other than the use of library resources.

4) **Adviser Assistance**. Assistance from the student's thesis adviser and committee members has been reduced to levels required to produce the final version of the written thesis and to prepare for defense and public presentation.

5) **GA/TA/Student Assistant Employment**. The student cannot be employed in a work-study program, but he/she is eligible to be employed as a GA or TA for the department.

## Enrollment Procedures

To enroll in GRAD700 through Extended Education, a graduate student must file the blue GRAD700 Enrollment Request Form with a yellow cover sheet, which is available in the Biology department office. **A new form must be filed each semester.** No such form is required for enrollment in GRAD700 through regular university procedures (i.e., with full fee payment). To obtain departmental approval for enrollment in GRAD700 through Extended Education, the student must do the following:

1) **Adviser Approval**. Read the instructions on the yellow cover sheet. The student should complete the top part only of the blue enrollment form and meet with his/her thesis adviser to review the checklist on the yellow cover sheet. All questions on the checklist must be answered accurately with Y or N or the form will be returned to the student. The thesis adviser must indicate his/her approval of GRAD700 enrollment through Extended Education by the signing the yellow cover sheet.

2) **Verification of Eligibility by Biology Graduate Adviser**. Return the completed form to the Biology Graduate Adviser, who will review the responses on the cover sheet and verify that the student is eligible. He/she will check the appropriate boxes on the blue sheet, and sign the form. **The student should not check the boxes on the blue form**.

3) **Submission of Completed Form**. If the student is eligible, the signed blue form will be returned to the student's mailbox. The student must then return the form to the Graduate Studies Office (MH-103) to receive the registration card.

Because these routing procedures can take time, students should complete the enrollment forms well in advance of the posted deadline.

## Leave of Absence (adapted from University Catalog)

Graduate degree or credential students may request a leave of absence for up to 1 year. Conditionally classified or classified graduate students qualify for a leave if they are in good academic standing and have completed at least six credit hours' work toward the degree in residence at Cal State Fullerton. Forms to request a leave of absence are available at the Admissions and Records information counter or in the Graduate Studies Office. **However, you**

**should contact Karen Lau prior to applying for a leave so that she knows your plans and can advise you how to proceed.**

Any one of the following circumstances may be grounds for requesting a leave of absence:

- Illness or disability (permanent or temporary) or similar personal exigencies including pregnancy which make it impossible or inadvisable for a student to register for classes.
- Activities which enhance a student's professional career objectives.
- Active duty in the armed forces of the United States.
- Other reasons at the discretion of the Director of Graduate Studies.

After review by the Graduate Studies Office, a response is mailed to the student.

A first-time leave of absence of 1 semester only will normally be granted upon request for students who qualify and will not require an application for readmission to the university. Registration materials for the semester following the leave will be sent to the student.

Students requesting a subsequent leave or a leave longer than 1 semester are required to provide appropriate documentation (e.g., doctor's recommendation, verification of employment).

A leave granted to a degree objective student preserves the election of curriculum rights regarding catalog requirements. **However, leaves of absence do not change the time limits for completion of the degree.**