DEPARTMENT OF PHYSICS & ASTRONOMY
UNIVERSITY of CALIFORNIA · IRVINE

GRADUATE STUDENT HANDBOOK

Academic Year 2016-2017

Department Policies, Procedures, and Guidelines

Table of Contents

I. WELCOME TO THE DEPARTMENT OF PHYSICS AND ASTRONOMY AT UC IRVINE.

Welcome to the University of California, Irvine! We are pleased that you have decided to join us for your graduate studies, an important stage in your academic and professional development. This is an exciting time to become a part of the Physics and Astronomy graduate program. The Department continuously tries to enhance the graduate program, and we hope that you will experience the benefits of those efforts. This handbook is designed for both new and continuing graduate students. We wish to convey the Department's philosophy of graduate education, and to provide information on how to successfully complete the program and receive your degree.

It is the responsibility of the student to know and follow the regulations and requirements for maintaining good academic standing and for making satisfactory progress towards the Ph.D. degree in Physics at UCI. The UCI General Catalogue (available at the UCI Bookstore) contains all of the detailed information you need to plan your academic career here. Please obtain a copy and read it carefully. For an on-line version, go to http://catalogue.uci.edu/. The Graduate Advisor (Prof. Arvind Rajaraman, FRH 3174, 824-4352) and the Graduate Affairs Officer (My Banh, FRH 4109B, 824-3496) are here to help you in case you have any questions or difficulties in our program. Please feel free to contact them at any time during your academic career if you need help or guidance.

II. DEPARTMENTAL ADMINISTRATION

A. *The Role of the Department Chair*

The Department Chair is a faculty member who serves as the academic leader and administrative head of the department. Part of the Chair's job is to respond appropriately to questions, complaints, and suggestions from any member of the department, including students. The Chair will also make arrangements and assignments of duty for the counseling of students, and for the training and supervision of Teaching Assistants and other student teachers and teacher aides.

B. *The Role of the Graduate Advisor*

The Graduate Advisor is a faculty member in the Department of Physics and Astronomy who is the official faculty representative of the Graduate Dean in matters affecting students in the Physics and Astronomy graduate program. S/He is responsible for supervising graduate study, ensures that each graduate student is assigned an individual faculty advisor or track mentor and monitors the academic progress of graduate students. The graduate advisor plays a key role in the academic lives of graduate students, advising students and other faculty members about program requirements and the academic policies pertaining to graduate students, approving study lists, and evaluating academic petitions.

C. *The Role of the Faculty Mentors*

All graduate students who have not yet found a thesis advisor are assigned to a faculty mentor. The assignments are made according to areas of interest, indicated by the student. The main goal of the Faculty Mentor is to (1) improve and increase interaction between faculty and students, (2) monitor student progress, (3) notify the Graduate Advisor of any concerns or problems that need to be addressed.

D. *The Role of the Thesis Advisor*

Each graduate student must identify a faculty member to be his/her thesis advisor. A student's thesis advisor chairs the student's Advancement and Dissertation committees. Most importantly, thesis advisors become their students' primary source of academic and professional guidance. However, student academic petitions still must be approved by the Graduate Advisor.

E. *The Role of the Graduate Affairs Officer*

The Graduate Affairs Officer coordinates student services, advises graduate students and refers them to the appropriate faculty advisor and/or administrative office.

III. REQUIREMENTS FOR THE M.S. DEGREE

The requirements for the M.S. degree are (1) at least three quarters of residence; (2) mastery of graduate course material, which must be demonstrated by passing, with a grade of B or better, a minimum of eight quarter courses including: Physics 211, 213A-B, 214A, 215A, 223, at least two other course numbered between 200 and 259, and two other courses approved by the graduate advisor, which can include undergraduate upper-division courses in related areas, and (3) either Option A, a research project and written thesis, or, Option B, a comprehensive written examination. Students pursuing Option A typically complete three quarters of research, enrolling in Physics 295 or 296. It is suggested that students following Option B should take Physics 215B.

An M.S. by thesis will normally consist of about 12 months spent on supervised research under a thesis advisor. The student should submit a short (~1 page) written project description and schedule to the Grad Advisor for review once the research project is sufficiently well defined. The research need not lead to a publishable result, nor need it represent truly independent research. Rather, the basic idea is that the student gain substantial research experience under a faculty member's guidance, and obtain a useful result. The research must be described in a written thesis, which should demonstrate good understanding of the project and its scientific motivation and background. The thesis must be approved by a committee of three Physics and Astronomy faculty members consisting of the thesis advisor and two more faculty members chosen by the student. While it is not a requirement, we encourage an oral presentation of the thesis, lasting approximately 30 minutes, since technical

communication will be an important part of the student's future.

(The requirements for the M.S. degree with a concentration in Chemical and Materials Physics differ from these and are described in Section V.)

IV. REQUIREMENTS FOR THE PHD DEGREE

The principal requirements for the Ph.D. degree are a minimum of six quarters of residence, passage of a written and an oral examination, and successful completion and defense of a dissertation reporting results of original research. In addition, the Ph.D. candidate must complete certain graduate course requirements. There is no foreign language requirement.

Course Requirements:

Students are required to exhibit mastery of the basic sequences—Classical Mechanics, Electromagnetic Theory, Quantum Mechanics, Mathematical Physics, and Statistical Physics. Students who do not have a prior Master's degree (or other equivalent degree) in Physics from UCI or another institution must take a minimum of 11 quarter courses including 211, 212A, 213A, 214A, 215A-B, at least one of the two courses 213B or 240C, at least two other courses numbered between 200 and 259, and two other courses approved by the graduate advisor, must be passed with a grade of B or better. Students are strongly encouraged to take Physics 211, 212A, 213A, 214A, 215A-B, and either 213B or 240C in their first year of study. It is expected that students, having selected a research specialty, will ordinarily take the core courses in that subject in their second year of study. Students pursuing research in elementary particle physics ordinarily complete Physics 234A-B-C and 235A-B during their second year. Students pursuing research in plasma physics ordinarily complete Physics 239A during their first year and Physics 239B-C-D their second year; Physics 249 is also recommended. Students pursuing research in condensed-matter physics ordinarily take Physics 238A-B-C during their second year; Physics 133 should be taken in the first year by those students who have not had an equivalent course. Students pursuing research in astrophysics/cosmology ordinarily complete Physics 240A during spring of their first year; 240B-C in their second year; and one or more of Physics 241B-C-D in their second or subsequent years. Students interested in medical imaging should take Physics 233A-B-C in the second year. Students pursuing research in biological physics should take Physics 230A-B in the second year.

Students who have obtained a prior Master's degree (or other equivalent degree in Physics from UCI or another institution must take a minimum of 4 quarter courses including two courses numbered between 200-259 and two other courses approved by the graduate advisor. These students are strongly encouraged to take the qualifying exam in the Fall quarter of entrance.

NOTE: The requirements for the Ph.D. degree with a concentration in Chemical and Materials Physics (ChaMP) differ from these and are outlined in Section V.

Teaching Program:

Experience in teaching is an integral part of the graduate program, and all Ph.D. students are required to participate in the teaching program for at least one quarter during their graduate careers. **All new teaching assistants are required to enroll in Physics 269 and must pass in order to be allowed to TA in future quarters.** Students are required to enroll in Physics 399 while serving as a TA. Lab TAs are required to enroll in Physics 395 as well as 399.

Students who are not citizens from countries where English is either the primary or dominant language as approved by the UCI Graduate Council must pass either the Test of Spoken English (TSE) or the UCI SPEAK (Speaking Proficiency English Assessment Kit) examination. One of these tests must be passed before such a student can qualify for a teaching assistantship in order to fulfill the Department's teaching requirement. The Department expects one of these tests to be passed by the end of the student's second year at UCI.

V. CONCENTRATION IN CHEMICAL AND MATERIALS PHYSICS (ChaMP)

This is an interdisciplinary program between condensed matter physics and physical chemistry, which is designed to eliminate the barrier between these two disciplines. Students with B.S. degrees in Physics, Chemistry, or Materials Science and Engineering, are encouraged to apply to the program. The goal of the concentration in Chemical and Materials Physics (ChaMP) is to provide students with a broad interdisciplinary education in the applied physical sciences that emphasizes modern laboratory and computational skills. The program accepts students for both the M.S. and the Ph.D. degrees. Upon admission to the program, students are assigned two faculty advisors, one from the Department of Physics and Astronomy, and one from the Department of Chemistry, to provide guidance on curriculum and career planning.

The curriculum for the M.S. program includes a summer session to assimilate students with different undergraduate backgrounds; formal shop, laboratory, and computational courses; a sequence on current topics to bridge the gap between fundamental principles and applied technology; and a course to develop communication skills. The required courses include thirteen core courses and three electives (subject to advisor approval) as follows: **Core:** Physics 206, 207, 228, 229A, 266; Physics 273 or Chemistry 273; Chemistry 231A or Physics 215A; Chemistry 231B or Physics 215B; Chemistry 231C, 232A-B; one course from each of the following two groups: Physics 211 or 222; Physics 133 or 238A or Chemistry 236. **Electives:** Physics 134A, 223, 229B, 233A, 233B, 238A, 238B, 238C, Chemistry 213, 225, 232C, 233, 243, 248, 249, Engineering EECS 285B, ENGRMSE 259. In addition to the required courses, M.S. students complete a master's thesis. Students are required to advance to candidacy for the master's degree at least one quarter prior to filing the master's thesis. There is no examination associated with this advancement, but the thesis committee needs to be selected and appropriate forms need to be filed. The M.S. program prepares students to compete for high-tech jobs or to begin research toward a Ph.D. degree.

Successful completion of the M.S. degree requirements qualifies students for the Ph.D. program. Progress toward the Ph.D. degree is assessed by a written comprehensive examination administered in the summer after completion of the first year of study. This examination covers comprehensive knowledge acquired in course work, and the content of the examination depends upon the student's specific area of interest.

Participants in the Ph.D. program take an examination for formal advancement to candidacy. It is typically taken within one year of successful completion of the comprehensive examination. To satisfy normative progress toward the degree, it must be taken by the end of the student's third year. The examination is comprised of two parts: (a) a written report on a topic to be determined in consultation with the research advisor and (b) an oral report on research accomplished and plans for completion of the Ph.D. dissertation.

VI. RECOMMENDED COURSE SEQUENCES FOR PH.D. DEGREE

The recommended courses for first year graduate students who <u>are not</u> in the ChaMP program are:

<u>Recommended First Year Graduate Courses for Fall Quarter</u>

Physics 211	Classical Mechanics (Required)
Physics 212A	Mathematical Physics (Required)
Physics 215A	Quantum Mechanics (Required)
Physics 269	Seminar in Teaching Physics (Required: in first year students expect to TA)
Physics 291	Research Seminar (Required)

<u>Recommended First Year Graduate Courses for Winter Quarter</u>

Physics 213A	Electromagnetic Theory (Required)
Physics 214A	Statistical Physics (Required)
Physics 215B	Quantum Mechanics (Required for Ph.D., not Masters*)
Physics 291	Research Seminar (Required)

Note that Physics 228 Electromagnetism is for ChaMP students. Regular physics students take Physics 213A and 213B beginning in the winter quarter.

<u>Recommended First Year Graduate Courses for Spring Quarter</u>

Physics 213B	Electromagnetic Theory (Required) **<u>OR</u>**
Physics 240C	Radiative Processes in Astrophysics (Required)
Physics 291	Research Seminar (Required)
Elective	
Elective	

* *If the student plans to obtain a Masters Degree by taking the Comprehensive Exam,*

they should take these courses.

In the second year most Ph.D. students will take the "professional" sequence appropriate to their field of interest.

The recommended courses for first year graduate students who <u>are</u> in the ChaMP program are:

<u>Required First Year Graduate Courses for Summer</u>

Physics 206	Laboratory Skills (Required)
Physics 207	Chemistry for Physicists (Required)
Physics 208	Mathematics for Chemists (Required for Chemistry students)

* *Students will actually enroll and receive credit for these courses in the Fall Quarter of their entry year.*

Note that international students will need to enroll in Physics 295 (Experimental Research) during the Summer.

<u>Recommended First Year Graduate Courses for Fall Quarter</u>

Physics 211	Classical Mechanics (Required) **<u>OR</u>**
Physics 222	Continuum Mechanics (Required)
Physics 215A	Quantum Mechanics (Required) **<u>OR</u>**
Chemistry 231A	Fundamentals of Quantum Mechanics (Required)
Physics 229A	Computational Methods (Required)
Physics 269	Seminar in Teaching Physics (Required: in first year students expect to TA)
Physics 291	Research Seminar (Required)

<u>Recommended First Year Graduate Courses for Winter Quarter</u>

Physics 215B	Quantum Mechanics (Required) **<u>OR</u>**
Chemistry 231B	Applications of Quantum Mechanics (Required)
Physics 228	Electromagnetism* (Required)
Chemistry 232A	Thermodynamics and Introduction to Statistical Methods (Required)
Physics 291	Research Seminar (Required)

<u>Recommended First Year Graduate Courses for Spring Quarter</u>

Physics 133	Introduction to Condensed Matter Physics (Required) **<u>OR</u>**
Physics 238A	Condensed Matter Physics (Required) **<u>OR</u>**
Chemistry 236	Forces between Molecules (Required)
Chemistry 231C	Molecular Spectroscopy (Required)
Chemistry 232B	Advanced Topics in Statistical Mechanics (Required)
Physics 291	Research Seminar (Required)
Elective	

* *Physics 213A-B can be substituted for Physics 228 by approval.*

VII. EXAMINATIONS

Comprehensive Examination:

Progress toward the degree is assessed by a written comprehensive examination covering a broad range of fundamentals of physics at the graduate and advanced undergraduate levels. It is offered twice a year (typically just before classes begin in the fall and during the first week of the spring quarter), and a student is allowed a maximum of three attempts. The first attempt must occur before the end of the fall quarter of the student's second year, and the examination must be passed by the end of spring quarter of the student's second year.

Advancement to Ph.D. Candidacy:

For advancement to Ph.D. candidacy, a student must pass an oral advancement examination. It is typically taken within one year of successful completion of the comprehensive examination. To satisfy normal progress toward the degree, it must be taken by the end of the student's third year. The Candidacy Committee is comprised of five faculty who are voting members of the University of California Academic Senate. The majority of the Candidacy Committee must hold either primary or joint appointments with the academic unit granting the doctoral degree. The Candidacy Committee that administers this examination will contain one or two faculty members from outside the Department. This oral examination will cover material principally related to the broad and general features of the student's dissertation area.

Dissertation:

A dissertation summarizing the results of original research performed by the student under the supervision of a doctoral committee, appointed by the Department Chair on behalf of the Dean of Graduate Studies and the Graduate Council, will be required for the Ph.D. degree. A criterion for the acceptability of a dissertation by the Department is that it be suitable for publication in a scientific journal. The dissertation must not have been submitted to any other institution prior to its submission to the UCI Physics and Astronomy Department.

Defense of Dissertation:

Upon completion of the dissertation, the student will take an oral examination, open to the public, before the doctoral committee.

VIII. REGISTRATION AND ENROLLMENT

Registration consists of two steps, enrollment and fee payment. Registration is described at www.reg.uci.edu/enrollment/registration.html.

A. *Enrollment Process*

To register for classes, use UCI's web-based registration system WebReg (www.reg.uci.edu/registrar/soc/webreg.html). Registration through WebReg can be completed from anywhere in the world. WebReg requires access to the internet and use of a web browser.

B. *Fee Payment*

All of your billing information appears on your Zot Account, which you can access at https://zotaccount.uci.edu/. **It is essential that you keep track of this account**. Fee payment deadlines can be found at www.reg.uci.edu/fees/payments.html.

If you have financial support that includes fee remission, such as a fellowship or employment as a Teaching Assistant, Reader/Grader, or Research Assistant, your fees will automatically be paid when you enroll for classes through WebReg, provided that (1) you enroll for the Minimum Required Units (MRU); (2) you enroll by the fee deadline; (3) the aid posted to your ZotBill covers the full amount of your registration fees, and (4) you have no past-due debts or holds. If you fail to meet any of these conditions, your aid will not be activated and your fees will not be paid automatically. The typical MRU needed to activate aid is 1.

If you fail to register for classes on time, you will be subject to service charges, even if the Department is paying your fees. The Department will not pay the late charges for you. You must ensure that you enroll by the corresponding deadlines. Further details on enrollment procedures are on the Registrar's website. Please read this information carefully.

C. *Late Fees*

There are two separate late registration service charges: one for late enrollment and one for late fee payment. Late registration will be permitted only in exceptional circumstances. See www.reg.uci.edu/fees/latecharges.html for the late charges that may apply to your situation.

Late service charges may be waived only if the University is at fault for your late registration or if you have been incapacitated throughout the registration period due to illness or injury. *Documentation will be required*.

The absolute deadline for paying fees late and/or enrolling late is the end of the third week of classes.

D. *Cancellation/Withdrawal*

The Cancellation/Withdrawal (C/W) form is used during the quarter when a student wishes to discontinue enrollment in a quarter for which s/he has already paid fees. If you wish to discontinue enrollment after paying fees, you **MUST** file a C/W form. Do NOT drop all of your courses. Your classes will be dropped for you automatically during the withdrawal process. Likewise, do not stop payment on the check used to pay registration fees in lieu of filing the C/W form. Please

visit www.reg.uci.edu/registrar/soc/cw.html for more information. Please see the Graduate Affairs Officer should you choose to withdraw.

E. *Filing Fee*

Under certain circumstances, you may be eligible to pay a "Filing Fee" if approved by your academic unit and the Dean of Graduate Division. In general, the Filing Fee option only applies to students who have completed all requirements for a Master's, Ed.D, or Ph.D. degree except for their "official" submission of a thesis or dissertation to the Special Collections University Archives, or the final formal examination (e.g., the comprehensive examination for Master's candidates). However, prior to the beginning of the "filing fee" quarter ALL other requirements for the degree must have been met by the student, including advancement to candidacy. This means, for example, that you are not eligible for Filing Fee Status if you currently have incomplete grades (NR, I) in courses that you need to fulfill your degree requirements. You may be on Filing Fee for one quarter only. While on Filing Fee, you cannot hold an academic employment position (Reader, TA, or GSR). For more information, please visit www.grad.uci.edu/forms/index.html.

F. *Leave of Absence*

An academic leave of absence (LOA) is intended to cover the temporary interruption of the student's academic program. The reason(s) for requesting a LOA must be consistent with University policy and guidelines, and with the guidelines of the student's academic program.

The academic LOA can be granted for up to one year (3 quarters) if, following review of the student's academic record, it is deemed consistent with the student's academic objectives and academic progress. While on a LOA, a student is not eligible for University fellowship support, University research grants, or financial aid. While on a LOA, student may not hold any academic employment position (TA, Reader, or GSR). For more information, please visit www.grad.uci.edu/forms/index.html.

IX. RESIDENCY REQUIREMENT

A. *Domestic Out-of-State Students*

University Policy states that "domestic Ph.D. students who are citizens or permanent residents of the United States may be awarded tuition fellowship support on the basis of outstanding scholarship for a **maximum of one year (three quarters)**" [Section III.B.1c.1, *UCI Graduate Advisor's Handbook 2005-2006*]. The University will not provide tuition fellowships to domestic students who are eligible for California residency. For more information regarding California residency, visit www.reg.uci.edu/registrar/residence/resclass10.html.

In order to avoid costly tuition charges, you are strongly advised to acquire California legal residency after your first year of study. If you choose to maintain non-California resident status, you will be responsible for your tuition payment after your first year of study.

X. TEACHING REQUIREMENT

Experience in teaching is an integral part of the graduate program, and all students are required to serve as a Teaching Assistant (TA) for 1 quarter. The fall quarter of the first year you plan to serve as a TA you must take Physics 269, Seminar in Teaching Physics. **Failure to pass Physics 269 can jeopardize future employment as a Teaching Assistant.** Students are required to enroll in Physics 399 (University Teaching) while serving as a TA. Lab TAs are required to enroll in Physics 395 (Laboratory Teaching) as well as Physics 399.

Teaching Assistant Priority Appointments:

TA appointments are given preferentially to first and second year students. Second priority is given to international students who have advanced to candidacy and have not completed the 1-quarter TA requirement. Lowest priority is given to students beyond their second year who have completed the TA requirement.

XI. GUIDELINES FOR STUDENT EMPLOYMENT

A. *Teaching Assistants (TAs)*

Teaching Assistants (TAs) are full-time graduate students who are making satisfactory academic progress. Appointment as a TA in combination with other campus-wide employment may not exceed 50% time (220 hours per quarter) during any academic quarter. TAs must meet certain procedural and academic requirements. The academic requirements are enumerated in the Graduate Advisor's Handbook, as follows:

For *new and continuing* graduate students:

1. Satisfactory progress toward the degree objective. See section XII. A.
2. Enrollment in at least 12 units during the current quarter (i.e. the academic quarter in which the teaching appointment occurs).
3. **Lab TAs** are required to enroll in Physics 395 Laboratory Teaching AND at least one (1) unit of Physics 399 University Teaching.

Discussion TAs are required to enroll in at least one (1) unit of Physics 399 University Teaching.

4. International and U.S. Permanent Resident graduate student who are not citizens of countries where English is either the primary or dominant language as approved by the UCI Graduate Council must pass a campus-approved spoken English Proficiency Exam before becoming a TA. A full discussion of English proficiency options is available on Graduate Division's website at: www.grad.uci.edu/funding/employment/teaching-assistantships/english-proficiency.html. The Department expects one of these tests to be passed by the end of the student's first year at UCI.

For *continuing* graduate students:

During each of the three most recent quarters of enrollment:

1. Completion of 8 units or more of upper division or graduate level credit courses.
2. A letter grade of B, S, or above in all courses completed.
3. No more than two incomplete (I) grades.
4. A cumulative GPA of 3.1 or higher in those courses where a letter grade (A through F) was received.
5. Meet the spoken English Proficiency requirement described above.

B. Graduate Student Researcher (GSR)

Appointment as a GSR in combination with other campus-wide employment may not exceed 50% time during any academic quarter. Between academic year sessions (quarters) and during the summer recess, appointments may not exceed 100% time.

For *new and continuing* graduate students:

1. Satisfactory academic progress toward the degree objective. See section XII. A.
2. Enrollment in at least 12 units during the current quarter.
3. Combined campus-wide employment of no more than 50% time (220 hours of assigned workload) or less during any academic quarter.

For *continuing* graduate students:

During each of the three most recent quarters of enrollment:

1. Completion of 8 units or more of upper division or graduate level credit courses.
2. A letter grade of B**,** S, or above in all courses completed.
3. No more than two incomplete (I) grades.
4. A cumulative GPA of 3.0 or higher in those courses where a letter grade (A through F) was received.

C. Reader (Grader)

Appointment as a Reader in combination with other campus-wide employment may not exceed 50% time during any academic quarter.

For *new and continuing* graduate students:

1. Satisfactory academic progress toward the degree objective.
2. Enrollment in at least 12 units during the current quarter.

For *continuing* students:
During each of the three most recent quarters of enrollment:
1. Completion of 8 units or more of upper division or graduate level credit courses.
2. A letter grade of B**,** S, or above in all courses completed.
3. No more than two incomplete (I) grades.
4. A cumulative GPA of 3.0 or higher in those courses where a letter grade (A through F) was received.

XII. ACADEMIC STANDARD FOR GRADUATE STUDENTS

A. Good Academic Standing / Satisfactory Progress

Graduate students are expected to make satisfactory progress toward the M.S. and/or Ph.D. degree, as defined by the Physics and Astronomy faculty in accordance with policies of the Graduate Council, and to maintain a satisfactory grade point average (3.0 or higher) for all work undertaken while enrolled in graduate study. Satisfactory progress is determined on the basis of both the recent academic record and overall performance (i.e. research).

There are explicit requirements that are part of the definition of satisfactory progress.

1. **GPA:** the student must maintain at least a 3.0 cumulative grade point average. Students with a cumulative GPA below 3.0 for three successive quarters may be subject to academic disqualification.
2. **Normal Time to Degree:** the student must advance to candidacy and complete the degree within the limitations established by UCI's Graduate Council (March 2004). A student exceeding the maximal time to degree shall be deemed not to be making satisfactory progress toward their [sic] degree; moreover, they shall not receive University resources (e.g. financial aid, TA-ships, housing, etc.). Normal Time to Degree for each graduate program is listed in the General Catalog and in Section C below.
3. **Grade Reports:** all I, W, or NR grades should be reviewed and appropriate action taken as needed.
4. **P/NP:** no courses graded "Pass" are to be included as part of the advanced degree program, nor are they to be considered as satisfying academic criteria for University-administered fellowships and academic appointments or employment.
5. **Enrollment Units:** students must be enrolled for at least 12 graduate or upper-division units of credit each quarter, including credit for supervised teaching and research, unless part-time status or and academic leave of absence has been approved in advance by the Graduate Dean. In cases of approved part-time status, enrollment in eight (8) or fewer units of credit toward the degree is expected each quarter.

6. **Distribution of Units:** the number of upper-division and graduate-level units of credit completed toward degree requirements each quarter should be at least eight and no more than 16 units, unless an exception has been approved in advance.
7. **Residency:** time in residence prior to advancement to candidacy for the Ph.D. or professional doctorate degree should be within acceptable limits (ordinarily, no more than four years).

B. Policy regarding Grades Below "B"

For a graduate student, only the grades A+, A, A-, B+, B, and S represent satisfactory scholarship and may be applied toward advanced degree requirements. Graduate students may not apply courses graded Pass/Not Pass toward any degree or satisfactory progress requirements. A grade point average below the B level (3.0 on a 4.0 scale) is not satisfactory, and a student whose grade point average is below that level is subject to academic disqualification.

C. Normal Time to Degree

In general, graduate study in the physics Ph.D. program is expected to be a full-time activity. Students may pursue the M.S. degree on either a full-time or part-time basis. Departmental approval is required for part-time status and other proposed arrangements. The Normal Time to Degree for the Physics and Physics-ChaMP program is as follows:

- Advancement for the Ph.D. = 3 years
- Ph.D. completion = 6 years
- Maximum time permitted to Ph.D. degree = 7 years

Graduate Students must advance to candidacy and complete the degree within the limitations established by UCI's Graduate Council (March 2004). A student exceeding the maximal time to degree shall be deemed not to be making satisfactory progress toward their degree; moreover, they shall not receive instructional University resources (financial aid, TA-ships, housing, etc.).

D. *Departmental Commitment to Graduate Student Retention*

1. **Performance Review:** In an effort to maximize scholastic achievement, student performance will be reviewed at the end of each academic quarter. Students who receive a grade of B- or lower and/or a quarter GPA below 3.0 will receive a notice from the Graduate Advisor and a reasonable period of time in which to make up all deficiencies.
2. **Friday Seminars:** During the first year of graduate study, students are required to enroll in one unit of research seminar (P291) each quarter. Seminars are held each Friday at noon and pizza is provided. Each week, students will learn about the research interests of one faculty member. Attendance is required and will result in a grade of satisfactory/unsatisfactory for each quarter.

E. Unsatisfactory Progress

A graduate student who has not demonstrated satisfactory progress is not eligible for any academic appointment/employment and may not receive fellowship support or other award that is based upon academic merit.

1. **Criteria for Determining Unsatisfactory Progress**
   - An overall grade point average below 3.0; or
   - A grade point average below 3.0 in two successive quarters; or
   - Fewer than 24 units completed and applicable toward the advanced degree requirements in the last three quarters; or
   - Failure to complete required courses or examinations satisfactorily within the period specified by the graduate program; or
   - Failure to pass a required examination in three attempts; or
   - Failure to progress academically within the Normal Time to Degree framework specified; or
   - The appropriate faculty committee's evaluation that there has not been satisfactory progress toward completion of the thesis or dissertation.

   Note: Unsatisfactory academic progress may be determined on the basis of explicit requirements such as those outlined above. However, the professional judgment of the faculty, upon review of all graduate work undertaken by the student, is paramount.
2. **Notice of Unsatisfactory Progress**
   The Graduate Advisor will notify graduate students who have not demonstrated satisfactory progress and give them a reasonable period of time in which to make up all deficiencies. The purpose of the notice of unsatisfactory progress is to provide the student with a period of time (usually at least one academic quarter) in which to make the necessary improvement in their academic status, and successfully complete their graduate study. [Section VI.A.2.b, *Graduate Advisor's Handbook 2005-06*]

XIII. INTERNATIONAL STUDENTS

A. Traveling Outside the U.S. to Obtain a New or Renewed Visa

Please be aware that the United States Homeland Security Act has complicated visa processes. It is considered particularly difficult for students from certain countries to obtain new or renewed visa stamps after a stay in the U.S. Until further notice, you are highly discouraged from leaving the country at any time during your studies if your visa has expired.

If you should decide to leave the country with an expired visa, you must meet with the Graduate Affairs Officer, My Banh, to discuss the date you must return in order to receive funding. **If you cannot arrive by the agreed date, you will not be supported on departmental or research funds for the entire quarter.** You are required to make any and all arrangements for your financial obligations including housing during your absence. **Absences beyond two quarters require approval by the Department Chair.**

XIV. REQUIRED FORMS FROM GRADUATE DIVISION

Graduate student forms for all enrolled students can be found at www.grad.uci.edu/forms/index.html. Please contact the Graduate Affairs Officer, My Banh (FRH 4109B, 824-3496) if you have any questions.