

DEPARTMENT OF PHYSICS

GRADUATE POLICIES & PROCEDURES MANUAL

This graduate manual is intended for the informational use of graduate students in the Department of Physics only. Its purpose is to bring together pertinent information essential for Physics graduate students, and is meant to supplement and to clarify guidelines for graduate study published in other FIU publications. This manual is not intended to be a substitute for any of those documents.

It is the student's responsibility to familiarize him or herself with these policies. Each student must read these policies and sign the statement below. This statement must be submitted to the Graduate Program Assistant for inclusion in the student's file. To properly view the links, please copy and paste the URL's into your browser.

Version 1 August, 2019

Signature

Date

I have received and read the Graduate Policies and Procedures Manual

Name



DEPARTMENT OF PHYSICS

THE DOCTORAL (Ph.D.) PROGRAM

The Ph.D. is conferred on individuals in recognition of their demonstrated ability to master a specific field of knowledge and to conduct significant, independent, original research that is documented in a dissertation. The program of study leading to the Ph.D. must include a comprehensive plan to provide a strong background in a specific discipline in Physics.

THE PATH TO COMPLETION

Details and policies of the FIU Physics Ph.D. program are described in this document. The path to obtaining a Ph.D. in Physics has the following components:

- Complete required and elective coursework
- Gain experience as a teacher
- Pass the Ph.D. qualifying exam
- Select an area of research and a dissertation advisor
- Form a dissertation committee
- Develop and defend a dissertation proposal
- Conduct original research that leads to results suitable for publication in a professional, peer-reviewed journal.
- Write and successfully defend a dissertation

This path is in accord with best practices of physics graduate programs across the country.

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ADMISSION REQUIREMENTS

To be considered, the applicant must meet the entrance requirements set by the University Graduate School, as well as the Department. These include:

- A bachelor's degree (B.A./B.S.) in Physics or a closely-related field with coursework in upper division physics.
- A minimum GPA of 3.0 on a 4.0 scale in undergraduate work. Applicants with a M.S. degree in physics or a closely related field may also be admitted.
- Graduate Record Examination (GRE): quantitative, verbal, analytical writing sections.
- The GRE Physics subject exam is not required.
- At least two letters of recommendation from professors that can attest to the applicant's prospects for succeeding in a graduate program. Letters should be submitted through the Graduate School's online application.
- A personal statement that includes a justification of why the student wants to pursue graduate studies, any previous research experience, the reason for choosing the FIU Physics Graduate Program, research field of interest, and interest in working with a particular faculty member.

INTERNATIONAL APPLICANTS

- Must demonstrate proficiency in English by achieving a minimum score of 80 on the TOEFL iBT or score at least 6.5 of the IELTS.
- Applicants without financial support must complete a declaration and certification of financial ability to support themselves while a student (contact the FIU International Students Office for further information): https://globalaffairs.fiu.edu/isss/
- Transcripts must be translated and certified; information on translation service companies is available at: http://gradschool.fiu.edu/admissions/

Any applicant who fails to meet these criteria may appeal the admission decision to the Departmental Graduate Committee.

The Graduate Committee (composed of eleven Physics faculty members with Graduate Faculty Status plus the Graduate Program Director) makes admissions decisions based on the student's qualifications, match to the program, and availability of funding. All students admitted into the Ph.D. program may receive financial support in the form of a Teaching Assistantship, a Research Assistantship, or a Fellowship. Students may receive up to **5 years** of Teaching Assistantship support. The term of support for students on Research Assistantships will be determined by supporting faculty members. Students in the M.S. program are not eligible for Teaching Assistantships. All assistantships require good academic standing (minimum GPA of 3.0) and timely progress towards completion of the degree.

APPLICATION PROCEDURES

Prospective candidates must submit an application for admission into the graduate program online: http://gradschool.fiu.edu/admissions/. There is a \$30 application fee. Hit the "Apply Now" button on the left-hand side of the page. It is possible to start the application process without paying the application fee, and without submitting all official materials, though admission cannot be granted until these items are completed. On this site there is an admission checklist that tells you where you are in the process. Everything should be submitted through the Graduate School website. Official GRE scores are submitted by ETS. FIU's institution code is 5206.

If you are mailing documents from within the United States:

Florida International University Graduate Admissions Office PO Box 659004 Miami, FL 33265-9004

If you are mailing documents from outside the United States or using a courier service:

Florida International University Office of Graduate Admissions 11200 SW 8th Street, PC 230 Miami, FL 33199

For more on the application process please see the Graduate Schools FAQ at http://gradschool.fiu.edu/documents/FAQs Graduate Admissions.pdf

Due to the large number of applicants, we cannot check on the completeness of every application. Through the Graduate School's website there is an admissions checklist which will tell you the status of your application. Frequently, items missing from the checklist simply have not been processed yet but are in our possession. Inquiries regarding your application should be sent to the Department's Graduate Program Assistant, Mr. Omar Tolbert at otolbert@fiu.edu.

The Department of Physics has one application deadline per year, and that is for Fall admissions. That deadline is February 15. Applicants seeking an assistantship are encouraged to complete the process sooner since the allocation of assistantships begins in mid-January. Even if you cannot get official transcripts and GRE scores submitted prior to this, self-reported materials may be used for purposes of determining financial assistance. All applicants are automatically considered for financial assistance.

To submit unofficial documents, such as your own copies of transcripts, do so in the section of the online application that asks for "Supporting Documents." Select "Other" for document type and upload an electronic copy of the document.

Coursework

Required Coursework

All students seeking a Ph.D. degree are required to complete the following coursework. The courses are listed in recommended order in which they should be taken. Students on assistantships must take 9 credits in the Fall and Spring terms and 6 credits in the Summer C term unless they have advanced to Ph.D candidacy (D2&D3 forms submitted), then only 3 credits will be funded by the GA..

Recommended Term	Course No.	Title	Credits	
Fall 1 st year	PHY 5115	Mathematical Physics I	3	
Fall 1 st year	PHY 5240	Advanced Classical Mechanics	3	
Fall 1st year	PHY 5346	Advanced Electromagnetic Theory I	3	
Fall 1st year	PHY 5940	Physics Graduate Teaching Workshop*	1	
Spring 1 st year	PHY 6524	Statistical Physics	3	
Spring 1 st year	PHY 5347	Advanced Electromagnetic Theory II	3	
Fall 2 nd year	PHY 6645	Advanced Quantum Mechanics I	3	
Spring 2 nd year	PHY 6646	Advanced Quantum Mechanics II	3	
Fall 2 nd year - Fall 3 rd year	PHY 6524	Graduate Research Seminar OR		
	PHY 5930	Seminar in Physics**	3	
Fall or Spring of 2 nd year	PHY 6936	Advanced Topics***	3	
	PHY 7981	PhD Dissertation****	15	
* 1 st year students on TA must take this during their first term.				
** To be taken one credit pe				
*** Topics vary. Schedule of topics available on our <u>advanced-topicselectives-schedule page</u>				
**** Can only be taken once other coursework is completed. 15 credits is minimum				

^{****} Can only be taken once other coursework is completed. 15 credits is minimum

During the summer terms of the first two years students may take up to 6 credits of PHY 6939. Upon completion of required coursework and electives student should form a Ph.D. committee and defend a dissertation proposal. Once completed the student will be admitted to candidacy and subsequently take dissertation research credits (PHY 7981) until completion of degree.

Elective Coursework

In addition to the required coursework students are also required to take at least 3 approved electives for a total of 9 credits. The electives are offered periodically, different topics offered different years. A schedule is available at: advanced-topicselectives-schedule page. In addition, students may take electives in other FIU units (Math, School of Education, Engineering, etc.) with the approval of the Graduate Program Director and in consultation with the student's major professor. Students may also receive elective credits for outside summer schools or extended external workshops. This also must be approved by the Graduate Program Director. For these types of activities students would register for 3 credits of PHY 5936 during the term in which the activity takes place.

Transfer of Graduate Credits

If approved by the GPD, a maximum of 36 term hours earned elsewhere within a **completed graduate degree program** and up to 18 credits from a non-completed graduate degree program may be accepted toward the Ph.D. If a student has more than 18 credits of coursework prior to transfer to FIU, approved courses may be counted toward the coursework requirements but only 18 credits will be counted towards the 80 credits required for the degree.

Transfer credits are processed at the time the D-2 form is submitted.

All consideration of transfer credits will be done in accordance with Graduate School guidelines as specified in the FIU catalog; follow the links to the "Graduate Admissions" page from https://catalog.fiu.edu/ and then click on: Graduate —> Admission and Registration Information —> Graduate Admissions and then search on the page for "Transfer of Graduate Credit from other Institutions"

Ph.D. Qualifying Exam

All Ph.D. students must successfully pass both the Modern and Classical Physics portions of the Ph.D. qualifying exam after no more than two official attempts. The exam is administered before the start of the Fall term over a two-day period. After enrolling in the program, students have two chances to pass each portion of the exam. Newly admitted students may take a "free shot" at the exam. If either or both parts of the exam are passed the student will have completed those portions of the Qualifying Exam requirement. Any part that is not passed (or not taken) will not count against the student's two official attempts. If students have not passed both parts with their free shot, they must take any remaining part (or parts) when it is offered before the start of their 2nd year. Note that students that did not pass the exam with the free shot *must* take both parts. If either portion of the exam is not passed in this first official attempt the student will have one more attempt that will come prior to the start of their third year.

Any student not passing both parts of the Ph.D. qualifying exam prior to the start of their third year in the program will be dismissed from the Ph.D. program. They will be allowed to switch over to the M.S. program for one year, however, continued assistantship support is not guaranteed.

The exams require proficiency in upper-division undergraduate and lower-level graduate materials. The Classical exam covers classical mechanics, electricity and magnetism, and thermodynamics. The Modern exam covers special relativity, quantum mechanics, and other topics from basic atomic or nuclear/particle physics. Problems are submitted by the faculty at large and selected by the Graduate Committee. Each exam is four hours long, and students are required to do six problems from a list of nine. Prior years' exams can be found at: http://faculty.fiu.edu/~jrodrig/special-topics-qualifier-prep/

The passing score is set by a vote of the entire Department at a level generally consistent with a recommendation of the Graduate Committee. This level varies somewhat based upon the difficulty level as judged by the Committee. In recent years it has been in the range of 50-60% correct. Factors such as grades in coursework or proficiency as a researcher sometimes play mitigating roles for borderline students.

In addition to testing basic proficiency, the exam also tests a student's work ethic and study habits. That is, does a student have the drive and determination to put in the work required to pass the exams? If so, it is the Department's belief this demonstrates that the student also has the drive and determination necessary to go through the more rigorous trials of doing research and writing a dissertation. The qualifying exam is just one of many hurdles students encounter on their way to a Ph.D. and is not intended to assess all possible factors of student competence.

Dissertation Advisor and Committee

Dissertation Advisor

To serve as chair of a dissertation committee, a faculty member must:

- Be a tenured, tenure-earning, or have a courtesy faculty appointment in the Department of Physics, and have Dissertation Advisor Status (DAS). A list of DAS faculty is available at http://gradschool.fiu.edu/facultystaff/#facultylist -> Graduate Faculty Members -> College of Arts, Sciences and Education -> Physics.
- Have specialized academic competence in the student's major field.

Dissertation Committee

To serve as a dissertation committee member, the faculty member or external research scientist must:

- Be a member of the University Graduate Faculty or be approved by the Physics Graduate Committee if the person is an external research scientist.
- Have specialized academic competence relevant to one of the major emphases of the student's dissertation project.

The appointment of a dissertation advisor and committee is subject to approval of the GPD.

These guidelines may not adequately cover all situations. Therefore, faculty members may make a written appeal to the Graduate Committee. If necessary, an appeal of the Graduate Committee's decision will be made to the entire faculty.

Expectations of Students

Incoming graduate students are encouraged to join a research group as soon as possible. Many already know their area of interest and are frequently selected for admission on that basis. Those without a preset interest are encouraged to speak with all of the faculty about their research and to find a suitable fit. If students find that the area of research or research advisor they have chosen is not to their liking, they are allowed to make changes.

Since students in their first 2 years are generally busy with coursework in addition to fulfilling their responsibilities as teaching assistants, their early research activity is usually minimal. They generally work on small projects that help prepare for upcoming experiments or support more advanced students in their research. The Department finds the mentoring of junior students by more advanced students with the accompanying transfer of knowledge to be an important component in the development of both students.

Students are encouraged to form their dissertation committee as soon as possible but no later than the start of their third year. This requires filling out the D-1 form found at http://gradschool.fiu.edu/student-forms.shtml.

Role of Dissertation Advisor

Research advisors are expected guide their students into a project that ultimately leads to a dissertation. As opposed to the process frequently seen in other disciplines, the student's research project is generally closely tied to their advisor's own research interests. An advisor must provide adequate resources (equipment, space, and time) to make sure that the student's research is both successful and done in the shortest amount of time possible. Advisors are also expected to provide their students with the opportunity to present their results at meetings and conferences.

As the student begins to wrap up the data acquisition phase of his/her project, he/she is expected to begin writing the dissertation. This is frequently the most difficult part for many of our students as many of them are non-native English speakers. The advisor is expected to be the primary editor of the dissertation and to advise the student on organization, use of reference materials, best practices for presentation of results, and interpretation of results. It is also expected that the dissertation be in a state that is 85-95% final before it goes to the dissertation committee. Students with little writing experience are frequently referred to the Center for Excellence in Writing (http://writingcenter.fiu.edu).

The dissertation advisor is also responsible for preparing the student for the dissertation defense. This includes critiquing the student's presentation prior to the defense. It is the expectation of the Department that every student that defends will be successful in that defense. That is, no advisor should let a student advance to a defense unless that student is truly ready to defend.

Role of Dissertation Committee

The following list gives some examples of what is expected of committee members.

• To make sure that the dissertation project is suitable. This is usually done at the time that the dissertation proposal is written and defended by the student. (See section on Dissertation Proposal.)

- To monitor the progress of the student. This is done through informal meetings of part or all of the committee several times a year and through the formal annual review process. (See section on Annual Reviews.)
- To provide advice and support in areas where their own expertise is complementary to the dissertation advisors.
- To verify that the dissertation is well organized, has properly used reference materials, that results are properly presented, that the interpretation of the results is accurate, and to provide minor editing. This is first done prior to signing the preliminary version of the dissertation before the defense, and then again prior to signing the final version. (See section on Dissertation Defense.)

Dissertation Proposal and Defense

A formal research proposal must be submitted by students and approved by the dissertation committee. The dissertation proposal outlines the goals, techniques, and scientific justification for the research project to be covered in the dissertation. It is common for the research project to deviate from the proposal as research progresses, which is, after all, in accord with the proper application of the scientific method.

The proposal should be done as soon as all coursework is completed, usually in the third year. The proposal must be defended by the student before the committee. This involves a presentation to the committee in which the members probe the student's understanding of the proposed topic and methods to be used. The proposal defense satisfies the Graduate School's requirement of the "Candidacy Exam."

Upon successful defense of the proposal, forms D-2 (Program for Doctoral Degree and Application for Candidacy), D-3 (Doctoral Dissertation Proposal) as well as the Responsible Conduct of Research (RCR) certificate are submitted to the GPD for approval and processing. The forms can be found at http://gradschool.fiu.edu/student-forms.shtml and the link to the RCR certification is at http://research.fiu.edu/rcr/index.html. As with all form submission, students should be aware of the deadlines put forth by the Graduate School: http://gradschool.fiu.edu/calendar-deadlines/#doctoral

The formal proposal should follow the general guidelines outlined in the Regulations for Thesis and Dissertation Preparation Manual

(http://gradschool.fiu.edu/documents/Proposal_Guidelines.pdf) and should contain the following sections:

- Introduction statement of the problem/purpose and a review of prior relevant work Materials & Methods a technical discussion of the methods and approaches to be used in the research
- Preliminary Results/Feasibility
- Program Schedule
- References

The proposal shall be of sufficient length to adequately describe the research topic justification and plan. Generally, this is 5 to 10 pages. The proposal should first be vetted by the dissertation advisor and then the committee. If approved, a proposal defense can be scheduled. If it is not approved and the matter cannot be satisfactorily resolved, the student and major professor should take the issue to the Graduate Committee for mediation.

The student is responsible for scheduling the defense of the proposal at a time convenient for the committee members and the faculty of the Department of Physics (during regular business hours). The student must also adequately advertise the proposal defense at least one week in advance of the presentation. The student must send an electronic version of the proposal announcement to the Graduate Program Assistant (Omar.Tolbert@fiu.edu).

Immediately following presentation of the proposal seminar and a public question period, the public audience shall be asked to leave and the committee and major professor will remain for a defense of the proposal.

Upon successful defense of the dissertation proposal the student advances to candidacy and enrolls in PHY 7981 for the remainder of their time within the program. Once a student advances to candidacy, the student must be continuously enrolled in three and only three credits each term including the summer term until graduation. Students will receive IP (in progress) grades for PHY 7981 credits until the final term. Grades will be changed from IP to P as soon as the candidate successfully defends the dissertation and the major professor files the grade.

Annual Student Evaluation and Mentoring Program

In accordance with Graduate School policies (http://gradschool.fiu.edu/students/doctoral-student-annual-evaluation/, form found through my.fiu.edu), each doctoral student is required to undergo an annual review. Students that have not yet formed a dissertation committee will meet with the GPD and advisor (if applicable), while students with a dissertation committee will meet their committee. These reviews are intended to evaluate progress and establish goals for the coming year. The student must submit a completed Annual Student Evaluation and Mentoring Plan form to the Graduate Program Director following this meeting. The Performance Summary and Future Goals sections must be completed by the major professor with input from the committee members. If a member cannot attend physically but hears/sees the meeting then he/she can send an email to the advisor authorizing him/her to sign the form.

This review generally takes place in the spring term and has a May 30 deadline. Failure to complete the review may lead to the suspension or permanent revocation of the student's assistantship.

Dissertation

A dissertation is required of all candidates for the Ph.D. degree. It is the single most important document the student will write during his/her academic career. It is the expectation that the results of the dissertation research lead to original, publishable results. The document is expected to be in accord with usual best practices in physics and must conform to the format outlined in the Regulations for Thesis and Dissertation Preparation Manual available to students online from the Graduate School website, search for "Forms and then "Dissertation Forms"hrough t. Students should consult examples of previous FIU Physics dissertations available through the FIU Library for further guidance on content and formatting: http://digitalcommons.fiu.edu/etd/ (enter Physics in the search box).

Preliminary Approval of Dissertation

Prior to defending the dissertation, students must gain preliminary approval from the advisor and committee. If deemed ready for a defense, the student will submit the dissertation along with form D-5 (Preliminary approval of dissertation and request for oral defense) to the GPD for approval one week prior to the deadline for submission to the College of Arts and Sciences. These documents along with a defense announcement then go to the Associate Dean for Graduate Studies for approval, which must be done four weeks prior to the proposed defense date. In order to graduate in a given term, the defense must take place prior to deadlines dictated by the Graduate School. (See http://gradschool.fiu.edu/calendar-deadlines/#doctoral)

Dissertation Defense

The dissertation is defended through a presentation before the committee. All committee members are required to attend in person unless approval has been previously granted by the graduate school (see section on Exceptions to Requirements). The defenses are open to the public. Students must present a synopsis of the dissertation and be able to answer any relevant questions posed by the audience. At the end of the presentation, there occurs a closed session with the student, committee, and sometimes the GPD, in which more in-depth questioning of the student may take place. This is followed by a closed discussion among the committee members who then decide if the student has met the requirements for a Ph.D. and what changes to the document are needed. The defending students are then brought back into the room to be given the decision of the committee and to discuss any changes to the document. The committee reads and approves the final draft of the dissertation after changes have been implemented.

Dissertation Defense Rubrics

When a student successfully defends the dissertation, committee members will fill out three rubrics evaluating the contents, written and oral presentation of the dissertation. These completed rubrics are submitted to the Graduate Program Assistant after the defense. The rubrics forms are available in the College of Arts & Sciences Graduate Program website:

<u>https://case.fiu.edu/academics/graduate/index.html</u> (Rubrics can be found by scrolling down and clicking the link under Thesis & Dissertation Rubrics).

A student who fails the dissertation defense may be allowed a second defense, on recommendation of the dissertation committee. If re-examination is necessary, the examination cannot be held earlier than six months or more than one year from the date of the first examination.

Final Document

When a student successfully defends the dissertation, committee members and the Committee Chair may suggest changes in the content of the final document. When those changes have been completed to the satisfaction of the Committee, one paper copy of the final version of the dissertation (for College of Arts & Sciences) must be presented to the Graduate Program Director with the accompanying Electronic Thesis and Dissertation form eight days before it is due at UGS. The Graduate Program Office will make a copy of the form and submit the dissertation to the College who will submit it to the Graduate School.

Active Status and Time Limitations

Continuous registration is required for all students accepted into the Ph.D. program. All students supported with a Graduate Teaching Assistantship or Graduate Research Assistantship must register for at least nine credits per term during the regular academic year and six credits during the summer term. Once students have advanced to candidacy, a minimum of three hours per term is required to maintain active status in the program, if not supported by an assistantship. Students must be continually enrolled until they defend.

At the Ph.D. level, all requirements, including the successful defense of a dissertation must be completed within <u>nine years</u> of first enrollment in the Ph.D. program, inclusive of any leaves of absence or other interruptions of active student status. Students who do not complete their dissertation within this time period may apply for an exception to this rule by filing a Request for Exception form to the Dean of the University Graduate School.

Assistantships and Other Financial Support

Various forms of financial assistance are available to graduate students at FIU. Recommendations for aid as well as admission into the program are based on the ranking of applicants by the Graduate Committee. In addition to Teaching and Research Assistantships, graduate students are encouraged to apply for external support for their graduate work (e.g., NSF, DOE, etc.). Proposals to funding agencies must have the approval of the Department of Physics and, in some cases, the Office of Sponsored Research Administration. Information regarding financial assistance may be obtained from the Physics Graduate Program Office or from the University Graduate School website (http://gradschool.fiu.edu/students/funding/, the types of financial assistance are located by scrolling down and selecting the appropriate resource).

TA's and RA's come with a stipend and tuition fee waivers. Students are responsible for additional "Fees" imposed by the university.

Graduate assistantships are renewed each term subject to adequate progress being made towards completion and the GPA. All funding requires students to maintain a 3.0 minimum GPA. *Students will be allowed no more than 5 years of TA support*. Exceptions may be granted by the Graduate Committee subject to various factors including the availability of support, efforts by the student and the advisor to obtain other funding, or other extenuating circumstances. The term of RA

support is at the discretion of the principal investigator (usually the advisor) of the grant on which the student is supported.

Research assistantships are intended to:

- Provide financial support for graduate students working toward their degrees.
- Give graduate students the opportunity to obtain university research experience under the guidance of departmental faculty; specific research duties are assigned by the researcher providing the assistantship.

Teaching assistantships are intended to:

- Provide financial support for graduate students working toward their degrees.
- Give graduate students the opportunity to obtain university teaching experience under the guidance of Departmental faculty. The Teaching Assistant Coordinator in consultation with faculty determines specific course assignments.
- Enable the Department to meet the teaching demand of multiple-section high-enrollment laboratory courses.

Students on assistantships receive a waiver for 24 (25 first semester) credits of matriculation annually, and must be enrolled as full-time students. Full-time enrollment is designated as 9 credits in the fall and spring terms and 6 in the summer, or as 3 credits per term after a student advances to candidacy. International students, however, are **not** considered full-time at 3 credits, so action must be taken by requesting an approval for Reduced Course Load due to Advancement to Thesis or Dissertation Segment. The form is available from FIU's ISSS office at

 $\underline{https://globalaffairs.fiu.edu/wp\text{-}content/uploads/sites/40/2018/08/Advancement-ploads/sites/40/2018/Advancement-ploads/sites/40/2018/Advan$

Thesis_Dissertation-08-2018-fill-1.pdf

Students are paid in bi-weekly paychecks.

Supervised Teaching Experience

All Ph.D. students in Physics are required to spend at least two semesters as a teaching assistant (TA) during their time at FIU. This includes students who come into the program on a research assistantship (RA). This is clearly important for students wanting to pursue an academic career.

Teaching Assistants are expected to allocate 20 hours per week to responsibilities associated with teaching. The majority of the TAs teach three introductory labs per semester or five astronomy labs per year. Some students teach recitations sections or act as in-class TAs and most TAs will also be assigned some exam grading. Assignments are based on preferences and experience.

Introductory lab TAs are required to attend weekly orientation sessions. They are in charge of their lab sections and are generally aided by undergraduate Learning Assistants (LA). The TAs are responsible for grading the lab assignments and assigning grades at the end of the semester.

All graduate students are required to sign up for the one-credit Physics Graduate Teaching Workshop course (PHY 5940). New TAs sign up for this in their first semester. This course is covered by the weekly orientation meetings. The Physics Education Research Group oversees the training of the students as instructors.

Evaluation of Teaching Assistants

Teaching assistants receive an evaluation from students in every laboratory that they teach. Graduate students who have also enrolled in PHY 5940 will also receive a Pass/Fail grade based on their teaching performance. The TA Coordinator and faculty members are also encouraged to submit written evaluations of the TAs involved with their courses to the Physics Graduate Program Director. These evaluations are added to the student's file. TAs also are evaluated by the students in their classes. These are posted by the university office of institutional research at https://opir.fiu.edu/faculty-evaluations.htm

Teaching Assistant/Faculty Grievances

On rare occasions disputes between TAs and faculty members will arise. Changes in TA assignments or suggestions to resolve conflicts should be made to the Physics Graduate Program Director or a member of the Graduate Committee. Failure of the Graduate Committee to resolve a conflict to the satisfaction of all parties will necessitate the formation of a temporary "Graduate Assistant Committee". This temporary committee will be composed of: two representatives from the Physics faculty elected by the faculty, one of whom will be designated as the chair; the Physics Graduate Program Director as *ex-officio* member; two graduate student representatives elected by fellow graduate students; one faculty member from outside of the Department selected by the temporary committee chairperson.

A majority vote by this committee will resolve complaints. This committee may also make recommendations to the Graduate Committee and the Department concerning issues of TA welfare. The members of the Graduate Committee are listed on the Department web site.

STUDENT DISMISSAL POLICY

Certain circumstances may lead to a graduate student being dismissed from the program. Those circumstances may include:

- 1) Falling out of GPA compliance for two consecutive semesters
- 2) Student fails qualifying exams twice
- 3) Failure to maintain continuous enrollment
- 4) Failure to meet conditional admission requirements
- 5) Student no longer has a sponsoring major professor
- 6) Student is not making satisfactory progress as reflected by unresolved unsatisfactory annual evaluation.
- 7) Student academic or research misconduct, illegal, fraudulent, or unethical behavior.
- 8) Other serious issues as determined by the Graduate Committee
- 1) To remain in good academic standing, graduate students must maintain a graduate GPA of 3.0. Failure to maintain good academic standing will result in placement on academic warning, probation or dismissal. A graduate student whose cumulative graduate GPA falls below a 3.0 will be placed on warning, indicating academic difficulty. A graduate student on warning whose cumulative graduate GPA remains below 3.0 in the following semester will be dismissed. A graduate student will not be dismissed prior to attempting a minimum of 12 hours of coursework as a graduate student. The student has ten working days to appeal the dismissal decision.

Note that students on a graduate assistantship will lose the assistantship immediately upon dropping below a GPA of 3.0. The assistantship may be reinstated after the GPA has been raised to 3.0. There is no appeal for this action.

- 2) Failure of a second attempt in the qualifying exams will result in the student dismissal. No appeal of dismissal under these circumstances will be considered.
- 3) Lapses in enrollment for two or more consecutive terms prior to advancement to candidacy for PhD or approval of the proposal for MS students will result in the student being dropped from the program. After a doctoral student is advanced to candidacy, continuous registration for at least 3 dissertation credit hours each term (including the summer term) is required until the dissertation requirement is fulfilled. For Master's degree students with an approved proposal, continuous registration for at least 1 thesis credit hour each term (including the summer term) is required until the thesis requirement is fulfilled. A student who finds it necessary to be excused from registration must formally request a leave of absence from the graduate program.
- 4) Under some circumstances students are admitted conditionally with unofficial documents, pending receipt of the final official documents. If the official documents are not received by the middle of the first semester of attendance, the student will be dropped from the Program.
- 5) Faculty sponsors may decide that they are incompatible with a student or the student may wish to separate from the lab. If a faculty sponsor has decided that they are no longer willing to advise a student, they must immediately send a memo to the GPD, copied to the student, stating they will no longer continue to be the student's advisor. If a student wishes to separate from a lab, they should immediately consult with the Graduate Program Director who will help them find a different sponsor, if possible. Students whose advisor has terminated their sponsorship or students who have left a lab have until the end of the semester to find an alternate sponsor before they will be dropped from the Program. Students who were admitted to the program on a research assistantship without promise of Departmental support will require a vote of the Graduate Committee to determine if TA support will be provided (if available) to allow the student to remain in the program under sponsorship of a new advisor without available grant support. The duration of such TA support would be determined at the discretion of the Graduate Committee on a case-by-case basis.
- 6) During the spring term, the student must schedule a meeting with the GPD. The purpose of this review is to insure that the student is on track with regards to the process of the graduate program (meeting program milestones, i.e., committee formation, committee meetings, memos in file, etc) to insure smooth and timely progress for the student. Students who fail to meet Departmental milestones may receive an unsatisfactory review. Students who are supported by a teaching assistantship or research assistantship must obtain a satisfactory review to maintain their support for the next academic year. Students who receive unsatisfactory reviews and do not correct deficiencies by the end of the summer term will be recommended for dismissal from the Program. Students who have been dismissed must apply for readmission if they wish to complete their degree.
- 7) Students are bound by the codes of student and academic conduct as described in the FIU Student Handbook. University policies outline acts of student misconduct, which are expressly

prohibited and violate University rules and regulations. These include such actions as disruptive conduct, theft or unauthorized possession, vandalism, hazing, falsification of records, harassment, and assault. Once a student has been charged with a code violation, he/she has three options: 1) administrative disposition, whereby the student may accept responsibility and a sanction is imposed by the judicial administrator; 2) a formal administrative hearing; 3) a formal hearing before the University Judicial Committee. The format for the formal hearings, the appeals procedures, and possible disciplinary sanctions are all outlined in the Student Handbook and may include dismissal. Separate policies and procedures govern academic misconduct. Academic misconduct (i.e., academic dishonesty) includes but is not limited to: cheating, plagiarism, falsification of academic records, bribery to gain academic advantage, and misuse of computer services, including the unauthorized appropriation of another's program(s). Disciplinary penalties for academic misconduct range from counseling to expulsion from the University. Allegations of academic misconduct are handled through Academic Affairs Office as outlined in the Student Handbook.

8) Other serious issues as determined by the Graduate Committee.

Appeal:

Students dismissed from the Program have 10 business days to appeal to the Department of Physics Graduate Committee for reinstatement. If one of the committee members or the GPD has a conflict of interest with the student, the member in conflict will be removed from the committee for the purpose of the appeal. The Committee will evaluate the appeal and render a decision within two weeks. Note that for reinstatement for dismissal of items 1 and 3, a petition to UGS will also be required. Appeals from students failing their qualifying exams twice (2) and petitions from students not meeting conditional admit requirements (4) will not be considered.

*Re-admission:

A period of at least one academic year must elapse after the date of dismissal before an application for admission will be accepted for consideration. In applications for re-admission, to the same program or admission to another program, admission criteria shall include consideration of previous performance at the graduate level in addition to the normal admission requirements. A student who has been dismissed for failure to make sufficient progress toward degree completion or for non-compliance with the continuous enrollment policy may submit an application for readmission at any time prior to their time limit for degree completion. Re-admission of all doctoral students will require approval by the Dean of the University Graduate School.

Exceptions to Requirements

Under certain conditions, exceptions to the Graduate School or Departmental requirements may be waived. Students may seek waiver by submitting a Petition for Exception form to the GPD with all required documentation. The petitions are now submitted electronically. For additional information please see the Graduate Program Director.

Obtaining Florida Residency

Students supported by an assistantship are considered Florida Residents for the purpose of determining tuition and fees. Students using other forms of financial aid or are otherwise not on assistantships may seek Florida Residency. To be considered for Florida residency, the student

must be a U.S. citizen or legal alien, and independent (i.e., your parents do NOT claim you on their taxes and you file your own taxes). To apply for residency, the following information and any other documentation proving your ties to the state of Florida must be taken to the Enrollment Office to be reviewed. Residency may only be established prior to the beginning of your first enrollment term – after that point, you may not alter residency status. Therefore, it is extremely important to get the following items BEFORE YOUR FIRST TERM BEGINS. Even if residency is established during their first term, some may need to turn in a "Residency Reclassification" form if there is a change of their funding source.

Proof of Residency:

- Florida Driver's License
- Voter Registration Card
- Florida Vehicle Registration
- Declaration of Domicile (from a Dade County Court and signed by a Notary Public of Florida)
- Proof of Independence (e.g., tax return)
- Permanent Employment (e.g., a copy of your agreement with the University)
- Residence during periods of non-enrollment
- Lease/Own Home/Own Property
- Checking Account with a Florida Bank

Withdrawal, Leave of Absences, and Readmission

Admitted graduate students who have not been registered for two consecutive terms, including the summer session, will be dropped from the graduate program and must apply for re-admission through the Graduate Admissions Office. Graduate students who withdraw voluntarily from their graduate studies are required to apply for readmission under the admission regulations in force at the time of reapplication. Forms for readmission and leave of absence are available online from the Graduate School.

If a student finds it necessary to be excused from registration in a graduate degree program for *two* or more consecutive terms he/she must formally request a leave of absence from the graduate program. Leave will be granted only under exceptional circumstances. When the student returns from a leave of absence, decisions concerning previous or current programs of study will be mutually agreed upon by the student's supervisory committee and the student.

A leave of absence does not extend the amount of time allotted for degree completion. The nine years for the Ph.D. are calculated from the entry date in the program and do not take absence from the program into account.

Research and Patents

The results of a graduate student's research could lead to a patent and the payment of royalties. The University claims no rights to patent royalties if the research is performed in a laboratory *outside* of the University under close cooperation with an *outside* advisor. The University requires,

however, that the student receive a fair share of any financial benefits from such a patent. If the patented work was done in a University laboratory, the University will own the patent and royalties will be distributed in accordance with the University Patent Policy.

Rights and Responsibilities

The University has developed policies and procedures on the rights and responsibilities of students and a code of conduct assuring that these rights may be freely exercised without interference or infringement by others. The code of conduct, academic misconduct policies, student grievance procedures and policies on student records are given in detail in the University publication Student Code of Conduct (https://studentaffairs.fiu.edu/get-support/student-conduct-and-conflict-resolution/student-code-of-conduct%20/index.php). Also, all administrative procedures and time deadlines must be met, whether or not they are specifically mentioned in this document. Students must operate within the rules and guidelines of the Graduate Policy and Procedures Manual, Graduate Catalog and the Regulations for Thesis and Dissertation Preparation Manual. Accordingly, graduate students should obtain copies of these publications from the Graduate Studies Office or visit the University Graduate School website (http://gradschool.fiu.edu/) and be familiar with their contents. Particular attention should be paid to the deadlines posted annually in the University Academic Calendar.

UNIVERSITY GRADUATE SCHOOL FORMS

available as PDF files at http://gradschool.fiu.edu/students/#studentforms

Ph.D. FORMS

Form D-1	Appointment of Dissertation Committee
Form D-1r	Appointment of Revised Dissertation Committee
Form D-2	Program for Doctoral Degree and Application for Candidacy
Form D-3	Doctoral Dissertation Proposal
Form	Student Evaluation and Mentoring Plan Form[J1]
Form D-5	Preliminary Approval of Dissertation and Request for Oral Defense
ETD Form	Approval of Defense and Electronic Submission of Dissertation.