Graduate Student Handbook

University of Virginia

Physics Department

2015-16

Contents

Graduate education is an important part of the mission of the Department of Physics at the University of Virginia. Our graduate students play a key role in both our research and teaching efforts, and the students we train go on to serve as leaders in physics and many other technical fields. We strive to challenge students to reach their full potential as research scientists, while at the same time providing the support and resources needed to ensure success.

This handbook is intended as an overview of the policies and procedures regarding graduate students in the department. The Department of Physics is a member of the Graduate School of Arts and Sciences (GSAS), and follows GSAS policies in most cases. More information on GSAS regulations can be found at http://artsandsciences.virginia.edu/gradschool. Additional policies particular to the department are summarized here. Where clarification or more information is required, students should consult the department's Director of Graduate Studies (DGS).

The department reserves the right to change the policies described here at any time. A version of this handbook is available on the department website at http://www.phys.virginia.edu. The online version may not be the latest. Please consult with the graduate advisor for any policy changes.

I. Degree Programs

The department offers four graduate degrees: the Ph.D., M.S., M.A., and M.A.P.E. Most students are admitted to the Ph.D. program, and the bulk of the information in this handbook is intended for them.

Ph.D. Degree: This degree is the highest degree available in physics, and represents professional preparation for a career in research or education. It requires both rigorous academic training and a research project yielding a significant contribution to science. The minimum time required for the degree is three years, but six years is more typical.

M.S. Degree: This degree has requirements similar to the Ph.D., but with fewer courses and a smaller-scale research thesis. It can normally be completed in two years, including summer research. The maximum time that a student can spend towards the MS degree is 3 years. The 3rd year has to be approved by the DGS and it is not automatically granted. A good case for the extension has to be made and must be to the progress evolution of the research project.

M.A. Degree: This degree requires several graduate-level courses but no research. It can normally be completed in three semesters, but it can be extended to a fourth semester. Thus a total of 2 years can be spent for the MA degree unless approved by the DGS

M.A.P.E. Degree: The M.A.P.E (Master of Arts in Physics Education) degree is intended for middle-school and high-school science teachers. It is administered separately from the other graduate physics degrees, and is not covered in this handbook. More information can be found online at http://galileo.phys.virginia.edu/outreach/ProfessionalDevelopment/mape.
Note that physics courses numbered at the 6000 level are intended for M.A.P.E. students.

II. Course Requirements

A total of 12 graded courses (36 credits) are required for the Ph.D. degree in Physics that includes six core classes, five electives, and independent study classes. Graded courses are those receiving a letter grade (A+ through F). In addition, ***first year*** students are required to take for credit the Introduction to Physics Research I and II (PHYS 9010 and 9020) as well as Physics Colloquium (PHYS 5993). Separately, at least 18 credits of non-topical research are required. Non-topical research is evaluated as "Satisfactory" or "Unsatisfactory," and is not considered as graded. Non-topical research courses are typically taken after the student has finished all required courses.

Core Classes: The six core classes are:

PHYS 7010 (Fall)	Theoretical Mechanics I
PHYS 7210 (Spring)	Statistical Mechanics
PHYS 7410 (Fall)	Electricity and Magnetism I
PHYS 7420 (Spring)	Electricity and Magnetism II
PHYS 7610 (Fall)	Quantum Mechanics I
PHYS 7620 (Spring)	Quantum Mechanics II

All Ph.D. students must pass each of these courses with a grade of B- or higher, but transfer credits from other graduate programs can be accepted with the approval of the DGS. The material covered in these courses forms the basis for the Qualifying Examination (see Section V). If a student fails to obtain a B- or higher for a core class, the particular class in question must be repeated once again and the student must acquire a passing grade of B- and above. If a student fails two core courses in the same semester, then he/she cannot continue in the PhD program. An average GPA based on these courses should be maintained at B or above.

Electives: Five elective courses are required. Electives include any graded 5000-, 7000-, or 8000-level physics class, except for the core classes and independent study courses. At least two of the five electives must be 8000-level classes.

Regularly offered electives include:

PHYS 5190 (Fall)	Electronics Lab
PHYS 5240 (Spring)	General Relativity
PHYS 5250 (Fall)	Mathematical Methods of Physics
PHYS 5310 (Fall)	Optics
PHYS 5630 (Fall)	Computational Physics I
PHYS 5620 (Fall)	Introduction to Solid State Physics
PHYS 5720 (Fall)	Introduction to Nuclear and Particle Physics
PHYS 8220 (Spring)	Fundamentals of Photonics
PHYS 8420 (varies)	Atomic Physics
PHYS 8450 (Spring)	Computational Physics II
PHYS 8630 (Fall)	Introduction to Field Theory
PHYS 8640 (Spring)	Modern Field Theory
PHYS 8610 (Spring)	Solid State Physics
PHYS 8710 (Spring)	Nuclear Physics I
PHYS 8750 (Spring)	Elementary Particle Physics I

Not all of these courses are offered every year, but all should be available at some point during a student's time in the program. A variety of other courses are offered on a less regular schedule, subject to student demand and faculty availability. In recent years, topics have included accelerator physics, materials science, nanophysics, quantum computing, quantum optics, spintronics, string theory, ultracold gases, and ultrafast lasers.

In addition, students may take one elective class from a department other than physics under the following circumstance only: if and only if a similar course is **not** offered in the department of physics **and** the course proves to be extremely useful to the student's research **and** is thus recommended by the student's research advisor **and** approved by the DGS. Failure by the student to provide proof that the particular course has been recommended by the advisor, the said course will not be approved and will not be paid by the department. Courses from other departments can qualify as 7000/8000-level electives, subject to approval by the DGS. Note that if a student has chosen to work with an advisor outside the department, then the physics department will not be financially responsible for any courses taken by the student. The student should make sure that all financial obligations are met and that the research advisor outside the department is aware of the situation.

Colloquium and Research Classes: Colloquium (PHYS 5993) is a requirement for first and second year students. Students sign up for PHYS 5993 every semester for the first two years constituting to 4 courses. Introduction to Physics Research, PHYS 9010/9020, is a requirement for first year students only. This course constitutes for 2 courses and serves as an introduction to the various physics disciplines offered in the department. It is very informal and in some cases hands-on.

The independent study course (PHYS 7995) can be repeated for credit with the approval of the DGS but cannot be used to replace an elective. The work load for PHYS 7995 should be similar to that of a regular course with the same number of credits. PHYS 7995 is taken under the supervision of a faculty member, typically the student's prospective research advisor. PHYS 5993 and PHYS 9010/9020 are taken in conjunction with an otherwise full load of regular classes and/or research. There is no work load for these courses.

Non-Topical Research: Students working on their thesis or dissertation research enroll in non-topical research. At least 18 credits are required for the Ph.D., but most students take considerably more. It is the responsibility of the student to obtain permission from the instructor of the non-topical research section before enrolling for that section. Once enrolled, the student must meet with the instructor to arrive at a mutually agreed plan to complete the requirements of the non-topical research course. Failure to do so could lead to an unsatisfactory grade for the course. There are three courses that qualify as non-topical research:

PHYS 8999	For M.S. students
PHYS 9998	For Ph.D. students who have not yet passed the qualifier exam
PHYS 9999	For Ph.D. students who have passed the qualifier exam

Master's Degrees

M.A. Degree: The M.A. degree requires ten courses (30 credits) in total, with an average GPA 3.0 or higher, including four core classes and four electives as described above. A coherent course plan for this degree must be approved by the DGS.

M.S. Degree: The M.S. degree requires eight courses (24 credits), with an average GPA 3.0 or higher, including six core classes and two electives as described above. In addition, at least six credits of non-topical research are required for a total of 30 credits.

III. Course Schedule

Standard Schedule: The course schedule for Ph.D. students in the first two years of study is as follows:

Year 1:

Fall	*Spring*
PHYS 7010 – Theoretical Mechanics I	PHYS 7420 – Electricity and Magnetism II
PHYS 7410 – Electricity and Magnetism I	PHYS 7210 – Statistical Mechanics
PHYS 7610 – Quantum Mechanics I	PHYS 7620 – Quantum Mechanics II
PHYS 5993 – Colloquium	PHYS 5993 – Colloquium
PHYS 9010 – Introduction to Physics Research I	PHYS 9020 – Introduction to Physics Research II

Summer (first summer and every subsequent summer): students working on research during the summer should take 6 credits of PHYS 9999 – Non-Topical Research. Students should make it a priority to find a faculty to work with during the summers.

Year 2:

Fall	*Spring*
Elective	Elective
Elective	Elective
Elective or PHYS 5995 – Research (3 credits)	Elective or PHYS 5995 – Research (3 credits)
PHYS 5993 – Colloquium	PHYS 5993 – Colloquium

Subsequent years: 12 credits of PHYS 9999 – Non-Topical Research in each semester.

Fellowships: The standard schedule outlined in the above tables is appropriate for students who are working as a Teaching Assistant or Research Assistant in order to obtain financial support. Students who are entirely supported by a fellowship are expected to take one additional regular course in each semester that they receive such support. Ordinarily, the additional course is either an elective or PHYS 7995 Research. Fellowship students should consult with the DGS regarding their options.

Transfer Credit: Course requirements are reduced for students who have Master's degrees or who have taken graduate courses at another institution. Such students should consult with the DGS and develop an appropriate course plan. **At least 18 graded credits must be earned at the University of Virginia**, thus any transfer of credits must be discussed and approved by the DGS. Transcripts will be needed for courses to be transferred from other accredited institutions.

Extra Classes: The department will **pay tuition for up to 18 graded** classes for each student, which is sufficient to meet the degree requirements. This number may be reduced for students entering with transfer credit. **Students who wish or need to take additional classes are responsible for the additional tuition.** The charges may be paid from a research advisor's grant to the extent that tuition is an allowable expense. Note that audited courses are charged the same tuition as courses taken for a grade.

Course Registration: Students register for all courses through the online Student Information System (SIS), at http://www.virginia.edu/sis. Occasionally, special registration situations require a Course Action Form, available at http://www.virginia.edu/registrar/courseactionform.html.

Note that each student needs to be registered for a minimum of 12 credits every semester to be in good standing.

IV. Language Classes

All students whose first language is one other than English are required to take an English proficiency exam (the SPEAK test) administered by the Center for American English Language and Culture (CAELC). Students who have spent substantial time in an English-speaking environment may request a waiver for the exam, but such waivers are seldom granted. The SPEAK test is administered before classes begin in August and students coming from abroad should make sure that they are here before classes start to take the SPEAK test.

Based on the exam results, the CAELC will recommend a sequence of language courses for the student. Language courses are not graded and are taken in addition to the graduate courses described in Section II above. The student must take and maintain good standing in the recommended courses in order to be eligible for financial support as a Teaching Assistant. This is a GSAS requirement that cannot be circumvented. The only exceptions are the courses ESL 0901 and 0902, which are writing courses designed to help students with their research and thesis. These two courses may be deferred or waived with the approval of the DGS and the student's research advisor.

The department does not have a foreign language requirement for English-speaking students.

V. Qualifying Examination

All candidates must pass a qualifying examination to be eligible for the Ph.D. degree. Two attempts at the exam are allowed and no exceptions are granted on this regard. The exam is offered every May and August, with the first attempt taken in May after the first year of study and, if necessary, the second in the following August.

The exam covers the material of the six core classes: Classical Mechanics, Statistical Mechanics, Quantum Mechanics I and II, and Electromagnetism I and II. It is held over two days, with Classical Mechanics and Electromagnetism covered on one day and Quantum Mechanics and Statistical Mechanics on the other. The exam consists of twelve problems total, with two each from Classical and Statistical Mechanics and four each from Quantum Mechanics and Electromagnetism. Thus six problems will be offered on each day. The length of each day's exam is **four hours**.

To help prepare for the exam, the department provides students with a study guide consisting of approximately 200 problems given in previous qualifying exams. One half of the problems assigned in each new exam will be drawn from the study guide, and should thus be familiar to the students. The DGS can provide access to the study guide.

The qualifying exam is set and graded by the Qualifying Examination Committee. Each subject is independently graded by two faculty members, with the student names held anonymous. The final score is determined in consultation with the full committee.

To pass the exam, it is necessary to pass each day with a 50% mark. It is not necessary to pass each individual subject within a day. If a student fails one day but passes the other with a mark of 66% or better, then the student only needs to retake the exam for the day he or she failed. Superior performance on the entire exam will be awarded a pass with distinction. On occasion, an extraordinary performance may be awarded double distinction.

Students failing the exam who wish to continue in the program must try again at the next available date. Students failing a second time are ineligible for a Ph.D. degree. Students who fail the exam can usually obtain an M.A. degree, or can pursue an M.S. degree with the support of a research advisor.

VI. Research

Research Advisor: Each student's thesis project will be performed under the guidance of a research advisor. The research advisor is the student's primary mentor and guide in the development of research expertise. When selecting an advisor, students should think carefully about their own interests and needs, and speak frankly with the prospective advisor about both the student's and the advisor's expectations.

Students are expected to make a final selection for a research advisor within the department of Physics by the end of their second year. Prior to that time, there are several opportunities for summer research and independent study, so that students can become familiar with the research work. Students who have difficulty finding a research advisor should consult with the DGS, as the department makes a considerable effort to find positions for all students. A student may switch advisors at any time, but should be aware that doing so will generally delay the thesis project. Students past their second year who are not affiliated with an advisor are considered to be not in good standing.
A student in their third year and beyond without a research advisor will be terminated from the program by the end of the semester that the student has stayed without an advisor.

Research Funding: When selecting a research advisor, students should be aware of the level of research funding that is expected to be available. As noted in Section VII below, the department can provide financial support to a student for only a limited number of semesters, **no more than 6 semesters**. If research grant funds are also limited, a dissertation project should be chosen that can be completed during the time support is available.

Seeking Advisors Outside the Department: Only physics faculty or affiliated faculty members are permitted to serve as a research advisor for a physics student. If a student is unable to find an advisor in physics and chooses to work with an advisor outside the physics department, he or she will no longer be supported by the department of physics.

Research Committee: The research progress of each Ph.D. student is monitored by a research advisory committee. The committee consists of the research advisor, a departmental representative, and a third faculty member of the student's choice. The departmental representative is appointed by the DGS and serves as the committee chair.

The Research Committee meets every spring semester, normally starting in the third year of study. At the meeting, the student will discuss research progress and plans for the thesis. The meeting is typically scheduled for one hour, including 15 minutes for a student presentation, 30 minutes for discussion of the research, and 15 minutes for discussing evaluations. Evaluations are recorded on a research evaluation form, which the committee chair should return to the department office following the meeting. Research Committee evaluations are used by the department when allocating departmental fellowships and other awards. A poor evaluation may serve as an important warning to the student, but does not in itself jeopardize a student's standing in the department.

The Research Committee meeting must be held **by April 1 of each year**. A student who otherwise fails to hold a Research Committee meeting on time will be considered not in good standing for the following semester unless he or she graduates before then and the funding will be put on hold until the particular student finishes the review for the particular year in question.

Fourth-Year Seminar: Each Ph.D. student is required to present a seminar to the department by the end of the fourth year of study. Scheduling arrangements should be made with the listed instructor for the appropriate seminar class. The DGS can approve well-justified requests to postpone the seminar, but a student who otherwise fails to present the seminar on time will be considered not in good standing.

Time to Degree: The Physics Department adheres to the GSAS policy that all graduate students must complete their Ph.D. work (including the thesis defense) within seven years of entering the graduate program. Students entering their seventh year of study will be notified of this deadline and asked to provide a plan of research enabling them to complete their degree by the end of the year. A student whose research has been delayed by factors outside of his or her control may submit a request for an extension of study to the Graduate Program Committee. If approved, extensions will typically be granted for no more than six to twelve months of additional time. Once the time limit and any extensions have expired, the student will be considered not in good standing, and thus ineligible for financial support.
Personal events that entail a significant distraction from research may justify an extension of study. Such events could include the birth or adoption of a child, illness of the student or a family member, or time spent out of the country due to visa difficulties. Personal requests should be made at the time of the event, as requests made well after the event may be viewed less favorably. See also Section X below regarding leaves of absence; time spent on leave does not count toward the time to degree.

M.S. Degree
Students working towards an M.S. degree are not assigned a research committee and need not present a seminar on their research. All work for the degree must be completed within a maximum of three years from the time of admission to the program.

VII. Financial Support

This section describes general policies for financial support. Exceptions to these policies can be made as the department deems appropriate. Each student receives a letter from the department before the beginning of the academic year which details the financial support offered for that year. The terms and conditions set forth in the support letter take priority over the policies described here.

Types of Support: Nearly all Ph.D. students receive financial support during their studies. Support includes a stipend for the 9-month academic year, a stipend for summer research, tuition, fees, and basic health insurance. Support can either be provided by the department or university ("departmental support"), or by other sources ("non-departmental support"). Departmental support usually takes the form of a teaching assistantship (TA), but can also be a fellowship, gradership, departmental assistantship, or various combinations of these forms. Non-departmental support can be either a research assistantship (RA) or a fellowship paid by sources external to the university. RA support is normally paid by a faculty member's research grant, and arrangements for RA support must be made with a student's research advisor.

The academic year stipend amount for RAs and TAs is set for all students by the Graduate School of Arts and Sciences. The current stipend level can be found on the department web page. Please note that the stipends are subject to applicable federal and state taxes.

Duties: Students supported by a TA contribute to undergraduate instruction by supervising lab classes or recitation sections, holding office hours, and similar duties. A maximum of 20 hours per week of instructional effort may be required. Students supported by an RA work on a research project under the guidance of their research advisor. Students supported by a fellowship have no formal duties, but are expected to work full time on coursework and/or research. The duties required for other forms of support will be explained in the support letter.

Departmental Fellowships: The department offers a limited number of fellowships each academic year. Students may be nominated by a faculty member or may apply for a fellowship themselves. Awards are made by the Financial Aid Committee on the basis of course grades, qualifying exam scores, teaching performance, and research committee evaluations. Some priority is given to students who have not received a fellowship previously. Some consideration is also given to student need, such as whether RA support is otherwise available and how much time the student has remaining to complete his or her degree. Please note that fellowship stipends are subject to applicable federal and state taxes.

In addition, the department nominates several students each year for various University and external fellowships. Such opportunities are announced as they arise. The department's nominees are selected by the Financial Aid Committee from those students who respond to the solicitation.

Summer Support: The department does not provide support for the summer, but most students receive a summer stipend from a research grant. The stipend amount is set by the physics faculty, and can be found on the department web site. In addition, a small number of summer TA positions are typically available through the Summer Session Office. These positions are awarded by the Chair of the Summer Session on the basis of teaching performance and seniority.

Tuition and Fees: When students receive any form of financial support, all required tuition, fees, and basic health insurance will be paid as part of that support. Regardless of the source of support, the department will pay required fees and the tuition for up to eighteen graded courses. The charges for health insurance and non-topical research are paid by the department when a student receives departmental support, and by the research advisor when a student is supported by an RA. If the student receives support from a combination of sources, the charges for health insurance and non-topical research will be allocated in the same proportion as the student's stipend.

Limit on Department Support: Students are expected to obtain non-departmental support where possible, but the department will, if necessary, provide stipend support to a student in good standing for **six academic semesters** during the first five years of study. Departmental support for an additional two semesters will be provided as finances permit. Departmental support for more than eight semesters is provided only under exceptional circumstances, as determined by the Financial Aid Committee. Summer TAs do not count toward the limit on departmental support.

Students without Support: Students receiving no financial support are responsible for their own tuition, fees, and insurance. If all required coursework (including non-topical research) has been completed, the tuition charges can be minimized by registering as a non-resident student.

Master's Students
Students pursuing a Master's degree are normally ineligible for departmental support. However, a Ph.D. candidate who fails the qualifying exam in August may be offered financial support for the following fall semester so that he or she can complete an M.A. degree.

VIII. Satisfactory Progress

Requirements: Ph.D. students are expected to continually demonstrate satisfactory progress towards their degree. Satisfactory progress is defined according to the following criteria:

1. The student must maintain at least a **3.0 (B) grade average in the core courses and electives**. Seminars and independent study courses are not included in this average.

2. The student must pass all graded and non-graded courses. A grade of C+ or below is not passing, and neither is a mark of Unsatisfactory in a non-graded course.

3. The student must take the Qualifying Examination at a time approved by the DGS. (See Section V.) The student must pass the exam after at most two attempts.

4. After the second year of study, the student must be affiliated with a research advisor. (See Section VI.)

5. After the second year of study, the student must hold a Research Committee meeting each year by the specified time. (See Section VI.)

6. Before the end of the fourth year of study, the student must give a departmental seminar on his or her research. (See Section VI.)

7. The student must complete his or her degree before the end of the seventh year of study. (See Section VI.)

Sanctions: Students failing to maintain satisfactory progress may be placed on probation, declared not in good standing, or expelled from the Ph.D. program. This decision is made by the DGS in consultation with the Graduate Program Committee.

A student on probation is given a fixed amount of time to rectify the problems noted. If the student fails to do so, he or she is no longer in good standing and may be expelled from the program. The details of an individual case of probation will be explained in a letter to the student.

A student who is not in good standing is ineligible to receive financial support from departmental or research grant funds. If the problem resulting in loss of standing is rectified, the eligibility for financial support may be restored.

Teaching Duties: In addition to the above, students receiving support as a TA or grader must perform their duties with appropriate diligence. Students failing to perform satisfactorily may be deemed ineligible for future departmental support, at the discretion of the Financial Aid Committee.

Academic Misconduct: The department does not tolerate any form of academic or scientific misconduct. In addition to referring violations to the Honor Committee, the Graduate Program Committee reserves the right revoke a student's eligibility for financial support in cases of misconduct.

Master's Degrees
Students pursuing a Master's degree must pass all coursework required for the degree. M.S. students must also be affiliated with a research advisor after the first year of study. Students failing to meet these requirements may be subject to sanctions as described above.

IX. Dissertation Information

To complete the Ph.D. degree, the student must prepare a dissertation exhibiting independent research in physics. The basic requirements for preparing the dissertation and completing the degree are summarized here. More detailed information can be found at the GSAS website,
http://gsas.virginia.edu/enrolled-students/thesis-submission

Application for Candidacy: Prior to graduating, a student must file an Application for Degree Candidacy. The procedures and deadlines for filing can be obtained at:
http://gsas.virginia.edu/enrolled-students
Dissertation: Physical standards for the dissertation are described at:
http://gsas.virginia.edu/sites/gsas.virginia.edu/files/thesisPhysicalStandards.pdf
Procedures for submitting the thesis are described at:
http://gsas.virginia.edu/enrolled-students/thesis-submission

Examination: An oral examination in defense of the dissertation must be passed before a committee approved by the research advisor and the DGS. The examining committee consists of the research advisor, at least two other faculty members from Physics, and at least one other faculty member from another department in GSAS. Further information is available at:
http://records.ureg.virginia.edu/index.php

Deadlines: Several deadlines must be met to ensure graduation at the desired date. A current schedule can be found at: http://gsas.virginia.edu/enrolled-students/calendar. This schedule should be consulted at the beginning of the semester in which the student plans to graduate.

M.S. Thesis
The M.S. degree requires a written thesis documenting the research effort, with the same physical standards as the Ph.D. dissertation. The thesis must be defended before an oral examination committee consisting of the research advisor and at least one other faculty member from the Physics Department. Further information can be found at: http://records.ureg.virginia.edu/content.php?catoid=40&navoid=2485

X. Benefits and Policies

Health Insurance: All registered students are required to carry an approved health insurance policy. Basic health insurance is provided at no charge to students receiving financial support, but students are required to

apply for this coverage each year. Application information will be provided at the beginning of the fall semester.

Property Liability: The department cannot assume liability for personal belongings that are stolen, damaged, or destroyed in department facilities. Students are encouraged to obtain renter's or homeowner's insurance to protect their private property.

Student Services: Students receiving financial support are eligible for student services provided by the University. Services include gym access, intramural sports, attendance at athletic events, and access to the student health center. Further information can be found on the University web site. Only students receiving summer support retain access to these services during the summer session.

Leave of Absence: Students may request a leave of absence from the program for any reason. An official leave of absence must be approved by the Dean of the Graduate School of Arts and Sciences, and will be noted on the student's transcript. Unofficial leave may be arranged with the student's research advisor and the DGS. During unofficial leave, the student should register as a non-resident student during the academic semesters, and not register at all during the summer. During a leave of absence, student services are not available and the student is not eligible to receive a stipend. Taking a leave of absence will have no impact on a student's standing, unless the leave extends for more than two calendar years. After longer absences, the student must apply for readmission to the program.

International Students: The University's International Studies Office (ISO) provides support for issues specific to international students, including visa applications and tax advice. However, international students are individually responsible for knowing and following all relevant regulations. One notable requirement is that international students traveling to do research at an off-campus location must inform the ISO before leaving campus. It is important that ISO knows the whereabouts of every international student.
International students should also be aware that going back home at any time during the academic year make give rise to unexpected visa problems. Students should make sure to return on time when traveling during the academic year or summer so they do not miss classes or TA assignments. The department cannot be responsible for any visa problems that may arise upon re-entering the country as it is out of the department's control. If the student goes back during a break but cannot return by the start of the semester, the student's registration will be altered so they stay enrolled but the department will not be able to financially support them until the following semester after their return to the department.

Harassment and Discrimination: The Physics Department fully adheres to the University's policies, and does not tolerate any form of harassment or discrimination. Students are encouraged to bring any incident or situation that makes them feel uncomfortable to the attention of the DGS. Alternatively, the Committee on Diversity, the Graduate Program Committee, the Grievance Committee, and the Department Chair provide other resources within the department, while the Dean of Students and the Ombudsman can provide assistance at the University level.

Grievances: The department's Grievance Committee is available to consider grievances from students that are not resolved through direct discussion with an individual faculty member. A student should feel free to bring any unsatisfactory issue to the attention of the committee. The Ombudsman provides a similar service at the University level.

XI. Safety

To ensure safe practices in department laboratories, students should be aware of the following guidelines:

Emergencies: For general emergency response, contact the campus police by dialing 911 from any phone. For facility emergencies such as water leaks or electrical faults, contact Facilities Management at extension 4-1777.

Lab Safety: When a student begins work in a teaching or research laboratory, he or she should become familiar with the safety regulations for that laboratory. The student's research advisor, the lab course instructor, or the department's Director of Laboratories should be consulted regarding lab-specific regulations.

Eye Safety: Safety glasses or goggles should always be worn when working where the eyes are potentially exposed to chemicals or flying debris.

Hair Safety: Long hair should always be tied back or covered when working with moving machinery.

Student Shop: The department has a machine shop available for students to use for research-related projects. Before using the student shop, a student must be certified as being able to use the equipment safely. Normally, certification is obtained by taking a short course. The department's professional machine shop staff manages the student shop and the certification course.

XII. Department Organization

Communication: The department endeavors to keep students informed of upcoming events, deadlines, and opportunities. Communication is through both e-mail and student mailboxes located in the hall near room 107. It is a student's responsibility to check his or her e-mail daily and mailbox regularly. Students working off-campus should inform the office staff so that important information can be forwarded appropriately.

Seminars and Colloquia: A weekly schedule of seminars and colloquia is listed on the department web site, distributed via e-mail, and posted several places in the department facilities. Note that any student may attend any seminar, regardless of whether he or she is enrolled in the corresponding seminar course. Students, like faculty, are expected to attend the weekly department colloquium on Friday afternoons. First and second year students are required to attend the colloquium.

Services: The department provides several services important to graduate education and research, including computer support, a department library, administrative support, management of teaching laboratories, professional machine and electronics shops, and a department stockroom. More information about these services can be obtained from the department web site.

People: Contact information for all physics faculty, staff, and students can be found on the department web site. Some positions and committees of particular interest to graduate students are listed below. The department web site has a complete list of departmental committees as well as a current listing of position holders.

Department Chair: Overall executive responsibility for the department.

Director of Graduate Studies: Oversees the graduate program. Main contact for student advising.

Teaching Assistants and Graders Chair: Organizes teaching and grading assignments. Main contact for TA questions.

Director of Laboratories: Oversees department infrastructure and technical personnel. Main contact for building and facilities questions.

Graduate Program Assistant: Administrative assistant for the graduate program. Main contact for administrative issues.

Ph.D. Qualifying Examination Chair: Organizes and schedules the qualifying exam.

Chair of the Summer Session: Manages summer session courses and teaching assistants.

Graduate Program Committee: Sets policy for the graduate program.

Financial Aid Committee: Awards TA assignments and departmental fellowships; selects nominees for extra-departmental fellowships.

Grievance Committee: Considers student concerns that could not be resolved through direct discussion with a faculty member.

XIII. University Resources

The general University of Virginia website is http://www.virginia.edu. It provides information on upcoming events, links to all University organizations, and directory information for students, faculty, and staff. The following sites provide information or services that graduate students may find particularly useful:

Academic Calendar: Academic holidays and deadlines.
Website: http://www.virginia.edu/registrar/calendar.html
Campus Police: Security and emergency response. For emergency service, dial 911 from any phone.
Website: http://www.virginia.edu/uvapolice
Career Services: Help with finding a job after graduation.
Website: http://www.career.virginia.edu
Center for American English Language and Culture: English language classes for international students.
Website: http://www.virginia.edu/provost/caelc/
Collab: Collaboration support and course websites.
Website: https://collab.itc.virginia.edu/portal
Counseling and Psychological Services: Counseling and psychiatric services including crisis management.
Website: http://www.virginia.edu/studenthealth/caps.html
Dean of Students: Advising and support on issues of student life.
Website: http://www.virginia.edu/deanofstudents
Environmental Health and Safety: Enforces safety regulations and handles materials disposal.
Website: http://ehs.virginia.edu/ehs
Facilities Management: Maintenance and repair work for building facilities. (See also the Director of Laboratories.)
Website: http://www.fm.virginia.edu
Fellowship Disclosure: This policy describes the general guidelines for disclosing fellowships.
Website: http://www.virginia.edu/polproc/pol/ivg3.html
Graduate School of Arts and Sciences: GSAS policies, information, and contacts.
Website: http://artsandsciences.virginia.edu/gradschool
Graduate Student Council: Graduate student self-governing body.
Website: http://www.student.virginia.edu/index.php

Information Technology and Communication (ITC): University-level computer support and licensed software.
Website: http://itc.virginia.edu
International Studies Office: Support and services for international students.
Website: http://www.virginia.edu/iso/issp/index.html
Learning Needs and Evaluation Center: Diagnosis and services for students with learning disabilities.
Website: http://www.virginia.edu/studenthealth/lnec.html
Ombudsman: Advocacy and advice regarding conflict resolution and issues of fairness.
Website: http://www.virginia.edu/ombudsman/
Oracle Integrated System: Timesheet forms, payslip information, and W2 tax forms.
Website: http://www.hr.virginia.edu *(click on SSTL – Self Service Time and Leave)*
Student Health: Clinical services and specialist referral.
Website: http://www.virginia.edu/studenthealth
Student Information System: Course registration and academic records.
Website: http://www.virginia.edu/sis
Student Legal Services: Low-cost, confidential legal assistance.
Website: http://www.student.virginia.edu/~stud-leg
Summer Session: Information regarding summer TA positions.
Website: http://www.virginia.edu/summer
Teaching Resource Center: Training and services to promote good teaching.
Website: http://trc.virginia.edu
University of Virginia Library: Library services.
Website: http://www.lib.virginia.edu