

Graduate Handbook

Department of
Physics and
Astronomy

Table of Contents

I Introduction	2
II Getting Started.....	3
III Graduate Program Organization	4
3.1 Graduate Committee	4
3.2 Advisor.....	4
3.3 Supervisory Committee	4
IV Physics Degree Program	4
4.10 M.S. Degree Program.....	9
4.11 Ph.D. Degree Program	10
4.12 General Program Information.....	11
V Assistantships – General Information	12
6.1 Duties	14
6.2 Procedures	16
7.1 Communication.....	18
7.2 Copying	19
7.3 Business Office.....	20
VIII Facilities	20
8.1 Access.....	20
8.2 Buildings, Offices, and Rooms.....	21
IX Appendix A. Academic Integrity	24
XI Appendix C. Personal Safety & Health	26
XII Appendix D. Academic Leave of Absence	28
XIII Appendix E. Departmental Contact Information	30

I Introduction

Welcome! We are pleased that you have decided to pursue your graduate studies at the University of Nebraska-Lincoln. Graduate students play an integral role in the department.

Throughout your time as a graduate student in our department, faculty and staff are available to help you with academic and non-academic concerns. Please feel free to call on us if you need advice or help.

We have prepared this handbook to help you make the most of your UNL experience and to layout the policies and procedures of our department. It is your responsibility to familiarize yourself with the information presented in this handbook and to know and observe all regulations and procedures relating to the degree you are pursuing. All graduate students should use it as a reference throughout their program. **Keep in mind this handbook is not a replacement for the current [UNL Graduate Studies Catalog](#)**, which contains current information on graduate program requirements, thesis guidelines, and deadlines at the Graduate Studies level.

The information in this handbook and other University catalogs, publications, or announcements is subject to change without notice. In no case will a regulation be waived, or an exception granted because a student pleads ignorance of or contends that she or he was not informed of, the regulations or procedures. A student planning to graduate should be familiar with the dates relating to application for graduation and other pertinent deadlines. University offices can provide current information about possible changes, and students should visit the UNL Graduate Studies [website](#) for the most current information.

II Getting Started

To get started at the university, check your profile in MyRed to make sure the university has your current Lincoln address, phone number, and email. Your most current information and emergency contact information must be kept updated with the HR Coordinator in the Department of Physics and Astronomy as well as in MyRed.

The following checklists were prepared by the Office of Graduate Studies to help you orient yourself to graduate school:

- [Graduate Student Orientation](#)
- [Onboarding](#)
- [Arrival Checklist](#)

Students are responsible for knowing the requirements of their degree program as specified in the [Graduate Catalog](#). Forms and specific dates needed to meet graduation deadlines, schedule final examinations, deposit final copies of a thesis or dissertation, etc. are also obtained from the Office of Graduate Studies' [website](#). These requirements are not discussed in this handbook. In brief, the Graduate College requires a total of 90 credit hours for a PhD. The faculty of the Department of Physics and Astronomy has approved the departmental requirements outlined in the following sections of this handbook.

III Graduate Program Organization

3.1 Graduate Committee

The mission of the [Graduate Committee](#) is to maintain excellence in the departmental graduate program. The Committee consists of faculty members, who are appointed by the Department Chair to deal with program policies and student concerns. The Graduate Committee Chair leads the activities of the committee and signs various student forms. A separate committee, the Graduate *Admissions* Committee, reviews applications and approves admission to the graduate program.

3.2 Advisor

Each graduate student is assigned an academic advisor by the Graduate Committee Chair when they begin the program. This advisor will be a member of the department's Graduate Committee and will advise the student until her or his Ph.D. Supervisory Committee is formed. At that time the Supervisory Committee Chair will become the student's advisor. You will need to meet with your academic advisor (to choose which classes to enroll in.) The enrollment process is all online, and you will complete it through MyRed. Students are, of course, encouraged to seek advice from any member of the faculty at any time.

3.3 Supervisory Committee

The primary function of the Supervisory Committee is to assist the student in developing a Ph.D. program of study, to monitor the progress of the student and provide counsel if problems arise during the program. The Supervisory Committee ultimately functions to ensure that the student has reached a satisfactory level of academic and research achievement prior to conferring the Ph.D. degree. See the [Ph.D. Degree Program](#) section below for more details.

A Supervisory Committee is not required for an M.S. degree in our department. See the [M.S. Degree Program](#) section below for more details.

IV Physics Degree Program

4.1 Preliminary Exam: Students joining the program in the fall semester will take this exam as a placement exam, as an assessment of their knowledge of undergraduate physics prior to their first semester of study. This exam will cover quantum mechanics, classical mechanics, electricity and magnetism and thermodynamics at the level of advanced undergraduate courses, to ensure readiness for graduate level classes. All four topics must be taken together. This exam is also required for M.S. and Ph.D. candidacy. Depending on your performance, the Graduate Committee may require the student to take selected 800-level courses before the corresponding 91X courses.

The exam will be offered twice a year: after the end of the spring semester and before the beginning of the fall semester. Students may take the exam up to three times and must pass it before the beginning of their second academic year. Examples of past exams can be found at: <https://www.unl.edu/physics/preliminary-examination-examples>.

4.2 General Information: The Department of Physics and Astronomy offers graduate education leading to the degrees of Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) in Physics. In designing their M.S. and Ph.D. programs, students should consult with their academic advisor and Supervisory Committee as well as refer to the Graduate Studies Catalog. Course descriptions and Office of Graduate Studies minimum requirements are presented in that catalog. An adequately prepared student will take most of the formal courses in the program during the first and second years of graduate study.

Students must complete the following to obtain a graduate degree in physics:

- Obtain admission to the UNL Graduate College and the Department of Physics and Astronomy.
- Pass the Preliminary Exam on undergraduate-level physics.
- Complete all required coursework with an adequate GPA (Grade Point Average).
- Note that UNL uses an A through F grading system.

Letter Grade	Point Value
A+	4.0
A	4.0
A-	3.67
B+	3.33
B	3.0
B-	2.67
C+	2.33
C	2.0
C-	1.67
D+	1.33
D	1.0
D-	0.67
F	0

A GPA calculator is available at <https://registrar.unl.edu/academic-standards/gpa/>.

4.3 Transfer Hours – Students may use graduate credit hours received from an accredited institution other than UNL to fulfill up to half of the total credit hours on the Program of Studies required by the Supervisory Committee to meet the degree requirements for a Ph.D. These are subject to approval by the Graduate Committee.

4.4 Coursework: Students are not allowed to enroll in any course other than the required ones unless they have requested and obtained explicit permission from their advisor or supervisor. A permission code is required to register in all PHYS 81X and 91X courses. This is done by the student emailing pagrad@unl.edu and copying the student's advisor. In the email, the student is to request a permission code(s) and include: 1) their name and NUID, 2) course(s) requested, and 3) their advisor's name.

4.5 Registering for Courses: Graduate students are expected to register for courses during priority registration. This is done through MyRed utilizing the permission codes obtained from the email sent to pagrad@unl.edu. If there is some reason why registration cannot be accomplished at that time, the Graduate Chair and Main Office should be notified via email.

The required courses for every student seeking a doctoral degree are:

PHYS 811: Methods in Theoretical Physics I
PHYS 911: Classical Mechanics
PHYS 912: Statistical Physics
PHYS 913: Electromagnetic Theory I
PHYS 914: Electromagnetic Theory II
PHYS 916: Quantum Mechanics I
PHYS 917: Quantum Mechanics II
PHYS 998: Special Topics in Current Research and Professional Development
(PHYS 998 is taken in both fall and spring semesters)

Plus three of the following five introductory survey courses:

PHYS 925: Introduction to Atomic and Molecular Physics
PHYS 926: Introduction to Elementary Particle and Nuclear Physics
PHYS 927: Introduction to Solid State Physics
PHYS 928: Introduction to Plasma Physics
PHYS 929: Quantum Field Theory

Plus at least one additional mathematics course, chosen in consultation with an advisor.

Acceptable Math courses are:

PHYS 812: Methods in Theoretical Physics II (PDEs)
PHYS 813: Methods in Theoretical Physics III (Group Theory)
MATH 824: Introduction to Partial Differential Equations

Students with deficiencies in one or more topics will be directed to take the appropriate 400/800 level courses. See discussion of Preliminary Exam [section 4.1](#).

More information on these courses is available in the [Graduate Catalog](#). This includes prerequisites and a description of the course.

The order in which a fully prepared student should take these courses is listed below.

FIRST YEAR

<u>Fall Semester</u>	<u>Credit Hours</u>	<u>Spring Semester</u>	<u>Credit Hours</u>
PHYS 811	3	PHYS 914	3
PHYS 911	3	PHYS 916	3
PHYS 913	3	MATH Elective	3
PHYS 998	1	PHYS 998	1
	Total: 10		Total: 10
Total credit hours after year 1 = 20cr			

- If grades are adequate, file a [memorandum of courses](#) for M.S. Degree.

SECOND YEAR

<u>Fall Semester</u>	<u>Credit Hours</u>	<u>Spring Semester</u>	<u>Credit Hours</u>
PHYS 912	3	PHYS 92X	3
PHYS 917	3	PHYS 92X	3
PHYS 92X	3		
	Total: 9		Total: 6
Total credit hours after year 2 (including year 1) = 35cr			

- If grades are adequate, file a [Program of Studies](#) form for Ph.D. Degree.

PHYS 812 and 813 (Methods in Theoretical Physics II and III), and PHYS 925, 926, 927, 928 and 929 (the survey courses) are offered once every two years. It may be necessary to wait until the third year to finish the introductory course sequence.

4.6 Grades: Students seeking a Ph.D. are required to have a B average (GPA of at least 3.00) in the courses taken to satisfy the degree requirement. In some graduate courses, a grade of P will be given to indicate passing work. **It is important to understand that in all PHYS 900-level and 800 Level courses, a grade less than a C is failing; in 800-level courses, a passing grade is B or higher if the course is cross-listed with an undergraduate course, otherwise the passing grade is C.** PHYS 811, 812, and 813 are not cross listed, so the passing grade is C. Most other 800-level courses in our department are cross-listed and have a passing grade of B.

4.7 Withdrawal from Courses: Students may not withdraw from courses required for the graduate degree they are pursuing without explicit, written permission from the Graduate Committee.

We follow the Academic Calendar (<http://registrar.unl.edu/academic-calendar>) to define the deadlines for early and late withdrawals.

The consequences of a withdrawal are as follows:

- On or before the early withdrawal deadline: The course has not been taken, and no grade will be recorded.
- On or before the late withdrawal deadline: The course has been taken, and a grade of W will be recorded. This W will be disregarded in GPA calculations. Required courses may only be taken twice; **late withdrawal counts as one of the two attempts.**
- After the late withdrawal deadline: No withdrawal is allowed.

NOTE: International students are required to be enrolled full time (9 cr) to maintain visa status

4.8 Academic Probation

1. Students that fail more than one class (a grade <C for graduate level classes or <B for cross listed classes) in a semester will be put on academic probation.
2. Students with a cumulative GPA less than 2.50 will be put on academic probation.

A student put on academic probation who subsequently fails to raise their cumulative GPA above 2.50 in the next semester or fails more than one class in the next semester, may be dismissed from the program. Any student placed on academic probation (as explained above) is strongly urged to discuss their academic performance with their assigned graduate advisor.

If a student fails a required course, she or he must retake it to remain in the program. No course may be taken more than twice. Cumulative grade point averages will be based on the highest grade a student receives in each course. Required courses may not be taken on a Pass/No Pass basis.

4.9 Research Courses

Students participating in research may register for the following:

- PHYS 899 (Master's Thesis)
- PHYS 996 (Research Other Than Thesis)
- PHYS 999 (Doctoral Dissertation). **You must form your Supervisory Committee before enrolling in PHYS 999.**
 - A minimum of 12 hours and a maximum of 55 hours of PHYS 999 may be taken in the Ph.D. program. Contact Graduate Studies(graduatedocuments@unl.edu) if you have exceeded this number and are filling out your Program of Studies.

Permission Codes: Students wishing to enroll in the above research courses will need to obtain permission codes. This is done by sending an email request to pagrad@unl.edu. **The student's supervising professor must be copied on the email.** Contents of the email request must include the following:

- Student's name
- Student's NUID
- Supervisor's name (also put supervisor's email in the email address line)
- Name of course (PHYS 899, 996, or 999) and the semester to enroll in
- Number of credits the student wants to register for

The supervising professor will give the grade (Pass/No Pass) at the end of the semester. Please discuss research expectations with the supervisor at the *beginning* of the semester.

4.10 M.S. Degree Program

The master's program of the Department of Physics and Astronomy follows and meets all of the requirements set forth for a [Master's \(M.S.\) degree](#) by the Office of Graduate Studies.

These requirements include (i) 30 credit hours of graduate level classes and (ii) a comprehensive exam. Most graduate students receive their M.S. *en route* to receiving their Ph.D. Students who wish to get an M.S. degree in our department must follow the [Master's Degree Steps to Completion](#).

The Departmental requirements for an M.S. degree are to pass (grade \geq C) the following courses:

- PHYS 811: Methods in Theoretical Physics I
- PHYS 911: Classical Mechanics
- PHYS 913: Electromagnetic Theory I
- PHYS 916: Quantum Mechanics I
- PHYS 998: Special Topics in Current Research and Professional Development (PHYS 998 should be taken in both fall and spring semesters)

Plus one of the following courses:

- PHYS 912: Statistical Physics
- PHYS 914: Electromagnetic Theory II

4.10.1 M.S. Comprehensive Examination: Students with an average GPA of 3.00 or above in PHYS 911, 912 (or 914), 913, and 916 may be awarded an M.S. degree *en route* to a Ph.D. without being required to write a Master's Thesis. This is listed as "Option B" in the [Graduate Catalog](#).

4.11 Ph.D. Degree Program

The doctoral program of the Department of Physics and Astronomy follows and meets all of the requirements set forth for a [Doctor of Philosophy \(Ph.D.\)](#) degree by the Office of Graduate Studies. Graduate students pursuing a Ph.D. in the Department of Physics and Astronomy must follow the [Doctoral Degree Steps to Completion](#).

All PhD documents [explained below] will be processed via [DocuSign](#). The student is responsible for filling out the form and sending it to pagrad@unl.edu to route through DocuSign to obtain signatures from their committee. Once all signatures have been obtained, they need to be sent to graduatedocuments@unl.edu and pagrad@unl.edu

4.11.1 Ph.D. Supervisory Committee: As soon as a student has completed the required 81X and 91X courses satisfactorily and **prior to the completion of 45 credit hours**, a Supervisory Committee will be formed to guide dissertation research. We strongly recommend that this is done by the end of the 2nd year. Other requirements for forming a Supervisory Committee can be found in the [Graduate Catalog](#). The Supervisory Committee form can be found [here](#).

4.11.2 Program of Studies: A complete Program of Studies approved by the Supervisory Committee must be filed with the Office of Graduate Studies. This should be completed and returned to Graduate Studies in the same semester that the Supervisory Committee is formed. Other requirements for filling out a Program of Studies form can be found in the [Graduate Catalog](#). The Program of Studies form can be found [here](#).

4.11.3 Ph.D. Comprehensive Exam: A Comprehensive Examination, administered by the Supervisory Committee, is required by the Graduate College for all doctoral candidates. The exam includes a written report, an oral presentation, and questions from the Supervisory Committee. The written section is a written report based on approximately two weeks of intensive research (at the discretion of the Supervisory Committee) on a topic approved by the Supervisory Committee. It is expected that this topic will be in the general area of the student's dissertation (e.g., AMOP, HEP, etc.), but will not be a simple extension of their dissertation research topic.

An "[Application for Admission to Candidacy](#)" form must be filled out, signed, and submitted to graduatedocuments@unl.edu once the Ph.D. Comprehensive Examination is passed. Following admission to Candidacy, the student must register for at least one credit hour during each academic-year semester until the doctoral degree is conferred, even if the student has already met the total dissertation hours in her/his approved program of study. Other requirements for the [Comprehensive Examination](#) and admission into [Candidacy](#) can be found in the Graduate Catalog.

4.11.4 Ph.D. Dissertation: All Ph.D. students must write a dissertation. The dissertation must be completed between seven months and three years following the passing of the Ph.D. Comprehensive Exam. In addition to the written dissertation, an oral defense of the research is required. The "[Application for Final Oral Exam](#)" form should be emailed to graduatedocuments@unl.edu no less than two weeks prior to the scheduled defense.

Specifics concerning the organization and preparation of the document are published in the Graduate Catalog and on the Graduate Studies website.

- [Dissertation and Final Oral Exam](#)
- [Preparing a Thesis or Dissertation](#)
- [Due Dates](#)
- [Report of Completion](#)

4.12 General Program Information

4.12.1 Evaluation of Student Progress: Students are expected to make timely progress toward their degree objective. Some issues that are considered by the faculty when evaluating a student's progress are as follows:

- Is the student taking a full load of substantive courses relevant to his or her degree?
- Is the student's grade point average (GPA) in all required graduate courses a B (3.00) or higher?
- Does the student show interest in current research through attendance at colloquia, seminars, and discussions with faculty members?
- Has the student made progress towards participating in research?

Students not making adequate progress towards their degree may be dismissed from the program.

Students are encouraged to select a research group to join by the middle of the spring semester of their first year and, if possible, join a research group the first summer. When joining a research group please inform the Admin Tech via pagrad@unl.edu. It is important for the student to realize that, until they have finished their required course work, their priority is coursework, not research. A summary of the research interests of our faculty is presented on the Physics & Astronomy [website](#).

4.12.2 Colloquia and Seminars: All graduate students are strongly encouraged to attend colloquia. Departmental colloquia are an important part of graduate student

education and help to provide students with knowledge of a broad range of topics in physics and astronomy. Colloquium speakers are specifically told that graduate students are a primary audience. As your research interests develop, you are encouraged to attend seminars, which are more technical talks in specific subfields.

Departmental colloquia take place on most Thursdays during the fall and spring semesters, and they are generally scheduled at 4:00 p.m. in room JH 136. Refreshments will be available in the vending machine area on the first floor of Jorgensen Hall from 3:30 p.m. to 4:00 p.m.

V Assistantships – General Information

5.1 Registration Requirement / Full-Time Status: The department requires that all graduate students holding either a teaching or a research assistantship (TA or RA) be registered as a full-time student (9 credit hours) during each semester of the academic year.

During the summer semester (June and July), students are not required to register for credit hours to maintain graduate student status. However, if they do not register for at least a total of 5 credit hours over the summer sessions, Social Security and Medicare taxes will be withheld from their paychecks. For more information see *the Social Security & Medicare Taxes* section below. In addition, graduate students not enrolled for credit hours during the summer may not have access to some campus facilities or services during that time (i.e. online libraries, the recreation center, etc.)

If a student has been granted [Candidacy](#), they can apply for [full-time certification](#). More information on full-time status can be found [here](#).

5.2 Getting Paid: The salary for your graduate TA and/or RA assistantship for the academic year (August – May) is paid out in ten equal monthly payments on the last business day of each month beginning in August and ending in May of the following year. If your appointment is for one semester only, your stipend will be paid out in five equal monthly payments.

Summer TAs (not RAs) result in an unusual pay schedule. During the summer, TAs are paid a total of 2 months of salary, but the salary is split between the summer months as a percentage based on the days worked each month. The number of days worked each month are calculated based on the dates of the summer sessions. In addition to any summer salary that might be paid in August, TAs for the regular academic year will also receive their regular monthly salary on their August paycheck. See the HR Coordinator for questions about paychecks.

5.3 Tuition Credit:

Academic Year (August-May): To be eligible for tuition waiver, graduate students must have an assistantship or a combination of assistantships that have a combined FTE (Full-Time Equivalent) of at least 33% (13 hours per week) and remain in the assistantship for at least 120 continuous days each semester. Tuition is waived for up to 12 credit hours each semester.

Summer (June-July): Students may receive tuition credit during the summer sessions if they meet one of the following:

- *For appointments from the preceding academic year*: Summer tuition is automatically waived if the student had a qualifying assistantship the preceding academic year.
- *For appointments beginning in the spring*: Graduate assistants starting in the spring may qualify for a summer tuition waiver if they have a qualifying appointment the following fall semester.
- *For appointments beginning in the summer*: Graduate assistants starting in the summer may qualify for a summer tuition waiver if they have a qualifying appointment the following academic year.

5.4 Social Security & Medicare Taxes:

- International students here on an F-1 or J-1 visa generally do not pay Social Security and Medicare taxes for the first five years they attend UNL. Those on F-2, H-1, H-2, or J-2 generally do pay Social Security taxes. For further information, consult the [Payroll Office](#).
- Domestic students (and international students in our program for longer than five years) who have a graduate teaching or research assistantship do not pay FICA taxes if they are registered for at least 5 or more credit hours in each academic semester, including summer. For summer, be sure to register for all 5 credit hours no later than June 1 to avoid paying FICA taxes in June. **Social Security and Medicare taxes withdrawn from paychecks cannot be reimbursed.**

5.5 Health Insurance: International students and graduate assistantship recipients are automatically enrolled in the student health insurance. International students are always required to have student health insurance coverage, unless proof of comparable insurance from an outside source is provided.

Graduate students are eligible for 79% of their individual student health insurance to be paid by the University if they have an assistantship or a combination of assistantships that have a combined FTE (Full-Time Equivalent) of at least 33% (13

hours per week) and remain in the assistantship for at least 120 continuous days each semester. Approximately 21% of the annual cost of the health insurance premium will be billed directly to the student's account. There is also the option of purchasing additional health insurance for family members from the same plan.

If a student has other qualifying insurance and wishes to cancel (waive) the University health insurance, the student must act each semester to cancel it. If the student does not successfully cancel the student health insurance, they will be responsible for their share of the premium. Please visit [Student Health Insurance | Student Accounts | Nebraska \(unl.edu\)](#) for more information.

5.6 Termination of Assistantship: If the student wishes to terminate the assistantship, a 30-day written notice must be given. Likewise, if the Department decides to terminate the assistantship, the student will be given 30 days written notice. If the assistantship is terminated before the student completes 120 continuous days of employment within the semester dates, all tuition and health benefits will be forfeited and the entire cost for those benefits for that semester will be billed to the student.

VI Teaching Assistantships – Duties and Procedures

6.1 Duties

Teaching Assistants (TAs) make essential contributions to the department's teaching program. They are among the few instructors from whom a student obtains guidance in the study of physics and astronomy.

A full-time TA assignment generally includes:

- Teaching of three laboratory sections, six recitations, or some other equivalent assignment. Depending on the department's schedule of courses, the assignment may be split in several ways. Every effort will be made to schedule a teaching assistant in only one course, but this is not always possible. Attendance at laboratory briefings scheduled by the Laboratory Manager is required of students with lab sections.
- Tutoring undergraduate students taking introductory physics courses for one hour per week. TAs are to be present in the Physics Resource Center during the entire assigned hour and are to be prepared to assist the undergraduates with the questions they are likely to ask. TAs should feel free to seek help from others if needed.
- Proctoring examinations. Proctoring assignments are made during the semester. It is your responsibility to contact the professor or instructor for whom you will be proctoring to receive information about the assignment.

- Grading of homework and examinations.

According to the Bylaws of the Board of Regents it is the responsibility of every faculty member “to fulfill the assigned time schedule of all classes, including quizzes, laboratories, tests, and other meetings unless absence is caused by an emergency or approved University business.” TAs have the same responsibilities. The “assigned time schedule” for TAs includes assigned grading, proctoring, and tutoring duties as well as scheduled recitation and laboratory teaching.

All graduate students with TA assignments are required to attend TA Training held the week before the beginning of fall classes. All TAs are expected to be present in the department during General Registration, which occurs on Thursday and Friday immediately before the first day of classes for both fall and spring semesters. TAs will be notified of their duties by email and/or through their departmental mailboxes. Email and departmental mailboxes should be checked frequently, especially at the beginning of the semester.

If a student is away on university business or unavoidably absent for other reasons, she/he has the responsibility to arrange for a replacement for her/his teaching responsibilities. These arrangements must be satisfactory to the course instructor (in the case of recitation teaching and/or grading and proctoring assignments) and/or to the Laboratory Manager (in the case of laboratory teaching). The student will also need to fill out the [CAS absence form](#). In the case of an absence caused by an emergency, the teaching assistant should notify the course instructor and the Main Office (JH 208) as soon as possible. If a TA knows beforehand of an unavoidable absence, she/he is expected to proceed as described in the previous paragraph.

The duties of a TA are not complete until the grades for the course the TA has been teaching have been filed or posted. The Academic Senate has proclaimed that all grades must be completed and filed within five working days of the final examination. The TA is expected to have the grades ready at the time specified by the course lecturer and to be available for consultations with the lecturer until the course grades have been filed.

If you are not a U.S. citizen or permanent resident, we do not recommend travel outside the country between fall and spring semesters. Delays in returning are likely, which may cause you to return after the semester has begun. If your return is delayed (for example due to visa processing delays) beyond the start of the semester, causing you to be unable to fulfill your assigned duties, your pay may be reduced for the days you are absent.

Yearly renewal of a teaching assistantship is based on:

- Satisfactorily meeting the obligations of a teaching assistant.
- Satisfactory progress toward a degree.

- Availability of funds.

6.2 Procedures

6.2.1 Preparing for Class: When preparing for a class, a TA should read and understand the assigned material, work on the assigned problems, and be thoroughly prepared. Nevertheless, situations may arise in which the TA is unable to respond correctly to a reasonable question. In such situations it is usually best to admit one's difficulty and have the needed information available at the next class meeting.

6.2.2 Holding Office Hours: Each full-time teaching assistant is required to have three office hours per week. This is in addition to the tutoring hours previously mentioned.

6.2.3 Proctoring Examinations: You may be assigned to proctor exams for courses other than the ones for which you are teaching. Unless directed otherwise by the course instructor, the following procedures should be adhered to:

- Proctor schedules are emailed to students at the beginning of each semester by the Lab Manager and/or the Main Office staff. It is your responsibility to read the schedule as soon as you receive it and report any conflicts to the Lab Manager.
- You are responsible for contacting the Course Instructor at least one week in advance of a scheduled exam. They will instruct you on when and where to meet. You are expected to be available 10 to 20 minutes before the examination begins. The exam may not be in the same location as the class. Be sure you know the room, building, and time of the exam. Consult a campus map if the exam is held in a building unfamiliar to you.
- Proctors should see that students' seats are uncluttered and that all books, papers, and other material are deposited at the front of the room.
- Students' seating should be arranged so that communication between them is minimized.
- A count of the number of students taking the examination should be taken at least twice. Attendance should be taken when seats have been assigned.
- At the beginning of the examination, the number of problems and the number of pages on the exam should be announced so that each student can tell whether his or her exam is complete.
- Proctors should remain alert to what is happening in the examination room.
- Proctors should be ready to clarify questions the students may have about the examination without solving the problems.
- When the examination is over, before leaving the room, the proctor should count the number of papers turned in. If it differs from the number of students,

check the room for fallen or misplaced exams, compare the tests turned in with the attendance roster, etc.

- Any suspected cases of improper student conduct during an examination should be reported to the instructor in charge with all the evidence collected. Do not make any accusations during the examination period.

6.2.4 Paid Tutoring: The department does not arrange or coordinate paid tutoring. Graduate students may engage in tutoring for pay, subject to the following conditions:

- Graduate students may not accept payment for tutoring from students in classes they are assigned to teach or for which they are assigned grading.
- Due to immigration regulations, international students may not be employed by non-UNL entities (including private tutoring).
- Graduate students may not tutor for pay in the Physics Resource Center or in their offices.
- Graduate students may request to have their name included on the departmental list of qualified tutors.
- Written permission must be obtained from the graduate student's research supervisor before they may begin paid tutoring.
- Graduate students must inform the Vice Chair before they begin paid tutoring.

6.3 TAs for International Students

6.3.1 Institute for International Teaching Assistants: The Institute for International Teaching Assistants (ITA) has been created by UNL to prepare international graduate teaching assistants to teach American undergraduates. Participants attend a two-week intensive training program that focuses on instructional strategies, classroom management and active learning, English pronunciation and intonation, and cross-cultural communication.

When an international student is required to provide an English test score for admission to the college, they may be awarded a Teaching Assistantship (TA) involving classroom or laboratory contact with students only if the international student:

- has been admitted to a degree program in the Graduate College, and
- has successfully completed the ITA at UNL.

Those international students are expected to pass the ITA by the end of their first year at UNL so that they are eligible to be assigned contact TA duties starting their second year. This is done by taking the ITA before their first semester at UNL, during the summer after their first Fall and Spring semesters at UNL, or both.)

International students who are required to take the ITA and do not attend and pass the ITA during the summer before their first semester at UNL will be assigned non-contact teaching duties.

***NOTE:** All international students upon arrival to campus must take any subsequently required [English coursework](#). If a student is a native of a country in which English is the only national language or English is the student's medium of instruction, both the EPE and second requirement may be waived. Other criteria considered by the Department Vice Chair when appointing and reappointing Teaching Assistants include, knowledge of the material, good teaching skills, etc.*

VII Department Information

7.1 Communication

7.1.1 Email and Computers: When you arrive on campus, our primary means of communication will be to your @huskers.unl.edu email address. Check your email at least once a day for important messages. If there is a change in your contact information while you are enrolled in our program, inform the HR Coordinator. This email address will be needed for travel or department business (i.e. attending conferences) and is useful for undergraduates needing to contact their TAs (you).

Be prudent when opening files and/or forwarding messages from unknown sources. Report suspicious email messages (i.e. phishing) by clicking the Report Phish icon in Outlook.

7.1.2 Departmental Mailboxes: Physics graduate students have mailboxes located in JH 214. Do not move the location of any mailbox.

7.1.3 Regular Mail: The office staff receives U.S. Postal Service (USPS) mail on even-numbered calendar days and distributes it to the mailboxes. Check your mailbox at least once per day for interdepartmental mail.

Packages delivered to the department via UPS or FedEx may arrive at any time during regular business hours (M-F, 8:00am – 5:00pm). Those will be picked up in the mailroom (JH 214). When you receive your order, verify that the shipment is correct then sign the invoice and the packing slip. Place in Brodie Ronspies mailbox

No personal mail should be sent from or delivered to the departmental office. Outgoing mail for both on-campus and USPS should be placed in the tray in JH 214. Mail for off-campus delivery must have the department's address and the sender's name listed as the return address.

On-campus mail addresses must include the recipient's name, the building, the room number, and the on-campus zip code. Departments on City Campus are denoted by CC (xxxx), where the xxxx is the last four digits of the extended zip code. The Department of Physics and Astronomy's extended zip code is 0299. Departments on East Campus are denoted by EC (xxxx).

7.1.4 Shipping via UPS and/or FedEx: Occasionally students may be required to ship items via UPS and/or FedEx. To do this, download the *Shipment Form* found here: <http://www.unl.edu/physics/forms>. Once you have downloaded the form, fill it out, and email it to paoffice@unl.edu as an attachment.

After you have finished doing this, take your items to the Main Office to ship. If you are shipping samples, your items must be in a box large enough to fit a shipping label on the outside. Anything shipped outside of the United States must be in a box large enough to easily fit customs papers on it. Samples will not be shipped in envelopes.

Please note: Any items taken to the Main Office after 1:00 p.m. for shipment cannot be guaranteed to ship out the same day.

7.2 Copying

The department copy machine is in the Mail Room (JH 214). Those wishing to scan, or copy must input a code. Codes can be obtained from the Main Office staff.

TA's may use the TA computer in the Main Office during regular business hours. **If you come five minutes or less before the office closes you will not be allowed to print.**

If you aren't sure how to use the machine, ask the Main Office (JH 208) staff for assistance.

Do not try to fix the copier if it breaks/jams. Report all problems to the Main Office.

If the copier needs toner, paper, staples, etc., notify the Main Office, and they will handle the maintenance.

Close the lid completely before you copy.

Do not copy papers that may leave marks on the glass (i.e. paper with white-out or ink that is still wet).

Do not place anything on the photocopy surface that could scratch the glass. The scratch will be reproduced on everything copied on the machine.

7.2.1 Personal Copying: A [Wepa printer](#) is available for personal copying on the first floor of Jorgensen Hall near the vending machines. This kiosk is a pay-per-print kiosk and has no affiliation with the department.

7.3 Business Office

The Physics and Astronomy Business Office is in JH 208.2. Among other things, they provide:

7.3.1 Supplies (paper, pens, chalk, etc.): for research and teaching-related uses are in the Business Office. Some materials are in an open cabinet; others must be requested from the Business Office staff. If you need something that is not stocked, it can be ordered through Ariba. The supplies in JH 208.2 are for research and teaching related needs only.

7.3.2 Travel Reimbursement: All travel related reimbursements must be done through the Travel and Expense Reporting tile in Firefly, and all booking must be done through Concur, which is accessible through the Travel and Expense Reporting tile in Firefly as well. Fill out a Travel Request in Travel and Expense Reporting prior to leaving for work-related trips that provide reimbursement. Reimbursement must be requested within 60 calendar days of the last day of travel.

VIII Facilities

8.1 Access

8.1.2 NCard Access: As outlined in your onboarding email titled "office desk/keys/NCard," all students must get an NCard available at the ID office in the City Campus Union. Students must be registered for classes and bring a photo ID with them to the ID office when obtaining an NCard. This student ID is vital for library and JH access.

An active NCard is needed to enter various rooms inside Jorgensen Hall, as well. Some of those rooms include the Mail Room (JH 214) and various labs. NCard access to these rooms as well as the Jorgensen Hall exterior doors is obtained by sending paoffice@unl.edu an email request. Include your name, NUID, and the rooms/doors of which you wish to have access in the request.

8.1.3 Key Access: Keys for assigned offices are obtained from the Admin Tech in JH 208. Security concerns dictate that keys may not be duplicated, lent, or given to anyone else. DO NOT switch your keys with anyone other than the Main Office.

8.2 Buildings, Offices, and Rooms

8.2.1 Department Buildings: The Department of Physics and Astronomy occupies Jorgensen Hall (JH) and Behlen Observatory near Mead, Nebraska.

8.2.2 Office Space/Desks: Office space assigned by the department is temporary and will expand or contract depending on current departmental teaching and research requirements. New graduate students will receive office assignments from the Admin Tech (JH 208). **Do not move to another desk or office.**

8.2.3 Department Offices: The Main Office is in JH 208, and adjoining this are the Department Chair and the HR Coordinator offices in JH 208A and 208B, respectively. The Business Office is JH 208.2. The copy machine and mailboxes are in the Mailroom in JH 214 and are located between the Main and Business Offices.

8.2.4 Conference, Seminar, and Meeting Rooms: Seminars, conferences, and informal meetings may be held in JH rooms 071, 207, 309, and 338. Reservation requests for their use should be emailed to paoffice@unl.edu.

8.2.5 Teaching Rooms:

- **Physics Resource Center:** Graduate students are assigned to serve as tutors during various hours of the week.
- **Lecture Halls:** Used for large-enrollment introductory physics courses are JH 110 (reserved through the University Registrar) and JH 136 (reserved in the Main Office, paoffice@unl.edu).
- **Introductory Laboratories:** Laboratories for all the lower-level physics courses (141, 142, 211, 212, 213) are held in the labs on the north half of the first floor of Jorgensen Hall. The office of the Laboratory Manager is JH 139.
- **Advanced Undergraduate Laboratories:** JH 241 and JH 233.

8.2.6 Department Shops:

- **Electronics Shop:** Located in JH 358.
- **Instrument and Student Shops:** The department maintains a fully equipped instrument shop in JH 177 as well as a student shop in JH 175. The machines in the instrument shop are to be operated only by the shop staff. Machines in the student shop may be used for departmental student work authorized by a member of the faculty.

For safety reasons, students may use the machines only after being trained by the student shop machinist and passing a safety test. Students must always have a second person in the shop (“buddy” system) when they are working.

8.2.7 Student Observatory: In addition to the Behlen Observatory near Mead, Nebraska, our department operates a Student Observatory located on the UNL campus. Located on top of the parking garage at the intersection of Stadium Drive and 10th Street (west of Memorial Stadium), the observatory is open on clear nights during the academic year.

8.2.8 Lecture Demonstration Apparatus: Demonstration apparatus for teaching purposes is stored and assembled in JH 134.

8.2.9 External Research Laboratories: Professors doing experimental research maintain laboratories in Jorgensen Hall and Behlen Laboratory. Off-campus research is carried out at:

- Fermi National Accelerator Laboratory (near Chicago, IL)
- The Large Hadron Collider at CERN (in Switzerland)
- The Advanced Light Source at Lawrence Berkeley Laboratory (Berkeley, CA)
- The Behlen Observatory (near Mead, NE)
- Thomas Jefferson National Laboratory (Newport News, VA)
- The Spallation Neutron Source (SNS) at Oak Ridge National Lab
- Advanced Photon Source (APS) at Argonne National Lab
- NCNR at NIST, Gaithersburg

8.2.10 UNL Libraries: There are several different libraries at UNL. A listing of all UNL Libraries can be found at <https://libraries.unl.edu/library-branches>. The main library for UNL's city campus is Love Library, and it is a good resource for a variety of things.

In addition, many research journals and databases for searching scientific literature are available online through UNL's libraries. Go to the UNL library [website](#) to access them.

- **Books:** Books can be checked out of the library using your NCard. Some books are on reserve for courses or are designated reference materials that can only be used in the library. Please be aware of fair use copyright laws and limit your copying to materials that fall within these guidelines.
- **Ordering Articles:** The delivery of any requested books will be made to the Engineering library. These are picked up at the Circulation Desk, Nebraska Hall (NH) W204. Any journal articles requested will be delivered directly to the email address provided.
- Books or Articles not located in UNL's library system can be requested through Interlibrary Loan (ILL) via the University library's website. To access Interlibrary Loan, go to <https://libraries.unl.edu/library-account-logins>.

8.2.11 Parking & Transit Services: More information on how to obtain a parking permit and/or bus pass can be found at <https://parking.unl.edu>.

IX Appendix A. Academic Integrity

Academic Integrity: Graduate students are expected to be familiar with and adhere to the [Student Code of Conduct](#) in their academic and research activities. This section summarizes the main points made in the [Graduate Catalog](#) regarding academic dishonesty. Penalties for academic dishonesty are discussed in Appendix B.

Academic dishonesty includes, but is not limited to, the following;

- **Cheating.** Copying, attempting to copy, or referring to an academic test, examination, or assigned work of another student, using or attempting to use unauthorized materials from any source, whether human or computer-generated for any academic test or assignment.
- **Fabrication and Falsification.** Falsifying or fabricating any information or citation in an academic exercise, assignment, or examination. Falsification is the alteration of information, while fabrication is the invention or counterfeiting of information where none otherwise existed.
- **Plagiarism.** Presenting the work of another as one's own (i.e., without proper acknowledgement of the source) and submitting examinations, theses, reports, or other academic work in whole or in part as one's own when such work has been prepared by another person or copied from another person.
- **Abuse of Academic Materials.** Destroying, defacing, stealing, or making inaccessible library materials or other academic resources, including those provided in electronic form.
- **Complicity in Academic Dishonesty.** Helping or attempting to help another student to commit an act of academic dishonesty.
- **Falsifying Grade Reports.** Changing or destroying grades, scores, or markings on an examination or in an instructor's records.
- **Misrepresentation to Avoid Academic Work.** Fabricating an excuse such as illness, injury, accident, etc., in order to avoid or delay timely submission of academic work or to avoid or delay the taking of an examination.

Student Code of Conduct: Please refer to the university's policy regarding professional conduct and student code of conduct within the program at <http://stuafs.unl.edu/dos/code>

X Appendix B. Academic Dishonesty

Academic and disciplinary sanctions imposed on an individual who has engaged in academic dishonesty vary with the kind and extent of dishonesty. In what follows, some possible sanctions are presented in specific instances. The Bylaws of the Department of Physics and Astronomy require a discussion and vote by the faculty of the department if a student is to be expelled from the graduate program.

An individual who engages in academic dishonesty in a particular course will face penalties at the discretion of the instructor teaching the course. These penalties may range from failing the assignment or examination to failing the course. Regardless of the degree of the penalties she/he has assessed, the instructor will report the nature of the infraction to the Graduate Committee of the Department of Physics and Astronomy. After investigation, the Graduate Committee may impose further penalties or sanctions up to, and including, expulsion from the graduate program (with faculty consent and approval).

An individual who engages in academic dishonesty during the Preliminary Exam will normally be expelled from the graduate program. The extent and degree of academic dishonesty will be investigated as fully as possible, and the Graduate Committee will recommend penalties to the faculty of the department for their discussion and adjudication.

An individual who engages in academic dishonesty while carrying out the research for a Master's thesis, or in presenting the results of such research, will normally be expelled from the graduate program. The student's advisor will report the nature of the academic dishonesty to the Graduate Committee. The Graduate Committee will then investigate the extent and degree of academic dishonesty as fully as possible and make a recommendation regarding expulsion from the graduate program to the faculty of the department.

An individual who engages in academic dishonesty while carrying out research for a doctoral dissertation, or in presenting the results of such research, or when taking the Comprehensive Examination will normally be expelled from the graduate program. The student's supervisory committee will investigate, as fully as possible, the extent and degree of the academic dishonesty and report its findings to the Graduate Committee. After completing its own investigation and deliberations, the Graduate Committee will make a recommendation regarding expulsion from the graduate program to the faculty of the department.

XI Appendix C. Personal Safety & Health

The University of Nebraska and City of Lincoln strive to be safe environments for individuals to grow and thrive. Unfortunately, adverse situations do sometimes occur. Please keep the following information in mind to help ensure your safety and health:

10.1 Jorgensen Hall Safety:

- Keep offices and labs locked when they are empty. Make sure that all locked doors shut and latch when leaving.
- Do not prop open doors.
- Keep purses and valuables (i.e. laptop computers) out of view and locked up when you are not present. Items have been stolen from offices and labs in the past. The problem is usually at its worst during the last few weeks of classes each semester.
- Report any suspicious individuals and/or activities to the University Police Department at 402-472-2222 and the Physics & Astronomy Main Office.

10.2 Husker Safe Walk: The University Police Department will provide a walking escort to all members of the University Community upon request. A Husker Safe Walk may be requested at any time while on campus by calling the UNL Communications Center at [\(402\)-472-2222](tel:402-472-2222).

This service is prioritized amongst other calls for service at any given time. These walks may be conducted by a Campus Security Officer, or a Police Officer, depending upon availability and staffing levels.

The response time for this request may be up to fifteen (15) minutes, or longer if officers are dealing with an emergency. If you are requesting a Safe Walk at night, it is best to wait for an Officer in a public, well-lit area. Please plan your request for this service accordingly. Advanced notification for utilizing this service is preferred. A University Police Officer will make every effort to accommodate your request; however, there may be times when this service may be delayed because of other duties. During these instances we ask for your patience and understanding.

Note: This service is meant to be used as a courtesy and should not be used for ongoing occurrences. If students know ahead that they will have to stay late on-campus, please arrange to have someone who can come pick them up or walk them to their vehicle.

10.3 On-call Van Service: University students can take advantage of an on-call van transportation service at no cost. The service provides rides between designated campus bus stops after the end of daily bus route schedules.

The service is available weekdays in perimeter permit areas beginning at 6 p.m. and from 9 p.m. to 11:30 p.m. at designated campus bus stops.

The on-call van service is simple to use:

- Arrive at a designated StarTran bus stop.
- Call **402-326-8807**.
 - Provide current location and destination request.
 - Response time is about 15 minutes.
- Enter the van upon arrival and repeat your destination request.

The van then delivers riders to requested campus bus stop locations.

On-call van service is available weekdays during fall and spring semesters.

10.4 Other Useful Resources:

- **The Women's Center** - <https://womens-center.unl.edu/welcome>
- **LGBTQA+ Resource Center** - <https://lgbtqa.unl.edu/welcome>
- **University Health Center** - <https://health.unl.edu/>
- **Wellness Services (Campus Rec)** - <https://wellness.unl.edu/>
- **UNL Student Affairs** - <https://studentaffairs.unl.edu/>
- **Student Legal Services** - <https://asun.unl.edu/student-legal-services/welcome>
- **Victim Advocacy** - <https://victimadvocacy.unl.edu/welcome>
- **Services for Students with Disabilities** - <https://www.unl.edu/ssd/home>
- **Huskers Helping Huskers Pantry+** - <https://pantry.unl.edu/welcome>
- **Students with Children** - <https://womens-center.unl.edu/student-parents>

XII Appendix D. Academic Leave of Absence

Found on the Graduate Studies website at:

<https://graduate.unl.edu/academics/academic-leave>

11.1 PURPOSE: Graduate students are expected to maintain active status through continuous registration from the time they matriculate until they graduate. If a student is unable to continue active participation, the student must complete an Academic Leave of Absence to temporarily suspend his or her graduate studies and the pursuit of a degree.

11.2 POLICY: An Academic Leave of Absence may be granted to students for illness or injury, to provide care or assistance for family and dependents, to meet military service obligations, or for other personal reasons.

Students considering a leave are strongly encouraged to explore alternatives, discuss the impact on their plan of study with the graduate chair and their faculty advisor, and develop a strategy for completing the degree program.

In many cases students are better served by **alternatives that maintain enrollment and eligibility for student services**, for example:

- Modify program expectations.
- Reduce coursework, research, teaching, or other educational responsibilities.
- Working at a slower pace.
- Delaying milestone deadlines.
- Taking incompletes in the current semester with a plan to address them at a later time.

11.3 PROCEDURES:

Requesting a Leave

- Students consult their faculty advisor and their department's graduate chair to determine whether a leave is the most appropriate course of action.
- The student submits a completed Academic Leave of Absence Form to Graduate Studies with the required signatures. This form can be found at:
https://www.unl.edu/gradstudies/current/Academic_Leave_Request_Form.pdf
- Upon approval by Graduate Studies, an email notification with a copy of the signed form is sent to the student, graduate chair, and faculty advisor.

Extending a Leave

To extend an approved leave, students must notify the graduate program chair and their advisor at least four weeks prior to the end of the semester in which the leave terminates. An extension requires approval of the department and (if international) ISSO.

Returning from Leave

Students on academic leave must notify Graduate Studies of their intent to return, in writing, to graduate@unl.edu, at least four weeks prior to the end of the leave. The Master's or Doctoral Specialist will notify the graduate chair and the faculty advisor of the student's intent to return.

XIII Appendix E. Departmental Contact Information

Title	Responsible for	Faculty/Staff Member
Main Office (JH 208)	Room reservations, shipping (UPS/FedEx), general queries, card access	paoffice@unl.edu
Graduate Chair	General advising, course advice, student progress, etc.	Shireen Adenwalla JH 310E; sadenwalla@unl.edu ; 472-2709
Admin Tech	Graduate program assistant, office assignments, course permission codes, etc.	Kelcey Gabriel JH 208; kgabriel2@unl.edu ; pagrad@unl.edu 472-9220
Vice Chair	Oversees TA assignments	Ilya Kravchenko JH 258C; ikrav@unl.edu 472-6014
Department Chair		Ken Bloom JH 258E/208B; physicschair@unl.edu 472-6093
HR Coordinator	TA/RA offer letters & onboarding, manages payroll, assists with work authorizations	Jennifer Light JH 208A; jlight3@unl.edu 472-9222
Laboratory Manager	Introductory lab management, TA assignments, tutoring assignments, lecture demonstrations	Josh Beck JH 139; palab@unl.edu 472-2199
Physics Department Directory		https://www.unl.edu/physics/directory
BPAC (BioSci, Physics & Astronomy, Chemistry)	Provides assistance across 3 departments with finances, HR and administrative duties	https://cas.unl.edu/bpac-business-center
BPAC Finance team	Lab and teaching equipment orders, travel reimbursements, supplies	JH 208.2 bpacpurchasing@unl.edu bpacfinance@unl.edu
Electronics Shop Manager	Computer issues, electronics	Anatoly Mironov JH 356; amironov2@unl.edu 472-2793
Student and Instrument Shop Manager	Machine shop student training	Bob Rhynalds JH 177C; rrhynalds@unl.edu 472-2780

