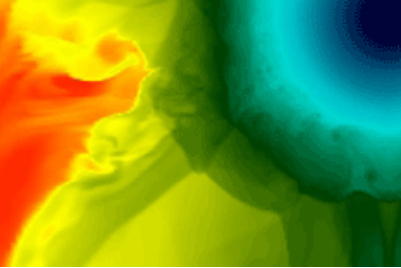


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PHYSICS
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Physics Graduate Handbook

2025/26 Academic Year

This handbook covers requirements specific to the UA Physics Department. For general UA Graduate College rules and regulations you should consult: grad.arizona.edu and/or <https://grad.arizona.edu/new-and-current-students> and links therein.

Key Personnel in the Department

The following people have significant responsibilities for the graduate program, and their roles are referenced in several places in this handbook:

Director of Graduate Studies (DGS), a faculty member in charge of the Physics Graduate Program:
Erich Varnes (varnes@arizona.edu)

Graduate Coordinator (GC), a staff member supporting the Physics Graduate Program:
Clare DeBuhr (debuhr@arizona.edu)

Laboratory Manager (LM), a staff member in charge of coordinating the lab courses and TA assignments: Rohit Singh (rohitsingh@arizona.edu)

Ph.D. Degree Requirements

1. COURSE WORK

Minimum credit hour requirements

36 credits in the Physics major (or cross-listed) graduate-level courses

9 credits are required for a Physics minor, but some other minors require more – please check with the minor department.

18 Dissertation credits (PHYS 920)

At least 50% of the course work in the major and minor needs to be regularly (A, B...) graded.

GradPath

GradPath is the online record of your degree progress. You should access it in the first semester of the program and sign the Responsible Conduct of Research Statement. As you progress in the Ph.D. program, you'll need to fill out and submit additional forms. The Graduate College requires completion of all the GradPath forms for graduation.

Required courses

All students regardless of research direction are required to take the four core courses:

PHYS 511 Analytical Mechanics

PHYS 515A Electromagnetic Theory-I

PHYS 528 Statistical Mechanics

PHYS 570A Quantum Mechanics-I

These core courses must be completed by the end of the third semester in the program with a cumulative core-class GPA of at least 3.0. These courses may not be repeated. The material studied in the above courses represents what we expect every student to master in order to continue on to a Ph.D. degree. In addition, PHYS 570B (Quantum Mechanics-II) and PHYS 515B (Electromagnetic Theory-II) are important courses for many students. You should consult with your research advisor to determine whether you should take one or both of these courses. In particular, enrollment in PHYS 570B is required unless your research advisor explicitly decides otherwise. If you do not currently have an active research advisor, please consult with the DGS. Should you and your advisor determine that it is in your best interest to forgo PHYS 570B and/or 515B, your advisor will provide guidance on alternative physics courses to best support your academic and research goals.

Recommended curriculum

Year 1, Fall semester: PHYS 511, PHYS 570A, PHYS 599

Year 1, Spring semester: PHYS 515A , PHYS 599, PHYS 570B or another course decided by you and your advisor

Year 2, Fall semester: PHYS 528, PHYS 599, PHYS 515B or another course decided by you and your advisor

PHYS 599 is Independent Study, giving you the opportunity to engage in research with a group or individual faculty member immediately after you have entered the program. The Independent Studies are meant for you to explore research areas or groups that you may be considering for your Ph.D. thesis. The DGS reviews the independent study proposals of all students.

Note that no more than half of the 36 required credit hours of graduate-level Physics courses may be taken as PHYS 599. Remaining courses consist of the core courses listed above as well as more advanced specialty courses.

What to do if a student's core course GPA is below 3.0

At the end of the third semester, if a student's core course GPA is below 3.0, they can petition for an oral exam to test whether they can continue to the Ph.D. written comprehensive exam. This petition must be submitted in writing to the DGS before the start of the 4th semester. If approved by the DGS, the graduate curriculum committee will give an oral exam in the first month of the 4th semester to test the student's mastery of core course knowledge. The oral exam must be a minimum of one hour and a maximum of three hours in duration. The graduate curriculum committee will present the results of the oral exam to the entire faculty. The faculty will determine by anonymous vote if the student can continue in the Ph.D. program based on the student's performance in the oral exam, taking into consideration the student's overall academic and research performance.

Number of credit hours students need to register each semester

Generally, physics students and Graduate Assistants (GAs) are required to enroll in 9 credit hours to be considered full-time students until they have passed the comprehensive exam. After passing the comprehensive exam, full-time physics

students and GAs must enroll in a minimum of 6 credit hours. The Graduate College policy covers all other situations.

Procedure to transfer credits for students entering with an MS degree or graduate course credit

The DGS will review the credits you wish to transfer. Please provide: a detailed list of courses, credits or credit hours for each course, textbook used, grades received, and a syllabus (if available). If the course is deemed equivalent to one of the core courses, you will have the option to take a test to pass out of taking that course. This exam must be completed by the end of the second week of the semester that course is offered. The grade received on the exam will be used in the calculation of the core course GPA. Only grades of A or B will allow you to skip the course. For Graduate College regulations on transfer of credit visit grad.arizona.edu

Time to register for thesis credits (PHYS 920)

Students may register for PHYS 920 only after they have passed both portions (written and oral) of the Comprehensive Examination. Note that you cannot register for more than 9 PHYS 920 credits per semester.

Minor in Physics

If Physics is chosen as the minor as well as the major, the minor requirement is fulfilled by 9 additional credits beyond the 36 required for the major, consisting of at least 3 graduate-level courses. Together, these 3 courses should provide at least three credits from three of the following areas. Courses below meet the requirements for the minor in physics, however additional courses (including courses from outside the Physics Department) may be considered as part of these areas with the approval of the DGS.

General Graduate-Level Physics: 515B, 522, 541, 570B, 576

Atomic, Molecular and Optical Physics: 534, 544(Op.Sci.), 549(Op.Sci.), 573, 646(Op.Sci.)

Condensed Matter Physics: 560A, 560B, 561, 562, 566

Quantum and Particle Physics: 579A, 579B, 579C, 581, 586

Nuclear Physics: 551

Gravity, Astrophysics and Cosmology: 569, 582, 589

Experimental Physics: 505, 573, 586

Biological Physics: 531

It is expected that this minor requirement be satisfied through actual courses rather than Independent Studies. However, exceptions can be granted in special situations.

Minor in another department

Students choosing a minor in a different department must satisfy whatever minor course requirement(s) the other department demands. In some cases, the minor requirements may include you having to take the comprehensive exam in that department. Before you decide on a minor in a department other than Physics, please notify the DGS in Physics and inquire with the DGS in the other department about their minor requirements.

Students are required to have a **representative of the minor department on your committee for the written and oral portions of the comprehensive exam.**

Policy on receiving an incomplete (grade of I)

See the [University of Arizona Registrar's policy on incompletes](#). Remember that expired incompletes become Es after one year, and that requests to extend the time to finish an incomplete must be requested to the Graduate Coordinator before the incomplete expires.

Standards for satisfactory student progress

The most important goals in the first two to three years of graduate school are performance in courses and passing the written and oral comprehensive exams. Students are expected to maintain a minimum cumulative 3.0 GPA. A student whose GPA falls below 3.0 will be placed on [academic probation](#) and may not be allowed to be a Teaching Assistant/Research Assistant (TA/RA). The student will then meet with the DGS to develop an academic plan to improve their GPA. The DGS communicates informally with instructors of the core physics courses about twice a semester to see if any students have significant struggles. If so, the DGS advises the student about possible courses of action.

2. THE COMPREHENSIVE EXAMINATION (WRITTEN AND ORAL PORTION)

The written and oral comprehensive exam consists of a research proposal that needs to be completed and defended in a single semester, no later than the 5th semester in the Ph.D. program. The main purpose of this exam is to test the student's ability to identify and analyze a complex physical problem that may or may not be directly related to their future dissertation research. The student must present approaches that can potentially lead to a solution to their stated problem. The research proposal will be graded by a comprehensive exam committee consisting of at least four faculty members, usually chaired by the student's research advisor, as described below.

Comprehensive exam committee

Together with your research advisor, you choose at least four committee members (including the advisor). The majority of the committee members must have a primary appointment in Physics. The makeup of this committee shall conform to all regulations of the Graduate College. Important note when your minor is NOT in Physics: you need to make sure that there is a representative of the minor department on your committee during the written and oral portions of the comprehensive exam. In most cases the comprehensive exam committee will be the same as your Ph.D. committee, so the members should be chosen with this expectation in mind.

2.1 WRITTEN PORTION

The written portion of the exam must be less than 10 pages (not counting references) with a minimal font size of 11pt Times New Roman, and must contain the following sections:

- Abstract (less than 250 words)
- Motivation
- Specific Aims
- Background Information (literature survey)
- Research Plan (methods, expected outcomes, etc.)
- References (no page limit for this part)

Students may consult with others in choosing the topic of the proposal and in designing the research plan, but they must write the proposal independently.

Timeline for the written exam

1. At the end of the 3rd semester (or earlier), the student needs to have a completed Plan of Study approved in GradPath.
2. By the end of the first week of the semester chosen to complete the comprehensive exam (no later than the 5th semester), the student must select a proposal topic, in consultation with the student's research advisor, and form a comprehensive exam committee. This committee needs to be approved by the DGS in GradPath by the end of the first week of the semester.
3. By the end of the fourth week of the semester, the student submits the written proposal to the committee.
4. By the end of the sixth week of the semester, the comprehensive exam committee will have graded the proposal. The grade will be either pass or not pass, determined by the majority of the committee. If a student does not pass, the committee will provide comments to the student at that time.
5. For students that do not pass in the sixth week, they can submit a revised version of the proposal to the committee for final evaluation by the end of the ninth week of the semester. The grade will be reported back to the student by the end of tenth week of the semester.
6. After passing the written portion of the exam, the student must defend the proposal as part of the oral portion of the comprehensive exam by the end of twelfth week of the semester.

If a student fails the written comprehensive exam?

Students failing the comprehensive written exam after revisions in the ninth week will be eligible to earn an M.S. degree if they complete the other requirements of that degree. All requirements for the M.S. degree must be completed by the end of the 5th semester.

2.2 ORAL PORTION

Timeline for the oral exam

The oral exam is taken by the end of the 12th week of the semester in which the student submits the written comprehensive exam. Once you have found a suitable time to meet with your committee for the exam, make sure you submit the oral exam announcement form on GradPath. This should be done at least 3 weeks before the exam so that your advisor may

submit the result immediately after the exam.

Format of the oral exam

The oral part of the comprehensive exam asks students to defend their written research proposal to the student's comprehensive exam committee in a well-prepared presentation (~45 minutes), which then is to be followed (and/or interspersed) with general Physics questions. Note: it is not necessary that you already have done parts of the research (although many students will have done so). You need to be able to defend your proposal for research.

Duration of the oral exam

The duration of the oral exam shall not be less than one hour or exceed three hours.

If a student fails the oral exam?

Students shall be allowed a maximum of 2 attempts at passing the oral portion of the comprehensive exam, but shall not change the composition of the committee, except with the permission of the DGS and the Graduate College. The second attempt must occur during the same semester as the initial attempt. Students will not be able to continue in the Ph.D. if they fail the second attempt, but may earn an M.S. degree as described below.

3. BETWEEN ORAL AND PH.D. DEFENSE: SATISFACTORY PROGRESS

If you have completed all course requirements, the written and oral portion of the comprehensive exam, and the 18 thesis credits, you may register for 1 credit to maintain continued enrollment. However, certain rules apply. For example, for students holding teaching or research assistantships/associateships, the minimum enrollment required is 6 graduate credit hours. Visa issues may apply for international students. Please consult: <https://grad.arizona.edu/policies/enrollment-policies> and <https://grad.arizona.edu/policies/enrollment-policies/continuous-enrollment> for details and make sure to confirm with the Graduate Coordinator.

Finding a thesis advisor

Starting no later than the fourth semester, each graduate student must have a substantive affiliation with a research group and be making demonstrable progress towards the completion of the Ph.D. degree.

Regular reports on progress/performance

All students are required to provide regular updates on their progress and performance by filling out "conversation forms" with their supervisors. These forms are prepared by the Graduate College, and will be sent out by the DGS to all students via email. Some details:

- Students with TA positions are required to fill out the TA conversation form each semester. Lab TAs should work with the LM and/or their course instructor to fill out the form. All other TAs should complete the form with their course instructor.
- Students without TA positions are required to fill out the RA conversation form once

per academic year. They should work with their research advisor to complete the form. (Most students in this category will be RAs, but students who for example have an external fellowship rather than an RA should also complete the form).

- Students who have RA/TA appointments, or who have passed their comprehensive exam and are working with an advisor toward their PhD but have a TA rather than RA position, should fill out both the RA and TA conversation forms.

Upon completion, the forms should be sent to the GC. The DGS will follow up as needed.

Changing research direction

While students remain free to change Ph.D. advisors or alter the direction of their research program, there must be constant, forward progress towards the Ph.D. degree. Maintaining active status in the Ph.D. program shall be contingent on continuing satisfactory progress.

4. THE DISSERTATION DEFENSE

Ph.D. students are required to defend their dissertation in an oral examination before their degree can be granted.

Deciding the time

This examination is distinct from the comprehensive exam and occurs at the end of the dissertation work, by mutual agreement between the student and their research advisor. In the rare occasion that such agreement cannot be reached, please contact the DGS. The DGS will then contact your research advisor as well as the committee to whom you reported your yearly progress in order to resolve the issue.

Publication requirement

Almost all students graduate with either published work or work submitted for publications. However, the Ph.D. program does not require a minimum number of publications as this may vary strongly among the different Physics disciplines. Your dissertation advisor and thesis committee will advise you about their expectations for publications.

The Ph.D. Thesis Committee

The makeup of this committee shall conform to all regulations of the Graduate College (see <http://grad.arizona.edu>) and consist of a minimum of four members, the majority of whom must have a primary appointment in the Physics Department. It is advised that this committee is identical or similar in make-up to the oral comprehensive exam committee that also monitors your yearly progress towards the degree.

Time-critical events before the exam takes place

At least **4 weeks** before your planned date of the thesis defense you must:

- 1) Check if your plan-of-study has been approved and is up to date in GradPath;
- 2) Submit the Doctoral Dissertation Committee form in GradPath;
- 3) Submit the planned date of the defense to the Graduate College in GradPath;
- 4) Reserve a room for the defense.

At least **2 weeks** before the exam you must send a copy of your thesis to your committee.

One week before the exam: Email an announcement with the time and place of the public portion of your defense. This should be sent to the Physics Department mailing list.

Dissertation format

Please follow the formatting guidelines at <https://arizona.app.box.com/v/grad-gsas-dissformat>. If you are using MSWord, the Graduate College has sample pages for some of the dissertation elements at <https://grad.arizona.edu/degree-services/dissertations-theses/sample-pages>. If you are using LaTeX, there is an Overleaf template that was up-to-date as of 2023 at <https://www.overleaf.com/latex/templates/university-of-arizona-thesis-or-dissertation-2023-version/gjsvystwpwvk> (note the department does not maintain this template and therefore cannot guarantee that any future changes to University formatting requirements will be implemented).

Archiving your dissertation

The submission process is explained in detail at <http://grad.arizona.edu/gsas/dissertaions-theses/submitting-your-dissertation>.

All doctoral dissertations are available to the public through the UA Campus Repository (<http://arizona.openrepository.com/arizona/handle/10150/129651>) and available through ProQuest's Dissertations and Theses subscription database (subject to any restrictions requested by the students).

Please direct any questions to the Graduate Admissions & Degree Services office.

5. DOCTORAL CONTINUOUS ENROLLMENT POLICY

A student admitted to a doctoral program must register each fall and spring semester for a minimum of 1 graduate unit from original matriculation until final copies of the dissertation are submitted to the Graduate Admissions & Degree Services Office.

Students receiving funding such as assistantships, fellowships, loans, grants, scholarships or traineeships may be required by their funding source to register for more than 1 unit to meet full-time status requirements, and should check with their program advisor regarding such requirements to ensure that they remain qualified for funding. Please see the Graduate Coordinator to confirm that your requirements are met, before you register for only 1 unit of dissertation credit.

Doctoral students who have maintained continuous enrollment and are taking only comprehensive exams during either summer or winter term do not have to register for graduate credit during that summer or winter session.

Doctoral students who have maintained continuous enrollment, fulfilled all their other

degree requirements as well as the 18 credit hours of dissertation, and were enrolled in the prior semester may defend in the summer or winter term without registration. If, however, a student needs library privileges in the summer or winter session, enrollment is required.

6. TIME TO OBTAIN YOUR Ph.D. DEGREE

Most of our students graduate during their 5th or 6th year here. Upon entering your 6th year the DGS will request a detailed plan/timeline for completion of the Ph.D.

Note that according to Graduate College regulations, students are expected to complete all requirements for the Ph.D. within five years of passing the comprehensive exam. If that does not happen, the student will need to submit a petition to the Grad College for a program extension. You should also check the Graduate College website for any recent changes in policies.

Alternatively, in some cases the 10-year rule applies. This rule states that graduation must occur within 10 years of having started in the degree program.

7. OTHER REQUIREMENTS

Colloquium

In the first year, graduate students are required to attend all Physics Department Colloquia (usually held Friday afternoons) as an introduction to the excitement and breadth of current research in Physics. Attendance is also encouraged for graduate students beyond their first year, as part of their education in the state of the art of physics research across multiple disciplines.

Master of Science in Physics Degree Requirements

The Physics Master's degree is intended for those students who wish to certify their mastery of Physics coursework at the graduate level; such students may or may not go on for a Ph.D. in Physics. This document applies exclusively to the requirements for the M.S. degree in Physics.

For graduate college policies/rules make sure to check
<https://grad.arizona.edu/degree-services/degree-requirements/masters-degrees>

The requirements for the M.S. degree are as follows:

- 1) 30 credits of graduate-level physics courses
- 2) Students are required to take the following core courses:
 - PHYS 511 Analytical Mechanics
 - PHYS 515A Electromagnetic Theory I
 - PHYS 528 Statistical Mechanics
 - PHYS 570A Quantum Mechanics I

- 3) Students are required to have passed an oral comprehensive exam. The oral comprehensive exam may entail either:
 - a) an oral defense of a Master's Report; or
 - b) an oral defense of the written comprehensive exam; or
 - c) an oral examination on the core Physics knowledge taught in the four core courses.

Students choosing to write a Master's Report may enroll in up to 3 credit hours of PHYS 909 (Physics Master's Report) for credit. Since this is considered an internal report and not an official "thesis," you should not report a thesis committee in GradPath. See the Graduate Coordinator to enroll in PHYS 909.

Students completing a Master's Report (PHYS 909) will not submit their report for archiving.

Students who have passed both the written and oral portions of the Ph.D. Comprehensive Exam are encouraged to obtain the M.S. degree enroute to the Ph.D. degree. Contact the Physics Graduate Coordinator for a Change of Program form to add the Master's program.

Master of Science In Physics (Semiconductor Science and Technology Emphasis) Degree Requirements

The Semiconductor Science and Technology emphasis of the Physics M.S. degree is intended for those students who wish to certify their mastery of semiconductor coursework at the graduate level; such students may directly seek employment in the semiconductor industry, or pursuit Ph.D. study in Physics, ECE or MSE, after obtaining this M.S. degree. This document applies exclusively to the requirements for the Semiconductor Science and Technology emphasis.

For graduate college policies/rules make sure to check <https://grad.arizona.edu/degree-services/degree-requirements/masters-degrees>

The requirements for the M.S. degree are as follows:

- 1) 30 credits of graduate-level physics courses
- 2) Students are required to take the following core courses:
 - PHYS 560A Condensed Matter Physics (3)
 - PHYS 565 Quantum Materials and Devices (4)
 - PHYS 695A Current Problems in Physics (2)
 - MSE/ECE 546 Semiconductor Processing (3)
 - MSE/ECE 547 Semiconductor Processing Lab (2)
 - MSE/ECE 580 Advanced Materials Characterization (3)

Students choosing to write a Master's Report may enroll in up to 3 credit hours of PHYS 909 (Physics Master's Report) for credit. Since this is considered an internal report and not an official "thesis," you should not report a thesis committee in GradPath. See the Graduate Coordinator to enroll in PHYS 909.

Students completing a Master's Report (PHYS 909) will not submit their report for archiving.

Resources

Graduate mentoring program

UA Physics recognizes the importance of advising relationships to student success. Starting in Fall 2025, the department has implemented a formal mentoring program in which all incoming graduate students are assigned a faculty mentor distinct from their research advisor. Mentor assignments are made by the DGS. A web-based tracking system has been developed. Each semester, students with an assigned mentor will be asked to complete a brief survey regarding their academic experience, identify their current mentor, and indicate whether they would like to schedule a meeting—prompting automatic notification to the mentor if requested. Participation in the program is optional for continuing students, who have the option of requesting a mentor (such requests should be sent to the DGS). Students may request to change their assigned mentor at any time.

How to get help resolving problems with a faculty or staff member, or with a fellow students?

You should always feel free to contact your department head, advisor, or the DGS for advice. However, if you are not 100% comfortable with that, to determine who can best help you, use the guide to grievance types and responsible parties assembled by the Graduate College. If students have concerns, they can also meet with the Associate Dean for Graduate & Postdoctoral Affairs in the College of Science, or the Associate Dean of Student Services in the Graduate College. Another alternative is to meet with the Ombuds, a UA service for informal, confidential problem resolution. Information on how the Ombuds can help may be found at <http://ombuds.arizona.edu>.

Coping with the stress of graduate studies

Professional help is available at <https://caps.arizona.edu/>.

Appealing grades or comprehensive exam results

Graduate students should refer to the university catalog for the grade appeal policy and procedures. Appeals related to the Physics written comprehensive or oral comprehensive exams are rare, but in any case should start with a written appeal request to the DGS. The appeal will be adjudicated by the Graduate Curriculum committee. Appeals on oral comprehensive exams will be adjudicated by the DGS and the Graduate College; both must rule in favor for the appeal to be successful.

Appealing other decisions

Appeals in matters not related to grades or the comprehensive exam are brought to the attention of the DGS and documented in writing. For matters relating to the DGS, the student should register the appeal directly with the Department Head.

Graduate and Professional Student Council (GPSC)

The GPSC has many resources of value to Ph.D. students. It should be your first resource when looking for grants for student travel to conferences, student clubs, and other resources. Make sure to visit their website <https://gpsc.arizona.edu/>.

Physics Graduate Student Council (GSC)

Grad students in the physics department are represented by the graduate student council (GSC). When matters relevant to the graduate students arise, the department head or DGS will contact the GSC by e-mail or in person to inform them of the issue. Often this may result in the GSC collecting opinions from the grad students and then responding to the head or DGS. Conversely, the GSC will contact the DGS or head when there arise issues of concern to the grads which they feel need to be addressed by the department administration. Additionally, each academic year a least one town hall meeting with the head and DGS will be held to collect important issues held by the graduate students.

Physics for Equity an Inclusion (PIE)

PIE is an active graduate student-run club that aims to cultivate an atmosphere of respect and inclusion for all members of the physics community at the University of Arizona. All students are welcome to join and attend any of the meetings and events. PIE organizes events ranging from social activities, such as BBQs; Physics outreach such as helping with elementary school science fairs; and professional events such as hosting invited speakers from academia and industry. For more information about the group please visit <https://arizona.campusgroups.com/club1139/home/>.

Work and Study Space

Physics graduate students can study and meet in the graduate student lounge located in PAS 345. Physics TAs are supplied desks and office cubicles. RAs typically have offices in the research group in which they work.

Privacy room

Room PAS 249 is available if you need private space for any purpose. Please contact the Graduate Coordinator for the code to access the room, and observe the guidelines for use that are posted on the door.

Technology

UA WiFi service is provided throughout the physics building. The physics computing lab, room 272, contains 14 Windows PCs for student use (login via NetID). Check <https://physics.arizona.edu/rooms> for room availability. Additionally, one computer is available in the Grad Lounge. For more information of technology resources available through the university, visit <https://it.arizona.edu/student-resources>.

Other Important and Useful Links

University Policies and Codes

Students are responsible for knowing and adhering to all university policies.

[General Catalog](#)

[Academic Integrity](#) and [Student Code of Conduct](#)

Family Friendly Information

The Graduate College is dedicated to promoting and strengthening family relationships. Many

resources have been designed to help graduate students balance and manage family, work, and school.

Graduate Assistant/Associate Parental Leave

Temporary Alternative Duty Assignments (TADA) for Teaching Assistants/Associates

Extension of Time to Degree Policy

Life & Work Connections - Child and Elder Care Resources

Teaching and Research Assistantships (TA, RA)

Maximum hours for TA and RA positions

Graduate assistant/associate appointments in Physics, generally, may not exceed a maximum 0.50 FTE (20 hrs/wk), during fall and spring semester. Enrolled graduate assistant/associates with 0.50 FTE (20 hours per week) or less during the academic year may work during the summer months. The standard for summer supplemental compensation is 155 hrs/mo. However, make sure to check with your research advisor and the business office because precise hours and regulations can change.

How much will I get paid? (precise amounts may change w/o notice)

Before passing the comprehensive exams, you'll get paid \$11,500 per semester, at 0.5 FTE (20 hrs/wk), based on annualized 1.0 FTE salary of \$46,000.

After passing the comprehensive exams, you'll get paid \$11,960 per semester, at 0.5 FTE (20 hrs/wk), based on annualized 1.0 FTE salary of \$47,840.

Current summer teaching assignment rates are \$3,425 for labs and \$5,450 for lectures. Summer supplemental compensation positions and rates must be approved by the supervisor and arranged through the physics business office.

For benefits/health care see

<https://grad.arizona.edu/funding/gaships/benefits-appointment>

Other related GA/TA information at <https://grad.arizona.edu/funding/gaships>

TA training

All incoming graduate students are required to participate in TA training provided by the Physics department. You will receive a schedule of training dates. In addition, your teaching will be evaluated by a faculty member who will visit one (or more) of your labs.

TA duties

1) Most TA will teach labs or studios, and/or grade homework.

2) Office hours and consultation room hours:

0.25 FTE Lab TA's are expected to have 1 office hour or 1 consultation room hour per week.

0.50 FTE Lab TA's are expected to have 1 office hours and 1 consultation room hour per week.

Sign up for consultation room hours at PAS 260.

Office Hours should not conflict with the associated lecture time.

3) Attendance at the weekly lab meeting is required if you are serving as TA for the course for the first time.

4) Miscellaneous requirements

- Teach as directed.
- Be in the room/lab 5 minutes early when teaching.
- If unfamiliar with the experiment, do a practice run, and write an outline of the lab report.
- Grade and return lab reports in **one** week.
- Grade tests and homework in time frame requested by the instructor.
- Contact the lab manager, and find a replacement, if you cannot make your assigned lab section.
- Find a replacement if you cannot make consultation room hours.

Note: Priorities in future TA assignments are dependent upon your performance/behavior as a TA in previous semesters.

"Grandfather" policy

The rules set forth in this handbook, as well as any subsequent versions of these rules, shall apply to only those students entering the Ph.D. program after these rules are enacted. Students already in the program shall have the option of conforming to either the new rules or the rules that were in force at the time of their entry into the program.

As a general policy, all rules and regulations are intended to be interpreted as broadly and flexibly as possible while remaining consistent with the intellectual (educational and research) missions of the Ph.D. program. Special cases and exemptions can be granted, when appropriate, by the DGS, and students are encouraged to discuss such options with the DGS. Students must also ensure that they satisfy all rules determined by the Graduate College, which may be independent of those rules listed here. Students can also file petitions with the Department of Physics or the Graduate College to seek exceptions to these policies.