Department of Physics and Astronomy Purdue University

Procedures and Information for Faculty

2025-26

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Introduction

The purpose of this manual is to provide information concerning all the facets of being a faculty member in the Department of Physics and Astronomy. This document will always be a work in progress, with revised versions available at the beginning of the academic year. In order to make this document as useful as possible please provide feedback (robison@purdue.edu) on how the document can be improved based on your own personal experience.

1. Summary of Faculty Responsibilities and Duties

Research

Tenure-track and tenured faculty are expected to be active in research in one or more areas. The typical research program of an active faculty member would consist of:

- Extramural funding
- Serving as a major professor for one or more graduate students
- Publication of research results in peer reviewed journals
- Invited talks
- Awards and fellowship in Professional societies
- Participation in professional meetings, chair of session, organizer, etc.
- Service to the research community as editor, proposal and manuscript reviewer, review panel member, etc.

Teaching

The standard teaching load for a fully funded, research active member of the faculty is one course per semester during the academic year (AY). The Head and Associate Head for Academic Affairs are responsible for making teaching assignments, taking into account faculty preferences, graduate student needs (in the area of specialty courses), etc. Generally speaking, faculty can expect to teach a given class for three years.
Per our Policy on Additional Teaching for Research Inactive Faculty (approved during Fall 2017) faculty with a reduced research program may be assigned additional teaching duties and/or other responsibilities.

All faculty should familiarize themselves with Student Regulations regarding academic matters. The office of the Dean of Students has compiled important information at: http://www.purdue.edu/studentregulations/

Service

Each member of the faculty is expected to contribute his or her fair share of service to the department, college and university. Each fall, a list of departmental, college and university committee assignments will be distributed to the faculty. The Head or Associate Department Heads generally make committee assignments with the exception of the following committees which are filled via nomination and election:

- College of Science Faculty Council
- College of Science Promotion Area Committee (Full Professors)
- Physics Advisory Committee

- Promotions Subcommittee
- University Senate
- Head Search Committee

General

Although currently the department has both 12-month (or fiscal year FY) faculty and 9-month (or academic year AY) faculty, all hires since 1993 have been on an AY basis. The University requires AY faculty to be on campus one week prior to the beginning of the fall and spring semesters. Faculty are not required to be on campus during:

- Official university holidays
- Spring and Fall Breaks (AY faculty only)
- Periods between fall and spring semesters (AY faculty only)
- Summer (AY faculty only)

All faculty are expected to be on campus until commencement day and until they have submitted course grades.

2. Department Services

2.1 Main Office

Gabor Csathy Department Head, PHYS 217F, gcsathy@purdue.edu, 4-3002
Oana Malis, Associate Department Head (Facilities and Personnel), PHYS 170, omalis@purdue.edu, 4-3039
Ken Ritchie, Associate Department Head (Academic Affairs), PHYS 58, kpritchie@purdue.edu, 6-8315
Andy Robison, Assistant Head, PHYS 217D, robison@purdue.edu, 4-3001
Debbie Nahlik, Executive Assistant to the Head, PHYS 217E, dnahlik@purdue.edu, 4-5564

2.2 Administrative Support

The department currently employs 5 clerical staff to support faculty, their graduate students and professional staff. It is the responsibility of each faculty member to notify administrative staff of new employees and graduate students.
General Administrative Duties

- Provide parking passes for visitors
- Place purchase orders
- Reserve Conference rooms
- Make travel arrangements
- Electronically process travel for approval and reimbursement
- Process FedEx and UPS shipments
- Handle seminar set-up/clean-up
- Maintain Printers and Office Supplies
- Prepare and/or review requisitions and turn into Business Office
- Document preparation
- Prepare travel arrangements for visitors
- Other – each administrative office has specifics for their group

The faculty assignments for each administrative staff/office are:

Administrative Staff	Office	Faculty	
Jeaneen Morris 4-5381 morri445@purdue.edu	S153	Caffee/PRIME Lab	
Angela Edmondson 4-3035 edmondad@purdue.edu Sonia Hill 4-3005 hill552@purdue.edu	162	Arnold Banerjee Carlson Chamon Csathy Durbin Ellison Gerber Khlebnikov Liu, Jing Lyanda-Geller Ma Malis Manfra	Nie Nolte Pushkar Pyrak-Nolte Rebello, Carina Rebello, Sanjay Ritchie Rokhinson Savikhin Sederberg Varynen Wang Xie Zeng Zhu
Kristin Deweese 4-5390 deweese@purdue.edu	370B	Duffell Eiles (1/1/26) Giannios Greene Hung Jones Jung Koltick Kruczenski Lang Lashkari Lee	Li Liang Liu, Mia Lyutikov Milisavljevic Neumeister Peterson Polin Robicheaux Shivaram Srivistava van't Hoff Xia (1/1/26)

2.3 Purchasing

Purchasing is responsible for assisting all departments in making the most intelligent and economic product selection as well as adhering to the University's policies and procedures and those dictated by the State and Federal governments. All purchases require prior academic and comptroller (Business office) approval, regardless of the source of the funds. **A Purchase Requisition form (Form 125) must be completed and submitted for all purchases. Receipts are also to be submitted.** These forms are available from the Administrative Assistant office or http://www.physics.purdue.edu/business-office/forms.html. Orders are processed by the area administrative staff.

Orders that are larger than $10K require a competitive bid. Purdue's purchasing department (https://www.purdue.edu/procurement/purchasing/competitive-bids.php) requests that faculty begin the process as early as possible once you have identified your need. Your Administrative Assistant will facilitate the process for you. If needed, Procurement Services will then contact the faculty member to discuss the specifications, compile the minimum specs and discuss potential sources with you from the very beginning.

The competitive bid process follows Federal and State guidelines to maintain the university's level of funding. Over the years and for various reasons, deviations from the process have been allowed. Procurement is now under new management and under greater scrutiny to make sure choices are data driven and will uphold internal and external audits, as well as creating opportunities and fairness of bidding for our suppliers, which in turn increases the value for the customer.

Methods for Purchasing

Listed below are the basic methods available for purchasing items. The method you choose is based on the type of item to be purchased and the Vendor involved. All order requests must be signed by an individual authorized to commit the use of the funds. To authorize others to purchase on your accounts, you must complete the Account Authorization Form (available from your account manager).

Ariba

Ariba is Purdue's web-based procurement system, developed to expedite orders in a timely fashion. It allows the end user to submit the order on-line, track where the procurement is in the routing process and when it has been ordered. **Contact your Administrative Assistant if you would like more information on this process.** Purchasing requests should be submitted to **your area administrative assistant** to place the orders for you.

Computer equipment including printers, scanners, hard drives and other peripheral devices are part of the university's strategic sourcing plan and may only be purchased outside the Ariba system with prior approval from Purchasing. Please be advised that prior approval is not always granted.

Credit Cards

Credit cards are available from **your area Administrative Assistant** to facilitate purchasing by telephone or on-line. In the instance that supplies are being purchased, credit cards should only be checked out and used with Vendors that do not exist in the Ariba purchasing system. You must complete a purchase request form before you can check out a credit card. The department has multiple credit cards available with different single transaction limits to meet your needs. Purdue is a tax exempt organization and purchasers should be cognizant of that while making purchases and

ensure tax is not charged to the purchase. Once the credit card is returned, an itemized receipt or packing slip is required.

NOTE: When making online purchases, department credit card information must not be saved on individual user accounts as is sometimes allowed for sites such as Amazon. The University has an Amazon Membership, which stores invoice information and allows many items to ship within two days for free. All Amazon orders should be placed with your area Administrative Assistant to ensure correct billing & shipping is applied.

Stores Requisition

Store requisitions are used for the purchase of supplies available from General Stores or other campus stores that you wish to walk to the store and pick them up yourself. The general stores operation carries an inventory of approximately 10,000 commonly-used items which are stocked by Fischer Scientific.
The different stores on campus and their locations are:

- Biological Sciences Stores, Lilly Hall (LILY);
- Chemistry Stores, Wetherill Laboratory of Chemistry (WTHR).

To order merchandise from the above Stores, please see your area administrative assistant. You will need to take appropriate account information to place your order.

Returning Items

Staff members should not return faulty equipment for repairs or refunds on their own. These matters must be handled through your area Administrative Assistant and/or Business Office.

2.5 Hiring Procedures

The hiring of any personnel requires prior approval. All pay scales are established by the University, and the established rate of pay for any position should be obtained and approved before a commitment is made.

- To hire an undergraduate student (hourly employee) contact **Loren Randall (larandal@purdue.edu)**.
- To extend an offer of employment to a graduate student, see **Aimee Wen** (wen137@purdue.edu or 4-3099) in the Graduate Office room 152. Pay scales for graduate students can be obtained from **the Business Office**.
- To hire a postdoctoral research associate, visiting scientist, or visiting scholar, contact **Debbie Nahlik**.
- To hire an administrative/professional staff member contact **Debbie Nahlik**. These hires must be authorized by the Dean of the College of Science before an offer of employment is extended.

Employment Eligibility

Federal law requires that all new employees must complete Section 1 of the U.S Citizenship and Immigration Services' Form I-9 and present documentation of employment eligibility on or before their first day of employment. This documentation may consist of driver's license, social security card, or passport information. To access the electronic form, new employees should visit the Purdue University payroll site at www.purdue.edu/payroll and click on the link titled "Electronic I-9 for new hires/rehires", login and complete Section 1. After completing Section 1, a list of acceptable documents will be provided. As a supervisor, please inform all new staff of these requirements. Staff may not begin work until this I-9 documentation has been provided and certified. For continuing staff, any delay in providing updated information may result in held pay, suspension of work, or eventual termination of employment. Offers for all new non-student (graduate and undergraduate) are also contingent on successfully passing a required background check.

2.6 Visas

Debbie Nahlik is the principal contact for visas needed by faculty, postdoctoral research associates, visitors and consultants. **Aimee Wen (wen137@purdue.edu)** is the principal contact for visas needed by graduate students.

2.7 Website & Communications

The Department maintains a website (www.physics.purdue.edu) that includes information about department personnel, academics programs, courses, research, and outreach. There is also a faculty-only area at https://www.physics.purdue.edu/resources/faculty-resources.php.

To make changes to your faculty or research page, contact Science IT Support at 4-4488, sciencehelp@purdue.edu, or http://science.purdue.edu/scienceit/ticket.php. If desired, you may have access to your pages to edit them yourself. Science IT will visit you in your office to conduct a short training session.

To add a news item to the website, contact our Communications Specialist, David Siple at dsiple@purdue.edu, 4-9503.

3. Business Services

The department business office consists of 4 full-time remote staff members and provides services including payroll administration, account and grant management.

3.1 Business Office Staff

Loren Randall, Business Manager – PHYS 217B, larandal@purdue.edu, 4-5379
Melissa Richardson, Research Account Specialist, mrichardson@purdue.edu, 6-6112
Tina Sandefur, Business Assistant – PHYS 217, tsandefu@purdue.edu, 4-6786
Sarah Sellgren, Senior Business Assistant, - PHYS 217, ssellgre@purdue.edu, 4-3144

3.2 Funding/Grants: Proposal Preparation/Account Management

Proposal preparation and development is handled through the Purdue Excellence in Research Administration (PERA) https://pera.research.purdue.edu/.
Through the center, faculty have access to professional staff devoted solely to assisting them with the development and submission of proposals. Services available through the center include preparation of the proposal budget, review of the budget justification, assistance with subcontractors, cost sharing, sponsor forms and electronic submission systems, and institutional review and approval of the proposal. Please go to the "Grants Module" on the PERA site to initiate a proposal. The Proposal must be started in PERA at least 15 business days prior to the submission deadline. The proposal specialists can work via e-mail, via phone, or are also available to meet in person.

If cost sharing and/or additional lab space are required by the sponsor, please discuss with the department head as soon as you are aware of the requirement. **If you are requesting cost-sharing assistance from the central administration, please contact the Physics and Astronomy business manager.** Cost sharing on equipment is generally split between the Vice Provost for Research, the College of Science and the Department of Physics and Astronomy on a 50%-25%-25% basis.

From the Sponsored Programs Services website:
"Pre-Award specialists provide the following services in the support of PIs:

- Review sponsor guidelines, identify key requirements
- Assist with budget preparation, related documentation and proposal submission forms
- Prepare required sponsor administrative forms
- Ensure that all Purdue information included within the proposal is accurate and complete
- Contact and collaborate with partner institutions to secure all necessary subcontract documentation
- Assure all regulatory requirements and export control issues are identified
- Review the final proposal package to ensure all administrative requirements have been met
- Obtain academic approvals and provide institutional approval for the proposal
- Complete the final submission package, upload final documents and forms, and submit to the sponsor"

Once your proposal is funded, the Business Office will play an important role in monitoring your research accounts.

Account managers have the following faculty assignments.

Sarah Sellgren		Tina Sandefur		Melissa Richardson
Caffee	Milisavljevic	Arnold	Polin	Carlson
Ellison (8/25)	Nie	Banerjee	Pushkar	Chamon
Giannios	Nolte	Csathy	Rebello,Carina	Greene
Hung	Peterson	Durbin	Rebello,	Jones
Jackson	Rokhinson	Duffell	Sanjay	Jung
Khlebnikov	Sederberg	Gerber	Ritchie	Koltick
Lang	Van't Hoff	Li	Robicheaux	Kruczenski
Lee	Wang	Lyanda-	Savikhin	Lashkari
Liang	Xie	Geller	Shivaram	Liu, Mia
Lister	Zeng	Ma	Vayrynen	Neumeister
Liu, Jing	Zhu	Malis	Zhou	Pyrak-Nolte
Lyutikov				

3.3 Payroll/Hiring of Personnel

Purdue operates its payroll on several different systems depending on the staff member's classification.

Monthly	**Biweekly**
Faculty	Administrative staff
Postdoctoral research associates	Service staff
Graduate students	Undergraduate students
Administrative/professional staff	

The calendar of payroll dates can be found at https://www.purdue.edu/hr/buspur/calendars/.

Monthly payroll is handled by (cospayroll@purdue.edu).
Any questions can be directed to either Payroll or Loren Randall, Business Manager (larandal@purdue.edu).

Payroll Cost Distribution

At the beginning of each semester, the Business Office will send an email to all faculty asking for their employees' cost distribution information for the upcoming semester. This email is the mechanism you use to inform the business office of all payroll and cost distribution information for yourself and your support staff. It is equally important to notify the College of Science payroll clerk immediately if your payroll distribution changes during the semester. Changes might include adding a graduate student, terminating a graduate student, or changing the accounts from which you or your students are paid.

Personnel Activity Reports (PARs)

Purdue requires that the employment effort of monthly payroll staff be certified each semester. Faculty members are responsible for certifying the effort of each monthly payroll staff member, including graduate students, whom they supervise. The Business

Office will notify you when PARs are available at the end of every semester for completion and certification.

Biweekly Employees
Biweekly paid employees use an online timecard to record both hours and distribution of effort that an individual spends directly on each account. If a day off is taken or requested, it should be submitted in the Success Factors system. It is the supervisor and/or faculty member's responsibility to approve the timecard or to designate someone on his or her staff to that duty.

Summer Employment
For academic year staff, summer employment is contingent upon available funding. During the final weeks of the semester, each faculty member will receive an email from the Business Office regarding summer employment that asks for employment dates and sources of funding for themselves and their support staff. The summer employment information must be completed at the Business Office to ensure a timely receipt of pay checks for the specified work periods.

4. Science IT

Computing support in the department is handled by Science IT. Science IT is comprised of three groups of IT support professionals: Systems & Support, Unix Systems, and Database & Web Administration. The department also has a dedicated academic site specialist to assist with higher-level research and teaching needs specific to the department. Science IT can be contacted by a variety of methods, telephone 4-4488, email sciencehelp@purdue.edu, or browse to http://science.purdue.edu/scienceit/ticket.php. Additionally, the main Science IT web site offers links to documentation and other useful resources, http://science.purdue.edu/scienceit/.

4.1 Physics IT Staff

Mark Linvill, Senior Research Specialist – PHYS 220A, mlinvill@purdue.edu, 6-6163
Joshua Wallace, Desktop Support Specialist – PHYS 394, hall752@purdue.edu, 4-7191

4.2 Infrastructure

Science IT staff are located in room 394 and are responsible for maintaining the department's computing facilities. The Physics Computer Network infrastructure is a complex heterogeneous system comprised of FreeBSD, Linux, and Windows servers, with more than 500 Windows, Debian and Scientific Linux, Mac OS X, and FreeBSD workstations supported.

4.3 Science IT Help Center

Science IT maintains the Physics Help Center consisting of 8 Windows workstations in rooms 11 and 12. Science IT also maintains 45 Windows instructional lab workstations spread over 3 distinct locations throughout the building.

4.4 Computer Support and Purchasing

It is recommended that Science IT be consulted when ordering computer equipment. For any computer problems, email sciencehelp@purdue.edu.

5. Facilities

5.1 Machine Shop

The Department machine shop is in Rooms 39 and 33 and is under the direction of a full-time machinist, Seth Flutz, smfultz@purdue.edu , 4-5548

Duties of the Staff Machinist include machining training and safely, helping faculty with machining jobs, and shop maintenance. During periods of increased load, the staff machinist may recommend faculty members to use the Purdue Research Machining Services (RMS), 4-3710 or RMS-Physics@purdue.edu or machining services external to Purdue.

During work hours, all physics faculty, staff, and graduate students are eligible to use the Faculty Shop provided they have completed the necessary training. After hours, faculty may use the shop. After hours, faculty may let their students/postdocs use the show as long as they are physically present in the shop, with the student/postdoc at all times.

5.2 Electronics Shop

The Physics Electronics Shop is located in Rooms 29 and 31. The work performed in the shop is a combination of research and teaching projects. The Electronics Shop serves as a valuable source of information and advice for physics graduate students working on electronics associated with their thesis research. Currently, we are in the process of filling this position.

5.3 Helium Liquefier and House Chiller Water Loop

Aaron Mull, our maintenance mechanic, operates critical equipment for research operations: the Helium Liquefier for recycling helium and the House Chilled Water Loop operations to cool lab equipment.

5.4 Research Analyst

Mark Linvill supports the department scientific computational needs. He is an expert on distributed computing and large database analysis.

6.0 Building

Keith Schmitter, Building Deputy – PHYS 1, schmittk@purdue.edu, 4-5531, (765) 242-4610 (cell)
Aaron Mull, Maintenance Mechanic – PHYS 32, acmull@purdue.edu, 4-5533
Firoz Desai, Shipping and Receiving Clerk – PHYS 34, fbdesai@purdue.edu, 4-5029

6.1 Conference Rooms

The department has 7 conference rooms available for use by faculty staff and students. If you need other meeting space in the building, visit https://timetable.mypurdue.purdue.edu. A career account is required to view the university timetabling application.

Room	Capacity	Projection	Internet	Phone	Computer	Contact for Reservation
72	12	HDTV	Wireless only	None	None	https://www.physics.purdue.edu/webapps/index.php/conference_rooms/calendar/6 First Floor Admin office 4-3005 or 4-3035 hill552@purdue.edu, edmondad@purdue.edu
220B	10	None	Yes	Yes	None	Debbie Nahlik, dnahlik@purdue.edu, 4-3000[1]
242	24	Screen and projector	Yes	Yes	None	Debbie Nahlik, dnahlik@purdue.edu, 4-3000
279	14	HDTV	Yes	Yes	None	https://www.physics.purdue.edu/webapps/index.php/conference_rooms/calendar/7 First Floor Admin office 4-3005 or 4-3035
350[3]	9	Screen and projector	Yes	Yes	No	Kristin Deweese, deweese@purdue.edu, 4-5391
398	15	Screen and Projector	Yes	Yes	Yes[2]	Kristin Deweese, deweese@purdue.edu, 4-5391

1: The priority usage of PHYS 220B is for the Department Head and Business Office. Other reservations may be cancelled at short notice.
2: Videoconference capable
3: Special Approval required.

The Department owns two Meeting Owls. To borrow one, please contact Andy Robison, robison@purdu.edu

6.2 Individual Laboratory and Office Space

Faculty will be allocated office and laboratory space commensurate with the level of research activity. Office furniture is provided by the department. If special furniture is desired, startup funds may be used.

7.0 Research in the Department

Faculty are expected to apply for and obtain extramural funding in order to support their research program and to provide for summer salary. Purdue is one of about 200 research universities in the United States. It is natural, then, that research plays an important role in the mission of the university, in the promotion and merit increases for faculty.
The University's Office of the Vice President for Research provides a resource for faculty seeking external funding. The URL is: https://www.purdue.edu/research/oevprp/

8.0 Teaching in the Department

The standard teaching load for a fully funded, research active member of the faculty is one course per semester during the academic year (AY). Per our Policy on Additional Teaching for Research Inactive Faculty (approved during Fall 2017) faculty with a

reduced research program may be assigned additional teaching duties and/or other responsibilities.

It is especially important for faculty who are just beginning their teaching careers to familiarize themselves with University regulations regarding academic matters. The office of the Dean of Students has compiled important information at: https://www.purdue.edu/odos/osrr/resources/pub.html

These publications cover the following subjects:

- Academic integrity: A Guide for Students
- Deterring and Detecting Academic Dishonesty: Suggestions for Faculty
- Responding to Academic Dishonesty: A Guide for Faculty
- Managing Classroom Behavior: Rights of Faculty and Students
- Speech and Expression on Campus
- A Student's Guide to the Grade Appeal Process
- Student Organization Disciplinary Status

When questions concerning academic dishonesty arise, it is advisable to consult with the Head as soon as possible.

Teaching faculty should familiarize themselves with the policy regarding the posting of grades. The Family Educational Rights and Privacy Act (FERPA), as well as Purdue Executive Memorandum C-51, prohibit the release of private student information (https://www.purdue.edu/policies/records/viiia4.html)

This includes the posting of grades by social security numbers, student identification numbers, or by names. FERPA prohibits the posting of grades in any personally identifiable forms, including the use of portions of social security or student ID numbers. FERPA does not preclude an instructor or an institution from assigning individual numbers to students for the purpose of posting grades providing only the student and the officials who assigned them know the numbers. Questions about FERPA or University policy relative to student privacy and distribution of grades should be directed to the University Registrar.
http://www.purdue.edu/registrar/FERPA/FERPA_.html

The Office of Student Rights and Responsibilities publishes the Code of Student Conduct which is recommended to review. You may view this publication at https://www.purdue.edu/odos/osrr/conduct/code.php.

The Head and Associate Heads are responsible for making teaching assignments, taking into account faculty preferences, graduate student needs (in the area of specialty courses), etc. Generally speaking, faculty will be expected to teach a given class for three years.

8.1 Course Management with Banner and myPurdue

Purdue University uses Banner and myPurdue for management of courses. Visit https://wl.mypurdue.purdue.edu/ to look up course rosters, enter grades, etc.

Instructions can be found at
https://service.purdue.edu/TDClient/32/Purdue/KB/ArticleDet?ID=195

Before accessing any student-specific records, a faculty member must be FERPA and GLBA certified. More information on certification can be found at:
https://service.purdue.edu/TDClient/32/Purdue/KB/ArticleDet?ID=41

With the implementation of Banner, +/- grading is now available for all courses. The Department strongly suggests that all service courses use the +/- grading system.

8.2 Introductory Course Sequences

Physics Majors Sequence
Please visit https://sp.itap.purdue.edu/science/phys/inside_physics/ to view the curriculum for physics majors that was approved by the faculty in May 2008.

Engineering Sequence
By far, the single largest block of students we teach is Freshman Engineering (PHYS 17200). About 1500 students take PHYS 17200 in the spring semester. A smaller number, about 800, take PHYS 17200 in the fall. The typical sequence is as follows:

- PHYS 17200 – Mechanics, spring semester (all majors)
- PHYS 27200 – E&M for Engineering Education and ECE majors
- PHYS 24100 – E&M for all other engineering majors

Purdue Polytechnic Institute Sequence
Students in the Purdue Polytechnic Institute take the following courses:

- PHYS 22000 – Mechanics
- PHYS 22100 – Electricity & Magnetism

Life Sciences Sequence
Students in the life sciences may take the following courses.

- PHYS 23300 – Physics for Life Sciences I
- PHYS 23400 – Physics for Life Sciences II

or

- PHYS 22000 – Mechanics
- PHYS 22100 – Electricity & Magnetism

8.3 Graduate Courses

In addition to the core courses (PHYS 61700, 63000, 66000, and 66100) physics and astronomy graduate students take at least three specialty courses. A partial list of specialty courses can be found in myPurdue.

8.4 Undergraduate Office

The Undergraduate Office (room 144) handles many resources for instructors:

- Course schedules and room assignments

- Teaching Assistant assignments
- Grade records
- Preparation of course and test materials
- Sending/receiving faxes

Requests for a change in course time or location should be made to **Heather Lange** (langeh@purdue.edu, 4-7713) at least two semesters in advance.

Requests for particular Teaching Assistants may be submitted to Lucy Nelson (lucian@purdue.edu, 4-5516).

Requests for duplication of course materials should be submitted through room 144 at least 24 hours in advance.

Completed grade rosters must be submitted online at myPurdue no later than noon the Tuesday following examination week. **Faculty in charge of a course are expected to remain on campus until this time in case a grade issue arises.** Faculty are responsible for handling all inquiries by students concerning grades in a timely manner. Primary test and quiz materials should be kept for at least one semester after final grade submissions. It is not uncommon for a student to initiate a grade revision or inquiry six months following completion of a course. It is therefore imperative that faculty instruct their TAs to retain all primary materials as well.

Instructors in charge of a course should schedule a pre-semester meeting with his or her TAs to go over class policy regarding matters such as missed quizzes and exams, absences, grading policies. It is very important that students receive a consistent message from all teaching personnel associated with a given course. Many problems arise because this advice is not followed.

If problems develop with a TA, the professor in charge of the course should notify **Lucy Nelson** immediately (lucian@purdue.edu, 4-5516).

Instructors should develop course policies and a course syllabus suitable for both distribution in hardcopy and posting on the course web page. **Heather Lange** can assist you with setting this up. Faculty will receive a reminder during the current semester to submit course materials for the subsequent semester. Adhering to this deadline is essential in assuring that all materials will be available to students at the beginning of the semester. Sample syllabi can be obtained in room 144 or by looking at current course web pages.

Students with disabilities and diagnoses may request accommodation to aid in completing homework, classwork and exams. If accommodation is approved, instructors of affected courses will receive an email outlining which accommodation(s) must be given to the student. For exam and test-based accommodations (e.g. extended time or reduced distraction environment), the student can reserve a time at the Purdue Testing Services (https://www.purdue.edu/studentsuccess/testing-services/) to take their exam under their accommodations. The instructor will need to approve the conditions of the exam and provide a copy of the exam/test to the DRC several days in advance.

Other accommodations may require modification to classroom teaching and/or homework for the student. Note the responsibility to ensure the student's accommodations are met is the instructors, including if Testing Services refuses to proctor an exam for any reason. Personnel in room 144 and David Huckleberry can assist you in handling accommodations.

8.5 Peer Review of Teaching

In 1998 the department began a program of peer mentoring of teaching. The primary goal of the peer teaching evaluation program is to provide feedback to individual faculty (Assistant, Associate, Full, Visiting Professors, and Lecturers) in an effort to improve teaching effectiveness and student learning. The Peer Mentoring evaluation form can be found Inside Physics, under Promotion Document Information: https://www.physics.purdue.edu/resources/faculty-resources.php

The peer evaluations, together with the "cafeteria" evaluations, will be used in the promotion and tenure process, as well as for documentation for various teaching awards at the school and university level. Additional benefits of the evaluation process are: 1) increased awareness among the faculty of the physics curriculum and course content; 2) the opportunity for faculty to improve their own teaching skills by observing their colleagues teaching.

Over the past several years, the quality of one's teaching has come play a more significant role in the promotion process. It is no longer sufficient to be an excellent researcher to earn promotion. One must also be a good or excellent teacher. Our departmental efforts are an attempt to provide feedback to faculty early in their careers. In addition, faculty can also take advantage of opportunities provided by the University to improve teaching skills. The Center for Instructional Excellence (http://www.cie.purdue.edu/) provides services such as one-on-one consultation, workshops, etc.

9.0 Committees/Service

Each member of the faculty is expected to contribute his or her fair share of providing service to the department, school and university. Each fall, a list of departmental, School and University committee assignments will be distributed to the faculty.
The following committee assignments are via nomination and election:

- College of Science Faculty Council
- College of Science Promotion Area Committee (Full Professors)
- Physics Advisory Committee
- Promotions Subcommittee

The Head or Associate Department Heads make all other committee assignments.

9.1 Departmental Committees

Physics Advisory Committee

The Physics Advisory Committee (PAC) is an eight-member committee with one member elected from each of the following groups:

- AMO
- Applied Physics
- Astrophysics
- Condensed Matter Physics
- Biophysics
- Education
- High Energy Physics
- Nuclear Physics

Each faculty member will individually choose the group to which he or she belongs but the choice should be consistent with the faculty member's activities. To ensure continuity either three or four members of the PAC are elected each year. A faculty member may not serve more than two consecutive terms. The chair of the PAC will notify the groups that need to appoint a member of the PAC.
The committee meets regularly with the Head present at virtually all meetings. The agenda is set by the PAC chair based on suggestions from the Head, Committee members and faculty. Generally the Head asks for opinions and/or actions on a wide variety of important issues and generally the committee is the constructive interface between the faculty and the Head.

Promotions Subcommittee

Full professors are elected to serve two-year terms on the Promotions Subcommittee. The committee's primary function is to monitor the progress of faculty eligible for promotion and to initiate formal promotion process. The committee meets each spring to consider faculty for promotion the following fall.

Graduate Oversight Committee

The Graduate Oversight Committee handles policy issues pertaining to the graduate program. The Committee also reviews Plans of Study to ensure that each graduate student is making adequate progress.

Individual Promotions Committee (IPC)

To mentor junior colleagues, each Assistant and Associate Professor with have an Individual Promotions Committee assigned. For further details, please read section 15.2.

9.2 College of Science Committees

A brief summary of some of the College of Science committees outlined therein is given here.

College of Science Area Promotion Committee

The CoS Area Promotion Committee is comprised of the seven CoS department heads (Biology, Chemistry, Computer Science, Earth, Atmospheric and Planetary Sciences,

Mathematics, Physics and Astronomy, and Statistics), the Dean, plus elected representatives from each department who serve two-year terms. Physics and Astronomy has two such representatives.

College of Science Faculty Committees
The College of Science holds regular faculty meetings during the academic year. An agenda is distributed in advance by the Dean's office. Faculty are encouraged to attend. The College maintains several committees: Faculty Council, Graduate Curriculum and Academic Policy (GCAP), Undergraduate Curriculum and Academic Policy (UCAP), the Elections Committee, the Grade Appeals Committee, and the Grievance Hearing Committee, .

University Senate
Each department has representation on the University Senate. The Senate maintains a URL: http://www.purdue.edu/faculty/.

10.0 Faculty/General Information

10.1 Faculty Appointments

Although currently the department is a mixture of 12-month (or fiscal year) faculty and 9-month AY faculty, all hires as of 1993 have been on an AY basis. The University requires AY faculty to be on campus one week prior to the beginning of fall and spring semesters. AY faculty are not required to be on campus during:

- Official university holidays
- Spring and Fall Breaks
- Periods between fall and spring semesters

AY faculty are expected to be on campus until commencement day or when their grades are submitted, **whichever comes later**. Full details on employment periods for academic year staff can be found in University Policy, Academic-Year Employment: https://www.purdue.edu/policies/human-resources/vif12.html

10.2 Leave and Personal Days

Absences from campus must be approved by the Head and Dean. For absences related to non-university business, sickness, or vacation, prior approval can be obtained by completing an online leave request in Success Factors.

10.3 Personnel Issues

A comprehensive Human Resources Services Department exists by functional areas to assist departments at Purdue University. Currently, this department is remote. https://www.purdue.edu/hr/aboutus/hrteams.php

In conjunction with the Business Office, Human Resources provides service in benefits, compensation & classification, employee assistance program, employee relations & human resources policy, and employment.

If you have questions pertaining to student employment, wage and salary analysis, creating new positions, or any employment related questions, please contact the Physics Business Office for information on policies and procedures.

As a supervisor, the faculty member should also be sensitive to employee relation situations. For example, layoff, discharge, poor performance, and disciplinary problems, to name a few, are serious issues which should be addressed to the Department Head and the Business Office for discussion and assistance in resolving. The Employee Relations and Human Resources Policy area may also be called upon to resolve sensitive employer/employee issues, thereby avoiding a potential grievance action.

10.4 Department Seminars

The department sponsors an active seminar series throughout the academic year. Faculty should plan to attend the Colloquium held every Thursday in room 112 from 3:30 – 4:30 p.m., preceded by a coffee at 3:00 p.m. in room 242. It is also important that you encourage your graduate students to attend these functions as well. They serve a very important role in the education of our students. Please keep in mind that visitors to our department will form an opinion of us based on what they see and experience and that poorly attended seminars and colloquia will reflect poorly upon us.

10.5 Faculty Meetings

Faculty meetings are generally held on the 3rd or 4th Wednesday of every month at 3:30 p.m. in PHYS 203 or 223. The department tries to schedule no classes or conflicting events during these times.

10.6 Faculty Coffee and Social Events

The department sponsors a faculty coffee every Wednesday at 3:30-4:30 p.m. in room 242. This is an opportunity to meet informally with fellow members of the faculty to discuss the affairs of the day.

The department maintains a PRF and faculty flower fund. Both funds are supported through annual faculty donations. The flower fund is used to acknowledge special occasions such as births and deaths of faculty, staff, and immediate family members. The department sponsors many social events throughout the year ranging from weekly coffees to special banquets. Participation at these functions is important in building a sense of community and collegiality.

The department sponsors special events for its students, faculty and staff every year.

11.0 Travel

11.1 Travel Authorization

Purdue uses an electronic booking and expense system called Concur. Within Concur, a travel request must be completed and submitted, for both domestic and international

travel, prior to the date travel begins. For international travel, a travel request should be completed and submitted in Concur at least three weeks prior to the date of the travel so that the International Insurance card can be issued prior to departure. Please estimate your costs as close as possible, and always be complete and thorough.

Your area administrative assistant can assist you with your Travel Requests and has been set up as a delegate in the Concur system. You will need to submit your request through Concur once you or your clerical support have completed the request. Your clerical support cannot approve/submit on your behalf.
Travel cards are available for all travelers with the approval of their PI/Supervisor. Applications are available in the business office or on Travel's website.
https://www.purdue.edu/procurement/card-services/travel-card.php

You are encouraged to approve travel cards for your grads and staff to reduce out of pocket expenses. With the availability of travel cards for all travelers, the Business Office is unable to prepay for any airfare or registration. PRF advances previously available are no longer an option.

Graduate students traveling on your accounts will need your electronic approval. Please make sure your Graduate students know what account number(s) they will be traveling on.
Detailed travel rules and regulations can be found on the Travel website:
http://www.purdue.edu/business/travel/.

Your regular health insurance does not cover international trips. Before international travel, please file your Travel Request in a timely fashion, such that a mandatory International Travel Insurance policy can be issued for your upcoming trip.

11.2 Travel Reimbursement

Upon completion of your trip, you (or your administrative support) must complete a travel expense report in Concur. All of your original receipts including airfare, rental car, lodging, meals, tolls, and registration fees must be included in your travel expense submission. The Expense Report must be submitted by you in Concur to certify that the reimbursement claim is accurate and rightfully due to you. Current rules require you to submit your receipt and reconcile your trip within 2 weeks of your arrival back to campus.

11.3 Transportation Services

Vehicles reserved for local car rental is now booked with Enterprise or Concur as Transportation Services discontinued reservation coordination effective May 31, 2024. The website for vehicle reservations can be found at:
http://www.purdue.edu/transportation/.

Student employee drivers must designated as an approved driver by Risk Management:
https://www.purdue.edu/business/risk_mgmt/Vehicle_Use_Info/index.html

11.4 Insurance

The University maintains blanket insurance coverage for various situations. For U.S. car rentals, optional insurance on Avis, Budget, Enterprise, Hertz & National rental cars in the U.S. should be declined as the University does cover this while you are traveling on official University business as this is already covered in the rental cost.
For international car rentals: contact the rental agency to see what insurance is available through them, then contact Risk Management at 4-7695 on what insurance, if any, you need to purchase from the rental agency. If international insurance coverage is recommended, it is advised to purchase directly from the rental agency, it is a reimbursable expense.

11.5 U.S. Flag Carriers and Federal Funds

A U.S. Flag carrier must be used for air travel when utilizing federal funding, unless extenuating circumstances exist. There are some circumstances where it's not reasonable to use a U.S. flag air carrier, and you can make an exception to the Fly America Act. The exceptions by the Open Skies Agreements for government-funded travel do not apply if your transportation is funded by the Department of Defense.
https://www.purdue.edu/procurement/travel/regulations/sponsored-program.php

12.0 Competitive Awards

12.1 External Awards

A wide variety of awards exist all the way from a local teaching award to the Nobel Prize. Many of these awards require a pro-active approach by the candidate and such awards can play a critical role in funding, promotion and overall professional development. Many of the funding awards are specifically focused on faculty in the early stages of their career. Following is a listing of awards indicating the process necessary to compete for these awards.

- The Outstanding Junior Investigator (OJI) award from the DoE. This requires a detailed multi-year research proposal and is one key to obtaining long-term stable funding from the DoE.
- The NSF has a number of programs for junior faculty. These programs have deadlines, require proposals, and include
- NSF Career Awards. This requires a multi-year research proposal and success opens the way to long-term stable funding.
- NSF PECASE Awards. These are the most prestigious awards, reserved for the top 20 scientists in the CAREER award competition.
- The Sloan Fellowship. This prestigious award requires nomination by the Head of Department. These two-year awards totaling $40,000 are for new faculty, no more than six years from attaining the Ph.D. Nominations are due by September 15 for awards beginning the following September.

12.2 Internal Awards

AY PRF Awards

Each January, the University allots a few PRF awards to the department. Typically, the department receives from 2 to 4 awards per year. The award provides 1 year of graduate student support to tenured or tenure-track faculty members. A call for proposals will be issued by the Head and awards will be determined by the Head and Associate Heads. Although it is not required, faculty typically submit such proposals with a qualified graduate student identified. The higher the student's grade point average (GPA), the better. It is also possible to submit a proposal with the student to be named later. The Head will provide examples of successful proposals upon request.

Summer PRF Awards

These awards support graduate research only during the summer. The Graduate School determines which graduate students qualify.

Spira Undergraduate Research Awards

The Associate Dean for Undergraduate Education in the CoS will request nominations from the heads of Mathematics and Physics in the spring for suitable candidates for this summer research award. Ideally, the undergraduate should be a joint Mathematics-Physics major. In the event that no such suitable candidate can be identified, the department heads will nominate either a Mathematics or Physics major.

Spira Undergraduate and Graduate Teaching Award

This is an award designed to reward outstanding teaching in undergraduate and graduate physics by physics professors. The selection for undergraduate teaching is organized by our local Society of Physics Students (SPS). The award for graduate teaching is organized by our local Physics Graduate Student Association. The award is made at the special Awards Convocation late in the spring semester and carries with it a monetary award.

Prizes Awarded to Physics Students

A list of all of the prizes annually given to our physics students, both undergraduate and graduate, can be found at:
http://www.physics.purdue.edu/about/prizes_awards/index.html. Nominations are typically due in late January or early February. The Head and/or Associate Heads appoints members of the Awards Committee to make the selection of awardees. Winners are announced at a department reception, typically held during the final week of classes in the spring semester.

13.0 The Graduate Program

The details of the Graduate Program can be found in the Manual for *Graduate Students in Physics and Astronomy*. The sections below have been extracted from that document.
https://www.physics.purdue.edu/academic-programs/graduate/resources.html

1. Completion (or equivalence) of each of the following core courses with a grade of B- or better: PHYS 61700 (Statistical Mechanics), PHYS 63000 (Advanced Theory of Electricity and Magnetism I) and PHYS 66000 and 66100 (Quantum Mechanics I and II).

2. Identify a major professor. In that process professors who agree to supervise you in Reading and Research courses (PHYS 59000) will be your academic advisor and help you select courses to meet requirement (6) below.

3. Having satisfied requirements (1) and (2) above, notify the Graduate Coordinator when you have identified a faculty member who agrees to be your major professor. It is expected that this will occur before the beginning of your third year as a student in the department. Research towards completion of your PhD (i.e., enrollment in PHYS 699) must be begun before the end of the spring term of your third year. A formal request for an extension of that deadline must be submitted to the Graduate Education Oversight Committee by a student before the end of the spring term of the third year. The Committee will evaluate the request and decide whether to grant it.

4. Identify, with the help of your major professor, a Ph.D. Advisory. A Ph.D. Advisory Committee consists of at least three persons in addition to the Chairman. At least two of those three additional members of the Committee must have a regular appointment in the Physics and Astronomy department rather than an adjunct or courtesy appointment. The required third additional member may be a Physics and Astronomy Department faculty member or a professor from another department if they are working in a research field closely related to the student's thesis research. The Committee must include a theoretical physicist, an experimental physicist and a member working outside the student's field of research. Your Committee will help you select courses to meet requirement (5) below and guide your progress toward the timely submission of your Ph.D. Plan of Study to the Graduate School, your Ph.D. research (PHYS 69900) and the timely completion of your Ph.D. Preliminary and Ph.D. Final Examinations.

The PhD Plan of Study lists the courses taken that will be used to satisfy the course requirements of your PhD degree. Your Ph.D. Plan of Study may list only 500-level physics courses with grades of B- or better and 600-level physics courses with grades of C- or better. The Plan of Study must be signed (electronically) by your major professor, members of your Advisory Committee, the Head of the Department and, when approved by the Graduate School, the Dean of the Graduate School. Once a Plan of Study has been filed and approved, it can only be amended by written application to the Dean of the Graduate School.

Normally, your Advisory Committee will serve as your Ph.D. Preliminary Examination Committee and your Ph.D. Final Examination Committee. In the interest of transparency, you must submit requests to replace members of your Advisory, Preliminary Exam or Final Exam Committees to the Graduate Oversight Committee for approval. The request should clearly document the reasons you think the changes are necessary and justified.

5. In addition to the core courses, each graduate student must take at least 3 Specialty Courses approved by the Physics and Astronomy Department. Almost all 500 and 600-level courses offered by the Physics and Astronomy Department are currently approved. The exceptions include remedial courses such as PHYS 51000, 51500, 53000 and 55000 and preparatory or skills courses such as 53600, 58000, 60000 and 60100. Your major professor must approve, through an e-mail to the Graduate Coordinator, the use of any

course taken outside the Physics and Astronomy Department as a Specialty Course. A graduate level course taken in a department at Purdue other than the Physics and Astronomy Department must be approved by the Graduate Oversight Committee. While graduate level physics courses taken at other universities may be transferred to Purdue, they may not be used as Specialty Courses.

In addition to core and specialty courses, a student may take any 500 level courses that may be needed in order to achieve a level of proficiency adequate for good performance in the core courses, (b) laboratory courses needed in preparation for the thesis research, (c) any courses recommended by the Advisory Committee to broaden preparation in physics, and (d) an advanced course or courses in the field of specialization.

6. Ph.D. research (PHYS 69900) encompasses work toward the research goals set and agreed to by you, by your major professor and the other members of your Advisory Committee. You must keep your major professor and Advisory Committee members informed of progress in your agreed research program and meet with them, either as a group or individually, at least once a year for that purpose, as required by the procedures of the College of Science. The guidance they provide while reviewing your progress will ensure the timely completion of your thesis and your Ph.D. Preliminary and Ph.D. Final Examinations (see section 12 below).

7. The Graduate School must be notified of the time and place of your Ph.D. Preliminary Examination at least two weeks in advance. A student who fails the examination on the first attempt may be granted a second try by the Preliminary Examination Committee. Appeals of decisions made by that Committee may be made to the Graduate Oversight Committee.

The Graduate School must be notified of the time and place of your Ph.D. Final Examination at least two weeks in advance and it must be published within the department so that interested faculty members and students may attend. The Examination covers the content of the thesis research and related subject matter. The Dean of the Graduate School reserves the right to appoint additional members of your Ph.D. Final Examination Committee.

8. Preparation of your Ph.D. thesis is one way in which you will disseminate the results of your research. Its content is subject to the approval of your major professor; its format is subject to the regulations of the department and the Graduate School (see the "Policies and Procedures Manual of the Graduate School"). The Thesis/Dissertation Office, Room 179, Young Hall, can provide useful guidance when preparing your thesis document and links to LaTeX and Microsoft Word thesis templates.

9. The publication of at least one article on the results of your Ph.D. research in an appropriate, refereed scientific journal is a departmental requirement for the Ph.D. degree.

M.S. Degree Requirements

Most students receiving the M.S. degree do so via the non-thesis option. However, a thesis option is available for a student wanting research experience if a physics and astronomy faculty member agrees to supervise the work as their major professor.

Graduate students admitted to Purdue without a master's degree are encouraged to obtain the M.S. degree during their course of study here. For some students this will be a terminal degree, but most plan to continue working toward a Ph.D. degree. Continuing students can usually satisfy the non-thesis M.S. degree requirements without delaying their progress toward a Ph.D. degree. To do so the student must simply find a M.S. non-thesis option major professor, prepare an M.S. degree Plan of Study, and pass a course or two required by the M.S. degree program but not the Ph.D. degree program, e.g., a mathematics course or laboratory course. In the process, the continuing student profits by earning a graduate degree in physics just in case unforeseen circumstances cause an interruption or termination of their Ph.D. studies.

M.S. Degree Non-Thesis Option Degree Requirements:
The satisfactory completion of 24 credit hours of 500- and 600-level physics courses, including one laboratory course, and in addition, 6 credit hours of 500- or 600-level mathematics courses (which may be replaced in whole or in part by PHYS 60000, 60100). To count toward this requirement the grades of 500-level physics courses must be B- or better, the grades of 600-level physics courses must be C- or better and the grades of 500- and 600-level mathematics courses must be C- or better. Note that all courses used towards a Master's degree must assign letter grades (i.e. no pass/fail or satisfactory/unsatisfactory graded courses are allowed). The student must file an M.S. non-thesis option Plan of Study with the Graduate School listing the courses taken. The Plan of Study must be signed by the student's major professor, the Head of the Department, and, when approved by the Graduate School, the Dean of the Graduate School. Once a Plan of Study has been filed and approved, it can only be amended by written application to the Dean of the Graduate School.

A grade index of 2.80/4.0 or higher. The Registrar's Office deletes a first grade from a student's graduation index if that specific course was originally taken while the student was enrolled as a graduate student and is subsequently repeated for credit and a grade. The graduation index for graduate students will include all grades earned in 500- and 600-level courses taken while enrolled as a graduate student.

In addition, once approved by the Graduate School as a part of the M.S. non-thesis option Plan of study it is possible for the graduation index to include grades received in up to 6 hours of approved 300- and 400-level undergraduate courses taken while in the graduate program. To be clear, grades for such courses will be added into the graduation index only once they are listed on the approved plan of study.

M.S. Thesis Option Degree Requirements:
The satisfactory completion of 21 credit hours of 500- and 600-level physics courses, including 6 credit hours of 500- or 600-level mathematics courses (which may be replaced in whole or in part by PHYS 60000, 60100). In addition, 9 credit hours of physics research.
supervised by the student's major professor (PHYS 69800) is required. To count toward this requirement the grades of 500-level physics courses must be B- or better, the grades of 600- level physics courses must be C- or better and the grades of 500- and 600-level

mathematics courses must be C- or better. Students engaged in PHYS 698 research are to set research goals with their major professor. The procedures of the College of Science require that the student meet annually with their Advisory Committee to assess their progress toward those research goals and, when appropriate, amend them. The student must file an M.S. thesis option Plan of Study with the Graduate School listing the courses taken. The Plan of Study must be signed by the student's major professor, members of their Advisory Committee, the Head of the Department and, when approved by the Graduate School, the Dean of the Graduate School. Once a Plan of Study has been filed and approved, it can only be amended by written application to the Dean of the Graduate School, see section 5.

A grade index of 2.80/4.0 or higher. The Registrar's Office deletes a first grade from a student's graduation index if that specific course was originally taken while the student was enrolled as a graduate student and is subsequently repeated for credit and a grade. The graduation index for graduate students will include all grades earned in 500- and 600-level courses taken while enrolled as a graduate student.

In addition, once approved by the Graduate School as a part of the M.S. thesis option Plan of study it is possible for the graduation index to include grades received in up to 6 hours of approved 300- and 400-level undergraduate courses taken while in the graduate program.
Grades for such courses will be added into the graduation index only once they are listed on the approved plan of study.

A M.S. thesis-option Advisory Committee will be chosen that consists of at least three persons, one of which will be the Chairman of the committee. The Chairman and at least one of the other two members must hold Physics and Astronomy Department faculty appointments. The third member must be a faculty member in the Physics and Astronomy Department or in a department in which the student takes a minor program of six or more credit hours. The functions of a M.S. thesis-option Advisory Committee are to monitor the student's progress, to approve the M.S. thesis-option Plan of Study and, if possible, to serve as the examining committee for the M.S. thesis-option Final Examination.

The final oral examination covers thesis research and the content of courses on the student's M.S. thesis-option Plan of Study. The Examination Committee consists of at least three members and will usually consist of members of the student's Advisory Committee.

14.0 The Undergraduate Program

Requirements

The requirements for the undergraduate program are detailed in the College of Science Catalog and can be found along with sample programs at the following URL: http://www.science.purdue.edu/Current_Students/curriculum_and_degree_requirements/index.html.

The undergraduate program is very flexible and comprehensive, with the following options:

- Physics
- Physics Honors
- Applied Physics and Applied Physics Honors
- Astrophysics
- Science Education – with Physics Concentration

https://www.physics.purdue.edu/academic-programs/undergraduate/majors.html

15.0 The Promotion Process

The promotion process and the criteria for promotion for Purdue faculty are specified in the West Lafayette Campus Promotions Policy:
https://www.purdue.edu/provost/policies/promotion-procedure.html

15.1 College of Science Promotion Document General Procedures and Guidelines

Please Note: red text indicates updated information from the College of Science.

The following is a College of Science Promotion Document format that incorporates current University formats. The Primary Committee, or members of the Individual's Promotion Committee (IPC), is responsible for reviewing and approving these Form 36 supplementary materials. The target length for promotion documents is no more than approximately 40-60 pages. Documents longer than 100 pages will not be allowed.

All pages of the document, including the first page which is the Form 36, should include the footer "LastName, Page 1 of XX" in the lower right corner. In the lower left should be the department name:
Department of Physics and Astronomy Last Name, Page 1 of xx

Page 2 should be the Table of Contents. Use the outline format:
I.A.
1.

I. Executive Summary
In one page or less, the Department Head will summarize how this candidate has met the criteria for promotion and tenure (if applicable) at Purdue University, within the College of Science, and the department. This section should be written by the candidate's nominator after the promotion package–including external letters–is complete, but prior to voting by the primary committee. It is meant to be understandable by any faculty member across the wide variety of disciplines at Purdue, and should avoid scientific jargon. It should focus on accomplishments and impact, and may summarize input from letters but should avoid quotations. It is to be treated as a confidential part of the promotion package, not shared with the candidate.

II. General Information
A. Education
B. Previous academic appointments

C. Present academic appointment
D. Awards and Honors
    a. External to Purdue
    b. Internal to Purdue
E. Memberships in academic, professional, and scholarly societies
F. Other items unique to the person or Department not included in A-D.
Examples: professional licenses or certifications, business or governmental positions

III. Discovery
A. Discussion
In approximately 2000 words or less describe the most significant research accomplishments and their impact on the discipline(s). This summary should focus on published research and may choose to highlight high-risk or interdisciplinary research being undertaken. It may be written by the candidate or by the primary or advisory committee, but must be written in the third-person.

B. Publications
A list of the top-tier journals (and conferences, if appropriate) in the candidate's field should be at the beginning of this section. The method by which the top-tier ranking was determined should be stated. List publications in conference proceedings separately with an indication of the importance of such publications in the particular field. The primary author(s) should be indicated by an asterisk (*), post docs by "P", graduate students by "G" and undergraduate students by "U". Publications with previous mentors should also be distinguished by "M". **Note**: all publication sections should be listed with the most recent publications first. For Assistant-Associate candidates, please separate out the following sections into pre-Purdue hire and post-Purdue hire. For Associate-Full candidates, please indicate pre-tenure and post-tenure.
    1. Refereed
    2. In press
    3. Submitted (do not include in preparation)
    4. Non-refereed books and book chapters, etc.

C. Invited Lectures
D. Other Presented Papers
E. Other Professional Activities
F. Interdisciplinary Activities/Collaborations
G. Patents
H. Funding (be sure to clearly note internal to Purdue vs. external to Purdue awards)
    1. Discussion of support (optional)
As necessary to convey information important to the individual's promotion, succinctly describe awards, the candidate's roles and responsibilities, and any other information not provided in section 2, below.
    2. Award information
Agenda/Title of Grant:
Dates of Funding (beginning to end):
Total Amount of Award:
Your Role:

If Co-PI, for how much of the total funding are you directly responsible:

The above is the University required information. May be placed into table format if desired, as long as all elements are included.

I. Evidence of Involvement of Students and Postdoctoral Scholars in Research Programs

1. M.S. and Ph.D. students graduated – for each student, please list name, date graduated and position taken
2. Current graduate students, with start date of research with advisor and expected completion date
3. Current and previous undergraduate students with dates and major.

Supervision of undergraduate research should be included here. Numbers or lists of undergraduates doing projects in a lab and a brief overview of the types of projects should be included. You may cite publications, but please do not list them separately if they are already included in section B, above.

4. Current and previous postdoctoral associates
5. Service on MS/Ph.D. committees with dates.

IV. Learning

In approximately 1000 words or less, a statement on the individual's teaching may be included from either the candidate's departmental committee or the individual. The document should contain a clear indication regarding who created the material. The University Promotions Committee Guidelines state that the last 3 years of teaching data should be included, with a maximum of up to 5 years of data where appropriate for cases where promotion is based on teaching. Contributions from beyond the 3 years of data may optionally be included in the narrative if they are considered important for promotion.

A. Teaching Assignments at Purdue

A table format is suggested. Present the most recent 3 years by semester (maximum 5 if needed). **Do not show more than 5 years of information**. Use the narrative to indicate teaching commitment over time. Please list courses with most recent first and clearly indicate any online courses with an *.

Semester & Year	Course Number, Credit Hour & Type	Course Title	Number of Students	Student Classification
S 1999	SCI 150, 4 cr, lecture/lab	Principles of Science	408	Fr through Sr
S 1999	SCI 430, 1 cr, seminar	Science Seminar	12	Sr
F 1998	SCI 350, 3 cr, Lecture	Science Lectures	45	Jr & Sr

B. Selected Discussion of Courses

Include innovation, significant impact on curriculum, or other evidence of impact on undergraduate education.

C. Course Evaluations

1. Student Evaluation

For course evaluations prior to Fall 2021, please include course evaluation information as outlined below. List two to five of the major questions on the evaluation instrument (e.g., I rate the instructor's teaching as excellent, very good, etc.) and show the results. Give the number of students in each course and the number responding. Include course-specific norms for the past 3 years if this information is available. Do NOT include student comments. Again, indicate online courses with an *.

Semester & Year	Course	Responses/Enrollment	C1 Score (course median)	C2 Score (course median)
S 1999	SCI 150	104/115	4.3 (4.7)	4.5 (4.9)
S 1999	SCI 430	20/21	4.2 (4.5)	4.6 (4.3)
F 1998	SCI 350	46/55	4.6 (4.4)	3.2 (4.5)

Beginning Fall 2021, please provide course evaluation information on the following four questions:

My instructor seems well-prepared for class.
The instructor is fair and consistent in evaluating my performance in the course.
The instructor created a welcoming and inclusive classroom environment.
The instructor is open to my questions and effectively answers them.

Semester/Year	Course	Well-Prepared	Fair & Consistent	Welcoming & Inclusive	Open to Questions
S 2022	SCI 100	4.3/5.0	4.0/5.0	4.4/5.0	3.9/5.0
F 2022	SCI 430	4.6/5.0	4.2/5.0	4.3/5.0	4.0/5.0
F 2022	SCI 350	4.4/5.0	4.1/5.0	4.3/5.0	4.0/5.0

2. Peer Evaluation

The format for peer evaluation is determined by the department policy. *The evaluation summary here should be ~500 words or less, and should be from within the last 5 years.*

D. Other Contributions to Undergraduate Education

This may include, for example, counseling, being a faculty fellow, online course creation, leadership of study abroad programs, *promoting student success*, etc.

V. Engagement and Service

A. Discussion of Engagement

In approximately 500 words or less describe how scholarly work is addressing need(s) inside or outside of the academy and serving Purdue's land grant mission. For example, this can be engagement through partnerships with outside entities, or outreach to communities of interest, individuals, or schools through activities or media.

a. Engagement with Partners - Engaged scholarship may include working with a variety of partners such as governments, schools, non-profit organizations, *national academies, professional societies*, business, and/or industries.

b. Individuals Mentored through Engagement Activities – undergrad students, grad students, postdoctoral scientists, community members, etc.

c. Impact of the Scholarship of Engagement – reciprocal relationships established, high level of disciplinary expertise, innovation, capability for replication or elaboration, professional and/or peer-review, documented results and impact.

d. Technology Transfer or Commercialization Results of Engagement.

e. Other Engagement Activities (for example – mention of work in the media, creation of websites to disseminate research results, short courses/workshops, etc.)

B. Discussion of Service

List or succinctly describe contributions through service to the university, professional societies, or other organizations.

a. Department

b. College

c. University

d. Professional (editorial boards, study sections, panels, consulting, program committees, *national academies, societies*, etc.)

e. Consulting Activities (with bearing on promotion candidacy)

f. Other Service Activities

VI. Mentoring

Effective mentoring is important for the success of students, faculty, and staff, and can take many forms. Criteria for promotion at Purdue include a commitment to active and responsive mentorship, as well as an active role in mentoring, advising, and supporting the academic success of students and postdoctoral scholars. Describe here your mentoring activities and/or philosophy. Do not repeat information provided in section III (Evidence of Involvement of Students and Postdoctoral Scholars in Research Programs).

A. Undergraduate students

B. Graduate students

C. Postdoctoral Scholars

D. Faculty members

VII. External Referees

A. *External letters should be collected for all tenure and/or promotion cases. External letters should be sought from peer or aspirational peer universities. Examples of the peer and aspirational peers include members of the Association of American Universities (AAU) and leading international institutions. Letters may also be sought from faculty members at top academic programs from other institutions, and from preeminent experts at other institutions, although justification in the form of expertise credentials is expected in the latter case.*

B. *A minimum of 8 letters is expected for tenure and/or promotion cases, and documentation should be included stating whether a letter writer was suggested by the candidate or by the department/school (or both). Additional letters provide the potential for more evidence and hence an even more robust assessment.*

C. *It is essential to obtain unbiased external evaluations, so the letters should come from distinguished scholars who are not: the candidate's thesis advisor (M.S. or Ph.D.) or postdoctoral advisor; a business or professional partner; any family relation such as a spouse, sibling, parent, or relative; a collaborator on a substantive project, book, article, paper, or report within the last 24*

months. An exception would be a letter from a collaborator, clearly identified, who can help to define and evaluate the candidate's role in major collaborative work, as per section IV.B.6 of the promotion Procedures document.
D. *Credentials and, if appropriate, relationship to candidate. Identify which referees were suggested by the candidate and which by the Department. The number of writers chosen by the primary committee should exceed the number chosen by the candidate.*
E. Include all other correspondence or communications with the referees. Non-written communications should be recorded or summarized in writing.
F. Copy of letter soliciting external comments. (Be sure to include the appropriate University statements on all letters requesting comments from external referees-see below.)
G. Per the Provost's April, 2023 memo - Bearing in mind the goal always of obtaining arms-length objective assessments from demonstrably leading scholars, deans will explicitly review and sign off on all letter-writers in advance of letters being solicited. In the rare cases where any exceptions to the Provost's guidelines may be warranted, heads can petition deans, who will make the Provost's Office aware in advance of any exceptions being granted, along with a detailed justification.

External Referee Letter Requirements:
Letter-writers must be explicitly asked "to comment on the suitability of the candidate for a tenured appointment at the level of [Associate Professor/Professor, as appropriate] at an institution whose goal is to be recognized as a top five U.S. public research university." Additional language that must be used in the instructions to letter-writers is included below and as a reminder, all prospective letter-writers' credentials as leading scholars must be clearly and factually summarized.

Some candidates for promotion and tenure will have received an extension of the tenure clock by virtue of University policy. Under these circumstances, the criteria for promotion and tenure are the same as those expected for a faculty member who has not received a tenure clock extension. The same is true for those being considered earlier than is typical. To ensure that our external referees are aware that we hold all Supersedes Memoranda dated April 22, 2021 West Lafayette Campus Promotion and Tenure Policy Purdue University 3 promotion cases to the same criteria, **the following statement must be included in every request for an external review letter for a candidate for tenure:**

> Please note that length of service in rank by itself is not a factor in promotion and/or tenure decisions at Purdue. Our criteria clearly state: "...issues of timing should not be paramount, and discussions should focus instead on the question of whether the faculty member has provided evidence of a sustainable and impactful record that warrants promotion and/or tenure..." We do not designate any promotion nomination to be "early" (records are ready for promotion or they are not), nor are any extensions of the tenure clock granted to a faculty member to be considered in the decision.

University regulations require that the following paragraph be included in all requests for outside evaluations of present and potential faculty and administrators:

> Candidates may request a summary of all evaluations in their file, however sources remain confidential. We cannot guarantee that at some future time a

court or government agency will not require the disclosure of the source of confidential evaluations. Purdue University will endeavor to protect the identity of the authors of letters of evaluations to the fullest extent allowable under law.

If a promotion document includes a Professional COVID-19 Impact Statement, then this language should be included in the letter to the external referees:

Purdue University acknowledges the differential and negative impacts that the COVID-19 pandemic may have had on faculty career development. In carrying out decisions about promotion and tenure, we will evaluate each candidate's research, teaching, service, and engagement activities within the context of the pandemic. To this end, candidates have had an opportunity to include in their document a Professional COVID-19 Impact Statement, which documents how the pandemic has affected their professional accomplishments in discovery, teaching, and engagement, as well as their service obligations. To assist in your evaluation, we include this statement in the promotion document with which you have been provided. It presents information about what obstacles were faced by this candidate during the COVID year and how they overcame them, and helps to put their impact during that year into the context of what was possible.

VIII. Minority Department Letter

Candidates with more than one departmental appointment should provide a letter from the minority department evaluating the case for promotion. The letter is usually written by the department head in consultation with their department's faculty and/or primary committee

15.2 Department Promotion Process

Individual Promotions Committee (adopted 8/24/2016)

Formation of the Committee

The Individual Promotion Committee (IPC) for a new faculty member whose home department is Physics and Astronomy will be constituted no later than the beginning of the second year of the appointment. Until the establishment of the IPC the department head will provide feedback to the faculty member. The constitution of the IPC will be determined by the Department Head in consultation with the faculty member and will consist of full professors from within the department in the area of the candidates expertise and any additional full professors from another area within the department or from another department to ensure that the IPC contains individuals knowledgeable in the faculty members area of research. The IPC will consist of no less than 4 full professors at least 2 of which are from the Department of Physics and Astronomy. The chair of the IPC will be determined by the department head.

Yearly review by the IPC

The IPC will meet at least once per academic year early in the spring semester to evaluate the faculty member's progress toward promotion. The committee will utilize the faculty member's annual report (in promotion document format) and any other materials that the IPC deems necessary to provide a recommendation to the Promotions

Subcommittee of the Primary Committee (PSPC). During the spring semester meeting the IPC can choose to recommend the faculty member for promotion or for termination (if appropriate). The materials for the deliberation will be provided by the department head and the IPC should meet, deliberate and submit a recommendation no later than the end of February.

Feedback to the faculty member

The chair of the IPC will meet with the candidate during the fall and spring semester and provide written feedback each spring that summarizes the IPC's suggestions and their evaluation of the progress toward promotion. The fall meeting is expected to be less formal and is intended to provide verbal feedback on progress toward promotion based on the deliberations of the IPC. In the spring semester the IPC chair will prepare a written report for the department head based on the meeting of the IPC and the IPC chair's meeting with the faculty member with a copy going to the faculty member. The report should include input on the research, teaching and service aspects of the faculty member. The faculty member may reply to the memo and the final report should be signed by both the IPC chair and the faculty member.

Documentation from the faculty member

Faculty members under consideration for a promotion to either associate professor with tenure or full professor should submit an updated version of their documentation in the form that is used for the promotion case in addition to the annual report format. This documentation should be submitted during the normal call for annual reports in the spring semester.

Decision on Consideration for Promotion

The IPC can recommend promotion in any year to the PSPC and, if that is the decision of the committee, a report should be prepared for the Department Head to present to the PSPC for consideration during the spring semester. If the decision of the PSPC is to move forward with the promotion case then, in consultation with the candidate, a member of the IPC will be chosen to present the case to the Primary Committee during the fall semester meeting. In the event that the opinions of the IPC and PSPC are at odds it becomes the responsibility of the department head to meet with the IPC and broker a resolution.

Evaluation of the Committee Makeup

The make-up of the IPC should be periodically evaluated and at the least at the time when the candidate is promoted from assistant professor to associate professor with tenure. This will ensure that the committee remains relevant as the interests and focus of the candidate shift over time.

Promotion Year

1. The promotion process normally begins in the spring semester when a subcommittee consisting of 6 full Professors meets and discusses the records of achievement of all faculty with the rank of Assistant Professor and Associate Professor. This is done in conjunction with the Head and provides continual and important feedback. At this time a request is sent to all full Professors asking for promotion nominations.
2. As outlined in the attached promotion document, a candidate can self-nominate.
3. For each candidate nominated, The IPC chair is usually assigned to take overall responsibility for the preparation of the promotion documentation. There is a guideline document (above 11.1). It is important that each category on this template appear in the final document and that the number scheme be strictly followed. Documents must be in word format. Latex or Latex-to-Word conversion documents will not be accepted. Please contact Debbie Nahlik in the Main Office (45564 or dnahlik@purdue.edu) with any questions.
4. The candidate for promotion has a central role in the preparation of the document and the candidate has the right to include any information that he or she feels is relevant.
5. There are two sections that the candidate does not see. These are
   - The Executive Summary
   - The outside letters of which there are typically 10
6. In order to solicit outside letters the candidate is asked to submit a list of names, and independently the two full Professors and/or the subcommittee suggest names, and select a final list based on all suggestions. Particularly for promotion to full Professor, it is expected that some letters will be from non-US sources.
7. Included in the document is a teaching evaluation table containing the results from the normal end of term evaluations. This table contains the numerical evaluation for two questions, the historical average and the number of students responding and the total enrollment. (A sample table is appended). The general guidelines are
   - Any score below 3 is a subject of discussion and concern
   - Typical scores for large enrollment service courses is 3.5
   - Anything above 4 is considered excellent and is expected for small enrollment courses for majors.
8. Promotion can be proposed on the basis of accomplishment in three categories, Research, Teaching and Service. The majority of cases in Physics are proposed on the basis of Research, but it is expected that the teaching and service records be acceptable. In the cases of promotion based on Research or Teaching it is expected that there is a strong record of creative accomplishment as evidenced by publications and invited talks. The funding and award record is also critical as is evidence of supervision of both graduate and undergraduate students in research, and such items as outreach, etc.
9. In the fall semester documentation is distributed to all full Professors. (As of 2005, tenured associate professors can vote on the promotion of assistant and

untenured associate professors.) A meeting is held in which a summary presentation is made for each candidate followed by discussion and a closed ballot vote. The Head chairs this meeting but does not vote. Any candidate with at least a majority vote goes forward to the College of Science Area Committee. A vote above two thirds is a strong vote but any vote below two thirds raises questions at the CoS Area Committee meeting. The record of the vote is added to the document and the Head makes a separate endorsement of the candidate that is added to the documentation before going to the Area Committee.

10. The Area Committee, consisting of all seven department heads plus 14 faculty and chaired by the Dean, considers all candidates from the College. There is a presentation for each candidate, a discussion, and a closed ballot vote. Voting results are not revealed until all candidates have been discussed and voted upon. The normal situation is that all candidates with votes above two-thirds are automatically supported by the Dean at the University level. For votes between a majority and two-thirds the Dean usually requires additional information. Below a majority the nomination does not go forward.
11. At the University level most candidates who received at least two-thirds vote at the Area Committee are not discussed although any committee member can ask for any candidate to be discussed. The recommendations of the University Committee go to the Provost and President and then the Trustees. The list of promoted Faculty normally appears in March or April.

Promotion Procedure for Faculty with Majority Appointments in Another Department

Some faculty have joint appointments – that is, appointments in multiple departments. An example might be a faculty member with a 75% appointment in Biology and a 25% appointment in Physics. The promotion procedure in such cases is different from the procedure for a person with a 100% appointment in Physics. In cases of a joint appointment, the majority department has primary responsibility; that department prepares the promotion document and the promotion case goes through the Area Committee of that department's College or School. The Department of Physics Primary Committee would then be given access to the promotion document, including external letters, and these would be discussed at a meeting of the Physics Primary Committee. The Department of Physics may also request additional external letters (typically two or three). The Physics Primary Committee would then vote on the candidate, and the results of that vote would be communicated to the majority department, along with a letter of support of the promotion (assuming the vote is favorable). This letter would be prepared by the Head.

Faculty Third-Year Review

At the end of their third year, untenured faculty will prepare a document describing all of their professional activities. This document will follow the format of a standard promotion document, except that letters from outside reviewers will not be requested. The faculty mentor or a member of the Promotions Subcommittee will assist in the preparation of this document. This document will be circulated to all members of the

Primary Committee, and will be the basis for discussion of the faculty member at the next Primary Committee meeting. The purpose of this discussion is to give the faculty member feedback about perceived strengths and deficiencies in their professional accomplishments. The Head will prepare a written summary of comments from the Primary Committee meeting, and discuss this summary with the faculty member. The intent is to provide constructive feedback at an early point in the faculty member's career at Purdue, and thereby strengthen their record when promotion is considered.