

**DEPARTMENT OF
PHYSICS & ASTRONOMY
GOVERNANCE DOCUMENTS
2015**

Structure

- | | | |
|----|-------------------------|---|
| 1. | Administration | 2 |
| 2. | Standing Committee List | 2 |

Policy

- | | | |
|-----|--|----|
| 3. | Mission Statement | 3 |
| 4. | General Committee Policies | 3 |
| 5. | Planning and Faculty Hiring Procedures | 4 |
| 6. | Promotion and Tenure Policy and Procedure (Blue Document) | 5 |
| 6.1 | Policy on Reappointments | 9 |
| 6.2 | Dual Career Accommodations | 9 |
| 7. | Position Responsibility Statements and Mediation | 9 |
| 8. | Hiring and Reappointing Lecturers and Senior Lecturers | 10 |
| 9. | Adjunct and Research Appointments | 11 |
| 10. | Affiliate and Courtesy Faculty | 12 |
| 11. | Post-Tenure Review Document | 13 |
| 12. | Procedures for Reviewing DEO and Searching for New DEOs | 14 |
| 13. | Annual Faculty Salary Review Procedures | 15 |
| 14. | Teaching Assistant Appointment Policies and Review Procedures | 16 |
| 15. | Curriculum Change Procedures | 17 |
| 16. | Regulations for the Written Graduate Qualifying Examination | 18 |
| 17. | Annual Budget Reporting Procedures | 22 |
| 18. | Strategic Planning | 23 |
| 19. | Departmental Awards Committee Procedures | 24 |
| 20. | Graduate Admissions Committee Procedures | 26 |
| | Appendix A: Departmental Resume Format | 27 |
| | Appendix B: Committee Descriptions | 29 |
| | Appendix C: Quorum and Vote Requirements for Various Procedures and Policy Changes | 30 |

1. Administration

The Departmental Executive Officer (DEO) is responsible for all aspects of departmental administration subject to LAS College and University regulations and procedures, and the governance policies described in the following sections.

The DEO appoints an Assistant Chair of the Department for a mutually agreed term. The specific duties of the Asst. Chair are assigned by the DEO, and determined by the current needs of the Department. They include acting for the DEO in routine matters and meetings when he/she is absent, to a degree determined by the DEO's ability to communicate with the Department. If both the DEO and Asst. Chair are absent, a senior professor is delegated to carry out essential department business. A rank-ordered list of individuals is maintained for his/her exigency.

The departmental office staff is generally under the supervision of the Departmental Secretary. The financial business of the department is supervised by the Administrative Assistant for Business and Finance. Laboratory and demonstration set-up and maintenance are supervised by the Teaching Lab Associate. All of these persons report to the DEO.

2. Standing Committee List

Department Chair (Department Executive Officer, DEO)

Assistant Chair

Advising Coordinator

Advisors for Undergrad Student Groups:

 Freshmen Physics Advisors:

 Designated Undergraduate Advisors:

 Physics:

 Honors Program Students:

 Physics with Astro Emphasis or Minor:

 Undergraduate in High School Preparation Program:

Alumni Relations

Art and Design Liaison

Astro Coordinator

Budget Advisory Committee

Class Scheduling

Colloquium Committee

Computer Facilities and Website Committee

Curriculum Committee: Along with faculty members, one graduate student representative, one graduate student representative also serves on this committee.

Executive Committee: Generally one faculty member from each of the major research areas serves.

Director of Graduate Education

Diversity Committee

Faculty Hiring Plan Committee

Faculty Honors and Awards Nominating Committee

Faculty Senator

First Year Grad Advisor

Grad Admissions Committee

Grad Status Committee

Grad Student Summer Orientation

Instructional Resources Committee

LAS Representative Assembly
Library Liaison
Observatory Director
Physics and Astronomy Club Faculty Advisor
Physics and Astronomy Live Green Committee
Post Tenure Review Committee
Promotion and Tenure Committee
PRS Conflict Officer
Seminars: Faculty members from the Astro, CMP, HEP and Nuc areas serve.
Space and Safety Committee
Strategic Planning Committee (every few years)
Student Honors and Awards Nominating Committee
Student Recruitment and Undergrad Visits Committee
Teaching Advisory and Evaluation Committee
United Way Campaign

3. Mission Statement

The mission of the Department of Physics and Astronomy of Iowa State University is:

- To conduct world-class research in Physics and Astronomy, including such subfields as condensed matter physics, biophysics, nuclear physics, high-energy physics, particle astrophysics, and astronomy and astrophysics.
- To have our research recognized for excellence by colleagues, journals, and funding agencies both national and international. To provide a stimulating and nurturing research community to underpin world-class education and training for graduate students, postdoctoral fellows, visitors, and interested undergraduate students.

Besides providing an excellent and rigorous education for undergraduate physics and astronomy majors, our department will provide an exemplary education in introductory physics and astronomy to all undergraduates majoring in the various other mathematical, sciences, and engineering disciplines.

Our department will encourage and engage in outreach activities, such as public lectures, web courses, planetarium and laboratory demonstrations, and K-12 classroom visits. We will extend our hand and, when useful, our expertise to assist the citizens of Iowa.

4. General Committee Policies

Committee membership is determined annually by the Department Chair, in consultation with the Assistant Chair, and the Executive Committee, as needed. In general, committee membership should include broad representation from the various research groups and instructional staff as appropriate to the committee's specific mission, and the particular requirements listed for some committees in Section 2. General diversity considerations should also be reflected in the overall pattern of committee membership in the Department.

To further encourage diverse and shared governance, the chairpersons of the committees charged with the primary governance and human resource duties of the Department will be changed approximately every 3 years. These committees include: Curriculum, Diversity, Faculty Honors and Awards, Graduate Admissions, Graduate Status, Faculty Hiring Plan, Post-tenure Review, and Promotion and Tenure.

Several of Departmental procedures require voting by written ballot. In general, this ballot will be distributed to the eligible voters electronically. However, marked ballot may be submitted to the Department Secretary by any of the following means: 1) an electronic message, 2) a hand-written submission, or 3) a verbal statement recorded on-the-spot by the Secretary. The motivation for this

procedure is both convenience and preservation of privacy in the balloting. Specifically, electronic communications are likely to remain on servers and be vulnerable to transmission indefinitely, which some may object to. Voters using an alternate procedure for their own privacy, also guarantee partial privacy to the vote as a whole.

5. Planning and Faculty Hiring Procedures

This section describes the policy and procedures for developing the annual hiring plan of new faculty members. The policies and procedures herein described are effective upon adoption by a 2/3 vote of the faculty, and may be amended by a 2/3 vote of the faculty. All amendments to this document shall be approved by written ballot. For these purposes and wherever referred to in this document, the faculty consists of persons of any academic rank who are either tenured or on tenure-track appointments and have at least one quarter of their academic-year salary listed in the Department of Physics and Astronomy budget. Membership in the faculty is not affected by leave of absence of any kind. However, when a vote is taken at a faculty meeting, a faculty member on leave, official travel, or sick leave, shall not be included in the count of eligible voters unless he or she is present at the meeting or has transmitted a proxy to the Department Executive Officer (DEO) before the meeting.

The Faculty Hiring Plan Committee (FHPC) develops the annual hiring plan, i.e. a plan that determines and rank orders the research areas for searches for new faculty members of the department in the subsequent academic year. The committee will be appointed by the DEO annually for a one-year term, with reappointments possible at the discretion of the DEO.

Every year, the FHPC will make a recommendation for hiring in the subsequent academic year in the Department of Physics and Astronomy. This recommendation will be made to the chair of the department but must be supported by a simple majority during a faculty meeting. The guidelines and time line for the development of the annual hiring plan are:

- Beginning of the fall semester: The FHPC invites the faculty members or research groups to submit brief proposal for new hires.
- End of the fall semester: The FHPC schedules a committee meeting where individual hiring proposals are presented. This committee meeting will be open to all faculty members. All proposals must be defended in an oral presentation to the committee and the attending faculty, addressing issues such as the scientific challenge, the vision of the proposed hire, aspects of funding opportunities, as well as compatibility with existing efforts. Based on the proposals for new hires presented during this committee meeting, the FHPC develops the annual hiring plan in concordance with the departmental Strategic Plan.
- Beginning of the spring semester: The FHPC presents its annual hiring plan, i.e. makes a recommendation to the faculty for new hires in the department for the subsequent year. The Committee shall summarize in writing the hires being recommended to the faculty prior to the faculty meeting where the recommendation will be discussed. The recommendation must be approved by a simple majority of the eligible faculty by written ballot. In case no simple majority of the faculty supports the proposal, the FHPC will produce and submit a revised plan. If no simple majority of the faculty supports the revised plan, the hiring plan for the subsequent year is considered failed, and the DEO determines the course of action.
- Once the annual hiring plan of the department is approved by the faculty, the DEO is authorized to request the permission from the Dean of the College to conduct faculty searches in the recommended areas.

This procedure applies to regular faculty hires recommended to the College. In the case of inter-departmental hires or special faculty hiring programs initiated by the College or the University this same procedure will be followed as far as possible, though recognizing that the timetable may have to be adjusted to fit that of the specific program. These positions should also be in accord with the current Departmental Strategic Plan. In particular, these types of faculty hires must still be approved by a simple majority of the faculty by written ballot.

In exceptional cases (e.g. hiring opportunities of highly accomplished senior scientists, partner accommodations, etc.) a different approach may be adopted. In such cases only the DEO has the authority to change the timeline, while the proposal for such a special faculty hiring must still be approved by a simple majority of the faculty during a faculty meeting by written ballot.

6. Promotion and Tenure Policy and Procedure (Blue Document)

This document describes the policy and procedures used in evaluating faculty members annually for promotion in the Department of Physics and Astronomy. The Department adheres to all policies of the College of Liberal Arts and Sciences and of Iowa State University, and this document is subservient to those policies in case of any disagreement. The policies and procedures herein described are effective upon adoption by a 2/3 vote of the faculty, and may be amended by a 2/3 vote of the faculty. All amendments to this document shall be approved by written ballot. For these purposes and wherever referred to in this document, the faculty consists of persons of any academic rank who are either tenured or on a tenure-track appointment and have at least one quarter of their academic-year salary listed in the Department of Physics and Astronomy budgets. Membership in the faculty is not affected by leave of absence of any kind, i.e., Faculty Professional Development Assignment (FPDA), sick leave, leave without pay (LWOP), or any other extended leave approved by the DEO. However, when a vote is taken at a faculty meeting, a faculty member on leave, official travel, or sick leave, shall not be included in the count of eligible voters unless he or she is present at the meeting or has transmitted a proxy to the DEO before the meeting. Proposed amendments must be circulated in writing at least seven days prior to the vote. In all procedural matters relating to these, or other votes mentioned hereafter, parliamentary procedure shall govern, as defined in Robert's Rules of Order, latest edition.

Evaluation of the qualifications of faculty members shall be carried out annually by a preliminary screening committee, as specified in the Faculty Handbook. This committee shall be titled the Promotion and Tenure Committee, and its membership shall include at least six members of the faculty with at least one holding a rank below professor. The Committee will be appointed by the Departmental Executive Officer (hereafter called the DEO) annually for a one-year term, with reappointment possible at the discretion of the DEO. The membership of the Committee shall be announced to the faculty at the beginning of each academic year.

The Promotion and Tenure Committee shall examine annually the qualifications of each faculty member below the rank of professor for promotion to the next higher rank. In cases of faculty members not holding continuous tenure appointments, it shall also examine, when appropriate, the qualifications of the faculty member for reappointment (see Appendix A). It shall determine which of the faculty members merit the detailed study appropriate to a recommendation for promotion or a recommendation regarding reappointment, and shall inform each faculty member examined whether or not he or she is being given that detailed study. A faculty member who is not felt by the Committee to merit such close examination, but who disagrees with that judgment, may indicate his or her disagreement in writing to the DEO; the DEO will then inform the Committee, who will add this name to the list of those to be given detailed examination. The DEO may also add other names at his or her discretion or at the suggestion of faculty members. A faculty member may also withdraw his or her name from consideration for promotion unless he or she is in the sixth year and/or penultimate year of a tenure-track appointment; in such a case,

withdrawal is permitted only upon presentation of a resignation to the DEO.

After the Committee has informed the faculty member that a detailed examination will be conducted, either for possible promotion or reappointment, all transmission of information to or from the candidate dealing with that examination, including any questions arising during the first meeting of the tenured faculty, will be dealt with exclusively by the Committee and when necessary in consultation and in cooperation with the Departmental Chair.

The Committee's evaluation shall be based upon a resume maintained by each faculty member, plus extra information kept in a dossier hereafter specified. At the end of the spring semester the Committee shall announce the date by which it expects all resumes to be complete for the following academic year's evaluation process. The faculty member is then responsible for seeing that the resume includes all appropriate information, and specifically the following items:

1. Vita information - name, rank, base, university appointment data, professional history, academic history, list of publications with indication of refereed journals, list of invited papers and talks, citations in the Science Citation Index for the last four years.
2. A brief (one page) description of the faculty member's current research program.
3. A brief (one page) description of the faculty member's teaching philosophy and methods.
4. A listing of all teaching assignments and tenures including the courses taught, the number of students, and the average rating where multiple sections are involved.
5. A listing of all students who have been directed in research by the faculty member, including both graduate and undergraduate students, the degree received, and the current activities of the student, if known. Also a list of the graduate student committees, inside and outside physics, served on during the last four years.
6. Service activities performed by the faculty member for the Department (including its activities related to the Ames Laboratory, USDOE), the College, the University, and relevant outside organizations.

The faculty member may include in the resume any other information he or she deems relevant, and shall have free access to all material in the resume. A sample resume is included with this document as Appendix B.

For those faculty members being given detailed evaluation as described above, the Committee may, at its discretion, use other material deemed relevant to each evaluation, which is kept in his or her Departmental dossier. It shall inform the faculty member involved, in writing, what extra material is being requested or what existing material is being used. The committee will develop a list of names from which letters of evaluation may be requested. This list shall contain referees suggested by the candidate, by the Committee, or by others. In accord with University policy the candidate may provide a list of up to three external referees who should not be used, along with a reason for each such exclusion. To be in accord with the College Promotion and Tenure Recommendations, at least five letters from qualified, impartial reviewers from outside the University should be submitted with a promotion and/or tenure recommendation, with at least two suggested by the candidate. Typically about ten letters will be solicited to guarantee that the required number of letters will be received and that the committee has the broad input it requires. The faculty member will not, however, have access to the confidential parts of the dossier assembled by the committee. The information in the dossier is considered to be privileged and may not be released for any uses other than those essential to the promotion and tenure procedure, except with the written approval of the faculty member involved.

The Committee shall then proceed with its evaluation, based upon the resumes and all additional material. In these evaluations the criteria followed shall be those specified in the Faculty Handbook, based upon the

areas of research, teaching, and service. Of these three areas, research and teaching have overriding importance in the Department; service activities are also considered, but normally play a tertiary role. Evaluation of research ability is based primarily upon published papers in refereed journals, while teaching ability is determined by student evaluations, using departmentally chosen forms (Appendix C), plus less quantitative peer and student evaluations. Academic advising activities are also included here. Service activities may include committee work and administrative activities on behalf of the Department, the College, the Ames Laboratory, the University, or relevant outside organizations.

The following guidelines for promotion to the various ranks with respect to evaluation of excellence in research are intended to define typical cases; they do not set absolute numerical standards, but rather illustrate what experience has shown to be the usual case. For promotion to associate professor, excellence sufficient to lead to a national or international reputation is required and would ordinarily be shown by the publication of approximately fifteen papers of good quality in refereed journals. For promotion to professor, attainment of a national or international reputation for excellence in research is expected, and would usually require at least thirty published papers of good quality in refereed journals. It should be emphasized, however, that subjective judgment is involved in all of these cases; promotion with fewer papers than indicated above, or non-promotion with more, could occur based upon the Committee's evaluation of the research involved.

Criteria for teaching excellence within the Department are essentially those described in the most recent edition of the Faculty Handbook. In evaluating the teaching performance of a faculty member, the Committee will compare the candidate with available standards of teaching of both undergraduate and graduate students in the Department and will include evaluation by peers, gathered, for example, by classroom visits and by evaluation of syllabi, course materials, and examinations.

Promotion to any rank will be based upon these criteria with the expectation of excellence in one and at least satisfactory performance in the other. An individual outstanding in research, but significantly below the Department average in teaching, would normally not be promoted. He or she will usually have been counseled and assisted by the DEO in an attempt to develop satisfactory teaching performance by means of the annual evaluation. The same conclusion would apply to a faculty member outstanding in teaching; satisfactory research performance would normally involve productive participation in a research program, but not necessarily the promise of leadership in an area of research. A strong record of service will augment teaching and research, but will not replace either. In individual cases, the Department may deviate from these criteria, but such deviation would be expected to occur only in truly exceptional cases. In all cases of promotion, the ultimate criterion which is expected to be applied in deciding the departmental recommendation is the question "will this promotion significantly enhance the ability of the Department and Iowa State University to meet the responsibilities implied by their respective missions?" All of the above guidelines for consideration are designed to answer this question in each individual case. No individual is considered to have a proprietary right to promotion. No individual earns a promotion without having earned a "yes" to this question.

The number of persons holding a given rank, or the number who might be recommended for promotion in a given year, shall play no part in the Committee's deliberations. It shall concern itself with faculty members on an individual basis, and shall recommend for or against promotion in each case.

The Committee shall also consider and make recommendations in exactly the same way in cases where time limitations for tenure are relevant. It is expected that tenure will ordinarily accompany promotion to the rank of associate professor. Granting of tenure without promotion, or promotion to associate professor without tenure would be exceptional in the Department; it would require exactly the same procedure and approval as that being described for promotion.

When the Committee deliberations are complete, a meeting of all tenured full professors is held to discuss the report of the Committee on promotion to full professor. They have copies of the resumes and the report from the Committee. The Committee chairman may read excerpts from the dossiers. The full professors vote on whether to promote.

A second meeting of the tenured full professors is held a few days later to discuss the result of the vote. Another vote is then taken on the question "we recommend to the Dean that (specific candidate) be promoted this year". The candidates are considered in order from the top-ranked to the bottom-ranked, where ranking is determined by the number of "yes" votes for promotion on the first ballot. Those eligible to vote, in person or by proxy, are tenured faculty (see p. 1) holding the rank of tenured full professor. The DEO shall not vote and will not be included in the count of eligible voters. If a tenure or promotion vote is to be taken on a spouse or immediate relative of a faculty member, that member shall not be present for discussion, shall not vote, and will not be included in the count of eligible voters. The DEO may require that a proxy vote be delivered to the DEO personally by the voter in advance of the meeting.

A 2/3 vote of those eligible is required for a formal Departmental recommendation for promotion or tenure. A quorum is defined as the actual presence at the meeting of at least 75 percent of all tenured faculty (see p. 1) holding the rank of tenured full professor and eligible to vote, except those who are absent while on leave or official travel.

Similar meetings of all tenured faculty (see p. 1) holding the rank of full or associate professor, with similar conflict of interest exclusions, are held to carry out the procedures for promotion to associate and assistant professor. Any cases of tenure without promotion are then voted on. All rules of procedure are the same as in the case of promotion to full professor, except that tenured associate professors may vote.

The Committee then provides the DEO with materials summarizing the recommendation of the faculty regarding each faculty member who has been given detailed examination. For each candidate who has received a formal Department vote, the Committee will submit a final version of the standard LAS College promotion dossier materials. The DEO then informs each candidate whether or not he or she has been recommended for promotion. The DEO transmits the recommendations for promotion or for tenure without promotion to the Dean of the College, including for each candidate the LAS College promotion dossier materials, the vote of the departmental faculty, a full copy of the resume, the letters of recommendation, both internal and external, and the DEO's letter of recommendation. The candidate may examine the resume to be transmitted to the Dean of the College.

The dossier materials will note that the Department requires the 2/3 vote for approval, this is especially important in cases where more than 1/2 but less than 2/3 of the faculty vote affirmatively for the promotion of an individual.

A faculty member with a grievance concerning the operation of these procedures in his or her particular case may appeal in writing to the DEO; or use the grievance procedures detailed in the Faculty Handbook.

6.1 Policy on Reappointments

Normally a faculty member is given an initial appointment of three years. During the third year of an initial appointment the P&T Committee will examine the faculty member's resume and ask for letters from members of the Department. The P&T Committee will then make a recommendation to the faculty. This could range from a one-year terminal appointment to a three-year reappointment. The faculty would then vote on the recommendation of the P&T Committee and/or suggest amendments; passage would be by a simple majority of the eligible faculty. The rules for a quorum and voting eligibility would be the

same as for promotion from assistant to associate professor.

6.2 Dual Career Accommodations

The Department of Physics and Astronomy views dual-career accommodation as a potentially important action to increase the diversity of the department, to attract or retain qualified faculty, and which can enhance the academic strength of our programs and the university as a whole.

Given the commitment of the university that “recruiting and retaining a talented, innovative, and diverse faculty remains a top university priority” [1] the department is committed to work with the Office of the Executive Vice President and Provost to identify resources needed in recruitment, retention, diversity and partner accommodation.

When an accommodation issue arises, the Chair shall form a committee to evaluate the candidate and make a recommendation to the faculty. This committee will take responsibility for the interview process for the candidate in the same way that a search committee usually does. Where possible, the committee will include members with recent hiring experience in the area or similar areas.

It is essential that faculty appointed as part of a dual-career accommodation are subject to the same evaluative procedures and criteria as all other faculty members of the department. It is understood that a dual career accommodation hire conveys no prejudice nor advantage when it comes to the promotion of the individuals involved.

[1] <http://www.provost.iastate.edu/fad/policy---salary---support.html>

7. Position Responsibility Statements and Mediation

Sample PRS:

In your position as a faculty member in the Department of Physics and Astronomy at Iowa State University:

You will carry out a research and scholarship program that is nationally competitive and recognized. This includes creation of the conceptual framework for the research, raising funding to support the work, and reporting the results in major journals;

You will perform classroom and laboratory teaching at a level consistent with Department norms established by peer and student evaluation; and

You will contribute to the outreach and service aspects of department activity.

(Dept Chair)

(Faculty)

Date

Date

8. Hiring and Reappointing Lecturers and Senior Lecturers

Preamble - The Physics and Astronomy Department may employ non-tenure-track (NTT) faculty with the titles "Lecturer" and "Senior Lecturer" in teaching positions. The appointments should be made to the mutual advantage of both the individuals and the department in maintaining a high standard of teaching. The department will seek to assist people in these positions in the pursuit of their professional goals. Modification of this document requires a vote of at least 60% of the eligible tenure-track faculty for approval.

Description of Positions - The Lecturer and Senior Lecturer positions are non-tenure-track and are distinct from "Adjunct Research" positions described in a separate document. An M.S. in Physics or Astronomy is required for Lecturer. A PhD in Physics or Astronomy plus five years teaching experience is required for a Senior Lecturer. The positions are limited-term appointments eligible for renewal based upon quality of performance and the needs of the department. The total amount of instruction within the Department done by non-tenure track faculty should be less than 15%. At no point in time may it be more than 25%. Following the University rule, faculty members who have been denied tenure in a mandatory review at Iowa State University are not eligible for appointment as Lecturer or Senior Lecturer.

Lecturer - Appointments as Lecturers will be made using established University search processes, with decisions made by the department chair upon recommendation of the assistant chair.

The normal term of appointment is one year. In special circumstances the duration of the appointment may be up to three years. The position may be full or part time, consistent with the advertisement through which the hire took place. The total length of time as Lecturer (through both appointment and re-appointment) must not exceed six years.

Renewal of an appointment is based upon quality of teaching as reflected in the vita, student teaching evaluations, faculty comments as well as continuing departmental need. The review will be made in the context of the Position Responsibility Statement (PRS) derived from the advertised position. The Chair upon recommendation of the Assistant Chair will make re-appointment.

After five years, persons on appointment as Lecturer holding a Ph. D. degree may be reviewed for advancement to Senior Lecturer.

Lecturers may participate in departmental faculty meetings, although they do not have voting privileges.

Senior Lecturer - Appointments as Senior Lecturers are made by the department chair upon recommendation of the P&T committee and approval of the P&A faculty. The Dean and the Provost also

must approve them as described the Faculty Handbook. The appointments are based upon the person's vita and quality of teaching record over the last five years, as demonstrated by student and faculty evaluations. Excellence in teaching is expected. Advancement to the position is possible without a search if the person has been a Lecturer for five years; otherwise established university search processes must be used.

As with the initial appointment, reappointment as Senior Lecturer is made by the department chair upon recommendation of the P&T committee, approval of the P&A faculty and the continuing need of the department. Demonstrated continuing excellence is expected for re-appointment.

The Dean as well as the Provost must approve reappointments as described in the Faculty Handbook. The term of appointment is normally three years.

Senior Lecturers may participate in departmental faculty meetings, although they do not have voting privileges.

Non-tenure Eligible Appointment Procedures - The faculty grants the Chair the authority to make initial one-year appointments to non-tenure eligible faculty teaching positions. (This does not include appointments as adjunct faculty which are described in a separate section.) Near the end of spring term the chair will present a summary of the performance of each of the non-tenure eligible faculty whose appointment is about to expire and seek approval for possible reappointment. The Chair may reappoint only those persons who receive such departmental approval.

9. Adjunct and Research Appointments

PREAMBLE: In addition to the customary tenure-track faculty appointment in the Department of Physics and Astronomy ("the department"), there can arise situations where the department may benefit in providing an adjunct appointment to an outstanding researcher who is expected to contribute in a significant way to the mission of the department but for whom the customary appointment is impractical. The department welcomes a limited number of applications of this type. University guidelines require that adjunct faculty not be I.S.U. employees. I.S.U. Employees are eligible for the similar Non-tenure-eligible Research Faculty Appointments, with departmental regulations described in a separate document. Once a person is given an adjunct appointment the department will seek to assist that adjunct faculty member in the pursuit of his or her professional goals.

Departmental Guidelines for Adjunct Faculty Appointments

1. An adjunct appointment will be a three-year non-tenured appointment at the rank of assistant professor, associate professor, or professor, renewable as described below. Adjunct faculty may be invited to fill a teaching need within the department. Financial remuneration for teaching services will be made in accordance with standard procedures.
2. Should adjunct faculty submit a grant proposal which would be administered through the department, provision will be made to reimburse the department for support services (secretarial and financial administration, etc.) required for preparing the proposal and all related work (reports to funding agency, purchasing, manuscript preparation, etc.).
3. Adjunct faculty members are expected to participate in the life of the department. Indeed, candidates for these positions should have shown significant involvement in the life of the department. Their active participation at faculty meetings is also encouraged (except for those meetings dealing with promotion and tenure matters) although they will not have voting privileges.

4. The department will submit the name of an adjunct faculty member for membership in the graduate faculty within one year from the time of the appointment.
5. The department regards an adjunct appointment as a matter for serious consideration. Thus an individual will be considered for an adjunct appointment if the following requirements are met:
 - a. The candidate is deemed to have a research record which meets the criteria for a tenure-track faculty rank as set down in the departmental promotion and tenure ("blue") document.
 - b. A faculty member of the department takes the initiative to bring forward the name of the candidate in a letter of nomination to the P&T Committee. This letter should include a description of the benefit the department will derive from the appointment. A letter from the candidate describing the reasons for the application is welcome.
6. The initial appointment and subsequent promotions will be dealt with by the P&T Committee. In particular, that committee will review the candidate's record and then make a recommendation to the faculty for consideration as described below. Specifically the P&T Committee will judge the research record of the candidate following similar procedures used in considering tenure-track faculty being considered for promotion at the same rank. In particular, the curriculum vitae and the research publications of the candidate will be examined. In addition, the committee will obtain letters from at least three external reviewers for their professional evaluation of the candidate. The committee will also take the initiative in scheduling a departmental colloquium to be given by the candidate.
7. A proposed appointment for an adjunct faculty position will be approved when not less than two-thirds of the eligible tenured and tenure-track faculty, at all ranks, vote in favor of the appointment. The eligible faculty is defined as those not on faculty leave plus those on faculty leave who vote. The faculty vote will be by secret ballot.
8. Renewal of an adjunct appointment will be initiated by the departmental chairperson and will follow the steps described above in paragraphs 6 and 7, with the exception that external letters will not ordinarily be required. In addition, the candidate will submit a statement describing his/her contributions to the Department during the past appointment period. The renewal period will normally be for 5 years. In the absence of renewal the appointment will automatically expire.
9. An adjunct faculty member will be welcome to direct a graduate student in the department jointly with a tenure-track faculty member. Both are expected to play an active, significant role in the direction and research of the student.
10. The department will define in the letter of appointment the title to be used in designating adjunct faculty. As an example, a suitable title for adjunct faculty at the rank of assistant professor will be "Adjunct Assistant Professor of Physics and Astronomy." The departmental chairperson and the person with budgetary authority for the candidate's existing position (e.g., unit director, grant principal investigator, etc.) should both sign the letter of appointment.
11. An adjunct appointment will be made only if it significantly strengthens the department.
12. These regulations will be superseded by college or university regulations in the case of any conflicts.

10. Affiliate and Courtesy Faculty

Affiliate Faculty - Affiliates are persons appointed to the faculty, without financial obligation on the part of the university, to carry out scholarly activities from which the individual as well as the department and the university will benefit. **Faculty rank will reflect scholarly qualifications equivalent to those of similar rank in the department.** Unlike collaborators, affiliates are not employed on a regular basis outside the university. Since affiliates are not recruited following university affirmative action procedures, they may not be assigned duties or responsibilities - such as teaching courses or providing research support for other faculty or staff - that would ordinarily be carried out by a person in a faculty or P&S position. If a department desires to assign such responsibilities to a person on an affiliate appointment, that person's appointment status may be converted to an appropriate status by following the university's procedure for filling a faculty or P&S position.

Appointments may be made for one to three years and may be renewed. The conditions of the appointment, including the extent to which the department will provide support services for the individual, are stated in a written agreement signed by both parties at the time of the appointment. If a person on an affiliate appointment obtains financial support from a grant or contract for which he or she is the principal investigator, he or she is paid through the university's payroll system and may participate in the university's benefits programs, provided that all salary and benefit costs are supported by the affiliate's grant or contract. An affiliate is not tenured, and time spent in affiliate status is not considered to be service in a probationary period leading toward tenure. Persons on affiliate appointments are, however, subject to university and faculty policies. The bolded sentence does support a faculty rank.

Courtesy Faculty - Courtesy faculty appointments for tenured or tenure-track professors in other ISU departments will be made at the discretion of the DEO. Following a brief period for review by the tenured and tenure-track faculty, appointments will consist of a period of three to five years.

11. Post-Tenure Review Document

A post-tenure review of all tenured faculty in the Department of Physics and Astronomy will be done by the DEO and a faculty review committee. Faculty members will be reviewed at least every seven years in the order of the length of time since their last detailed review, either a post-tenure review or review leading to promotion. The review will be conducted consistent with the Post Tenure Review Policy document of the College of Liberal Arts and Sciences. The review should address the quality of the faculty member's performance in accordance with all position responsibility statements (PRSs) in effect during the period of the review. Persons who have given notice in writing to the DEO of retirement or phased retirement beginning in the next academic year will be exempted from review.

This review will be based on the faculty member's departmental resume and on input from the faculty review committee chosen by the DEO. All faculty members will be invited by the DEO to submit to the faculty review committee and the DEO written comments regarding the performance of faculty members under post-tenure review. At the conclusion of their review the faculty committee will provide the DEO with a written report. The report will conclude with a summary statement of the outcome of the committee's review ("superior", "meeting expectations", "below expectations") and suggestions for an action plan to improve performance where necessary. Based on the above materials and input from the faculty review committee, the DEO will prepare a draft of the post-tenure review report. This draft shall be given by the end of January to the faculty member, who may append comments or corrections, if so desired, within ten days. The DEO's final report will include an action plan for performance improvement in those areas deemed necessary and will reflect discussions between the DEO and the faculty member.

The post-tenure review report will not be circulated to anyone within the Department without the advance written permission of the faculty member being reviewed. The report of the review will be used by the faculty member and the DEO as a guide to enhancing the performance of the faculty member reviewed.

The policies and procedures described herein are effective upon adoption by a 2/3 vote of the faculty and may be amended by a 2/3 vote of the faculty. This document and all amendments to it shall be approved by written ballot. The definition of the voting faculty is identical to that used for amendments to the document entitled "Department of Physics and Astronomy Promotion and Tenure Policy and Procedure" and is given in that document.

The departmental resume normally contains the following items:

Professional history
Teaching responsibilities and student ratings
Graduate students directed
Service record
Research summary
Summary of publications and talks
Numbers of citations
Honors and awards
Synopsis of funding
List of invited talks
List of refereed publications

12. Procedures for Reviewing DEO and Searching for New DEOs

I. Reviewing an incumbent DEO.

- A. No later than April of the penultimate year of the DEO's term, the departmental post-tenure review committee shall compile the results of a questionnaire distributed to faculty, staff, the graduate student representative and an undergraduate student selected by the committee.
- B. The questionnaire shall consist of the following questions:
 - 1. Give an example of something the present DEO has done particularly well.
 - 2. What would you recommend the current DEO do differently in the future? Do you have any other concerns about the performance of the current DEO?
 - 3. On balance, would you recommend to the Dean that the present DEO be asked to take another term? Please explain your reasons for this conclusion.
 - 4. If this DEO does not continue, should the department look for a DEO among internal candidates or conduct a full, external search? Please explain or expand upon your answer (e.g., by listing some possible internal candidates).
- C. The committee shall compile the results of this questionnaire into a brief report (without identifying the source of specific comments), provide a copy to the DEO and make a summary of the report available to faculty members. The full collection of responses shall be attached to a copy of this report to be sent forward to the Dean.
- D. If a new DEO needs to be found, a new committee shall be established according to the steps outlined below.

II. Searching for a new DEO

- A. If the majority of answers to question 4 of the preliminary questionnaire are in favor of an external search, or if the Dean's office requires an external search, then a search committee shall be set up in consultation with the Dean.
 - 1. This committee shall be structured and shall operate in a manner similar to other faculty search committees except that care shall be taken to avoid placing on it those who are likely to become candidates for the DEO position.

2. If any member of the search committee becomes a candidate for the DEO position, he or she shall immediately resign from the search committee.
 3. Interviews for the DEO position shall be carried out in a manner consistent with all faculty searches, with the added requirements that the candidates should meet with key staff members in the department, should have a public Q/A session with faculty, and should meet with the graduate students.
- B. If the decision is made to seek a new DEO from among present members of the department, a special procedure shall be followed:
1. The faculty shall be surveyed, by the Assistant Chair, for suggestions about the membership of the search committee, the likely DEO candidates, and issues likely to be important in the next 3-5 years. This questionnaire will be of the following format: Who among the faculty at the rank of associate professor and above would you suggest be considered a candidate for DEO? Who among the full departmental tenure track faculty would you recommend for inclusion on a DEO-selection committee? What do you see as key issues facing the next DEO?
 2. The responses should be tabulated by the Assistant Chair, or another neutral party, and conveyed in a report to the faculty. A committee shall be appointed by the faculty, in consultation with the Dean, from among those suggested for such membership. Faculty members that appear to have strong support for DEO candidacy, based on the results of the questionnaire, should not be asked to serve on the selection committee.
 3. Those nominated in the survey should be encouraged to participate in an informal interview process involving meets with the faculty, graduate, students, and other interested parties and the Dean. This process shall be set up and expedited by the DEO selection committee.
 4. A final ballot shall be circulated by the DEO selection committee. The ballot should ask for a ranking, and for comments about the perceived strengths and weaknesses of candidates for this position. Results of this ballot shall be tabulated. The top vote-getters should then be asked to agree to continue as candidates. The department should be informed about the finalists, typically no more than 3 or 4 of those interviewed, and including only those that, at this stage, agree to continue as candidates. This same list and a report summarizing comments should be sent to the Dean, as a recommendation from the department.

13. Annual Faculty Salary Review Procedures

Input is taken annually from 1/3 of the faculty to guide the Chair in salary recommendations to the Dean. In addition, every faculty member is asked to complete a questionnaire detailing their contributions in the areas of teaching, research and service, as well as update their curriculum vita, annually.

Memo to faculty from the Dept Chair:

In preparation for the annual performance evaluation, please **update your resume and the one-page Faculty Evaluation Questionnaire (included herewith) and email them to Gloria no later than (date in mid-February)**. To assure uniformity in the style of the resume, I am also attaching the template that appears as part of the departmental promotion and tenure document to serve as a guideline. Please make sure your resume follows this template. If you maintain your own resume, please send the source file to Gloria so that she can add updates to your teaching evaluation table when available.

A Faculty Evaluation Questionnaire 2013 is included with the above memo requesting the following information:

Name:

Summarize your efforts over the past year in the areas of research, teaching and outreach:

Research:

Teaching:

Outreach:

Summarize your most significant achievement over the past two years: Please provide any additional information that you feel should impact upon your salary increase this year:

Memo to faculty reviewers from the Dept Chair:

Attached is an alphabetical list of the faculty (including lecturers with long-term contracts). This year you are being asked to be part of the ~1/3 of the faculty reading all faculty resumes and the annual evaluation questionnaires and providing input to the annual salary review process. This review can be oral or written as you wish. Faculty evaluators should use the updated resumes and faculty evaluation questionnaires available in the Main Office. For the lecturers your evaluation should be based on classroom performance and other contributions to the teaching mission of the department.

Please indicate a plus, a zero, or a minus after each name with the total for all faculty summing to zero. I would like a reason for each + or - in the comments and in fact would like any comments you wish to make.

Please meet with me or submit the signed, completed form by **(date)**.

14. Teaching Assistant Appointment Policies and Review Procedures

Teaching is an important part of a graduate student's professional training. It helps new students review their basic knowledge of Physics for the qualifying exam and develop skills in communicating that knowledge to others. To be hired as a Teaching Assistant (TA) the applicant must demonstrate a working knowledge of Physics and have achieved good grades in their Physics classes. Prior teaching/tutoring experience is helpful, but not essential. Graduate student TAs should be in good standing in both academics (3.0 GPA) and in research. TAs are expected to spend 20 hours a week preparing/teaching undergraduate recitation sections and/or laboratories, grading, proctoring exams and staffing the help-rooms.

Graduate students whose native language is not English are required by the Graduate College to pass the Oral English Certification Test (OECT, formally SPEAK/TEACH Test) to be certified for classroom teaching. Students who fail the tests may be given a grading assignment and are required to take English classes and show improvement in their spoken English.

A Teaching Assistants salary may increase or decrease based on performance. Performance is determined by student survey comments and peer review. The latter is performed by lecturers using the form below.

Review form:

Department of Physics & Astronomy
Peer Classroom Recitation Instructor Observation Form – Spring 2013

catalog change procedures. Internal issues requiring faculty approval are presented to the Physics and Astronomy faculty throughout the year, as appropriate.

16. Regulations for the Written Graduate Qualifying Examination

Purpose of the Exam

The completion of a Ph.D. program in the department should imply that the student has mastered important areas of physics at both the undergraduate and graduate level and completed a significant original research project. Coursework, the qualifying exam, the preliminary oral exam, and a dissertation must be successfully completed in order to establish that these goals have been met.

In this context, the purposes of the qualifying exam are: (1) to require each student to demonstrate a good understanding of undergraduate physics and quantum mechanics material; (2) to encourage the student to organize and synthesize this material, thereby obtaining a better overall perspective of the field; (3) to provide an early identification of those students with the potential to complete a Ph.D. program. It is emphasized that the exam will be constructed so as to provide good discrimination among students at the pass/fail borderline.

Topics Covered by the Exam

The Qualifying Examination consists of two parts, one covering topics from classical physics and the other covering topics from modern physics. The level and areas of the examination are indicated by the following lists of topics and texts. Since special relativity may enter in both classical and modern topics, knowledge of special relativity (at the level of Lorrain and Corson) is assumed for both the classical and modern parts of the examination. Students are also expected to have mastered the topics at levels implied by the following lists of texts.

It is to be emphasized, however, that these lists of topics serve merely as a guide and that questions of comparable difficulty, may be asked on other topics in the areas covered by the list of texts. For examples of the character of the examination, students are advised to consult past exams, copies of which may be obtained from the staff of the departmental office.

A. Classical Qualifying Examination

The classical part of the qualifying examination consists of questions from mechanics and from electromagnetism. The levels and areas of the examination are indicated in the following list of texts or sections of the texts indicated.

1. Mechanics

a. List of topics

Newtonian mechanics; particle motion in 1, 2, and 3 dimensions, motion of systems of particles, rigid body motion, gravitation, moving coordinate systems, vibrating systems and strings, normal modes, theory of small vibrations, Lagrange's equations, virial theorem, special relativity, Hamilton equations of motion.

b. List of texts

- Marion "Classical Dynamics of Particles & Systems" 4th ed. 1995
- Fowles "Analytical Mechanics" 5th ed. 1993
- Symon "Mechanics" 3rd ed. 1971

- Lorrain and Corson "Electromagnetic Fields and Waves" 2nd ed. 1970
- Griffiths, "Introduction to Electrodynamics" 3rd ed. 1998

2. Electricity and Magnetism

a. List of topics

Electrostatics, electric forces and fields, Gauss' law, conductors, dielectric materials, scalar potential, solutions of Laplace's and Poisson's equations, boundary conditions, electric multipoles, energy density in electric fields, magnetostatics, B and H fields, Ampere's Law, Faraday's Law, Biot-Savart Law, magnetic forces and fields, energy density in magnetic fields, inductance, vector potential, magnetic materials, Maxwell's equations in free space and in dielectric and magnetic materials, plane electromagnetic waves in free space, good conductors, and dielectric media; Poynting's vector, reflection and refraction; Fresnel's equations, guided waves, special relativity, DC and AC circuits (i.e., some knowledge of simple circuits such as in Reitz and Milford is expected).

b. List of texts

- Lorrain and Corson "Electromagnetic Fields and Waves" 2nd ed. 1970
- Reitz and Milford "Foundations of Electromagnetic Theory" 4th ed. 1993

B. Modern Qualifying Examination

The modern part of the qualifying examination consists of materials corresponding to our undergraduate courses in modern branches of physics and astronomy with one question from our first-year graduate course in quantum mechanics. The modern qualifying exam will consist of 11 problems. Students must choose 7 of the 11 problems and only those problems will be graded. The 7 problems will be chosen from 3 groups of problems as follows.

Group A: Students are required to answer 3 out of 3 problems covering material in quantum physics at the Physics 480/481 level including uncertainty principle, wave packets, Schroedinger equation, discrete and continuous eigenvalues and eigenfunctions, one-, two- and three- dimensional potentials, harmonic oscillators, spin and orbital angular momenta, hydrogen-like atoms, LS and jj coupling schemes, basic matrix formulation of quantum mechanics, WKB method for bound-state energies and barrier transmission coefficients.

Group B: Students are required to answer 2 out of 4 problems in this group distributed as follows:

- One problem emphasizing condensed matter physics at the Physics 321/322 level including Fermi energy, conductors, insulators, semiconductors, superconductors, and magnetic properties of solids.
- One problem emphasizing high-energy physics at the Physics 321/322 level including quantum numbers of "elementary particles," interactions and conservation laws in reactions and decays, and families of particles and quarks.
- One problem emphasizing nuclear physics at the Physics 321/322 level including nuclear properties, the two nucleon system, nuclear models, nuclear decays, and nuclear reactions.
- One problem emphasizing astrophysics at the Astro 342/346 level including celestial mechanics, basic radiative transfer, stellar astrophysics (interiors, atmospheres, observations and evolution), galactic astrophysics (structure and dynamics of galaxies, interstellar medium, star formation), and observational cosmology (Newtonian).

The problems in Group B should be such that any student studying from the following recommended texts should be capable of solving all of them. For the CMP, high-energy and nuclear physics questions Eisberg and Resnik is recommended. For the astrophysics question Zelik & Gregory, Carroll & Ostlie, or Shu (The Physical Universe) are recommended.

Group C: Students are required to answer 2 out of 4 problems in this group distributed as follows:

- One problem emphasizing quantum physics at the Physics 591/592 level including time-dependent perturbation theory and other approximation methods, scattering theory including the Born approximation and partial waves, semiclassical treatment of radiation; quantum mechanical symmetries for translations, rotations, and space inversion, identical particles. Also more complex examples from the subject matter in Group A could be included.
- One problem covering other areas in physics at the Physics 321/322 level or equivalent including special relativity, blackbody radiation, optical and x-ray atomic excitations, Boltzmann, Bose, and Fermi distributions, and simple molecules. This problem could, for example, be a multiple choice problem covering several research areas in which the estimation of orders of magnitude for various quantities is required.
- Two problems covering astrophysics at the 405/505 level including such topics as hydrodynamics, radiative transfer (including stellar atmospheres), gravitational stability/collapse, shocks, radiation processes (including thermal bremsstrahlung and synchrotron emission), stellar interiors, Galactic astronomy and extra-galactic astronomy/cosmology.

Students should prepare for the exam using the current 405/505 text and the texts used in recent core graduate astrophysics courses.

List of texts

- Eisberg & Resnick "Quantum Physics of Atoms, Molecules, Solids, Nuclei, and Particles" 2nd ed., 1985.
- Griffiths, "Introduction to Quantum Mechanics" 2nd ed., 2004
- Sakurai "Modern Quantum Mechanics", Revised Edition, 1994
- Merzbacher "Quantum Mechanics" 3rd ed., 1998
- R. K. Pathria, "Statistical Mechanics" 2nd ed., 1972
- N. W. Ashcroft and N. D. Mermin, "Solid State Physics", 1976

Recommended Astrophysics Texts

Basic/Intermediate (Part B)

- Zelik & Gregory, "Introductory Astronomy & Astrophysics"
- Carroll & Ostlie, "An Introduction to Modern Astrophysics"
- Shu, "The Physical Universe"

Advanced (Part C)

- Shu, "The Physics of Astrophysics - Vol. I and II"
- Rybicki & Lightman, "Radiative Processes in Astrophysics"
- Shore, "Astrophysical Fluid Dynamics"

Qualifier Rules

1. The Qualifying Examination will consist of two parts, one covering essentially classical physics topics and the other covering essentially modern physics topics. A statement of the purpose of the examination as well as a detailed description of the character, level, and areas of coverage of the examination will be made available to students well in advance of the time at which it is offered. Each part of the exam may be passed independently of the other. The Classical part of the Exam will be administered in January in the week preceding start of the Spring semester, the Modern part of the Exam will be administered in August in the week preceding the start of the Fall semester each year. The GSC will appoint a Qualifying Examination Committee and a chair of that committee for each part of the exam. These committees will prepare, administer, and grade their respective part of the Qualifying Examination. Additionally, the GSC will appoint an Inspector General whose responsibility is to ensure that the examination adheres to the detailed description previously made available to students. The Qualifying Examination Committee members will be notified of their appointment by the Department Chair.
2. After completing two semesters of graduate study in Physics and Astronomy at ISU, excluding summer session, a student must pass both parts of the Qualifying Examination within the next two offerings -in order to proceed toward a Ph.D. Furthermore, students in this category are required either to take the portion of the examination they have not yet passed or to declare in writing their intention to terminate graduate study in Physics and Astronomy at ISU with a Master's Degree. Such a declaration may later be withdrawn only by permission of the GSC. Students who enter ISU with an M.S. degree from another institution must pass both parts of the Qualifying Examination the exam within 20 months after enrolling at ISU in order to proceed toward a Ph.D. In highly unusual circumstances, a student may petition the GSC for an exception to the above rules. The GSC action will be reported to the faculty.
3. Each committee will grade its corresponding part of the examination independently and without consulting with the other committee. Each problem will be graded independently by at least two members of the committee. Students will be identified only by the rank-order number of their score and the information correlating this number with a student's name will be known only to the respective Qualifying Examination Committee chairs until after the whole faculty accepts the committee results (see Section 4). The committee will then agree to a minimum passing score for that part of the examination. The Qualifying Examination committee chair will summarize the results as follows:
 - a) Every student will be assigned an identification code for each portion of the exam in any manner deemed appropriate by the Qualifying Exam Committee chair. The identification code for each student will be different for each of the classical and modern portions of the Qualifying Examination. The information correlating this code in any way with the student's name will be retained only by the Qualifying Examination Committee chair.
 - b) For each part of the exam a table will be prepared listing the students taking the exam rank-ordered by score and identified only by the assigned identification code for that exam. Lines will be drawn on the table to indicate the average score and the committee-recommended minimum passing score for the examination.
4. The Qualifying Examination Committee chair for each part of the exam will preside over a meeting of the Physics and Astronomy faculty and will present to the faculty the examination results in the form of the final tables and the prepared summaries . The faculty may not, except by a two-thirds vote, alter the decision of the Qualifying Examination committee. Individual student's names will not be associated with their identification numbers until the minimum passing score for each exam

is completely and finally established by the faculty and the determination of which students have passed each part of the exam has been made. A summary of the individual results for each student taking the exam and their academic record will then be presented to the faculty.

5. The following provisions are made for dealing with very unusual cases. After the identity of each student taking the examination has been revealed, any faculty member may request special study of a case in which (a) the student has failed the examination and will not be allowed to proceed further toward the Ph.D. in the Department of Physics and Astronomy at Iowa State, and (b) it appears that this result is clearly at odds with the rest of the student's record. If such a motion is made and seconded, the faculty will discuss the matter and vote on the question of whether the case should be referred to the GSC for study. A simple majority of those present will suffice to approve that motion. No further action shall be taken until the GSC has reported its study and recommendation to the faculty. The case will not be referred to the GSC unless all of the following conditions are satisfied:
 - a) The student must have passed one part of the exam.
 - b) The student's course grades are very good (e.g. a GPA of about 3.5 or better).
 - c) The student shows evidence of strong research performance.

In addition, any student may petition the GSC to have their case reviewed. The above conditions apply for a petition to be considered. In addition, a letter from the student and the advisor is required that explains the reasons for the petition and any mitigating circumstances that would warrant an additional attempt at the qualifying exam. In order to rule favorably on the petition the GSC must find that there are circumstances beyond the student's control that affected their performance and that there is a high probability of success if the petition is granted. After review the GSC may recommend one of the following:

- a) The student is not allowed to proceed further towards a Ph.D. in the Department of Physics and Astronomy;
- b) The student be given an additional opportunity to take the portion of the Qualifying Examination they have not yet passed.

These recommendations do not require departmental ratification. In all cases the guiding principle is that the student must amply demonstrate knowledge of both classical and modern physics at the level of the qualifying examination before being allowed to proceed further towards a Ph.D.

6. The Qualifying Examination Committee will publish solutions to the examination. Examination papers will be returned to the students with no marks on the paper. The tables for each exam will be made available to the advisors of students who fail the examination. This will be accomplished as soon as possible and no later than the Friday of the second week of the Fall Semester for the Modern portion of the exam and Spring semester for the Classical part. The advisor may indicate to the student only the position of his or her identification number in the tables.
7. The faculty may amend these rules by a 2/3 vote.

17. Annual Budget Reporting Procedures

To assist with, and to offer advice on, any budgetary issues in accord with the Faculty Handbook, the Chair shall appoint a Budget Advisory Committee. Members of the departmental Budget Advisory Committee will normally include: the Chair, the Asst. Chair, the Administrative Asst. for Business and

Finance, and other faculty members. In the spring of each academic year the Chair shall present to the faculty the annual budget report of the committee. This report should indicate the sources of income to the Department and the expenditures broken down by category (e.g., faculty salaries, staff salaries, graduate assistant salaries, materials and supplies, travel, and any other such categories as deemed appropriate) for the current fiscal year. In this presentation the Chair should discuss any budgetary challenges, and the anticipated funding for the next fiscal year.

18. Strategic Planning

Every 3-5 years, with the specific time within this interval determined by the Department Chair, the Strategic Plan of the Department of Physics and Astronomy will be re-evaluated and revised. The procedure for this process will be as follows.

- 1) The chair will appoint a strategic planning committee to supervise the process. This will generally be done at the beginning of the Fall term.
- 2) Over the course of the Fall semester the committee will actively solicit input from all relevant constituencies within the department, including: a) input from research groups and individuals on promising future research directions, b) input from individuals and interest groups on matters relating to instruction, curriculum and outreach, and c) input on broad changes in department governance and policy, if necessary.
- 3) The committee will also seek input from appropriate external sources, including the departmental advisory committee, other departments with shared teaching or research interests, the college office, and the strategic plans of comparable departments.
- 4) Once the information-gathering phase is complete, generally by the end of Fall semester, the committee will assemble a revised departmental Strategic Plan.
- 5) This will be presented to the faculty for approval in the spring semester. Following approval it will also be submitted to the College.

This Plan is meant to provide general direction and guidance to the Chair and relevant committees. Implementation of specific policies and procedures remains within purview of the Chair and these committees, and within the approved governance.

Content: The Plan will generally consist of the following basic parts.

- a) A brief, summary review of the research, educational, and outreach activities of the department, and current funding and other administrative issues.
- b) An overview of the information gathering process.
- c) Recommendations for what general directions the department should pursue for hiring in the Plan period, including areas for growth, maintenance, or renewal. Educational and administrative staff hiring needs should be considered as well as research faculty.
- d) New or revised directions in curricular, recruiting and public and alumni outreach areas should also be considered and prioritized.
- e) Projections for the hoped for outcomes of implementation of the various recommendations, and if possible simple metrics of success in achieving those outcomes, should be given.

Limitations:

The strategic planning process is separate from Self-Study and External Review processes. It should not duplicate the work of those processes, especially the detailed data gathering of the self-study process.

The strategic planning process is separate from the work of the Faculty Hiring Plan Committee. The latter committee sets annual hiring priorities partially in response to short-term, tactical needs, in agreement with the long-term goals outlined by the Strategic Plan.

The Strategic Plan will not generally recommend regular governance revisions or curricular review, though it may highlight areas where work needs to be done by the relevant committees.

The strategic planning process will not take place in the year of a chair search to avoid dealing with possibly competing agendas of the candidates.

19. Departmental Awards Committee Procedures

The purpose of the Faculty/Staff Honors and Awards Nominating Committee is to obtain recognition for outstanding achievements of regular faculty of the Department of Physics and Astronomy, of P&S staff scientists affiliated in some way with the Department, of Departmental Lecturers and of the secretarial staff of the Department. The Committee submits nominations for awards at the LAS and ISU levels in the areas of teaching, research and/or service, and also submits nominations for national awards for research excellence.

The committee usually consists of three faculty from different research areas, typically including representation from the condensed matter physics or biophysics, astrophysics, and high-energy or nuclear physics areas.

The current deadline for submitting nominations for most LAS and ISU level awards is around 12 December, before the calendar year the awards are chosen. Thus, most of the work of the committee is done during the Fall semester. The winners of these awards are announced just before the end of the following Spring semester.

In order to meet the 12 December deadline for LAS/ISU nomination submission, the Committee begins meeting soon after the start of the Fall semester. Each Committee member is responsible for conferring with his/her group and associated groups and suggesting nominees in the areas of teaching, research or service. Some ISU awards such as Distinguished Professor require the nominee to be outstanding in at least two of these three areas. Occasionally a member of the Department will suggest an unsolicited nominee to the Committee. After several meetings, the Committee reaches a consensus on the nominees to put forward. Each committee member is responsible for writing the nominations for two, or possibly three, nominees, including those nominated for outside scientific awards (see below). An early priority is to obtain commitments of internal and/or external individuals for letters of support for the nomination, as required, that the letters of support will be received by the Committee at least two weeks before the nomination submission deadline.

The Committee writes nominations for external scientific recognitions, especially for Fellowship in the American Physical Society (APS). Fellowship in the APS recognizes consistently outstanding research contributions over a period of at least ten years. The deadline for submitting nominations for APS Fellowships awarded in a given year depends on the research area, from 1 February to May of the given year. The schedule of the Committee on these APS Fellow nominations depends on the research field, and the submission deadline of the specific field. As a result of the Committee's efforts, a large fraction of the full Professors in the Department are Fellows of the APS.

Very occasionally, nominations for very prestigious national or international prizes and awards are made by the Committee. Usually a Committee member is aware of such an award and identifies a faculty member who has a good chance of receiving it. The schedule for the nomination depends on the nature and source of the award. The Committee has had several successes of such highly prestigious award nominations.

A guiding principle followed by the Committee is that nominations are not made for any LAS/ISU award or APS Fellow award unless the Committee considers that the nominee has a very good chance of receiving the award. This is the major contributing factor to the high success rate of the Committee's nominations. This principle does not apply to the highly prestigious, high-risk, nominations for national and international prizes and awards where there is a single recipient of the award each year. The Committee explicitly tries to formulate a roughly even and fair distribution of teaching, research and/or service nominations for faculty members of the Department and associated P&S research staff. When possible and prudent, the Committee includes Lecturers and Departmental office staff in the list of nominees.

20. Graduate Admissions Committee Procedures

The mission of the Graduate Admissions Committee is to review applicants for graduate study in the department. The committee is typically composed of 5-6 tenure-track faculty members, appointed by the department Chair at the beginning of the Fall semester. Ideally all of the major department research areas should be represented.

The department graduate secretary collects application files and maintains a spreadsheet containing a summary of information on each applicant. The department graduate secretary acts as the main point of contact for any communications between applicants and the committee.

Once there are sufficient completed application files for review, the Committee Chair assigns each file to an independent review by at least three of the committee members. Each committee member recommends whether to Admit/Hold/Deny the student based on Physics proficiency, English proficiency, and research experience.

The Committee then meets weekly to review the files under evaluation and selects students to be admitted. The entire committee discusses the recommendations of the three reviewing committee members. Some files are put on hold to be reviewed when the first screening of all files is completed. International candidates worthy of admission are called in a phone interview by a subset of the Admission Committee. The phone interview has the dual purpose of testing their communication ability and recruiting promising candidates. Candidates who show excellent potential for teaching and research are selected for the Bowie fellowship in addition to the standard assistantship support.

Committee Calendar

(This calendar applies to the normal cycle of fall term admissions, and should be modified as needed for spring term admissions.)

Sept. – December: Applications arrive throughout the semester. The Committee Chair, working with the department secretary, answers inquiries.

December: Meeting schedule set for full committee in Spring semester.

Mid January: Begin weekly meetings of full committee to review completed files.

Mid February: Start calls to foreign countries for English proficiency and recruiting.

Application Deadline: February 15.

Late March/Early April: Start the review of prior “holds”.

First Week of April (roughly 2 weeks before April 15th deadline and avoiding VEISHEA week: Open House for domestic students. Committee members are strongly encouraged to participate in this Open House.

Acceptance Deadline for Offers: April 15.

Late April: final review of holds.

End of Semester: Department secretary compiles statistics and the Committee Chair makes a summary report to Department Chair

Appendix A – Departmental Resume Format

NAME

TITLE

AMES LAB TITLE (if any)

PERSONAL HISTORY

MEMBERSHIPS AND HONORS

B BASE

Grad Faculty Status

Performance in Position Responsibilities

A. Performance in Teaching Position Responsibilities.

1. Statement of teaching philosophy.
2. List courses taught in last five years, beginning with the most recent semester.

Course	Semester	Title	Enrollment

3. Summarize results of student evaluations for all courses in the last five years on the two standard questions. Please note the following 5-point scale for instructor evaluations: 1 = very poor, 2 = poor, 3 = satisfactory, 4 = good, and 5 = very good

Sem and Year	Course #	Total Enrollment	% of Students Responding	Overall Rating of Instructor	Dept Mean for Comparable Courses	Overall Rating of Course	Department Mean for Comparable Courses

4. Course and curriculum development activity.
Summarize contributions to course and curriculum development.
5. Undergraduate Advising.
 - a. Average number of advisees per year since appointment _____.
6. Graduate Advising.
 - a. M.S./M.A. Program of Study Committees
 - i. In progress:
 - Chair/major professor (list names of students)
 - Member of committee (list names of students)
 - ii. Completed:
 - Chair/major professor (list names of students)
 - Member of committee (list names of students)
 - b. PhD Program of Study Committees (since appointment or last promotion)
 - i. In progress:
 - Chair/major professor (list names of students)
 - Member of committee (list names of students)
 - ii. Completed:
 - Chair/major professor (list names of students)

- Member of committee (list names of students)
7. Honors and awards received for teaching

B. Performance in Extension/Professional Practice Responsibilities

1. Summary of extension and/or professional practice activities with information on quality and impact.
2. Honors and awards for work in extension or professional practice (please list)
3. Positions/offices held on regional, national, and international organizations, panels, or committees.

C. Performance in Institutional Service

1. Please list committee memberships and/or chairships since appointment or the most recent promotion and comment on the quality of contributions to those groups.
2. Honors and awards for institutional service

RESEARCH SUMMARY
NAME and Date

Research:

SUMMARY OF PAPERS AND PUBLICATIONS (See attached lists.)

Date	Refereed Pubs. In Print	Books/ Chapters	Invited Papers/Talks	Contributed Papers	Other
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^aRefereed Publications in Process

Citations (last 4 years from science citation index)

Date # plus # self-citations

Papers and Publications Details

Books, Chapters.

Editorial Activities

Honors, Awards

Professional Involvement

Invited Papers, Talks (Underline name of presenter.)

Contributed Papers (Underline name of presenter.)

Refereed Publications in Print (These include only articles printed in Refereed Journals)

Refereed Publications in Process

Appendix B – Committee Descriptions

This section gives very brief descriptions of the duties and responsibilities of some the major committees within the department.

Budget Advisory Comm.: Assists with, and offers advice to the Chair on budgetary issues. Presents an annual budget report to the faculty, detailing sources of income to the Department and the expenditures broken down by category.

Colloquium Comm.: Schedules and hosts outside lecturers in a wide range of sub-disciplines for the departmental colloquium series. Colloquium talks are held about once a week during the teaching terms.

Curriculum Comm.: (See section on curriculum change.) Initiates or evaluates suggestions for changes in the physics and astronomy curricula at both the undergraduate and graduate levels, and forwards recommendations to the departmental faculty. Maintains and updates documentation of the curricula both within the department, and for the university catalog, and other college or university information portals.

Fac. Awards and Honors Comm.: Solicits suggestions and helps prepare documentation for departmental award nominations for college, university and national awards to faculty and staff.

Graduate Admissions Comm.: Identifies and communicates with prospective graduate students. Evaluates and rank-orders applications for graduate admission.

Graduate Status Comm.: Monitors the progress of all graduate students in assembling and completing their Programs of Study, and passing oral and written qualifying exams, and final oral exams. Considers student appeals or requests for exceptions to normal deadlines or other departmental regulations.

Long-Range Planning Comm.: Produces the departmental faculty hiring plan and updates it annually. See Section 4.

Post-Tenure Review Comm.: Annually carries out the Post-Tenure Faculty Reviews described in Section 10 above.

Promotion and Tenure Comm.: Assembles documentation for and evaluates all tenure-track and non-tenure track promotion and tenure cases. The committee chair presents these cases to the departmental faculty, and supervises the production of the formal documentation required by the College and University P&T committees. The committee also prepares renewal cases for non-tenured faculty, lecturers, and adjunct faculty as required by departmental regulations (see Secs. 5, 7, 8 and 9).

Teaching Advisory and Evaluation Comm.: Deals with issues related to faculty and staff teaching performance, and teaching assistant assignments, in cooperation with the Class Scheduling Coordinator and the Astronomy Program Coordinator. Supervises the operations and revisions of student evaluations of instructors.

Appendix C – Quorum and Vote Requirements for Various Procedures and Policy Changes

Votes:

Amending long range planning document: 2/3 vote of the faculty. This includes all faculty (full, associate, assistant) as detailed in Section 4.

Amending the Post Tenure Review document: 2/3 vote of the faculty.

Amending Promotion & Tenure, Blue Document policies: 2/3 vote of the faculty. With additional requirements for amendments given in Section 5.

Vote for Promotion & Tenure: A 2/3 vote of those eligible is required for a formal Departmental recommendation for promotion or tenure.

Reappointments: By simple majority.

Modification of Lecturer section text: At least 60% of the eligible tenure-track faculty is needed for approval.

Amending Qualifying Exam Rules: 2/3 vote of the faculty.

Amending Recommendations of the Qualifying Exam Subcommittees: 2/3 vote of the faculty.

For all other cases the default is a simple majority vote of those present at the meeting.

Quora:

For Promotion & Tenure of faculty: “A quorum is defined as the actual presence at the meeting of at least 75 percent of all (eligible) tenured faculty.”

For Reappointment of faculty: “A quorum is defined as the actual presence at the meeting of at least 75 percent of all (eligible) tenured faculty.”

For the annual Qualifying exam meeting of the faculty: “A quorum is defined as the actual presence at the meeting of at least 75 percent of all (eligible) tenured and tenure-track faculty.”