



Department of Physics and Astronomy

PROMOTION GUIDELINES
Developed December 7, 1998
Amended August 24, 2011

ITEM	PAGE
MISSION OF THE DEPARTMENT	1
GOALS OF THE DEPARTMENT	1
CRITERIA FOR PROMOTION	2
TEACHING EFFECTIVENESS	3
SCHOLARLY AND CREATIVE ACTIVITY	7
SERVICE	10

Departmental Mission and Goals Statement

September 29, 2003

The mission of the Department of Physics and Astronomy is to develop and maintain, as a part of the new campus culture, a rigorous, structured, effective and efficient learning community serving the intellectual needs of a broad spectrum of the University's students within the disciplines of Physics and Astronomy.

- For our majors our goal is to help them develop the analytical, technical and conceptual skills which will allow them to move confidently to graduate work in the disciplines; to productive careers in business, industry or government; or to teaching science in the public and private schools.
- For majors in other sciences we will provide the requisite knowledge of the principles of physics necessary for the pursuit of their own majors.
- For majors in other areas we will provide the sound grounding in the essentials of physics and astronomy that will enable them to better understand the world in which they live and the role of science and scientific thinking in their society.

For all our students we will, by precept and example, demonstrate both the highest degree of professional behavior and the responsibilities of the scientist to the larger community.

To attain these goals, we will strive to ensure that course content, to the extent appropriate to the experience and needs of our students, is kept current with new knowledge in the disciplines. Further, these students will have direct access, commensurate with their experience and needs, to significant laboratory experiences and modern instrumentation. There will be continuing attention to developing teaching strategies, including but not limited to those expounded in the University's Vision statement, that will speak to the divergent learning styles of our students; these strategies will be tested, assessed and modified as necessary to meet the particular needs of the Rowan student.

CRITERIA FOR PROMOTION

Adopted December 7, 1998

Promotion provides the means to recognize the past performance and to express an expectation about the future performance of a faculty member. Both the past performance and the future expectation must be assessed to be excellent. The three areas to be assessed in detail for each faculty member requesting promotion, and the weighting percentages for these areas, are Teaching Effectiveness—55%, Scholarly and Creative Activity—35%, and Service—10%. Service includes contribution to the university community and contribution to the wider and professional community. If the interests of a faculty member suggest that these percentages should be modified, then the faculty member can present a development plan that offers an alternative set of percentages. The Departmental Promotion Committee in discussion with the candidate will consider this alternative suggestion taking into account the justification offered and the needs of the Department. In no case though will the order of importance of these assessment areas be altered.

The Department Committee will be made up of members who are elected by the Department as a whole following the guidelines of §5.33 of the Faculty Promotion Memorandum of Agreement (FPMOA). The Committee will use the following guidelines in making its recommendations concerning each candidate.

CRITERIA FOR EVALUATING TEACHING EFFECTIVENESS

Teaching is the primary function of faculty. Faculty members are expected to facilitate learning, manage instruction and supervise students. They must advise students, develop learning activities and develop as a teacher. The evaluation procedure will include the examination of classroom and laboratory peer observations, student evaluations, course content, advising activities, and a statement by the faculty member which includes a self-assessment and a professional development plan.

CRITERIA FOR PEER CLASSROOM OBSERVATION

1. Mastery of subject matter discussed
2. Interactions with students:
 - Rapport
 - Sensitivity to students' difficulties
 - Impartiality
 - Respect
 - Humor
 - Flexibility
 - Avoidance of sarcasm
3. Classroom presence:
 - Awareness of physical conditions in classroom
 - Avoidance of distracting behavior and mannerisms
 - Awareness of students as a group and as individuals
 - Enthusiasm for subject taught
 - Interest generated in subject matter
4. Organization and technique
 - Development of presentation
 - Board work and use of other teaching aids
 - Planning of assignments, laboratory experiments and evaluations
 - Encouragement and handling of questions from the class
 - Ability to stimulate thinking
 - Flexibility in use of techniques and materials
 - Use of illustrative examples

CRITERIA FOR PEER LABORATORY OBSERVATION

1. Mastery of subject matter discussed
2. Interactions with students:
 - Rapport
 - Sensitivity to students' difficulties
 - Impartiality
 - Respect
 - Humor
 - Flexibility
 - Avoidance of sarcasm

3. Laboratory presence:
 - Awareness of physical conditions in the lab
 - Avoidance of distracting behavior and mannerisms
 - Awareness of students as a group and as individuals
 - Enthusiasm for subject taught
 - Interest generated in subject matter
 - Adherence to safety rules
4. Organization and technique
 - Development of presentation (if any)
 - Board work and use of other teaching aids
 - Planning of laboratory experiments and evaluations
 - Encouragement and handling of questions from the class
 - Ability to stimulate thinking
 - Flexibility in use of techniques and materials
 - Use of illustrative examples

CRITERIA FOR THE USE OF STUDENT EVALUATION DATA AND RESPONSE

1. The department uses the online Banner student evaluation form and its standard procedures for deployment and reporting. The survey is modified by the addition of two statements for the students to evaluate: “16. The instructor’s use of class time (e.g. office hours, e-mail, BlackBoard, etc.)” and “17. The instructor’s use, and teaching of, proper safety protocols in demos, activities, and/or lab.”
2. Overall rating of the quality of instruction in the course should be rated at least 4.0 out of 5.0 on the Banner Student Evaluation Form. If it is less than this, the candidate must address the reason(s).
3. Candidate’s response must address all other specific scores of less than 4.0 out of 5.0.

CRITERIA FOR EVALUATION OF COURSE CONTENT

1. Syllabi should reflect the Department’s collective decisions concerning multi-section courses. Such decisions may include items such as curricular content, laboratory experiences, texts, and goals.
2. Learning activities should have a clear relationship to course and program goals.
3. Learning outcomes assessment tools should be appropriate. Such tools might include but are not limited to the following: exams, tests, quizzes, papers, reports, projects, lab notebooks, presentations and portfolios.

CRITERIA FOR EVALUATING ADVISING

1. The candidate will do a self-assessment of his/her advising responsibilities, which may include academic advising, mentoring student research and/or advising student clubs. The candidate should specifically address the issue of developmental advising of academic advisees.
2. Student input will be sought through soliciting free-form prose evaluation from selected advisees. The students to be evaluated will be selected from the record of meetings with students provided by the candidate.

CRITERIA FOR EVALUATING THE DEVELOPMENT OF LEARNING ACTIVITIES

1. The candidate will do a self-assessment of these efforts detailing course revisions, new materials and exercises, new types of activities, updating course syllabi, updating and developing new curricula, development of assessment tools for learning outcomes, and other aspects that the candidate thinks constitute development.
2. Submission of documentation supporting these efforts is necessary. Documentation may include but is not limited to the following: description of activities, new course syllabi, details of curricular changes, student handouts, assessment tools, computer assignments, etc.

CRITERIA FOR EVALUATING DEVELOPMENT AS A TEACHER

1. The candidate will do a self-assessment of these efforts including attendance and/or participation in development activities and learning communities of the University, region, and world, maintenance of currency in coursework and pedagogical practices, demonstrated acquisition, trial use, and sharing of knowledge of new pedagogical techniques and knowledge within the faculty member's field of expertise, to help meet the department's mission and goals.
2. Submission of documentation supporting these efforts is necessary. Documentation may include but is not limited to the following: description of activities attended, letters of support from collaborating faculty, descriptions of new knowledge acquired and how it was applied to courses.

SPECIFIC REQUIREMENTS FOR PROMOTION

Each candidate will submit a portfolio of information to be judged. It will contain each of the following items.

1. Peer evaluations (§4.1123 FPMOA). Two evaluations from the previous year must be submitted: one for classroom activities and one for laboratory activities.
2. Student evaluations (§4.1124 FPMOA).
3. Self-assessment of advising activities, meeting records, and summary of the student survey.
4. Self-assessments of academic instruction, development of learning activities, and development as a teacher (§4.112, §4.13 and §4.14 FPMOA) including goals and evidence of success in realizing these goals.
5. Representative syllabi from courses taught and, if applicable, a representative list of laboratory experiments, including details of the learning outcomes assessment tools.
6. Teaching development plan.

Teaching is our primary task, and candidates for promotion to Assistant Professor, Associate Professor or Full Professor need be excellent teachers. This is to be demonstrated by high evaluations from students as well as peers, a clear record of development as a teacher, and the development of learning activities. The candidate's self-assessment should clearly explain efforts to achieve and maintain excellence.

Assistant Professor

The candidate's self-assessment and other evidence should show a consistent record of improvement in all the areas of evaluation described above. The focus should be on the specific courses taught by the candidate and not necessarily on the curriculum as a whole.

Associate Professor

The candidate's self-assessment and other evidence should show a consistent record of improvement in all the areas of evaluation described above. The focus should be on the specific courses taught by the candidate and not necessarily on the curriculum as a whole. There should be demonstrable strength in several of the evaluation areas: classroom teaching, laboratory teaching, advising, development as a teacher, and/or developing of learning activities.

Full Professor

The candidate's self-assessment and other evidence should show a consistent record of improvement in all the areas of evaluation described above. The degree of improvement need not be large in a numerical sense since the student evaluations should already be high. The record must clearly show a consistent development effort in all areas that is expected to continue unabated throughout the candidate's career. There should be demonstrable strength in all of the evaluation areas: classroom teaching, laboratory teaching, advising, development as a teacher, and/or developing of learning activities.

The focus should include both specific courses taught by the candidate and the curriculum as a whole. There should be clear evidence of leadership in this development effort. A candidate for Full Professor should be setting an example for others in the Department and mentoring those less experienced.

CRITERIA FOR EVALUATING SCHOLARLY AND CREATIVE ACTIVITY

Each faculty member is expected to maintain currency within his/her chosen field, and this cannot take place without continued scholarship and research. Such efforts will clearly enhance the Department's mission of providing students with a research-rich environment at all levels of coursework.

Scholarship and research activities in the Department of Physics and Astronomy are recognized as research and scholarship in physics and astronomy including efforts in science education. All faculty members are expected to perform primary research activities as well as appropriate secondary activities.

Candidates should address any and all such activities within the written self-appraisal. Any evidence of scholarly activity (abstracts, duplications of first pages from publications, grant proposal cover pages, etc.) may be placed within the Supplemental Folder.

Primary Research Activities:

- Publishing research activity and results in refereed (peer-reviewed) journals
- Grant proposal writing and submission for research activity

Secondary Research Activities:

- Writing and publication (by commercial or academic off-campus publishers) of chapters for science literature review manuscripts, science textbooks, laboratory manuals or academic/scientific computer software
- Oral or poster presentations of research at scientific or professional meetings
- Mentoring research students in projects, especially those that lead to publication or presentation by the student at scientific meetings
- Contributions towards departmental instructional improvement based on science education research (e.g., new courses, demonstrations, laboratory experiments, visual aids, application of computers, developing new software) with appropriate assessment thereof
- Research published without peer-review
- Unpublished research

SPECIFIC REQUIREMENTS FOR PROMOTION

Assistant Professor

A candidate for the position of Assistant Professor should be engaged in scholarship and research. The self-assessment by the candidate must clearly demonstrate that this effort is a priority. It should include a detailed list of the items from the lists above. Each item must be carefully and fully explained, describing how each fits the overall plan of the candidate. Evidence should be present demonstrating how future research will be funded from outside sources. Research done with the participation of students is especially valued.

Finally, a candidate will have conceived a development plan addressing the issue of future research and scholarship efforts which includes a plan for professional development in the broadest sense. The candidate must clearly demonstrate a record of scholarly effort that will continue.

Associate Professor

A candidate for the position of Associate Professor must be engaged in scholarship and research on a continual basis. The self-assessment by the candidate must clearly demonstrate this continuing effort and should include a detailed list of the items from the lists above. Each item must be carefully and fully explained, describing how each fits the overall plan of the candidate. Outside evaluations can be part of the documentation to demonstrate the program's significance.

It is clear that research in science has a high cost, and the seeking of funding is an important part of a continuing effort. Documentation should include reviews of unfunded grant proposals as well as copies of funded and unfunded proposals.

There is high value placed on research done with the participation of students. However, the Department recognizes the extra effort needed to involve undergraduates and know that such involvement may reduce the pace of research and lower overall production of publishable results.

Finally, a candidate will have conceived a development plan addressing the issue of future research and scholarship efforts which includes a plan for professional development in the broadest sense. The candidate must clearly demonstrate a record of scholarly effort that will continue.

Full Professor

A candidate for the position of Full Professor should be not only be engaged in research and scholarship as described above and present clear evidence to prove this involvement but also should be making significant contributions to his/her field that are recognized outside the University. This requires a record of publications and presentation appropriate to the specific field. Demonstration of the significance must include letters of reference from scientists in the field chosen from a list submitted by the candidate. The candidate should also submit other types of evidence such as a citation record, invitations to present at major conferences, letters from collaborators, annotated lists of presentations, and other such materials.

The research program of a candidate for Full Professor should be progressive and mature in the broadest sense. The candidate should be setting an example for others in the Department. The record should show a consistent effort in creative activities that is expected to continue unabated throughout the candidate's career.

The candidate should have secured external funding for his/her research program and provide the details as described above for the Associate Professor. This issue will be judge with the understanding of the different funding needs of various programs and exigencies of outside funding agencies.

Finally, a candidate will have conceived a development plan addressing the issue of future research and scholarship efforts which includes a plan for professional development in the broadest sense. The candidate must clearly demonstrate a record of scholarly effort that will continue.

CRITERIA FOR EVALUATION OF SERVICE

CONTRIBUTION TO THE UNIVERSITY COMMUNITY

It is expected that all faculty will share in the work load of operating and improving the Department, College and University. The following activities are considered in judging the contributions of a candidate. A self-assessment statement will address this issue and be accompanied by letters attesting to the contributions whenever possible.

1. Active participation in Departmental discussions concerning the regular business of the Department
2. Service on Departmental Committees (regular or ad hoc)
3. Service on College Committees (regular or ad hoc)
4. Service on University Committees (regular or ad hoc)
5. Development of new programs, courses or syllabi
6. Writing grants to obtain funding for curricular or instrumental improvements
7. Participation in student-related activities

CONTRIBUTION TO THE WIDER AND PROFESSIONAL COMMUNITY

Each faculty member is expected to participate in the success of their profession by contributing in some of the following ways. A self-assessment statement will address this issue and be accompanied by letters attesting to the contribution whenever possible.

1. Active participation in professional societies, including chairing of significant committees and organizing or presenting workshops and symposia
2. Attendance at professional society meetings and conferences
3. Membership in professional societies
4. Business, industrial and public body consultancies where the individual's professional expertise is requisite for appointment; including grant review panels, reviewing of textbook or journal manuscripts, and reviewing of academic science programs at other institutions
5. Participation in outreach activities to elementary, middle and high schools such as speaking to classes, demonstrations, judging science fairs, etc.

SPECIFIC REQUIREMENTS FOR PROMOTION

Assistant Professor

A candidate for the position of Assistant Professor will have served on several Departmental, College and/or University committees and made appropriate contributions. There should be clear evidence of participation in Departmental deliberations and activities. There should be clear evidence of participation in at least some of the items listed above under professional

responsibilities. The candidate should have appropriate memberships in national and/or local organizations.

Associate Professor

A candidate for the position of Associate Professor will have served on several Departmental, College and/or University committees and made appropriate contributions. There should be clear evidence of participation in Departmental deliberations and activities which should include a leadership role on occasion such as leading a search for a new faculty member and volunteering for recruitment tasks and writing assignments or data collection. There should be clear evidence of participation in at least some of the items listed above under professional responsibilities. The candidate should have appropriate memberships in national and/or local organizations.

Full Professor

A candidate for the position of Full Professor should meet the criteria detailed above for the rank of Associate Professor but the level of activity should be higher. The focus is on the quality of the effort and not the quantity. There should be clear evidence of the candidate taking a leadership role in these activities. The candidate will provide letters from persons who can speak to the candidate's leadership role.

The candidate should be setting an example for others within the Department. There needs to be a record of continuity of effort with the expectation of future participation in the work of the University, College, Department and profession.