

**College of Natural Sciences and Mathematics**  
**Department of Physics and Astronomy**  
**Policy on Reappointment, Tenure, and Promotion (RTP)**

**1.0 Guiding Principles and Preamble**

This document articulates how the Department of Physics and Astronomy implements the criteria and standards set forth in the College of Natural Sciences and Mathematics (CNSM) RTP policy. The guidelines below describe discipline-specific expectations in the Department for demonstrating achievement in research, instruction, and service, consistent with College and University policy.

The faculty of the department has an indispensable role in supporting the overall educational mission of the university, college, and department. While all units and bodies of the university have a duty to advance this overall mission, it is the tenured and tenure-track faculty alone who have been charged with responsibilities in instruction, the creation of new knowledge as a pedagogical tool, and the running of the various academic projects and programs of the university.

The faculty of the department is dedicated to a mission whose major components are:

- \* to provide high-quality instruction by faculty, for whom excellent teaching is a high priority and who produce ideas and innovations that continually improve teaching and learning;
- \* to conduct original research that leads to new knowledge, and to publish and present scholarly and creative works that advance all fields of physics, astronomy, and physics education;
- \* to provide opportunities for students to participate in research projects with faculty, who consider continuing scholarly activity a responsibility both to their students and discipline;
- \* to seek external funding from public and private sources in support of our mission;
- \* to provide students and faculty with high-quality learning and teaching environments, respectively, and to foster an atmosphere that encourages and supports collegial interaction, personal growth, and intellectual achievement;
- \* to support a diversity of emphasis and expertise in faculty assignments, because the department's goals are most fully realized when each faculty member maximizes their contribution, though those contributions may differ in area and emphasis.

Evaluators should recognize that the establishment of a fully functional and productive research laboratory in physics can vary significantly across sub-fields, depending on the nature and complexity of the work. Candidates are encouraged to describe any such setup-related circumstances that may have influenced the timing of their research accomplishments.

**2.0 Criteria Related to Areas of Evaluation**

The RTP areas of consideration are defined in the CNSM CSULB RTP Policy in Article 2.0. If not specifically designated in the university or college RTP policies, a candidate must identify the area—instruction and instructionally related activities; research, scholarly and creative activities (RSCA); service and engagement at the university, in the community, and in the profession—in which a given contribution is to be considered. The specified contribution will only be considered in the one identified area and will be excluded from consideration in the other two areas. If the committee decides that a contribution belongs in another area, the committee will provide written justification.

In addition to assessing the quality and quantity of specified requirements for ratings of “Competent” and “Excellent”, the evaluators shall apply a holistic and comprehensive approach when assessing the overall quality and significance of the candidate’s accomplishments in each area of evaluation.

## **2.1 Instruction and Instructionally Related Activities**

The candidate should refer to Articles 2.1 through 2.2 of the CNSM RTP Policy with the following emphases and specifics.

Given the department’s mission, the faculty members are expected to provide high-quality instruction and produce ideas that contribute to the improvement of teaching and learning. The department RTP committee will evaluate the candidate’s contributions in a) teaching lecture or laboratory classes, with consideration of all courses at every level taken into the analysis of performance and b) the quality of mentoring that students receive in research and directed study. These contributions will be the most important factors in assessing instruction and instructionally related activities in the department.

- i. Candidates will specify student learning outcomes for their courses. For course assessment purposes, candidates will submit artifacts of student work from examinations demonstrating acquisition of disciplinary skills such as physical reasoning and mathematical calculations. Assessments of 100-level courses may include pre-instruction/post-instruction scores on multiple-choice instruments recognized and validated by the physics education research community (e.g., the Force Concept Inventory).
- ii. Peer observation of instruction will occur as described in the CNSM policy.
- iii. Candidates and evaluators will analyze the standard university course evaluations in the context of department and college means and should comment on any qualitative factors affecting these evaluations. Evaluators and candidates shall treat grading information and practices with care. Interpreting grading distributions divorced from the overall context of the pedagogical tools in use in a particular course can lead to both false pictures of deficiencies as well as excellence. The CNSM RTP policy gives the guidance that courses with a low completion rate should be analyzed by the candidate in their narratives. Important factors to consider are the number of preparations for different courses in a given semester, the enrollment of the courses involved, if a course is being newly taught in a given semester, level of course, and any other factor strongly affecting the effort required to teach a given assignment.
- iv. Mentoring research students means substantial participation, evaluated in quality of the creative activity of the student and quantity of mentored students, in the supervision of student research, thesis research supervision, and the preparation of students for the presentation of such research, in addition to successfully bringing such research to a form of reportable conclusion in a reasonable time.

## **2.2 Research, Scholarly, and Creative Activities**

Given the department’s mission, candidates are expected to conduct scholarly research on an ongoing and sustained basis. Each candidate for tenure or promotion is required to have a record of publication that provides evidence of

- i. the quality of their scholarly activity, and
- ii. a sustained research program that involves students.

For purposes of alignment with the intent of the CNSM policy, the Department of Physics and Astronomy defines the phrase “identified as a senior investigator”, as used in paragraph 2.3.1 of

the CNSM RTP Policy, to mean that the candidate appears as an author on the publication *and* that the candidate has made a major contribution to the work presented in the publication as described in the candidate's narrative and assessed by evaluators. Candidates will specify what, if any, institutional support they received to produce research contributions, be they reassigned WTU, stipends, grants for equipment or other resources.

### 2.3 Service

Service includes service to the discipline, the departmental community (including students and staff), the college, the university, the local or the professional community. Meaningful service must be clearly related to the mission of the university. Candidates will specify what, if any, institutional support they received to produce service contributions, be they reassigned WTU, stipends, grants for equipment or other resources.

### 3.0. Responsibilities and Procedures in the RTP Process

Candidates should note that the narrative must include both a record of the adjustments the candidate has made in response to earlier reviews, if any, and, further, a plan for ongoing professional growth.

A major responsibility of the candidate is to make their narrative as clear and cogent as possible to colleagues whose special expertise lies outside the disciplines of the department. These colleagues serve at every level of the RTP decision-making process.

- i. The candidate shall submit a narrative (of no more than the page limit specified in section 3.1 of the college policy) that describes goals and accomplishments during the period of review, including a clear description of the quality and significance of contributions to the three areas of review: 1) instruction and instructionally related activities; 2) research and scholarly and creative activities (RSCA); and 3) service to the university, college, department, community, or disciplinary organizations. The candidate must write in their narrative a description of their teaching efforts including ongoing professional development as a teacher and in the discipline citing evidence. The candidate will clearly describe the overall goals and progress of the scholarly research, the nature of student involvement, the candidate's professional development, and service.
- ii. The candidate shall provide all prior RTP reviews and periodic evaluations over the full review period, including candidate's responses or rebuttals, if any.
- iii. The availability of resources, such as assigned time, from the university, the college, or the department may be addressed by the candidate in their narrative.
- iv. The candidate shall provide all required supplemental documentation, including summary sheets from student evaluations and an index of all supplementary materials.
- v. The documentation should include a description of total teaching assignment each semester, which includes consideration of the official number of WTUs of student contact each semester during the period of review, the level of the courses (100-level to 600-level), and the typical enrollment.
- vi. The candidate is responsible for providing the documentation as well as the context of the achievements. The candidate shall make clear in their materials the activities pertaining to the review period.

### 4.0 Timelines

Candidates and committees are responsible for following the timelines for this process as laid out in the relevant instructional memo from the University.

## **5.0 Reappointment, Tenure, and Promotion Criteria**

The Department of Physics and Astronomy recognizes and endorses Articles 5.0 through 5.5 of the CNSM RTP Policy, with the following definitions, criteria, and clarifications.

### **5.0.1 Criteria for a “Competent” or “Excellent” Rating in the Area of Instruction and Instructionally Related Activities**

A rating of “Excellent” in a given area indicates that the candidate has significantly exceeded the standards of a “Competent” rating for that area. In each area, the quality of the overall achievement of the candidate is paramount.

**5.0.1.1 A “Competent” rating in the area of instruction and instructionally related activities** is characterized by university student evaluations reasonably consistent with or exceeding departmental expectations for the same or comparable courses, courses conducted of the appropriate level and content meeting the needs of students to progress in their studies, and effective guidance of supervised research students. Each course should prepare the students for more advanced courses for which the course in question is a prerequisite and build on previous courses in the department. The material presented should be appropriately chosen and current. Course policies and grading practices shall comply with those of the university and college and must be clearly conveyed to students in a timely fashion. The results of grading practices should be consistent with department expectations for the same or comparable courses.

**5.0.1.2 An “Excellent” rating in the area of instruction and instructionally related activities** indicates evidence of sustained success in teaching students in the classroom and achieving student learning outcomes. The department places value on mentoring research students. Substantial participation, evaluated in quality and quantity appropriate for each field of physics, in the supervision of student research, theses research supervision, and the preparation of students for the presentation of such research, in addition to successfully bringing such research to a form of reportable conclusion in a reasonable time, is an important and vital function of teaching within the department. A faculty-led project that leads to a peer-reviewed publication or equivalent with a CSULB student as a significant contributor and co-author is considered strong evidence of instructional excellence. Candidates should address how students engaged in research under their mentorship demonstrated growth and learned new skills. However, such projects alone are not sufficient for an ‘Excellent’ rating; excellence must also be demonstrated through effectiveness in the classroom and meaningful mentoring. For the purposes of evaluation, a peer-reviewed publication or equivalent with a student co-author may be classified by the candidate as a contribution in this area, but the research and creative results of the work are distinct and separate and can be claimed as a contribution in the candidate’s scholarly work.

We recognize that substantial contributions can be made in many areas of teaching and mentoring, and examples of activities that may give rise to the level of a rating of “Excellent” are given in the CNSM RTP Policy in Article 2.2.8. The list below supplements the list of *Examples of Products/Activities* in Article 2.2.8, and is meant to be illustrative of possible activities, neither ordered nor exhaustive of the possibilities. What is determinative toward a rating of “Excellent” is not any particular activity on the lists of examples. Rather, the committee shall look at the overall quality and pattern of participation by the candidate during the period under review. The list is as follows:

- i. preparation of grant proposals for external funding for teaching projects or instructional laboratories, particularly if funded through a peer-review process;
- ii. development of a new course that is relevant to the curriculum;
- iii. organization of or chairing of sessions at meetings such as those of the AAPT;
- iv. assessment of one's own teaching effectiveness to improve performance in the classroom;
- v. organization and participation in special scholarly activities for students; mentoring research of students from high schools, other colleges, or universities;
- vi. support and mentorship of student organizations like the Society of Physics Students (SPS), unless the candidate specifically wishes student organization advising to be considered under service; and
- vii. other activities that lead to an enhancement of teaching effectiveness, as described and supported by materials in the candidate's narrative and attachments.

### **5.0.2 Criteria for a "Competent" or "Excellent" Rating in the Area of Research, Scholarly, and Creative Activities**

#### **5.0.2.1 A "Competent" rating in the area of research, scholarly, and creative**

**activities** requires that the candidate has produced multiple peer-reviewed publications or equivalents in reputable sources of research literature in Physics or Astronomy during the review period. Invited book chapters, topical review articles or peer-reviewed conference proceedings published by the candidate during the review period shall be counted towards this body of scholarly work. At least two of the peer-reviewed publications shall be in an academic, peer-reviewed journal. The candidate must make a significant contribution to the publications or equivalents, which must be a part of a research program developed by the candidate while a member of the faculty.

#### **5.0.2.2 An "Excellent" rating in the area of research, scholarly, and creative**

**activities** requires a record of peer-reviewed publication in the period of review over and above that required for the "Competent" rating. In addition, other RSCA contributions are required. These may include successfully funded external grant awards in which the candidate appears as an author or PI and has made a major contribution to the work. Faculty should describe their efforts and the process by which they guide students toward scholarly outcomes (such as theses, peer-reviewed publications, or conference presentations), as the department places high value on mentoring students and regards such contributions as an indicator of instructional excellence.

The list below supplements the list of *Examples of Products/Activities* in the CNSM RTP Policy, is meant to be illustrative of other possible activities, and is neither ordered nor exhaustive of the possibilities that may be considered in this category. A rating of "Excellent" is not warranted by any particular activity on the lists of examples, rather the committee shall look at the overall quality and pattern of participation by the candidate during the period under review in order to justify a rating of "Excellence". These additional examples include:

- i. high-quality applications for external funds to support ongoing scholarly and creative work;
- ii. peer-reviewed research publications or equivalents and awards in the area of physics, including physics education research or astronomy;
- iii. colloquia on the candidate's research presented at universities or government or commercial laboratories.
- iv. Initiating and sustaining scientific collaborations

- v. peer-reviewed University level awards

### **5.0.3 Criteria for a “Competent” or “Excellent” Rating in the Area of Service**

**5.0.3.1 A “Competent” rating in the area of service** indicates effective service contributions at the department and College level, which must be documented in the narrative. The candidate is expected to broaden their contributions past the departmental level after reappointment. This documentation will typically involve a description of achievements as a member of various elected, standing, or *ad hoc* committees.

**5.0.3.2 An “Excellent” rating in the area of service** will be documented by significant leadership in service within the department, service activity at the college, and service at either the university, or in the professional discipline community. The emphasis in the evaluation shall be on the quality and significance of the service activities and the extent and level of involvement. The quality of that service is the primary consideration. Service contributions based on discipline-related, voluntary consultancies must be clearly related to the university profession of the faculty member.

**5.1 Reappointment Consideration for Probationary Faculty (Article 5.1 of the CNSM RTP Policy):** The Department of Physics and Astronomy recognizes and endorses Article 5.1 in the CNSM RTP Policy.

### **5.2 Awarding of Tenure (Article 5.2 of the CNSM RTP Policy):**

To merit a recommendation for tenure from the Department Committee, the candidate must receive a rating of “excellent” in either Instruction and Instructionally Related Activities or in RSCA. Should the department chair elect to submit an independent evaluation, the same standard shall apply to that evaluation. Tenure recommendations are based on the positive evaluation of the quality of the candidate’s overall record of accomplishments at CSULB and a demonstrated potential for the continuation of this record.

### **5.3 For Promotion to Associate Professor (Article 5.3 of the CNSM RTP Policy):**

To merit a recommendation for promotion from the Department Committee, the candidate must receive a rating of “excellent” in either Instruction and Instructionally Related Activities or in RSCA. Should the department chair elect to submit an independent evaluation, the same standard shall apply to that evaluation.

### **5.4 For Promotion to Professor (Article 5.4 of the CNSM RTP Policy):**

A recommendation that a candidate be promoted to the rank of professor indicates that, in the department’s judgment, the candidate is a significant scholar and educator with a track record clearly showing growth and important contributions to all aspects of the department’s core mission. To achieve a positive recommendation from the departmental level, the quality of the candidate’s contributions must be judged at least “Competent” in all areas of review and must be judged as “Excellent” in at least one area.

- i. To merit a rating of “Excellent” in instructionally related activity, a candidate must meet the standards set forth in 5.0.1.2 and have a clear record of effectively using course assessments to address the quality of both teaching and learning.
- ii. To merit a rating of “Excellent” in RSCA, the candidate’s program of research must be ongoing and productive at a level significantly higher than that set forth in 5.0.2.2. Activities drawn from contributions in Article 2.3.2.3 of the CNSM RTP Policy and

Article 5.0.2.2 of this policy may be cited as evidence in support of a rating of "Excellent".

iii. To merit a rating of "Excellent" in service, a candidate must have displayed sustained leadership within the department, meeting the standards set forth in 5.0.3.2, and must have served as an elected officer of a standing or *ad hoc* committee at the university or college level, or by serving as an elected officer of a professional physics organization.

### 5.5 Early Tenure or Early Promotion

The department endorses the language of the college policy, Section 5.5. We interpret Section 5.5 of the college policy as providing a framework through which the department can provide advice to reviewers at other levels. A negative decision by the department on any early consideration request will be made without creating any negative inference for any future review. The candidate must achieve an "Excellent" rating in all three areas of review and substantially exceed departmental requirements in at least one. Suggestive specific examples of such exceptional achievements made by the candidate while at CSULB, in addition to the representative items in 5.5.2 of the CNSM RTP policy, are:

- Authorship of a peer-reviewed published textbook, monograph or equivalent in Physics at the advanced undergraduate or graduate level
- Peer-reviewed University level awards for excellence in research, student mentoring, instruction or inclusive excellence
- Development of patents or licensed technologies.
- Multiple keynote talks at topical conferences and research meetings
- Successfully leading multi-institutional or multi-disciplinary grants

This list is not exhaustive. It is the candidate's burden of proof to make the argument that any particular contribution supporting an early decision is of exceptionally high quality. Candidates may quantify the exceptional nature of their achievements through appropriate statistical measures. They may wish to note the rarity of the contribution in the historical context of the department and university. Thus, it will never be sufficient to simply check off items on a list to build a case for an early decision. Candidates should be aware that evidence that trained physicists would accept as documenting exceptionally high quality may not be sufficient to convince any other level of review of that fact.

Simply put, a positive early decision in a tenure or promotion process represents the most serious commitment to the candidate on behalf of the entire university, and ultimately the population of the State of California. Candidates should approach requesting early consideration with care.

### 6.0 Amendments

Amendments to this policy will be considered upon submission to the department with the signatures of three tenured or probationary members of the faculty of the department. Written notification to all tenured and probationary faculty members must be provided at least five working days prior to the close of balloting. Affirmative votes by a majority of the tenured and probationary faculty by secret ballot will be required to ratify the amendment. This means a majority of the faculty eligible to cast ballots (not a majority of the ballots cast) must vote in favor of the amendment. Amendments to this policy shall become effective when they have received a favorable vote, and they have the approval of the college council, the college dean, and the provost.

*Referential* amendments to this policy (i.e. when a section number of the CNSM or University policy is changed through the ordinary procedure) may be made

367 administratively at the discretion of the Chair of the department with notification to the  
368 department through a regular agenda item in a meeting of the faculty.