DEPARTMENT OF BIOLOGY, CHEMISTRY AND ENVIRONMENTAL SCIENCE
Departmental Standards for Teaching, Scholarship and Service

The following are guidelines developed by the department to assist the candidate in meeting the tenure and promotion standards set forth in the University Handbook, Section XII. However, the University Handbook is the final authority on matters of tenure and promotion.

A. Teaching Effectiveness

The following criteria will be used to evaluate quality of teaching:

Course development and planning:

- Syllabus:
  - Identification and statement of appropriate objectives
  - Definition of standards of grading, attendance, and student responsibilities
  - Designation of texts and related readings and assignments
- Management of course content
- Incorporation of innovative teaching techniques as appropriate

Use of appropriate instructional methods. Examples may include (but are not limited to):

- Lecture
- Seminar
- Projects
- Invited lectures or resource persons
- Class reports
- Audio-visual aids
- Computer assignments
- Demonstrations
- Laboratories
- Independent research
- Classroom handouts
- Innovative teaching methods
- Writing assignments
- Web- and technology-based instructional activities

Evaluation of student learning:

- Course-appropriate devices used to measure learning such as written exams, oral exams, quizzes, papers, classroom participation, lab reports, oral presentations, and take-home exams
- Appropriateness of assessments with respect to course material and learning objectives
- Timely review of assessment instruments toward the evaluation of progress to date

Fulfillment of other teaching responsibilities:

- Meeting class on time
- Meeting departmental and university deadlines such as timely submission of syllabi and grades
- Posting and holding appropriate office hours
- Timely grading and return of examinations and other assignments
- Timely distribution of student evaluations along with compliance with established procedures for administration of this activity

Interpersonal effectiveness both as a teacher and colleague:

- Respecting students and responding to their learning needs
- Teaching through mentoring
- Appropriately managing student questions and comments
- Contributing to the development of teaching skills of other faculty members

Classroom evaluation:

- Pattern of satisfactory student evaluation by way of IDEA or other evaluation system
- Pattern of satisfactory peer evaluation by way of classroom visitation and observation by the departmental review committee (DRC) members and other departmental members

B. Professional Development

In science, new knowledge is gained by conducting research, asking and answering questions by way of objective testing and analysis of hypotheses. This is true for both established scientists and students entering the discipline. At a liberal arts institution research involving students is a key component of both student learning and professional development.

Science, by its very nature, is a field in which productivity, as measured by the universally accepted standard of peer-reviewed publications, is highly variable. Many projects take years of work before enough data are collected for publication and, within the broad classification of "science," there is a great diversity of research experiences (e.g. laboratory or field work). The nature and specifics of the project undertaken mandate that some researchers will require a significant amount of time to establish a program of scholarship while others will not. Likewise, some will need external funding or need to purchase specialized equipment while others have only limited needs. For these reasons, it is inappropriate to set an absolute, quantitative standard by which professional development and scholarship in all scientific fields represented in the department will be judged. Therefore, the number of scholarly activities appropriate for tenure/promotion should, and will, vary.

The measure of success in professional development should be a well-defined scholarly program that is appropriately productive and intellectually engaging. This will be documented by a combination of the following scholarly activities that individually indicate different levels of productivity and engagement:

Peer-reviewed journal articles -This includes articles in the scientific or science education literature. Articles may be single or multi-authored, and it is especially commendable if students are co-authors (Student authors will be identified.). In multi-authored products a brief description of the candidate's contributions will be provided, but order of authorship is not a criterion of evaluation.

Peer-reviewed conference proceedings - This includes manuscripts presented at scientific or science education conferences and published in the corresponding peer-reviewed proceedings. Manuscripts may be single or multi-authored, and it is especially commendable if students are coauthors (Student authors will be identified.). In multi-authored products a brief description of the candidate's contributions will be provided, but order of authorship is not a criterion of evaluation.

Peer-reviewed, **published abstracts**.

Publication of a book (author or editor) - It is the responsibility of the candidate to provide evidence in support of the quality and magnitude of the work.

Chapter in a book or monograph - This includes book chapters or monographs published by university or scholarly presses in the following stages of development: in print, in press, accepted for publication, and accepted with revisions.

Funded grants - Funded external grant (public or private) as principal investigator or Co-PI.

Submitted grant proposals - This includes grant proposals (public or private) submitted as principal investigator or Co-PI. It is the responsibility of the candidate to provide documentation in support of the quality of the submission.

Professional conference presentations - This includes presentations at any professional conference, with either the candidate or a mentored-student making the presentation.

Technical reports - This includes in-depth reports of the results at the end of a contract or project. The report should include all data, data analysis and interpretation.

Student publication with faculty member in an undergraduate research journal.

Mentoring undergraduate and/or graduate students in research.

Production of an in-house field guide, lab manual or other similar work.

Performing commentary and editorial review of grants, manuscripts, and book chapters. (Note: this item also appears in service. It is the responsibility of the candidate to validate their participation in an activity listed and prove extent of technical expertise needed.)

Authorship of software or a major video - Videos must be technical productions with inclusion of original ideas.

Web-based scholarly products.

Attendance at professional courses and conferences.

Development of new courses and curricula.

Participation in professional societies.

C. Service to the Department, University and Community

The following criteria will be used to evaluate service:

Advising

Conducting non-classroom activities in support of the department or university.

Contributing as a member of elected or appointed committees or in other faculty roles.

Making the community aware of the presence of the university

- by providing professional expertise
- by serving in community organizations

Actively participating in professional organizations.

Performing commentary and editorial review of grants, manuscripts, and book chapters.

Mentoring undergraduate and/or graduate students

Contributing to the department's commitment to teaching in the Liberal Learning Curriculum, when departmental resources allow

EVALUATION FOR TENURE/PROMOTION TO ASSOCIATE PROFESSOR

The standards are:

1. A history of positive teaching evaluations by students and peers,
2. A clearly defined scholarly program with a documented history of productivity and evidence of maturation as a scholar (including projects independent of the graduate research advisor),
3. A record of engagement through department, university and community service.

EVALUATION FOR PROMOTION TO FULL PROFESSOR

The Department will follow the standards as stated in the University Handbook:

1. Consistently meeting or exceeding the expectations of the rank of associate professor,
2. A history of excellent teaching effectiveness,
3. An outstanding record of engagement through department, university and community service,
4. Continued productivity in professional development evidenced by additional products of scholarship since the promotion/tenure review,
5. Documentation to support great stature as a member of the department, university and community,
6. A history of strong positive annual and post-tenure evaluations.

The criteria used in tenure/promotion to associate professor decisions as described above will be the evidence provided to document a candidate's meeting of these standards. Candidates are invited to consult with the department chair and the Dean for further guidance.