

# Roles, Scope, Criteria, Standards and Procedures of the

(Name of Department/School/College)

Effective Date: July 1, 2022

## APPROVALS

## SIGNATURE

## DATE

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Department Faculty

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Chair, Primary Review Committee

Michael Babcock  
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# **Role and Scope Document for Department of Earth Sciences**

## **I. Role and Scope of Unit**

### **Introduction**

Montana State University, the State's land-grant institution, educates students, creates knowledge and art, and serves communities, by integrating learning, discovery, and engagement. The Department of Earth Sciences is a vital component of the College of Letters and Science at Montana State University. The faculty, staff, and administrators in the Department of Earth Sciences support the fulfillment of the University and College of Letters and Science's teaching, scholarship, and service mission in the areas of Geography and Geology, with equal importance placed on each field.

The role of the Department of Earth Sciences is to offer courses, conduct research, and provide service that integrates geographic and geologic principles to better understand Earth and its inhabitants. This integration includes atmospheric, biological, geological, hydrologic, societal, cultural, historical, and economic perspectives. The disciplines of geography and geology are valued equally in the Department.

### **List of Academic Programs of the Department:**

#### Undergraduate

- Bachelor of Science in Earth Sciences
  - Geography
  - GIS and Planning
  - Snow Science
  - Paleontology
  - Geology

#### Minors in Earth Sciences

- Geography
- Geographic Information Systems
- Geology
- Earth Science Teaching

Graduate Level (Focus areas in Geology, Geography, and Geobiology)

Master of Science in Earth Science  
Doctor of Philosophy in Earth Science  
Doctor of Philosophy in Ecology & Environmental Sciences (university  
interdisciplinary degree option)

University Programs with Earth Sciences Cooperation  
Undergraduate  
    Water Resources Minor  
Graduate  
    Master of Science in Land Rehabilitation

Centers with Earth Sciences Cooperation  
Center for Western Lands and People  
Human Ecology Learning and Problem Solving (HELPS) Lab  
Montana Institute on Ecosystems  
Imaging and Chemical Analysis Laboratory (ICAL)  
Thermal Biology Institute  
Energy Research Institute  
Museum of the Rockies

### **Emphasis of Department Research and Creative Activity:**

- Geology and geography using the outstanding natural laboratory of the mountains and plains of the Yellowstone Region and western North America.
- Geologic and tectonic processes.
- Human dimensions of land, food, energy, water, and their interactions in historical and present contexts.
- Human decision-making, and stakeholder engagement and planning processes across urban, rural, and working landscapes.
- Advancement of spatial science and measurements of the Earth across geographies and disciplines.
- Earth surface processes, particularly those related to snow, water and tectonics.
- Paleoecology, paleobiology, and vertebrate paleontology.

### **Scholarship**

Consistent with the role and scope of the College of Letters and Science, scholarship is of equal importance to teaching in the Department of Earth Sciences. Active research programs with continuous records of accomplishment are maintained in conjunction with undergraduate and graduate teaching programs and service responsibilities.

The scope of the Department's funded and unfunded research includes basic and applied sciences and social sciences focused on the Earth system and its inhabitants. Basic and applied research are valued equally.

The scope of the Department's research complements its teaching and advising activities, especially at the graduate level, where student research often directly overlaps with the research interests of faculty.

### **Teaching**

Teaching is a key mission of the Department of Earth Sciences. Courses are offered for MSU general education (CORE), as well as disciplinary options and minors at the levels of Bachelor of Science, Master of Science, and Doctor of Philosophy. The Department fosters innovative and effective teaching that supports an integrative Earth Science view. This view includes primary material from Geography and Geology and multi- and interdisciplinary perspectives. The departmental scope encourages interaction with faculty and students from other disciplines in all colleges where an Earth Science perspective is relevant. The teaching program also provides students with an appreciation for the breadth of the fields of Earth Science, Geography, and Geology as well as specialized knowledge and skills that can lead to opportunities for personal development, employment, and/or graduate education. Inquiry, problem solving, integrative analysis, and critical thinking skills are stressed at all academic levels. Student advising at the undergraduate and graduate levels is an important component of teaching. Faculty provide academic counsel to students in their classes within the major, and on thesis and research committees both within and outside the Department.

### **Service**

The Department of Earth Sciences is dedicated to providing service in the spirit of a land grant institution by integrating learning, discovery, and engagement. The scope of service includes faculty participation on departmental, college and university committees and administration; affiliation and participation with interdisciplinary research centers; outreach service to the community and general public; and service to the field of geography or geology through scholarly contributions and involvement with national organizations. Although service is a component of the role and scope of the Department, it is less important than the primary roles of teaching and scholarship.

## **II. Appointment and Advancement of Research Faculty**

**Procedures for appointing Research Faculty** - The following procedures should be used in appointing research faculty:

- i. Candidate will make a formal request in writing with the department head.
- ii. If the Department Head approves of the request, the candidate will submit a CV, rationale in support of the requested appointment, and any additional supporting documentation.
- iii. Department head will deliver materials to the faculty and tenure-

track faculty will vote to approve or deny the appointment.

- iv. Appointments will be made at the Assistant Research Professor rank.  
If a candidate seeks a higher rank, then the procedures outlined below will be followed.

**Procedures for promoting Research Faculty** - The following procedures should be used in promoting research faculty to the rank of Associate Research Professor or Research Professor. Note that where applicable, the Department Head will have the same responsibilities regarding the candidate as for tenure track faculty.

- i. Candidate will make a formal request in writing to the Department Head.
- ii. Candidate will submit a dossier that consists of the following:
  - 1. A personal statement or self-evaluation in which the candidate shall discuss his or her accomplishments in research and contributions or potential contributions to the department. This will provide a framework for the review of the dossier.
  - 2. Curriculum Vitae.
  - 3. Any supporting documents, including any articles, publications, creative endeavors, or other evidence that, in their judgment, represents their best efforts to advance the discipline or profession or documents their overall contributions to the department.
- iii. The Department P & T Review Committee (Primary Review Committee) shall review the dossier and prepare a written recommendation, with vote tally, concerning the retention and/or promotion of each candidate, and forward the recommendation to the department head, sending a copy to the candidate. The recommendation becomes a permanent part of the faculty member's personnel files maintained in the department office.
- iv. The Department Head shall also conduct an independent and substantive review of the candidate's dossier and make recommendations regarding retention and/or promotion. The department head will make the final decision regarding retention and/or promotion. In cases of non-concurrence with the recommendation of the P & T Committee, the recommendation shall include a written rationale for non-concurrence.

**Criteria for Research Faculty** - The specific criteria tabulated below for research in the Department of Earth Sciences are not listed in any order of priority or importance. Criteria to be used to evaluate research include:

Publications and presentations:

- Articles published in refereed journals;
- Articles published in non-refereed journals;
- Published books and monographs; chapters of books;
- Book reviews, published letters, and commentary in refereed journals;
- Papers read at conferences; published abstracts of same;
- Invited papers at conferences and symposia; invitations to participate in professional symposia or panels; invitations to chair sessions at professional meetings;

Grants:

- Grants submitted;
- Grants funded;

Research in progress:

- Research currently in progress; development of new research techniques; bringing new research specialties to campus.

Student research:

- Student theses done under the candidate's direction, especially if published and/or read at conferences;
- Other student research projects.

### **Standards for Research Faculty**

**Effectiveness** - The standard for effectiveness is evidence that the Candidate's research and creative activities have had a positive and demonstrable influence on students, colleagues, and/or peers, and that the Candidate meets or exceeds the departmental and college standards appropriate to the Candidate's discipline, assignment, and rank. Evidence of effectiveness in research/creative activity includes:

1. active research, presentations at regional or national professional meetings, publication in refereed journals, and/or publication of a major book; and
2. respect of peers outside Montana State University for the candidate's research.

**Accomplishment** - sustained and commendable performance reflected in the quantity, quality, and impact of scholarly activities and products. These activities and products include items specified as performance indicators in section 8.03. These activities and products must have impact and significance to the public, peers, and/or the discipline beyond the University.

**Excellence** - sustained, commendable, and distinguished performance reflected in the quantity, quality, and impact of scholarly activities and products. These activities and products include items specified as performance indicators in section 8.03. These activities and products must

have impact and significance to the public, peers, and/or the discipline beyond the University.

**Retention of Assistant Research Professor** - The standards for retention of an Assistant Research Professor are effectiveness in research performance and a promise of continuing effectiveness.

**Promotion to Associate Research Professor** - To be appointed as an Associate Research Professor, a faculty member shall, at a minimum, have demonstrated potential for achieving excellence in research/creative activity as required by tenure-track faculty.

**Promotion to Research Professor** - To be appointed as a Research Professor, the Candidate shall, at a minimum, have demonstrated ongoing productivity and leadership as a scholar and evidence of excellence in research and creative activity in his or her field, concrete and indisputable evidence of the Candidate's dedication to his/her profession, and irreproachable integrity as a scholar.

**Roles and Responsibilities for Research Faculty**- Research faculty in the Department of Earth Sciences are non-tenurable faculty whose assignment principally involves research. Their responsibility is to contribute to the research mission of the University and to the scholarly productivity of the Department.

In addition to their research responsibilities, research faculty may participate in other activities, provided these activities comply with the regulations and restrictions of the agency funding their appointment and consistent with University policies. These activities include, but are not limited to, co-chairing of graduate committees with tenurable faculty, serving on graduate student committees, teaching courses, presenting seminars, serving on departmental or college committees, serving on grant proposal review panels, reviewing manuscripts for journals, and related professional activities.

Research professors can participate in department meetings. However, they cannot participate in faculty meetings and/or decisions that concern Retention, Tenure, and Promotion issues.

### **III. Annual Review Process**

**Purpose of Annual Review** - Annual Review will be conducted for Tenure-Track faculty and Non-Tenure Track (NTT) faculty with greater than a 0.5 FTE appointment and not subject to the NTT Collective Bargaining Agreement. NTT faculty with less than a 0.5 FTE appointment can choose to have an annual review if desired. Annual review assesses the faculty member's performance over the preceding calendar year and is based upon the faculty member's letter of hire, role statement, annual assignments, self-



assessment, and the Department Head's evaluation of the individual's performance. Research faculty and non-tenure-track faculty are also subject to annual reviews at the discretion of the Department Head or by request of the faculty member. Reviews must be completed by April 10, or the date specified by the Provost and Vice President for Academic Affairs.

**Letter of Hire/Faculty Role Statement** - The letter of hire identifies the instructional or professional practice expectations of the faculty member's appointment. The faculty member and the department head are responsible for developing, and updating as necessary, the Role Statement which identifies the broad responsibilities each faculty member is expected to perform. Any substantive changes in the expectations and/or the role of the faculty within the Department and University must be approved by the Dean, Department Head, and the Provost and Vice President for Academic Affairs, after negotiation with the faculty member.

Annual reviews evaluate the faculty member's success in meeting expectations identified in the letter of hire or the most recent Assigned % of Effort form. If the assigned percentage of effort is inconsistent with the faculty member's current activities and levels of performance, a revision of the assigned percentage of responsibilities should be discussed by the faculty member and the Department Head. If a modification of the assigned percentages of effort is made, it will be documented using the Faculty Assigned Percentages of Effort Update form.

**Responsibilities of the Department Head** - The Department Head shall assign each faculty member the specific duties and responsibilities that meet department needs and enable the faculty member to fulfill the responsibilities of the position. The Department Head shall ensure that, taken collectively, the assignments of the faculty shall meet the Department's and College's obligations to the University. The Department Head and the faculty member shall annually review the faculty member's role within the department and make modifications as necessary. Any substantial modification of the faculty member's role within the department must be approved by the Department Head, Dean, Provost, and Vice President for Academic Affairs, after consultation with the faculty member.

**Procedures for conducting annual reviews** - The following procedures shall be used in conducting annual reviews:

A. The faculty member and Department Head annually review the faculty member's performance relative to the faculty member's role and responsibilities. Evaluations are expected to recognize the requirements and expectations of the position and the proportionate time and resources officially allocated to particular activities. Each faculty member shall document all information necessary to demonstrate accomplishments and performance in teaching, scholarship, and service for the calendar year in the Watermark Faculty Success database or University-approved alternative program. The faculty member shall also provide additional information

pertinent to the CLS Annual Report and university workload reports at the same time information is provided for annual reviews.

B. Annual reviews will be scheduled with the Department Head early in each calendar year (January-February).

C. The Department Head rates the performance of each faculty member in each area of responsibility and calculates an overall rating for the faculty member's performance for the year, weighted by the assigned percentages of effort using the [Annual Review form](#) approved by the Provost. The faculty member will be given a copy or access to the completed form if created electronically.

D. The Department Head and the faculty member will develop goals and assignments for the next calendar year. The goals and assignments for individual members of the faculty will reflect departmental needs and professional opportunities consistent with departmental strategic plans or articulated departmental priorities.

E. If the assigned percentages of effort are inconsistent with the faculty member's current activities and levels of performance, a revision of the assigned percentages of effort should be discussed. If a modification of the assigned percentages of effort is made as outlined in Section 4 of the [Annual Review Policy](#), it will be documented using the Faculty Assigned Percentages of Effort Update form.

F. The faculty member and the dean will be provided with a copy of or access to the annual review, ratings and any revision of the assigned percentages of effort. Copies of all annual reviews and the performance ratings of each faculty member will be maintained in the faculty member's personnel file in the department. These files shall be kept confidential and maintained as outlined in the [Faculty Personnel Files](#) policy.

#### **IV. Primary Review Committee and Administrator**

##### **Section 4.01 Primary Review Committee-Composition and Appointment**

The Department Review Committee for Retention, Tenure, and Promotion (RTP Committee) shall consist of 3 tenured faculty members, with at least 2 members of Full Professor rank. It is preferred to have all members be at the Full Professor rank. Members shall serve for 3 years, and new members are elected by faculty at the beginning of each academic year. New members will attend the retention, tenure and promotion orientation offered by the Provost's office. The committee shall have at least 25% female and/or minority representation, whenever possible without excessive burden to those committee members. The committee will select a chair. No faculty member may serve on any review committee during the year their Dossier is reviewed.

## **Section 4.02 Primary Review Administrator**

The department head will serve as the primary review administrator.

## **Section 4.03 Identification of responsible entities**

- (a) Establish the Primary Review Committee either by facilitating the election or appointment of the members as described: Review Administrator.
- (b) Select external reviewers and solicit review letters: RTP Committee.
- (c) If internal reviews are part of the unit's review process, select and solicit Internal Reviews: RTP Committee.
- (d) Assure the following materials are included in the Dossier:
  - (i) Internal and external reviewer letters of solicitation, letters from the reviewers and, in the case of external reviewers, a short bio-sketch of the reviewer: Review Administrator.
  - (ii) Applicable Role and Scope Document: Review Administrator.
  - (iii) Letter of hire, any Percentages of Effort changes, all annual reviews, and all evaluation letters from prior retention, tenure, and promotion reviews at MSU: Review Administrator.
  - (iv) Candidate's teaching evaluations from the review period. If the evaluations are not in electronic format, the unit will provide evaluation summaries. Upon request by review committees and review administrators, the unit will provide access to the original evaluations to review committees and administrators during the review: Review Administrator.
- (e) Maintain copies of all review committee Evaluation Letters and internal, (if applicable), and external review letters after the review: Review Administrator.
- (f) After review by the RTP committee - and independently by the Department Head - the Evaluation, upload letters into the candidate's dossier. Send a copy of the letter to the candidate: RTP Committee & Review Administrator.

## **Section 4.04 Next Review Level**

Following the review by the department head of Earth Sciences, the dossier will be forwarded to the College of Letters and Science review committee.

## **Article V. Intermediate Review Committee and Administrator**

### **Section 5.01 Intermediate Review Committee - Composition and Appointment**

The Dean of the College of Letters & Science serves as the Intermediate Review Administrator and she/he appoints an Intermediate Review Committee, which is the College of Letters & Science Retention, Tenure, and Promotion Committee (CLSRTPC). The CLSRTPC document will be followed with respect to the intermediate review committee composition and appointment.

### **Section 5.02 Intermediate Review Administrator**

The Dean of the College of Letters & Science serves as the Intermediate Review Administrator and will follow the CLSRTPC document.

### **Section 5.03 Level of Review following Intermediate Review Administrator**

The next level of review is URTPC.

## **Article VI. Review Materials**

### **Section 6.01 Materials submitted by Candidate**

It is the responsibility of the candidate to demonstrate to the satisfaction of colleagues and professional peers that the standards of performance have been met. The candidate is responsible for submitting the materials identified here as "Materials submitted by the Candidate" and making her or his case for retention, tenure, or promotion.

### **Section 6.02 Materials for external review must include:**

- i. A comprehensive Curriculum Vitae (CV) with teaching, scholarship, and service activities of the candidate.
- ii. A personal statement that includes a description of the candidate's area of Scholarship.
- iii. Selected articles, publications, creative endeavors, or other evidence from the review period that, in the candidate's judgment, best represent their scholarly accomplishments.

### **Section 6.03 Materials for Dossier must include:**

1. The "Cover Sheet," obtained from the Provost's office.
2. A comprehensive CV with Teaching, Scholarship, and Service activities of the candidate.

3. A personal statement that includes a description of the candidate's area of Scholarship.
4. Separate self-evaluations for teaching, scholarship, service, and integration providing evidence that the candidate meets the standards for the attainment of retention, tenure, or promotion, as applicable. Each self-evaluation shall include a summary of activities, selected products or accomplishments, and evidence of recognition itemized by year over the relevant Review Period.

Note that the College of Letters and Science (CLS) requires the candidate to separate the following categories in their CV:

- refereed books or book chapters
- refereed journal articles
- invited book chapters or articles
- invited conference presentations
- contributed conference presentations
- seminars and/or colloquia
- grant proposals submitted and grants funded
- unrefereed publications

The candidate may choose to include other categories as appropriate to the discipline and the candidate's record. On papers, grants funded, and other scholarly products, full author lists must match the publication or grant funded.

#### **Section 6.04 Documentation of Collaborative Scholarly Contributions**

As part of the Candidate's CV (or as a separate document), Candidates shall describe their contribution on those works that were done in collaboration with others. This will address the discipline-specific way that individuals contribute to collaborations in scholarly projects and products. Descriptions may be qualitative (e.g., descriptive) or quantitative (e.g., percentage). The description might include the Candidate's contributions to the conceptualization of the project; its funding; laboratory, field or data analyses; student advising; manuscript preparation, editing and submission; and/or other contributions made by the candidate.

#### **Section 6.05 Peer Review Solicitation Procedure**

The department requires at least 5 external peer reviews from respected authorities appropriate to the Candidate's area of Scholarship who will provide

an independent and objective evaluation of the Candidate's Scholarship. The RTP Committee will invite recommendations from the candidate, but at least one-half of the external reviewers should be persons recommended by the review committee. The solicitation of people independently recommended by both the candidate and committee will be allowed. External reviewers shall be selected based on the recommendations of the P & T Review Committee who may make inquiries to colleagues in appropriate fields at other institutions.

Reviewers shall be selected to the best of the Committee's ability to ensure objectivity and independence. Reviewers shall be selected from comparable peer institutions. A limited number of letters of support may also be solicited from other sources deemed appropriate by the Earth Sciences Promotion and Tenure Committee and must be respected authorities appropriate to the candidate's area of Scholarship.

Candidates should provide the departmental review committee with a short list of potential external reviewers (e.g., 2-3 names and biosketches). Candidates should also submit a list of individuals who would not qualify as external reviewers based on conflict of interest, with justification for each disqualified reviewer. Specifically, former mentors and former thesis and dissertation advisers are not acceptable external reviewers. Candidates shall not solicit letters of support themselves. Candidates shall not be informed of the identity of outside reviewers to protect the confidentiality of the review process.

Guidelines regarding who may and may not serve as referees are elaborated in the Faculty Handbook on "Retention, Tenure, and Promotion Rights and Responsibilities as follows:

*3.c. No person may participate in the review of any person with whom they have a personal, business, or professional relationship that could be perceived to preclude objective application of professional judgment. A conflict of interest occurs when the evaluating party could realize personal, financial, professional, or other gain or loss as a result of the outcome of the review process, or when the objectivity of the evaluating party could be impaired by virtue of the relationship. Examples of persons who may be excluded by professional relationship include undergraduate and/or graduate mentors, postdoctoral mentors, collaborators who are co-investigators on grants and/or co-authors on a significant portion of scholarly products completed during the review period, colleagues who depend on instrumentation controlled or operated by the candidate, and/or co-inventor of a patent.*

External reviewers shall be made aware of the appropriate expectations for effectiveness/accomplishment/excellence required for a given level of review.

External reviewers will be sent a copy of the departmental role and scope document. Referees should state either knowledge of or relationship to the candidate, if any. The committee shall summarize the criteria used to select each external reviewer and provide a brief biosketch of reviewers as a brief addendum to the committee's review letter. The department report should state how external reviewers were chosen and should include a brief statement of their status in the field.

Deadlines shall be established each year based on the dates set forth by the college and university Retention, Tenure, and Promotion committees.

The department does not require internal reviews, except when the Faculty member has obligations in another unit on campus, such as an interdisciplinary research center. In this case a letter that reviews performance relative to their workload allocation will be requested from the respective Center Director.

## **VII. Applicable Role and Scope Documents Applicable Role and Scope Documents**

**Section 7.01 Retention Review** - Candidates for retention are reviewed under the standards and indicators in the Role and Scope Documents in effect on the first day of employment in a tenurable position.

**Section 7.02 Tenure and Promotion to Associate Professor Review** - Candidates for tenure are reviewed under the standards and indicators in the Role and Scope Documents in effect on the first day of employment in a tenurable position. Candidates may select a more recent, approved Role and Scope Document by notifying the primary review committee

**Section 7.03 Promotion to Professor Review** - The faculty member will be reviewed using standards and indicators in the Role and Scope Documents in effect two (2) years prior to the deadline for notification of intent to apply for promotion.

## **VIII. Retention Reviews**

**Section 8.01 Timing of Retention Review** - Faculty are reviewed for retention in the academic year specified in their Letter of Hire, unless extended under the Extending Tenure Review Period policy.

**Section 8.02 University Standard** - The standards for the retention of probationary faculty members are:

- (a) effectiveness in teaching, scholarship, and service during the review period;
- (b) integration of no less than two of the following during the review period: teaching, scholarship, and service;

- (c) satisfactory progress towards meeting the standards for tenure by the candidate's tenure review year.

**Section 8.03 Performance Indicators and Weighting-** The performance indicators and weighting are defined below in Section 9.03. These indicators and weights are used for both tenure and retention reviews.

#### **Section 8.04 Quantitative and Qualitative Expectations**

**Effectiveness in scholarship** will be judged primarily by the quality of published scholarly work by the candidate. Refereed articles serve as the most common performance indicator. Effectiveness in scholarship includes, but is not limited to, the establishment of a research specialty in the candidate's discipline evidenced by the generation of scholarly products (see Section 9.03) throughout the review period.

There is no expectation that single-authored publications are required to demonstrate effectiveness in scholarship because collaborative work is highly valued. The candidate is expected to identify the level of individual contribution to the scholarly products under review by the committee (see Section 6.02). These scholarly products shall represent both Group I and II indicators (see Section 9.03). For retention reviews, scholarly products must be submitted, accepted, in press, or published at the time of review. The record of scholarship must be substantive enough to expect that the candidate will achieve the standards for tenure at the time of tenure and promotion review.

Scholarly products must be of high quality, as indicated by the reputation of the venue for disseminating the candidate's research and/or performance metrics such as citations and reads. The reviewers recognize that differences exist among the various fields represented in the Department of Earth Sciences with regard to self-citation norms and impact factors of social science as compared to physical science journals. When attainment of extramural funding is a critical component of a candidate's research program, the efforts and outcome of grant applications will be considered, keeping in mind the variations in competitiveness and overall availability of funding through time and by discipline.

**Effectiveness in Teaching** will be judged primarily by the candidate exhibiting competency, and sound standards in their instructional assignments. Both classroom teaching and mentoring of students in research experiences are highly valued by our department. A description of performance indicators in teaching is provided in Section 9.03.



**Effectiveness in Service** is shown when the candidate's service activities have a positive and demonstrable influence on the Department, College, and/or University. Candidates should participate in service activities in line with normative expectations for pre-tenure faculty, keeping in mind the primary objectives of scholarship and teaching. Service activity should reflect the percentage of effort documented in the Candidate's assignment. The minimum requirements of all faculty members include curriculum development, attendance and participation (when appropriate) in faculty meetings, and committee assignments (see Section 9.03).

**Effectiveness in Integration** is deemed effective when the candidate integrates or formulates a clear plan for integrating at least two areas evaluated as documented in the integration statement (see Section 9.03).

### **Section 8.05 Evidence of Performance Indicators**

Performance indicators in scholarship, teaching, and service (Section 9.03) will be evidenced by written documentation as specified in Section 6.01-6.02. Each activity or item that qualifies as a performance indicator must be independently verifiable by members of the review committee. The candidate shall provide the necessary documentation for verification by the review committee when the information is not freely accessible.

### **Section 8.06 Status of Scholarly Products**

The review committee will consider scholarly products that have been submitted for publication in refereed journals or to potential publishers as performance indicators for retention so long as they are deemed of publishable quality. Submissions shall not be weighted according to the potential impact of the publication until final acceptance. In case of tenure and promotion, works that have not been formally accepted for publication shall not be considered.

## **Article IX. Tenure Review**

### **Section 9.01 Timing of Tenure Review**

Faculty are reviewed for tenure in the academic year specified in their Letter of Hire, unless extended under the Extending Tenure Review Period policy.

### **Section 9.02 University Standard**

The University standards for the award of tenure are:

- (a) sustained effectiveness in teaching and service during the review period,  
and

(b) integration of no less than two of the following during the review period:  
teaching, scholarship, and service, and

(c) accomplishment in scholarship.

### **Section 9.03 Performance Indicators and Weighting**

This section describes the performance indicators considered in the review to determine if the standards are satisfied.

#### **Performance Indicators in Scholarship**

The following list of performance indicators are applicable to scholarship. Indicators listed in Group I are considered the primary activities by which performance in scholarship will be evaluated. Those from Group II also contribute to performance but carry less weight. Items from both groups represent scholarly products.

This list is representative but not exhaustive. The candidate may choose to include other relevant and appropriate indicators not listed here. The Department RTP Committee will determine the weight of such indicators and will describe this determination in their evaluation letter.

#### **Group I**

- Refereed journal articles, monographs, books, book chapters, and textbooks in the Earth Sciences or related disciplines (i.e. multidisciplinary research).
- The funding of external grant proposals.
- Invited speaker (e.g., plenary or keynote).
- Professional recognition (e.g., appointment to editorial boards, editorial positions, grant review panels, and/or grant panel leadership positions).
- Publication of an edited book volume for which the candidate serves as primary or co-editor.

#### **Group II**

- Refereed proceedings published in connection with professional meetings.
- Invited papers or presentations given at professional meetings.
- Contributed papers, abstracts, or presentations given at professional meetings.
- Internal grant proposals funded.
- Internal or external grant proposals submitted.

- Invited seminars and/or colloquia.
- Non-refereed scholarly publications or products (e.g., non-refereed proceedings, technical reports, film, software, etc.).

Weights of these indicators will be determined and described by the Department RTP Committee based on varying disciplinary norms for scholarly publications and presentations. For example, an invited presentation at a prestigious high-profile conference would be weighted as a Group I indicator, while an invited talk at a seminar on campus would normally be weighted as a Group II indicator.

### **Performance Indicators in Teaching**

The following list of performance indicators is applicable to teaching. These indicators represent the primary activities by which performance in teaching will be evaluated. This list is representative but not exhaustive. The candidate may choose to include other relevant and appropriate indicators not listed here as additional evidence of performance in teaching. The Department RTP Committee will determine the weight of such indicators and will describe this determination in their evaluation letter.

- Delivering quality instruction documented primarily by faculty peer review of teaching<sup>1</sup>.
- Mentoring students on co-authored papers.
- Implementation of teaching techniques informed by pedagogical scholarship<sup>2</sup>.
- Design and facilitation of instructional programs (e.g., graduate teaching assistant training).
- Mentorship of undergraduate, graduate and postdoctoral students<sup>3</sup>.
- Formal acknowledgment or awards for teaching, including nominations for teaching awards.
- Academic advising of graduate or undergraduate students.
- Student evaluations of instruction via University-approved instruments<sup>4</sup>.

## **Performance Indicators in Service.**

The following list of performance indicators is applicable to service. Each of the listed indicators are considered the primary activities by which performance in service is evaluated. This list is representative but not exhaustive. The candidate may choose to include other relevant and appropriate indicators not listed here as additional evidence of performance in service. The Department RTP Committee will determine the weight of such indicators and will describe this determination in their evaluation letter.

- Participating in the governance of the University at the department, college, and/or university level.
- Contributing to departmental projects and programs.
- Mentoring faculty colleagues.
- Delivering knowledge and scholarship to constituent groups and the public.
- Serving in leadership roles in professional organizations.
- Participating in the organization of regional or national professional meetings.
- Serving as a journal editor or referee of scholarly papers or proposals.
- Applying professional expertise in public service activities.

*<sup>1</sup> Prior to a faculty member's review for retention or review for tenure and promotion to Associate Professor, peer teaching evaluations will be conducted on them **once an academic year** by tenured faculty in the department. Following the award of tenure, peer teaching evaluations will be conducted once every two years until the faculty member obtains the rank of Full Professor. The department head will assign tenured faculty to this service activity. A confidential letter will be generated and provided to the department head that will be kept secure and provided to the RTP committee at the time of review. A non-confidential form will be used to provide feedback at the time of a peer teaching review. This form will not be given to the department head or included in the dossier materials.*

*<sup>2</sup>Teaching methods or material developed by faculty that are published in peer-reviewed pedagogical outlets constitute scholarship rather than teaching.*

*<sup>3</sup>Mentorship of students consists of leading students in a structured research and/or independent study projects.*

*<sup>4</sup>Evaluations provided by students are susceptible to various forms of bias. Evaluation scores and averages should be viewed with caution and not as a singular measure of teaching effectiveness.*

### **Performance Indicators in Integration.**

Performance indicators that may support the attainment of standards of integration include any activity that combines two or more of the above categories of scholarship, teaching, and service. For example, presenting a lecture on geology or geography to an audience of the public combines scholarship and service; academic career advising to graduate students combines scholarship and teaching; involving students from the candidate's classes in research projects combines scholarship and teaching; co-authoring publications with students combines scholarship and teaching.

## **Section 9.04 Quantitative and Qualitative Expectations**

### **Accomplishment in Scholarship Expectations.**

The University Standard for accomplishment in scholarship is sustained and commendable performance reflected in the quantity, quality, and impact of scholarly activities and products. These activities and products are specified in Section 9.03. The activities and products must have impact and significance to the public, peers, or the discipline beyond the university.

The candidate should have a record of generating and disseminating knowledge through the authorship of refereed publications and other media as described in Section 9.03. Scholarly products should be of high quality, as indicated in Section 8.04.

The minimal Departmental scholarly productivity expectation for Tenure candidates shall average between 1 and 3 scholarly products per year during the review period. These products may represent both Group I and Group II indicators (Section 9.03), and publications may be accepted, in press, or published at the time of review. It is expected at the time of tenure review that multiple items from Group I will appear in the candidate's body of work.

Irrespective of the quantity of scholarly products, the quality of the candidate's scholarship as documented by External Reviewers is of primary importance. In particular, the quality and reputation of journals and other scholarly venues as documented by External Reviewers and disciplinary norms is considered of critical important in the review process. Impact ratings for journals, such as Science Citation Index, and h-indices based upon publications (i.e., Google Scholar) may be also used as measures of prestige or scholarly accomplishment. Relative impact ratings of journals within a candidate's field of expertise should be favored over absolute impact metrics to avoid inter-disciplinary biases

### **Sustained Effectiveness in Teaching Expectations.**

Sustained effectiveness in teaching is achieved through the positive contributions to the design, delivery, and instruction of courses and labs by the candidate. Effectiveness is judged primarily from multiple peer reviews conducted by faculty that observe the candidate in the classroom or lab during the review period. Confidential written reports from peer reviewers are important in documenting the candidate's teaching performance and serve as evidence to evaluate effectiveness.

Student course evaluations provide a measure of student satisfaction. The Department expectation is that for each course taught the overall mean score from the student evaluation instrument is not less than the indicator for "Average." It is expected that any overall mean score below "Average" will be addressed by the candidate. Similarly, any issues related to teaching noted in the retention review should be addressed prior to tenure review.

Faculty are expected to contribute to graduate education in the Department. At the time of the tenure review, a candidate is expected to demonstrate evidence of ability to mentor graduate students. Evidence may include chairing or serving on graduate committees.

### **Sustained Effectiveness in Service Expectations.**

The standard for sustained effectiveness in service is evidence that the candidate's service activities have a positive and demonstrable influence on the Department, College, University, and the Profession. Candidates should participate in service activities in line with normative expectations for pre-tenure faculty. Service activity should reflect the percentage of effort documented in the candidate's assignment. The minimum requirements of all faculty members include curriculum development, attendance and participation (when appropriate) in faculty meetings, and committee assignments.

### **Integration Expectations.**

Integration will be deemed effective if the candidate demonstrates evidence in their integration statement the integration of at least two areas.

## **Section 9.05 Evidence of Performance Indicators**

Performance indicators in scholarship, teaching, and service (Section 9.03) will be evidenced by written documentation as specified in Section 6.01. Each activity or item that qualifies as a performance indicator must be independently verifiable by members of the review committee. The candidate shall provide the necessary documentation for verification by the review committee.

## **X. Promotion to Rank of Associate Professor**

### **Section 10.01 University Standards**

The University standards for promotion to the rank of Associate Professor are the standards for the award of tenure. Appointment at the rank of Associate Professor or Professor does not demonstrate, in and of itself, that standards for tenure have been met.

## **XI. Promotion to Rank of Professor**

### **Section 11.01 Timing of Review.**

Normally, faculty are reviewed for promotion after the completion of five (5) years of service in the current rank, however, faculty may seek promotion earlier if they can establish that they "meet the same standards of effectiveness and accomplishment or excellence used in evaluating candidates after five (5) years in rank."

### **Section 11.02 University Standard**

The University standards for promotion to the rank of Professor are:

- (a) sustained effectiveness in teaching and service during the review period;  
and
- (b) sustained integration of no less than two of the following areas during the review period: teaching, scholarship, and service; and
- (c) excellence in scholarship.

### **Section 11.03 Performance Indicators and Weighting**

Performance indicators and weighting used to review candidates for promotion to the rank of Professor are identical to those defined in Section 9.03, with the following additional performance indicators.

#### **Teaching.**

The candidate for Professor will have mentored multiple graduate and undergraduate students. Evidence of a sustained record of high performance in teaching assignments will be documented.

#### **Scholarship.**

The candidate is expected to demonstrate that they have contributed in a significant manner to their discipline including the sustained ability to define and

develop research ideas, create successful grant proposals, and generate scholarly products. The candidate shall demonstrate impact and recognition by their profession.

**Service.**

The candidate for Professor will document service on grant review panels, journal editorial boards, and service at all levels of the institution.

**Integration.**

The performance indicators that support the attainment of standards of integration include any activity that combines two or more of the above categories of scholarship, teaching, and service. For example, presenting a lecture on geology or geography to an audience of the public combines scholarship and service; academic career advising to graduate students combines scholarship and teaching; involving students from the candidate's classes in research projects combines scholarship and teaching; co-authoring publications with students combines scholarship and teaching.

**Section 11.04 Quantitative and Qualitative Expectations**

**Scholarship Expectations.**

The University Standard for excellence in scholarship is sustained, commendable and distinguished performance reflected in the quantity, quality, and impact of scholarly activities and products. These activities and products are specified in Section 8.04. The activities and products must have a notable impact and significance to the public, peers, or the discipline beyond the university.

The candidate should have a record of generating and disseminating knowledge through authorship of refereed publications and other media as described in Section 11.03. Scholarly products should be of high quality, as indicated by the reputation of the venue for disseminating the candidate's research and/or performance metrics such as citations and reads, keeping in mind the nuances of the various fields represented in the Department of Earth Sciences. It is the candidate's responsibility to provide qualitative or quantitative evidence for the quality of venues where scholarship is presented and/or published.

Irrespective of the quantity of scholarly products, the quality of the candidate's scholarship as documented by External Reviewers is of primary importance. In particular, the reputation of journals and other scholarly venues, as documented by External Reviewers and disciplinary norms is considered important in the review process. In some cases, a relatively small number of products with high impact may be acceptable for satisfying scholarship expectations.



When attainment of extramural funding is a critical component of a candidate's research program, the efforts and outcome of grant applications will be considered, keeping in mind the variations in competitiveness and overall availability of funding through time and by discipline.

### **Teaching Expectations.**

The expectation for promotion to Professor in the teaching domain is demonstration of effectiveness. This standard is defined in Section 9.04, with additional weight being placed on mentorship of undergraduate and graduate students.

### **Service Expectations.**

The expectation for this review is effectiveness in service, and the standard is defined in Section 9.04, with the exception that at the time of promotion review an additional weight is placed on active contributions to institutional committees and programs.

### **Integration Expectations.**

Integration will be deemed effective if the candidate integrates or formulates a clear plan for how to integrate at least two areas evaluated as documented in the integration statement.

## **Section 11.05 Evidence of Performance Indicators**

Performance indicators in scholarship, teaching, and service (Section 11.03) will be evidenced by written documentation as specified in Section 6.01-6.02. Each activity or item that qualifies as a performance indicator must be independently verifiable by members of the review committee. The candidate is expected to provide the necessary documentation for verification by the review committee when the information is not freely accessible.

## **Article XII. Procedures for Update and Revision of the Unit Role and Scope Document**

All faculty members in the Department of Earth Sciences are entitled to propose changes to this Role and Scope Document.

Any proposed changes to the Role and Scope Document will be discussed at a faculty meeting attended by a quorum of tenure-track faculty. If it is decided that improvement, clarification, or other revision to this Role and Scope Document is necessary, a committee or individual will be appointed to carry out the changes.

The Department will undertake a full review of this document no less than every 10 years, when a review is deemed necessary by the majority of tenure-track faculty, or when mandated by the intermediate academic unit (College of Letters and Sciences).

All updates and revisions must be approved as set forth in Article XIII.

### **Article XIII. Approval Process**

#### **Section 13.01 Primary Academic Unit Role and Scope Document**

- (a) tenurable faculty and administrator of the primary academic unit;
- (b) promotion and tenure review committee and administrator of all associated intermediate units (usually colleges);
- (c) University Retention, Tenure, and Promotion Committee (URTPC); and
- (d) provost.

#### **Section 13.02 Intermediate Academic Unit Role and Scope Document**

- (a) promotion and tenure review committee and administrator of the intermediate unit;
- (b) University Retention, Tenure, and Promotion Committee (URTPC); and
- (c) provost.

#### **Section 13.03 University Role and Scope Document**

- (a) University Retention, Tenure, and Promotion Committee (URTPC);
- (b) Faculty Senate;
- (c) Deans' Council; and
- (d) provost.