College of Earth and Mineral Sciences (EMS) Graduate Faculty Nomination and Approval to Teach Qualifications

The following College-specific document was developed in response to updates of GCAC-101, effective Summer 2022. This document is the College of Earth and Mineral Science's interpretation of the qualifications for faculty members to join the Graduate Faculty, and for non-Graduate Faculty members to teach graduate courses. This interpretation was appproved by the Graduate Councill's Ad Hoc Committee on the Implementation of GFNEC Qualifications and the Dean of the Graduate School on December 19, 2024.

The Graduate Faculty Nomination Evaluation Committee (GFNEC) for each college/school is charged with soliciting input, creating, and approving membership qualifications for Category P, Q, and R that interpret the Graduate Council policy GCAC- 101.

These guidelines will be reviewed and updated every four years by the GFNEC in consultation with graduate program leadership and then submitted to Graduate Council Committee on Academic Standards and the Dean of the Graduate School for approval as stated in Graduate Council policy GCAC-101.

Tenure-line Faculty Member Nominations

Graduate Professional Education - Category P Membership

Approval of the nomination of a faculty member with a tenure-line appointment for membership in Category P of the Graduate Faculty of the Graduate School is *pro forma*, with review to assure that a) information submitted is complete for inclusion in the Graduate Faculty database; b) the correct form has been submitted for the correct category of membership; and c) the individual's appointment at Penn State has begun (faculty members cannot be appointed to the Graduate Faculty prior to their start date at the University).

Graduate Research Education - Category Q Membership

Nominations for membership in Category Q of the Graduate Faculty of the Graduate School is for individuals with a tenure-line appointment who hold a terminal master's degree and are reviewed for the following criteria:

- A terminal master's degree with research training, or a terminal master's degree and a record
 of research, in either case sufficient to contribute to research doctorate training
- An active program of research appropriate to the field. (See below for assessing "an active program of research appropriate to the field".)

Graduate Research Education - Category R Membership

Approval of the nomination of a faculty member holding a PhD or other doctoral degree with a tenure-line appointment for membership in Category R of the Graduate Faculty of the Graduate School is *pro forma*, with review to assure that a) information submitted is complete for inclusion in the Graduate Faculty database; b) the correct form has been submitted for the correct category of

membership; and c) the individual's appointment at Penn State has begun (faculty members cannot be appointed to the Graduate Faculty prior to their start date at the University).

Non-Tenure-line Faculty Member Nominations

Graduate Professional Education - Category P Membership

There are two subgroups in Category P:

- Category P-M
 - o For individuals who participate in professional master's degree programs
- Category P-D
 - For individuals who participate in professional doctoral degree programs;
 such individuals may also participate in professional master's degree programs

CATEGORY P-M

Nominations for membership in Category P-M of the Graduate Faculty of the Graduate School for individuals not on a tenure-line appointment are reviewed for the following criteria as defined in policy GCAC-101 Graduate Faculty Membership:

- A full-time faculty appointment
- A master's degree
- Recent or ongoing professional experience relevant to the professional master's degree program field; alternatively, ongoing scholarly activity in the professional master's degree program field

CATEGORY P-D

Nominations for membership in Category P-D of the Graduate Faculty of the Graduate School for individuals not on a tenure-line appointment are reviewed for the following criteria as defined in policy <u>GCAC-101 Graduate Faculty Membership</u>:

- A full-time faculty appointment
- A doctoral degree
- Recent or ongoing professional experience relevant to the professional doctoral degree program field; alternatively, ongoing scholarly activity in the professional doctoral degree program field

PROFESSIONAL EXPERIENCE RELEVANT TO THE PROFESSIONAL DEGREE PROGRAM FIELD AS DEFINED BY THE COLLEGE OF EARTH AND MINERAL SCIENCES

The expectation of recent or ongoing professional experience relevant to the professional masters or doctoral degree program field derives from the fact that professional graduate degree programs prepare students for expert practice in the chosen field. Accordingly, with the recognition that fields and professional practice evolve quickly, and with a goal of preparing our students to practice their chosen profession at a high level based on the education we provide, faculty members who will be fully engaged in professional degree programs should be intimately familiar with the current state of practice in the field. We generally expect professional experience to be within the last 3-5 years; individual graduate programs may have higher standards.

Illustrative examples of professional experience follow. NOTE: The specific examples presented below

are NOT intended to be exhaustive.

- Employment
- Licensure or Certification
- Formal consulting activities
- Presentations at professional workshops or meetings
- Serving on professional advisory committees
- Participation in professional and industry networks
- Demonstration of mentoring and professional development of others

An expectation of professional degree programs is that they incorporate new practices derived from new discoveries in their field of study; thus, individuals with ongoing scholarly work in the field can appropriately be approved to Category P membership. Such membership is particularly important when the scholarly work in the field is rapidly advancing ahead of standard professional practice.

Graduate Research Education - Category R Membership

Nominations for membership in Category R of the Graduate Faculty of the Graduate School for individuals not on a tenure-line appointment are reviewed for the following criteria as defined in policy GCAC-101 Graduate Faculty Membership:

- A full-time faculty appointment
- A doctoral degree
- A record of scholarly achievement, and an active program of research/scholarly activity, appropriate to the field

A RECORD OF SCHOLARLY ACHIEVEMENT APPROPRIATE TO THE RESEARCH DEGREE FIELD AS DEFINED BY THE COLLEGE OF EARTH AND MINERAL SCIENCES

Below are illustrative examples of scholarly achievement. NOTE: None of the specific examples in the lists presented below are intended to be exhaustive.

- Scholarly written works
 - Books and book chapters
 - Peer-reviewed journal articles
- Scholarly activities
 - Invited talks
 - Presentations at academic meetings and workshops
 - Presentations at professional conferences and workshops
 - Communication of one's primary research to a non-scientific audience (e.g., technical reports, agency or corporative briefings, etc.)
 - Serving on advisory committees
- Professional activities
 - Organizing academic and professional meetings
 - Participating in funding review panels
 - Leadership positions in professional organizations

Additional activities that take primary research (generation of new knowledge) and translate it for use by, and benefit of, a lay audience may be considered. Examples include primary research communicated through technical reports, science-based datasets or tools, public workshops, etc.

NOTE: The focus here is on activities that generate new knowledge. Most of these will be communicated to peers (e.g., peer reviewed journal articles), however, those communicated to audiences who are direct beneficiaries of the new knowledge (e.g., technical reports, workshops) can also be considered. This differs from activities that summarize and communicate existing knowledge (e.g., outreach), which will not be considered.

AN ACTIVE PROGRAM OF RESEARCH/SCHOLARLY ACTIVITY

The College recognizes that research and scholarly activity occurs at different rates for different disciplines and there are also different forms of evidence for different disciplines. The EMS GFNEC will incorporate this variability in its assessment of candidates.

Assessment for membership in the Graduate Faculty is *not* formulaic; each nominee's accomplishments are considered holistically. Faculty members with ongoing journal publications or very recent books, combined with other *ongoing* scholarly and professional activities, would be well-qualified for membership in Category Q or R of the Graduate Faculty.

EMS Continuing Approval to Teach Qualifications

Individuals who are not members of the Graduate Faculty may teach specific graduate courses for one year when approved by the head of the graduate program offering the course. After the initial approval to teach, requests for continuation of the Approval to Teach will be reviewed and approved by GFNEC based on the qualifications described below and in accordance with Graduate Council policy GCAC-101 Graduate Faculty Membership. Required documents include CV, formal student evaluations, peer evaluation, and syllabi for special topic courses. Individuals with continuing Approval to Teach are then subject to Performance Evaluations every four years which requires student and peer evaluations. Process and procedure documentation are outlined in GCAC-101.

Peer Evaluation

Peer evaluations should focus on aspects of the instructor's skill in teaching the course that are not apparent from student evaluations. Programs are encouraged to use a standardized rubric that focuses on the instructor's teaching ability.

Formal Student Evaluation

Similarly, the review of PSU administered formal student evaluations for renewal of Approval to Teach should focus on the instructor's skill in teaching the course, not on course content. The GFNEC and Graduate School should look carefully at those metrics related specifically to instructor skill, and to specific comments from students. A potential outcome in cases of less than exemplary evaluations is renewal for one year (instead of three years), with an expectation of demonstrated improvement for future renewals.

500-Level Research Education Courses

To maintain standards across all 500-level courses, approval to teach 500-level courses requires a doctoral degree, a record of scholarly achievement, and an active program of research/scholarly activity, appropriate to the field.

A RECORD OF SCHOLARLY ACHIEVEMENT APPROPRIATE TO THE RESEARCH DEGREE FIELD

The requirement for an *active program of scholarly research* is based on the fundamental value proposition for graduate-level research education at a research-intensive University:

Students should be taught by *individuals at the forefront of creating new knowledge*, ensuring that students are exposed to not only the latest knowledge in the field, but the latest intellectual approaches as well.

The College and Graduate School recognizes that the breadth of fields of study offered means that no simple standard can be applied to evaluate a proposed instructor's "record of scholarly achievement". Each individual is evaluated according to the standards of their particular field of study.

In recognition of the short-term commitment typically represented by a request for approval to teach graduate courses, the College and Graduate School provides some additional flexibility in considering evidence of "an active program of research/scholarly activity." Illustrative examples sufficient for approval to teach 500-level courses typically include one or more of the scholarly activities listed below over the past four years. NOTE: the lists presented below are not intended to be considered exhaustive.

- Scholarly written works
 - Books and book chapters
 - Peer-reviewed journal articles
- Scholarly activities
 - Invited talks
 - Presentations at academic meetings and workshops
 - Presentations at professional conferences and workshops
 - Communication of one's primary research to a non-scientific audience (e.g., technical reports, agency or corporate briefings etc.)
 - Serving on advisory committees
- Professional activities
 - Organizing academic and professional meetings
 - Participating in funding review panels
 - Leadership positions in professional organizations

800-Level Professional Education Courses

To maintain standards across all 800-level courses, approval to teach 800-level courses requires a master's degree, and *professional experience relevant to the professional degree program field*.

A RECORD OF SCHOLARLY ACHIEVEMENT APPROPRIATE TO THE RESEARCH DEGREE FIELD

The requirement for professional experience relevant to the professional degree program field is an extension of the fundamental value proposition for graduate level education at a research- intensive University:

Students should be taught by *individuals who are expert practitioners at the forefront of their professions*, ensuring that students are exposed to not only the latest practices in the field, but the latest intellectual approaches as well.

Accordingly, with the recognition that fields evolve quickly, and with a goal of preparing our students to practice their chosen profession at a high level based on the education we provide, individuals recommended to teach 800-level professional education courses should be familiar with the *current* state of practice in the field. We generally expect individuals recommended for approval to teach specific courses to have evidence of professional activity in the field at any time over the last 5 years.

In recognition of the short-term commitment typically represented by a request for approval to teach, the College and Graduate School provides some additional flexibility in considering evidence of "professional experience relevant to the professional degree program field". With the recognition that professional practice evolves quickly, we generally expect one or more indicators of professional experience to be within the last 3-5 years; individual graduate programs may have higher standards.

Illustrative examples of professional experience follow. NOTE: *The examples presented below are NOT intended to be exhaustive.*

- Employment
- Licensure or Certification
- Formal consulting activities
- Presentations at professional workshops or meetings
- Serving on professional advisory committees
- Participation in professional and industry networks
- Demonstration of mentoring and professional development of others

An expectation of professional degree programs is that they incorporate new practices derived from new discoveries in their field of study; thus, individuals with ongoing scholarly work (as outlined above) in the field can also be appropriately approved to teach 800-level courses.