

GPO Mapping – Explanation of Symbols & Rationale for their Use

GPO Table Quick Reference (from Graduate Council Statement on GPOs)

GPO 1 – Advanced Knowledge

GPO 2 – Methodologies

GPO 3 – Research

GPO 4 – Teaching/Pedagogical Training

GPO 5 – Communication

GPO 6 – Professionalism

Symbols Used

To differentiate graduate education with its programmatic benchmark and capstone assessments of learning acquisition from undergraduate education in which courses are the main medium for evidence of learning, distinct symbols are used for program requirements and course requirements. The symbols indicate how the program requirements and course requirements relate to the learning expectations articulated in the Graduate Program Outcomes listed above.

Graduate Program Requirements (Section 1):

- I** for program requirements where GPO skills/competencies are **“introduced”**
- P** for program requirements that expect one or more GPOs to be **“practiced”** by the student
- D** for program requirements by which one or more GPOs are expected to be fully **“demonstrated”** by the student; the final assessment of GPO attainment

Courses Required (Section 2):

- I** **“Introductory”** course content with one or more GPO goals
- A** **“Advanced”** course content with one or more GPO goals

PROGRAM REQUIREMENTS (Section 1): Rationale and Whether Revisions are Needed

May appear in Doctoral or Master’s maps or both:

- **Foreign Language** – GPO1 indicates fulfillment of a requirement; GPOs 2, 3, 4, 5, 6 may be indicated for some language programs.
- **Teaching/Pedagogy training offered** – teaching experience is emphasized and a pedagogy training course is offered. If teaching is specifically *required*, the pedagogy course should be listed under the section “Courses Required.” In some cases GPO 5 indicating considerable emphasis may be warranted.
- **Internship/Practicum/Lab Rotations** – GPOs 1, 2, 3, 5, and 6 may be “introduced” or “practiced.” (For Education majors, the practicum would be training under GPO 6 rather than GPO 4 or university teaching).
- **Preliminary or Field Exams/Proceed to PhD Review** – indicates that the program has some type of screening (such as an oral or written exam) or a portfolio review for diagnostic purposes before a student may apply for the QE. Since it is largely used to assess capacity and could be followed by further development, it is not a final assessment where skills must be fully “demonstrated”. Therefore, “Practiced” is utilized rather than “Demonstrated” in this category.
- **QE** –the student must “demonstrate” GPO1 (their advanced content knowledge, breadth and depth, and GPO2 (methodological knowledge), as well as a “practiced” capacity for GPO 3 (research). “D” is not used for GPO 3 since the QE admits the student to develop the dissertation, where research mastery is fully demonstrated. Programs that also look for particular practice of communication skills during the QE would list “P” under GPO 5.
- **Prospectus** – the student must demonstrate (“D”) both GPO1 and GPO2, showing that their knowledge is such that they can propose a defensible hypothesis or research question for research (GPO3) which is still at the practice (“P”) stage. Programs that also look for particular practice of communication skills in the prospectus would list “P” under GPO 5.

- **Academic or Grant Writing/Professional Conference Participation** - if required or emphasized by the program: workshops are offered; faculty work with students on grant-writing; presentations of papers or posters at conferences and/or journal submissions are emphasized and part of the program's culture. If a strong structure exists (specific requirements), either a "P" or "D" may be used. Journal articles accepted for publication, of the kind that may later be dissertation chapters, for instance, may "demonstrate" research rather than illustrate skill-building or "practice". There may be considerable development of communication skills (GPO5) and professional development (GPO6).
- **RCR/Disciplinary Ethics Workshop** – is a category reserved for those programs that specially require training in the responsible conduct of research (RCR) or have workshops or courses that explore the ethical issues in the discipline. (A course that has an exploration of disciplinary "ethics" as part of a course, would warrant an "I" since the skill is introduced.) A more extensive discourse that involves clear professional development merits "introduced" or "practiced" or both (I/P) under GPO 6 (Professionalism).
- **Master's Thesis (Plan I)/Comprehensive Exam/Project (Plan II)** – the capstone assessment for the master's degree determines whether a student has "demonstrated" GPOs 1, 2, 3, and 5.
- **Doctoral Dissertation** – the capstone for all doctoral degrees (except the O.D.), in which a student must "demonstrate" GPO1, 2, 3, and 5.

COURSES REQUIRED (Section 2): Rationale and Whether Revisions are Needed

- Course work evaluations as "introductory" or "advanced" were based solely on whether information was provided in graduate degree program/department webpages, student handbooks, and the UC Berkeley Courses and Curricula Catalog. Please assess the accuracy of the required courses.
 - Independent study/research courses (e.g., 299, etc.) are not listed in the "Required Courses" section as they are the de facto course work of graduate students after advancement. As research in all but applied degrees is the fundamental basis of Berkeley's degree programs, these courses are assumed, and not considered part of the pre-advancement content foundation upon which post-advancement research rests.
- Courses that, based on course descriptions, are solely lecture courses may expect the student to acquire "introductory" or "advanced" content knowledge (or both, I/A) in terms of GPO 1 (Advanced Knowledge) and/or Methodologies (GPO2).
- Courses that involve lab sections are also evaluated as "I" or "A" with respect to GPO 3 (Research).
- Courses that require discussion sections, group projects, data analysis and modeling, and case studies, for example, are evaluated with respect to GPO5 as well.
- Courses described as overviews, surveys and introductory are usually assigned 'I'. Introductory courses in sub-topics may be exceptions and may merit an "I/A" designation.
- Courses that require prerequisite coursework are assigned "Advanced" ratings. Similarly, subsequent coursework in year-long sequences typically follow an "Introductory/Advanced" (I/A) progression, given that such coursework develops curriculum knowledge gained in initial coursework
- Advanced topics in the 200-level series are generally assigned "A," given that they require significant background knowledge in the relevant subject matter and the student is expected to acquire advanced knowledge and/or methodological skills.
- Courses that incorporate practical experience, application, and course projects should be assigned "A".