Protocol 1034 Curriculum Review

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Protocol

Curriculum review is a priority for GSSIMR. The Curriculum Committee works to ensure all courses are meeting stated goals and objectives. The committee reviews curriculum yearly and conducts a five-year comprehensive review.

YEARLY CURRICULUM REVIEW takes place at the course level every year. The Curriculum Committee receives reports from other faculty committees and the Grad School Office and analyzes the data and develops an action plan for improvement. The Curriculum Committee produces an Annual Curriculum Report detailing the actions of the committee as it relates to Curriculum Review. The report is included in the annual program review that is conducted by the Dean's Council.

Elements of yearly curriculum review:

- Annual Assessment Report (Academic Progression & Assessment Committee)
- Module Course Assessment Report (Academic Progression & Assessment Committee)
- Rotation Assessment Report (Academic Progression & Assessment Committee)
- Faculty Module Review Report
- Predoctoral Researcher Course Evaluation Report

Annual Faculty Module Review

- 1. Faculty Module Review Form Part 1 is completed annually with the Assistant Dean for Academic Affairs by the instructors in each module following their module course.
- 2. Faculty Module Review Form Part 2 is completed annually by the Designated Course Instructor within 2 weeks of the course ending. The Designated Course Instructor responds to the predoctoral researcher evaluations.
- 3. Part 1 and Part 2 are submitted to the Assistant Dean for Academic Affairs.

Predoctoral Researcher Course Evaluations

- 1. Following every module, the Associate Dean for Administration & Registrar sends the link to complete the module course evaluation to the predoctoral researchers.
- 2. Predoctoral researchers have one week to complete and return the module course evaluation.
- 3. The feedback from all predoctoral researchers in the course is combined for an aggregate report.
- 4. The Assistant Dean for Academic Affairs sends the aggregate report to the Designated Course Instructor for completion of Faculty Module Review Form Part 2.

Module Course Assessment Reports and Scoring Templates

- 1. Following every module, the Associate Dean for Administration & Registrar sends blank Module Course Reports and writing and presentation scoring templates to the faculty to complete for each predoctoral researcher.
- 2. Faculty have one week to complete and return the module course reports and scoring templates.
- 3. The module course report provides grade information for each predoctoral researcher as well as assessment data on the achievement of learning objectives.
- 4. The Associate Dean for Administration & Registrar sends each predoctoral researcher his/her section of the report.
- 5. The Academic Progression and Assessment Committee reviews the data for inclusion in the Annual Assessment Report.

Rotation Lab Reports

- 1. Following every rotation, each predoctoral researcher and their faculty complete the Rotation Lab Report and return it to the Associate Dean for Administration & Registrar.
- The predoctoral researcher writes a paragraph to summarize the project and what he/she
 learned and accomplished during the rotation, then forwards the report to the advisor.
 The advisor writes a paragraph to explain how well the predoctoral researcher executed
 the project, completes the assessment of learning section, and provides a grade of Pass
 or Fail.
- 3. Faculty and predoctoral researchers have one week to complete and return the rotation lab reports.
- 4. The Rotation Committee reviews the data and produces the Rotation Assessment Report.

Rotation Presentation Reports

- 1. At the end of the second rotation, each predoctoral researcher makes a brief presentation to the Rotation Committee on what he/she performed and accomplished in one of the first two rotations and answers queries raised by the committee members.
- 2. The Rotation Committee evaluates the comprehension of the project, including the background of the field and justification for pursuing the course of investigation; the understanding of the methods used and of alternative methods that can address the questions posed by the project; the explanation and interpretation of project results both methodologically and as it relates to the questions/hypothesis of the project; and the overall clarity of the presentation.
- 3. The rotation presentation report provides grade information for each predoctoral researcher as well as assessment data on the achievement of learning objectives.
- 4. The Associate Dean for Administration & Registrar sends each predoctoral researcher his/her section of the report.
- 5. The Rotation Committee reviews the data for inclusion in the Rotation Assessment Report.

The Curriculum Committee receives the forms, course evaluations, and reports for review. The data is analyzed, discussed, and changes proposed with the following guiding principles:

- a. Structure of module courses stays the same
- b. New module courses are not an introduction to biology courses but do need to cover the fundamentals of the topics
- c. Review and discuss changes in the areas of research or technologies
- d. Review and discuss additions to faculty and areas of research
- e. Sequence of modules must make sense in terms of science
- f. Review and discuss any redundancies
- g. Any changes made must support the mission of preparing predoctoral researchers for innovative and creative investigations in the biological sciences

Decisions are made at the committee level, discussed with the relevant faculty, and shared with the Dean for approval and confirmation of teaching faculty. New modules, course schedules, and other changes are reviewed and approved by Faculty Governing Council (FGC).

The Curriculum Committee produces an Annual Curriculum Report detailing the actions of the committee as it relates to Curriculum Review. The report is included in the annual program review that is conducted by the Dean's Council.

COMPREHENSIVE CURRICULUM REVIEW takes place every five years. The Curriculum Committee receives reports from other faculty committees and the Grad School Office and analyzes the data and develops an action plan for improvement. The Curriculum Committee produces a Comprehensive Curriculum Review Report detailing the actions of the committee as it relates to Curriculum Review.

Elements of comprehensive curriculum review:

- Module Surveys
- Rotation Surveys
- Preceding Five Years of Annual Curriculum Reports
- Preceding Five Years of Annual Assessment Reports
- Preceding Five Years of Annual Rotation Assessment Reports
- Preceding Five Years of Qualifying Assessment Reports
- Preceding Five Years of Matrix Summary Reports
- Preceding Five Years of Predoctoral Researchers Reports

Module Surveys

Module surveys are sent to the instructors in each module with the following questions:

- 1. Which module do you teach? (If you teach in more than one module, please submit separately for each module.)
- 2. List a major course topic covered in the module.
 - a. Rank the priority of this topic in the module.
 - b. Does this topic get sufficient coverage?

- 3. Question 2 is repeated five times to allow for multiple topics to be reported.
- 4. Which topics would you consider reducing, condensing, or merging with your module to make space for new topics or insufficiently covered topics?
- 5. Please give us your thoughts about the integration of technology in your module. Are you in favor of integrating technology training into the modules, especially in the afternoon lab portion?
- 6. Which topics would you consider reducing, condensing, or merging in the curriculum in general to make space for new topics or insufficiently covered topics?
- 7. In general, what topics would you like to see covered in future modules?

The Curriculum Committee meets to discuss results from the module survey and the annual Curriculum Reports. The decision-making process is completed at the committee level with the following guiding principles:

- 1. Structure of module courses stays the same
- 2. New module courses are not introduction to biology courses but do need to cover the fundamentals of the topics
- 3. Review and discuss changes in the areas of research or technologies
- 4. Review and discuss additions to faculty and areas of research
- 5. Sequence of modules must make sense in terms of science
- 6. Review and discuss any redundancies
- 7. Any changes made must support the mission of preparing predoctoral researchers for innovative and creative investigations in the biological sciences.

Decisions are made at the committee level, discussed with the relevant faculty, and shared with Dean for approval and confirmation of teaching faculty. New modules, course schedules, and other changes are reviewed and approved by FGC. All relevant documents including the curriculum map are updated to reflect the changes.

The Curriculum Committee develops a report for inclusion in the 5-year Program Review Report.

Rotation Surveys

Rotation Surveys are sent to faculty by the Rotation Committee with the following questions:

- 1. Is the length of each rotation (8 weeks) sufficient time for predoctoral researchers to complete a project? Please explain.
- 2. Is length of each rotation (8 weeks) sufficient time for the faculty to evaluate predoctoral researchers? Please explain.
- 3. Are predoctoral researchers adequately prepared for rotations?
- 4. If predoctoral researchers are not prepared, please list issues/deficiencies you have experienced.
- 5. How do you evaluate the predoctoral researchers in your lab during rotations?
- 6. Do the rotation presentations or lab meeting presentations reflect the appropriate rigor for first-year predocs? If not, what have you found to be lacking?

The Rotation Committee meets to discuss the survey results and the annual rotation presentation reports. The data is analyzed, discussed, and changes proposed with the following guiding principles:

- 1. Structure of one semester dedicated to rotation courses stays the same.
- 2. Any changes made must support the mission of preparing predoctoral researchers for innovative and creative investigations in the biological sciences.

Decisions are made at the committee level, discussed with the relevant faculty, and shared with the Dean for approval and confirmation of teaching faculty. New modules, course schedules, and other changes are reviewed and approved by FGC. All relevant documents including the curriculum map are updated to reflect the changes.

The Rotation Committee submits a report to the Curriculum Committee for inclusion in the 5-year Program Review Report.

Preceding Five Years of Annual Curriculum Reports

- 1. Yearly curriculum review takes place at the course level with the Faculty Module Review, predoctoral researcher course evaluations, assessment of learning objectives, rotation presentation report, and review and analysis by the Curriculum Committee.
- 2. The Curriculum Committee produces an Annual Curriculum Report detailing the actions of the committee as it relates to Curriculum Review.
- 3. The Annual Curriculum Reports are reviewed and included in the Comprehensive Curriculum Review process.

Preceding Five Years of Annual Rotation Summary Reports

- 1. The Rotation Committee produces the annual Rotation Summary Report.
- 2. The Rotation Summary Reports include the Rotation Lab Reports and the Rotation Presentation Reports.
- 3. The Rotation Summary Reports are reviewed and included in the Comprehensive Curriculum Review process.

Preceding Five Years of Qualifying Assessment Reports

Academic Progression and Assessment Committee analyzes the Qualifying Assessment data that is collected yearly. In addition, they distribute a survey to the faculty.

A Qualifying Assessment Survey is sent to faculty every five years with the following questions:

- 1. Are the predoctoral researchers adequately prepared for the Qualifying Assessment within their second year of thesis research?
- 2. What do you think of the general methodology of a predoctoral researcher presenting their thesis proposal and discussion of proposal versus an in-depth examination of the predoctoral researchers' general biological knowledge?
- 3. Are you satisfied with the amount of time the predoctoral researchers take to prepare for the Qualifying Assessment? Too little time? Too much time?

Academic Progression and Assessment Committee meets to review and analyze results from the yearly data and the survey. The decision-making process is completed at the committee level with the following guiding principles:

- 1. Structure of having a required Qualifying Assessment remain.
- 2. Any changes made must support the mission of preparing predoctoral researchers for innovative and creative investigations in the biological sciences.

Preceding Five Years of Matrix Summary Reports

- 1. Once a year, at the end of the summer term, the GSSIMR Academic Progression Matrix is used by the thesis advisor(s) and the predoctoral researcher to assess the predoctoral researcher's learning based on the GSSIMR Core Competencies.
- 2. Upon graduation, a predoctoral researcher should reach the category of proficient in the matrix for the majority of the items in each category.
- 3. The matrix summary report includes an aggregate summary for each core competency and other pertinent information derived from the matrix.

Preceding Five Years of Predoctoral Researchers Reports

Data is collected by predoctoral researcher self-report, report from the Grants Administration Office, and report from Library Services. The Graduate Office reviews the information and produces a report annually for inclusion in the Assessment Report.

Self-Reported:

- 1. Scientific meetings attended
- 2. Posters presented at scientific meetings
- 3. Talks given at scientific meetings
- 4. Award for poster and/or talk at scientific meetings
- 5. Predoctoral researcher satisfaction with the program
- 6. Demographics

Library Services:

- 7. First author papers published (number and year in program)
- 8. Author on a paper published (number and year in program)

Grants Administration Office:

- 9. Grants and fellowships applied for
- 10. Grants and fellowships received