

IAI GECC Mathematics Panel
Course Approval Criteria
Revised Fall 2025

An institutionally approved representative syllabus in electronic format is required by the panel for its review. Institutions should submit an actual and recent instructor syllabus which is not more than three years old. If the course is yet to be taught, a sample syllabus intended for future students is still required.

The representative course syllabus and any additional submission materials must include:

- **Institutional Name**
- **Course prefix, number, and title**
- **Course description:** Including the full catalog course description is required. The course description should compare favorably with the proposed IAI course description.
- **Number of credit hours:** For combined lecture and lab/studio courses, please include lecture credit hours, lab/studio credit hours as well as contact hours for lecture and lab/studio components. Indicate if these are semester or quarter hours.
- **Prerequisites and co-requisites:** If prerequisites are required for a course, it is preferred that the course prefix, course number, course name, and when IAI approved, the IAI code, are included in the submitted syllabus. Important note: as a rule, general education (GECC) courses in IAI should not have prerequisites. There are a few exceptions to this rule for sequences such as written composition and calculus; see panel specific information. Major courses may have prerequisites as appropriate. Co-requisite courses should show the credit hour breakdown between the two courses.
- **Textbooks, additional readings, additional course materials:** Please note if different resources are required for different delivery modes. Course materials should reflect content outcomes and requirements, and should be recently produced. For published texts, please include author, title, edition, date of publication, publisher, and the ISBN. If the course utilizes online or OER materials, please include an active hyperlink; hyperlinks cannot be embedded in the LMS nor be blocked by a password because the panel needs to have full access to the resource.
- **Delivery mode:** traditional/nontraditional, in-person/online/hybrid, etc.
- **Course Objectives:** The course objectives should clearly support the course description.
- **Assignment descriptions:** Please include a detailed description of assignments, readings, projects, etc. Assignment details should be clearly evident and referenced, and show connection to the course learning objectives. Assignments should demonstrate the rigor and scope of the course.
- **Methods of evaluating student learning:** The syllabus should state clearly how learning outcomes will be assessed, such as through objective/subjective examinations, quizzes, written assignments, oral presentations, projects, etc.
- **Grading scale and assignment weighting:** Please provide a grading scale and indicate the relative weight of assignments or evaluation categories (e.g., exams, essays, projects, etc.).
- **Detailed course outline, daily/weekly/hourly schedule:** A detailed topical outline and weekly schedule that *goes beyond chapter numbers and titles from a textbook (or select readings)* must be included and it should provide specific details of topics being presented in class. This may include assignments, readings, projects, etc. as appropriate. This could be done using a few bullet points or a couple of sentences. This level of detail is also appropriate for the lab/studio outline in courses that contain a lab or studio component. The lab/studio outline should include similar information but also detail the tools, materials, equipment, and instruments being used and the outcomes or topics that the students will be exploring.

General Coding Practice:

A course can only be assigned to one IAI code/description per panel. Institutions should be clear and careful in determining which IAI code is identified for any syllabus submitted for approval. The institution should also ensure that the course meets the minimum semester credit hour requirement included with the IAI course description.

A student may “count” only one course per code in fulfilling transfer requirements, even though an institution may assign more than one course to a code. In some cases, however, students at schools on a quarter calendar may need to complete two courses to equate to a one-semester course. An equivalency in this circumstance would be three quarter-credits equals two semester credit hours and five quarter-credits equal three semester credit hours.

Panel Specific Requirements:

Note: If the submitted course requires an IAI approved prerequisite, include the IAI code.

Note: Should a calculus course, other than Business Calculus, be submitted for approval, a syllabus for each course in the entire sequence must be submitted so that the proper assignment of the IAI code can be made.

Note: For M1903 - Mathematics for Elementary Teaching I and II, both course syllabi in the sequence must be submitted at the same time.

Note: The syllabus must include any technology used as required by the IAI descriptor.

Note: The course description should compare favorably to the description given on the iTransfer website. Courses that do not follow the suggested description will not be approved. For example, for M1 902 General Education Statistics, it is necessary that the description (and the content) state that both descriptive and inferential statistics will be covered adequately; and for M1 904 General Education Mathematics, the description must clearly show that only three or four topics will be studied in depth and three of the topics must come from the suggested topics.

Discipline Specific Concerns

- Interdisciplinary Courses – The only course that is cross-listed is M1905 Discrete Mathematics, which is a course that is listed as a mathematics course and a computer science course. This course may be used as a general education mathematics course and as a course that meets a computer science requirement.

Common Reasons Courses Are Not Approved

In order to facilitate approval of submissions, it may be helpful to be aware of some common reasons for which courses have not been approved.

- Course has an inappropriate prerequisite or is not clearly or appropriately stated on all submission documents.
- Course does not match course description.
- Course is too broad in scope – contains too many topics for the General Education Mathematics course (M1 904) that allows only 3 or 4 topics studied in depth (refer to IAI description).
- Syllabi for sequential courses are not supplied within the appropriate submission, e.g. M1900-1 thru M1900-3, and M1903.
- Course is too narrow in scope – does not cover the necessary components as described in the course description.
- Course is not a lower division course.