

COURSE OUTLINE

MATH 49 Math Independent Study

Catalog Statement

MATH 49 provides well-qualified students with an opportunity to explore a subject in greater depth than usual, to familiarize students with some basic research techniques, to interest students in possible career areas, and to take advantage of special academic interests. Emphasis shall be on individual projects in specific areas of mathematics. There is no prescribed course content. Students develop a research project, have it approved by the sponsoring instructor and appropriate division chairperson, then submit the finished project, which may be library research, or perhaps a supervised experimental program related to a specific course of instruction. Registration is open to any student at GCC who is currently registered for 6 or more units and who is admitted to Independent Study by the instructor. A student is limited to one Independent Study per semester and no more than 12 units credit toward the AA Degree or Certificate, and no more than 6 units per division. The units received may be acceptable for college transfer subject to the approval of the individual college.

Total Lecture Units: 0.0

Total Laboratory Units: 1.0-3.0

Total Course Units: 1.0- 3.0

Total Lecture Hours: 0.0

Total Laboratory Hours: 48.0- 144.0

Total Laboratory Hours To Be Arranged: 0.0

Total Faculty Contact Hours: 48.0- 144.0

Note: This course may be taken 3 times; a maximum of 9 units may be earned.

Prerequisite: Concurrent registration in 6 or more units.

Recommended Preparation: Math 105

Course Entry Expectations

Prior to enrolling in the course, the student should be able to:

- skills expectations: varies with subject area choice.

Course Exit Standards

Upon successful completion of the required coursework, the student will be able to:

- conduct independent discipline-specific research activities;
- demonstrate a specific in-depth knowledge in the discipline involved.

Course Content

Research project (48-144 hours)

Total Faculty Contact Hours = 48.0 to 144.0

Methods of Instruction

The following methods of instruction may be used in this course:

- individual meetings with faculty advisor;
- small group meetings with faculty advisor.

Out of Class Assignments

The following out of class assignments may be used in this course:

- research project;
- portfolio of completed research projects (e.g. proving relevant theorems);
- reading assignments (e.g. reading articles related to assigned area of mathematics);
- homework (e.g. problem sets related to assigned reading).

Methods of Evaluation

The following methods of evaluation may be used in this course:

- discussions;
- presentations;
- portfolio evaluations.

Textbooks

No required textbooks. Readings may be assigned by Faculty Advisor.

Student Learning Outcomes

Upon successful completion of the required coursework, the student will be able to:

- apply concepts and knowledge of discipline-specific materials to research projects, essays, and other assignments.