

Problems, Journals, and Research in Mathematics

MATH 4925

<http://faculty.weber.edu/aghoreishi/>

Prerequisites: Senior mathematics major or minor and Math 2925. The prerequisites maybe waived for motivated students.

Class Meetings: Mon 1:30-2:20, TY 365.

Credit Hour: 1 **This course can only be repeated once.**

Instructor Information: Dr. Afshin Ghoreishi. See <https://faculty.weber.edu/aghoreishi/contact.html> for instructor's information, including office hours. Office: TY 450M. You can see me whenever I am in my office and not busy. You can also see me by making an appointment.

Objective: This course is intended to develop independent learning abilities through solving mathematics problems and submitting their solutions, reading and comprehending journal articles, or doing research under guidance of an advisor, and presentation of these accomplishments.

Course Description: By taking this 1 credit **Cr/NC** course, students will build on earlier High Impact Educational Experiences in Math 2925 and other courses to practice guided independent learning. This is demonstrated by 1. (a) solving and submitting solutions of problems, (b) reading and comprehending articles, or (c) doing research, and 2. making a presentation. Parts or all of the part 1 may be replaced with successful participation in regional or higher level mathematics contests. This course is not intended to replace other mathematics requirements.

Grading: To earn credit, students may not miss more than one class and must be an active participant, and

1. Must complete at least one of the activities of (a) solving mathematics problems posed in mathematics journals and submitting their solutions, (b) reading and comprehending an undergraduate level mathematics journal article, or (c) do mathematics research under guidance of an advisor. The problems, articles, and research topic must be approved by the faculty advisor. In addition, the number of problems, level of journal article or research accomplishment is determined by the faculty advisor. For example, solutions of two problems, a lengthy journal article, or a new approach to a known result may be considered equivalent.
Successful participation in regional, national or international Math contests, like student contests in regional MAA meetings, SCUDEM, MCM, Putnam, etc., can be used to replace or supplement this requirement, by the discretion of the advisor.
2. Must make a presentation on accomplishments in part 1.