

Course Outline for MATH 4462, Senior Project II

MATH 4462 Senior Project II (1 unit)

Prerequisite: MATH 461 or [MATH 4461](#).

Completion of a capstone mathematics project under direct faculty supervision. Project results are presented in a formal report. Formerly MATH 462.

Course Learning Objectives	
1	Explore open-ended problems in mathematics.
2	Use standard modes of mathematical investigation such as rigorous logical arguments with proofs and/or numerical computations and simulations.
3	Design and implement key organizational components of independent research such as project proposals and timelines.
4	Communicate mathematical results and conclusions in written form via professional-style reports, including appropriate definitions, theorems, equations, figures, and tables.

Expanded Course Content

Textbooks, materials, and/or other resources
Journals and textbooks relevant to the chosen project topic

Week	Readings	Topics of Discussion
1-2	Literature related to project topic	Ongoing research contributing to project topic
3-6	Literature related to project topic	Ongoing research contributing to project topic; drafting project report
7-12	Literature related to project topic	Ongoing research contributing to project topic; editing project report
13-15	Literature related to project topic	Editing project report

Content and Method of Assessment

The student must enroll in the section of MATH 4462 assigned to the advisor before the last day to add courses for the semester.

The student should continue to meet regularly with their advisor.

After complying with the advisor's recommendations, the student will submit a final report including title and approval pages (see samples below).

The advisor will read the final report and assign a grade for MATH 4462, sign the approval page, and forward the complete package to the Mathematics Department chair.

If a project is deemed meritorious by the advisor, the student, with consent of the advisor, may submit the project to the library by following the instructions found here: <https://digitalcommons.calpoly.edu/seniorprojects/>

The department chair will record completion of the project.

(Sample Title Page)

(TITLE)

by

(Name)

Mathematics Department
California Polytechnic State University
San Luis Obispo
2018

2018/19

(Sample)

APPROVAL PAGE

TITLE: Daily Sunspot Spectral Analysis

AUTHOR: *(Student's name)*

DATE SUBMITTED: June 2017

Senior Project Advisor

Signature

Mathematics Department Chair

Signature

2019/20