

MATH 462 Senior Project II

1. Catalog Description

MATH 462 Senior Project II (2)

Completion of a mathematics project under faculty supervision. Project results are presented in a formal report. Minimum 60 hours total time. Prerequisite: MATH 461.

2. Required Background or Experience

Successful completion of Math 461.

3. Learning Objectives

The student should:

- a. Reduce a general problem to specific points of analysis.
- b. Organize points of analysis into a logical sequence.
- c. Apply competencies acquired in other courses to the successful completion of a specific project.
- d. Obtain information necessary to the solution of a problem by library study, experimentation, and/or correspondence and personal contact with individuals who have had experience in the field.
- e. Follow a work proposal without overlooking any major points or significant details.
- f. Organize, illustrate, and write a clear, concise, and correct report of the investigation.
- g. Work for a supervisor who desires quality performance with a minimum of supervision.

4. Text and References

Journals, books, and texts relevant to the topic.

5. Minimum Student Materials

Varies with each project.

6. Minimum University Facilities

Library and computer labs.

7. Content and Method

- a. Student must enroll in section of Math 462 assigned to the project advisor before the last day to add courses for the quarter.
- b. The student continues to meet regularly with his/her advisor.
- c. After complying with the advisor's recommendations, the student will submit the following items in an envelope labeled *Senior Project* to the advisor:
 - i) The corrected final report including title and approval pages (see samples below); and
 - ii) A completed Graduate Status Report (attached at the end of this document).

- d. The advisor:
 - i) Reads the final report and assigns a grade for Math 462.
 - ii) Signs the approval page.
 - iii) Forwards the complete package (including the completed Graduate Status Report form) to the Mathematics Department chair.
- e. The department chair checks completeness of the submitted package, signs the approval page, and records completion of the project. Projects are then returned directly to the advisor. If a project is deemed meritorious by the advisor, the student, with the consent of the advisor, may submit the project to the library by following the instructions found here:
digitalcommons.calpoly.edu/seniorprojects/.

(Sample Title Page)

(TITLE)

by

(Name)

Mathematics Department

California Polytechnic State University

San Luis Obispo

2018

(Sample)

APPROVAL PAGE

TITLE: Daily Sunspot Spectral Analysis

AUTHOR: *(Student's name)*

DATE SUBMITTED: June 2017

Senior Project Advisor

Signature

Mathematics Department Chair

Signature



CAL POLY GRADUATE STATUS REPORT

Please take a few minutes to respond to the questions below for Cal Poly's annual Graduate Status Report. Know that your Graduate Status response will support the Cal Poly community in advising current students, showcasing collective alumni accomplishments, and articulating the value of Cal Poly's *Learn by Doing* curriculum to employer and graduate school representatives. We wish you continued success in all your professional and personal endeavors.

Name: _____ Cal Poly Username: _____

First

Last

Major/Concentration: _____ Degree: Bachelor's ☐ Credential ☐ Master's ☐

Grad Date: _____ Personal Email: _____

Please check the most appropriate response:

☐ **Add Job:**

Employer: _____

Job Title: _____

Industry (See Back For Options): _____

Location (City, State): _____

When: Offer Received Date: _____ Offer Accepted Date: _____ Start Date: _____

Starting Compensation: _____ Base Salary: _____

Expected Bonus: _____ Other Guaranteed Compensation: _____

Signing Bonus: _____ Relocation Reimbursement: _____

☐ **Job Source:** (See Back For Options) _____

Is this a full-time position: Yes ☐ No ☐ To what extent is your employment related to your major?:

Directly related ☐ Somewhat related ☐ Not related ☐

Did this job come as a result of an internship you had with this employer: Yes ☐ No ☐

☐ **List all Internships:**

Internship Title	Company/Organization	Academic Credit Yes or No	Compensation Type	Salary/Stipend
_____	_____	Yes or No	_____	_____
_____	_____	Yes or No	_____	_____
_____	_____	Yes or No	_____	_____

Please share any advice you have for Cal Poly students in your field: _____

☐ **Add Education:**

Degree Level: 2nd Bachelor's ☐ Associate ☐ Master's ☐ Doctorate ☐ Certificate ☐

Degree Earning: _____ Start Date: _____

University Name: _____

Location (City, State): _____

Graduate Assistant: _____ Stipend: _____

☐ **Still Seeking Employment/Education (See Back for Options)** _____

☐ **Not Seeking Employment/Education**

☐ **Add Other Outcome or Plan (See Back for Options)** _____

Outcome Position: _____

Organization/Program: _____

Location (City, State): _____

The information collected is confidential, if you do not want your response to this survey shared with other University offices, please check this box. ☐

UNLIMITED POSSIBILITIES

Industry (Insert Abbreviation):

- » **Accounting** (ACT)
- » **Advertising** (ADV): General, Marketing, Public Relations
- » **Aerospace/Aviation** (AERO)
- » **Agribusiness** (AGB)
- » **Automotive** (AUTO)
- » **Construction** (CONST)
- » **Consulting** (CONSU): General, Biotech., Gas/Oil, Healthcare, Nonprofit, Management, Tech., Other)
- » **Consumer Products** (CP): General, Apparel, Food/Bev., Electronics, Household, Luxury, Tobacco/Alcohol, Other
- » **Economic Development/Microfinance** (ECON)
- » **Education** (EDU)
- » **Energy/Utilities** (ENER): General, Alternative Energy, Energy Trading, Oil/Gas, Utility Services, Other
- » **Entertainment** (ENTER): General, Recreation, Sports Mgmt.
- » **Environmental Services & Sustainability** (ENVE)
- » **Finance** (FIN): General, Commercial Banking, Diversified Financial Services, Hedge Funds, Insurance, Investment Banking, Investment Mgmt., Private Equity, Public Finance, Research & Ratings, Tax, Treasury, Venture Capital, Other
- » **Government** (GOV): General, Local/State/Federal, Military
- » **Healthcare** (HC): General, Biotechnology, Medical Devices, Providers & Services, Other
- » **Hospitality/Tourism** (HOSP)
- » **Human Resources/Recruitment** (HR)
- » **International Trade – Import/Export** (IT)
- » **Law/Legal Services** (LAW)
- » **Manufacturing** (MFG): General, Chemicals, Heavy Equipment, Packaging, Plastics/Rubber, Other
- » **Media** (MEDIA): General, Publishing, Radio/TV/Film
- » **Natural Resources** (NR): General, Forest, Metals/Mining
- » **Nonprofits & Social Enterprises** (NONP)
- » **Pharmaceutical** (PHAR): General, Distribution/Wholesale, Manufacturers, Other
- » **Real Estate** (RE): General, Commercial, Residential, Services, Other
- » **Retail** (RET)
- » **Technology** (TECH): General, Hardware/Networking, Internet Services, Multimedia Services, Software, Other
- » **Telecom** (TELE): General, Manufacturing, Services, Other
- » **Transportation/Logistics** (TRANS)
- » **Other** (OTHER)

Job Source:

- » Career or Job Fair
- » MustangJOBS job posting
- » Employer information/networking meeting
- » Scheduled interviews on campus
- » Resume books, resume referrals, web resumes
- » Off-campus activities supported by Cal Poly Career Services
- » School-facilitated Internships
- » Graduate-facilitated internships
- » Faculty referrals
- » Alumni referrals
- » Previous employer
- » Family, friends outside school
- » Consortia events
- » Other school-facilitated activity
- » Internet
- » Video and telephone interviews
- » Third-party sources (e.g., executive recruiters)
- » Direct mail campaign
- » Newspaper, magazine, and other advertisements
- » Other

Seeking Employment Status:

- » I have yet to make any attempts to look for a job
- » I have applied for one or more opportunities but have not received an invitation to interview
- » I have interviewed for one or more opportunities but have not received an offer of employment
- » I have received one or more offers of employment and I am currently deciding
- » I have received one or more offers of employment but have declined

Other Outcome:

- » Postponing Job Search
- » Fellowship
- » Service Organization
- » Volunteering
- » Military Service
- » Exam preparation
- » Artistic pursuits
- » Caring for or starting a home or family
- » Taking time off
- » Studying abroad
- » Summer classes
- » Research
- » Other intentions

calpoly.12twenty.com/SignUp/Student