Eastern Oregon University Course Syllabus

Number of Course:
MATH 407C

Name of Course:
Capstone III

Catalog Description:
This is the third of a three-part capstone course sequence. Students will select a final mathematical topic or application that is not covered in-depth amongst the current mathematics and statistics offerings. Students will also gain proficiency writing a mathematical exposition in LaTeX as they investigate their topic.

Credit Hours:
2

Instructor:
TBA

Time and place of the course:
TBA

Required Texts or Suggested Materials:
Link to the EOU Bookstore: Eastern Oregon University Bookstore (opens in new tab)

Prerequisites:
MATH 407A, MATH 407B

Learning Outcomes:
Upon successful completion of this course a student should be able to:

- Problem solve in the context of mathematics and be able to apply techniques learned in the study of specific topics in new areas.
- Demonstrate the skills of logical reasoning, and of independent, careful analysis of mathematical exposition.
- Demonstrate proficiency in using LaTeX software to create a mathematical paper.
- Demonstrate proficiency in using the Beamer feature of LaTeX to create mathematical presentation.
- Write and present with the skill appropriate to mathematical exposition.

Course Requirements:

- Daily Attendance
- LaTeX Assignments
- In Class Oral Presentations
- Final Capstone Paper
- Final Oral Presentation, open to the general EOU public

Means of Assessment:
Outcomes will be assessed through the following means:

- Attendance: It is essential that you attend every class period. Attendance includes participation during class topic discussions and being an active member of the classroom. (Outcome 2, 4, 5)
- Latex Assignments: Latex assignments will be geared toward completing your final paper and final presentation. See the rubric for the assessment of the final paper. (Outcomes
- 1, 2, 3, 5)
- Presentations: Each student will present at least twice during the quarter. At the end of the term, every student will give a final oral presentation. These presentations will be focused on the final topic of each student. See the rubric for the assessment of the final presentation. (Outcomes 1, 2, 4, 5)

Grading Policies:

- Attendance account for 5% of the student's overall grade.
- LaTeX Assignments account for a total of 50% of the student's overall grade, with the final paper accounting for 35% of the overall grade.
- Presentations account for a total of 45% of the student's overall grade, with the final presentation accounting for 35% of the overall grade.
- Note: Math 407C is a UWR writing-intensive course, all students must complete it with a C- or better.

Brief Outline of Course:

- The course will begin with discussion of Math Capstone 3 expectations and structure within the Math Capstone sequence.
- Students will spend time in class discussing questions about their topic and the structure of a mathematical exposition in LaTeX.
- Students will also have direct feedback and frequent guidance towards their progress on their topic from the instructor.
- Students will present at least twice in class throughout the term. These presentations will be focused on aspects of their final topic.
- Students will review and discuss their and classmates' presentations. Class discussions will be focused on lessons learned, useful presentation techniques, trouble shooting LaTeX, and best practices for presenting mathematical material.
- Students will submit a final draft of their Capstone paper at the end of term as well as give an oral presentation over their topic.

General Education Category and Outcomes:
NA

University Writing Requirement Outcomes:

- Students will produce at lest 5,000 words* (including drafts of their final paper), 2,000 of which should be in the student's Capstone paper.
- Students written work will be created using LaTeX.
- Students Capstone paper will document the multiple sources reviewed and required for the student to gain understanding of their topic.
- Students will draft, revise, and edit their Capstone paper.

- Students will seek assistance from a Writing Tutor in the Writing Center when needed and when referred to by the instructor.
- *In mathematics, entire sentences may be encompassed by mathematical symbols, for example "$\int_0^3 x^2 dx =$ 9" is equivalent to "The area from x=0 to x=3 that lies between the x-axis and the curve x^2 is 9." This will be considered when reviewing students Capstone papers.

Writing Center Statement:
The EOU Writing Center provides a place — physical or virtual — where every EOU student can find an interested, responsive reader. Writing tutorials are free of charge for EOU undergraduate and graduate students and are available for writing at any course level and for writing resumes, job letters, and graduate applications. For drop-in hours or to schedule in-person, synchronous online, or asynchronous online tutoring, please visit the EOU Writing Center: Writing Center – Eastern Oregon University (opens in new tab).

Classroom Decorum:
NA

Academic Misconduct Policy:
Eastern Oregon University places a high value upon the integrity of its student scholars. Any student found responsible for an act of academic misconduct (including but not limited to cheating, unauthorized collaboration, fabrication, facilitation, plagiarism or tampering) may be subject to having his or her grade reduced in the course in question, being placed on probation or suspended from the University, or a combination of these.

Accommodations/Students with Disabilities Policy:
Any student who feels they may need accommodation for any type of disability must contact the Disability Services Office in Loso Hall, Room 233. Phone: 541-962-3081.

Disclaimer:
This standard syllabus provides only general information on the course. For those enrolled in the course a detailed syllabus will be provided by the Instructor at the beginning of the term. Please keep in mind that not all courses are offered every year.

Syllabus Prepared By:
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Date:
11/28/2021