

Physics 480-01: Capstone Experience!

Fall 2019 | Department of Physics, Loyola Marymount University

Lecturer: J. R. Mureika

Class meetings: M 11:30 – 12:30 (SEA 109)

Office (hours): Seaver 102A (M 14:15-15:15, W 11:00-12:00, R 13:15-14:15, or by appointment)

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Outline:

This course will introduce and/or refine the skills and knowledge necessary for you to be successful after graduation. This includes being well informed about the latest discoveries in physics, having strong communication skills, and making clear plans that will allow each of you to achieve your career goals. Most importantly, the course serves as preparation for your senior thesis project, so much of the focus will be on how to search and read the appropriate literature, how to carry out your project, and how to disseminate the results with appropriate scientific language.

This is a University Core **Information Literacy** flagged course.

Learning Outcomes: By the end of this course, you will be able to:

- Write a research proposal.
- Give a scientific presentation.
- Write a resume that is appropriate for the scientific community.
- Locate, read and interpret a scientific research article.
- Create an annotated bibliography for a collection of related research articles
- Write one or two chapters of your senior thesis.
- Take ownership of your project!

Math and Science Background:

- This is the end! Everything you have done feeds in to this course!

Textbooks and Reading:

- There is no textbook for this course. Handouts and other electronic resources will be made available throughout the semester.

Marking scheme:

Assignments	50%
Class participation and in-class activities	50%
Total:	100%

Credit	50-100%
No credit	0-49%

Assignments: You will be assigned (usually) weekly tasks that covers a variety of topics and formats, including identifying an advisor, writing thesis proposal, creating an annotated bibliography and preparing presentations. As part of the course’s mandate is to prepare you for life after graduation, you will also complete assignments that are targeted for securing employment and/ or admission into post-graduate school. Late assignments will be reduced by 50% per day. Assignments two days late will not be accepted.

Participation: This is the type of class where you must attend, ask questions, or visit your professor in his office to discuss your future! You also won’t just be the audience, but you will periodically be asked to lead discussions or make presentations. Participation is essential to make this work effectively.

Attendance: Class attendance is essential for your understanding of the material and effective participation in discussions and activities. Absences are excused only for reasons of academic conflicts (e.g. field trips) or medical emergencies. These must be cleared with me ahead of time, and/or supported by official documentation afterward in the case of an unexpected situation (doctor’s note for illness, etc...). Three unexcused absences will result in a full letter grade reduction (A to B, B- to C-, etc...). Each additional unexcused absence will also result in a full letter-grade reduction. A maximum of six unexcused absences will result in failing grade.

Class conduct advisory: The use of cellular phones, PDAs, MP3 players and other electronic equipment is not allowed during class time. Cell phones must be set to vibrate before entering the classroom and must be kept inside a backpack, purse or pocket. Bluetooth earpieces must be removed and music players must be put away before entering the classroom. Emergency communications are exempted.

Statement of Academic Honesty: Academic dishonesty will be treated as an extremely serious matter, with serious consequences that can range from receiving no credit for assignments/tests to expulsion. It is never permissible to turn in any work that has been copied from another student or copied from a source without properly acknowledging the source. It is your responsibility to make sure that your work meets the standard of academic honesty set forth in the “LMU Honor Code and Process” in the Undergraduate Bulletin 2011-2013 pages 61 – 64.

THIS SYLLABUS AND ITS CONTENTS ARE SUBJECT TO REVISION; STUDENTS ARE RESPONSIBLE FOR ANY MODIFICATIONS ANNOUNCED IN CLASS, ON THE WEBSITE, OR VIA EMAIL.