



**Course:** PHYS 491/493

**Term:** Fall 2019

**Room:** HBH223

**Class:** M, 3:00-5:50

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## **INSTRUCTOR CONTACT INFORMATION**

**Instructor:** Karl Ecklund

**Office:** Herman Brown Hall 232C

**Phone:** 713-348-2037

**Email:** Karl.Ecklund@rice.edu

**Office Hours:** By appointment; feel free to contact the instructor at any time.

## **COURSE OBJECTIVES AND LEARNING OUTCOMES**

Physics 491 (Undergraduate Research, 2 credit hours) is conducted under the direction of a faculty member, usually affiliated with the Department of Physics and Astronomy, or with a faculty member engaged in applied physics research in another Department. PHYS 493 (1 credit hour) is Undergraduate Research Seminar, where students have the opportunity to learn written and oral communications skills by writing proposals, reports, and at the end of the academic year, a final undergraduate thesis, and by making oral presentations during class meetings. Students will also learn to "referee" their classmates written documents and oral presentations. The goal is to learn the communications skills of a professional physicist. Students must be enrolled in PHYS 491 to enroll in PHYS 493.

## **REQUIRED TEXTS AND MATERIALS**

There are no required materials.

## **EXAMS, PAPERS, AND GRADE POLICIES**

There are no exams in either PHYS 491 or 493. The grade received in PHYS 491 will depend on the significance and degree of involvement in the research project. In PHYS 493, students will be expected to attend and participate in class meetings, submit a proposal, several progress reports, make presentations, and critique other students work. Grades will be based on participation, and quality of the oral and written presentations.

## **CLASS MEETINGS**

PHYS 493 class meetings are scheduled for Mondays between 3:00p and 5:50p, as needed. The class will not meet every week, and the meeting duration will sometimes be less than the full allotted time.

## **ADVANCE PREPARATION**

Students should begin, and ideally complete the process of finding a research advisor before the semester begins

## **RICE HONOR CODE**

All students will be held to the standards of the Rice Honor Code. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at <http://honor.rice.edu/honor-system-handbook/>. Particular emphasis will be placed on properly citing other scientific work, and the avoidance of plagiarism.

**DISABILITY SUPPORT SERVICES**

Any student with a disability requiring accommodations in this class is encouraged to contact the instructor outside of class early in the semester. Additionally, students should contact the Disability Support Services in room 111 of Allen Center ([adarice@rice.edu](mailto:adarice@rice.edu)).

**SYLLABUS CHANGE POLICY**

This syllabus is only a guide for the course and is subject to change with advanced notice.