Research for Undergraduates

**Semester:** This course is offered each semester. It can only be taken until 3 credits are accumulated.

**Description:** In Phys215 the student works on a research study in physics under the supervision of an instructor. Students who intend to take this course are encouraged to contact a faculty member in advance and discuss possible research projects and the number of credit points (1-3). Matching of the selected project with the student’s interests, background, and capabilities is crucial to make a success of the project likely. Research projects can vary greatly, they can include experimental work, theoretical studies, or both.

**Instructor:** Any faculty member in the Department of Physics is eligible so serve as instructor. Exceptions need approval from the Department Head/Chair.

For faculty members in the Department of Physics see http://www.ndsu.edu/physics/people/

**Prerequisites:** This course has no formal prerequisites, but a strong aptitude for research is recommended.

**Meetings:** Meeting times and frequency are coordinated by the instructor. Meetings at least once a week are recommended. Additional meetings are scheduled as necessary.

**Textbook:** This course has no textbook. Reading assignments will be determined by the instructor.

**Homework:** This course has no formal homework. Tasks will be determined by the instructor and assigned on a weekly basis.

**Exams:** This course has no exams.

**Grading:** Each week, when possible, the instructor will note the student’s performance on a scale from one to ten. If a research segment cannot be graded weekly (if the work takes longer than one week) then grading will be done in a reasonable time span for that segment. A final paper is required in which the students describes the research results.

Results from weekly assignments contribute 75% and the final paper 25% to the final grade.

The recommended grading scale is: 90% -100% A, 80% - 89% B, 70% - 79% C, 60% - 69% D, 0% - 59% F.

**Final Paper:** The final paper gives an account of the research results. It contains an introduction, presents methods and results, provides a discussion, and ends with conclusions. The paper should aim to meet all requirements of a scientific publication.

**Coursepack:** Any students with disabilities or other special needs, who need special accommodations in this course are invited to share these concerns or requests with the instructor as soon as possible.

The academic community is operated on the basis of honesty, integrity, and fair play. NDSU Policy 335: Code of Academic Responsibility and Conduct applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of Registration and Records. Informational resources about academic honesty for students and instructional staff members can be found at www.ndsu.edu/academichonesty.