

## Physics Research Seminar

**Catalog:** An experimental or theoretical project will be continued by the student and the results reported in a seminar. Students who have not yet taken the ETS major field test in physics are required to do so while enrolled in Seminar.

**Prerequisites:** Physics Research Project

**Hours:** 1 credit hour (1 lecture/0 Lab)

### Campus Numberings:

Midwestern State University	PHYS 4621	Texas A&M University-Corpus Christi	PHYS 3490
Prairie View A&M University	PHYS 992	Texas A&M University-Kingsville	PHYS 4392
Tarleton State University	PHYS 462	Texas Southern University	PHYS 416
Texas A&M University-Commerce	PHYS 419	West Texas A&M University	PHYS 4103

### Learning Objectives:

Suggested:

Learning Outcome	Method Used for Assessment
<ul style="list-style-type: none"><li>Communicate physics topics to others effectively orally and in writing</li></ul>	Capstone Course Rubric
<ul style="list-style-type: none"><li>Demonstrate effective research skills</li></ul>	Capstone Course Rubric
<ul style="list-style-type: none"><li>Use appropriate mathematical techniques in solving advanced physics problems.</li></ul>	Capstone Course Rubric
<ul style="list-style-type: none"><li>Display critical thinking skills in applying their knowledge to realistic problems and situations</li></ul>	Capstone Course Rubric
<ul style="list-style-type: none"><li>Demonstrate adequate core knowledge in physics topics: mechanics, thermodynamics, electromagnetism, modern physics, and mathematical methods.</li></ul>	Comprehensive Exam (Field Test) Capstone Course Rubric

### Detailed Course Description (Course Topics):

Topics covered during the Seminar will include, but are not limited to:

- Using Latex and other scientific text editing and graphics software.
- Strategies for reference management – MyEndnoteWeb and other tools.
- Techniques and strategies for studying for comprehensive exams.
- Dress and comportment in a professional setting – how to present oneself to be taken seriously.
- International issues in communication for scientists.
- Discussing how to present scientific ideas to non-scientific audiences.
- Presentations of research work.