

General Course Data

Course Catalog Number	MAE 586/ 496
Course Title	Under Graduate Research
Credit-hours	3
Purpose	Make undergraduate students familiar with the research activities in Advanced Materials and solid Mechanic areas
Instructor	Dr. Afsaneh Rabiei, Office: BR 2417, Tel: 513-2674, Email: arabiei@eos.ncsu.edu, Office hour: TU&TH 1-2

Course Objectives

- 1 To be able to analyze the materials properties and correlate those to the mechanical behavior of the material
- 2 To be able to distinguish between different classes of advanced materials including the metal foams, thin films, coatings, biomaterials, nano-materials and shape memory alloys and their applications

Course Requirements

Attending the weekly meetings with the research team (each Friday from 1:00 to 3:00 PM)
 Working in the lab with the graduate research partner at least three hours a week
 Submitting one midterm paper of 10 pages including 6 pages of research back ground and literature survey and 4 pages of report on the progress of the work
 Submitting a final report of at least 15 pages and including maximum 5 pages of background and 10 pages of research progress report!

Evaluation/Grading

Attending the weekly meetings	(15%)
Actively participating in the research activities	(35%)
Midterm paper	(20%)
Final Paper	(30% Bonus)

instructor, resolve to:

- * Treat all students as a stakeholder in their own success and that of the class
- * Respect cultural diversity, mixed abilities and other differences at all times
- * Convey adequate and timely information to the students about evaluation of their work
- * Support each student in a process of continual improvement that supports his or her achievement
- * Team up each undergraduate student with a graduate student to work closely on individual research topics

instructor expect you as a student to resolve to:

- * Take pride and ownership in the lab and display a desire to learn
- * Take responsibility for your own learning
- * Respect cultural diversity, mixed abilities and other differences at all times
- * Be a team player
- * Conduct yourself as a professional, exhibiting: honesty, punctuality, and courtesy to your colleagues.

Final Grading Chart

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
100	97	92	90	87	80	78	75	67	65	62	52	50