

Spring 2016 Syllabus: EMA 3010, Section 1933  
**Introduction to Materials Science and Engineering**

1. **Course Description-** (3 credit hours) – Conceptual perspective for origin of materials behavior - structure/property/performance interrelationships. Materials selection and use of familiar material - metals, ceramics, polymers, electronic materials and composites in electronics, structural and other engineering applications.
2. **Pre-requisites and Co-requisites-** CHM 2045
3. **Course Objectives-** This is an introductory course, designed to provide the fundamental concepts of Materials Science and Engineering. To describe the structure, properties, and applications of metallic, ceramic, polymeric and composite materials.
4. **Contribution of course to meeting the professional component-**  
(ABET only – undergraduate courses)  
This course addresses the following MSE Program outcomes (note: Numbers refer to the list of MSE Program outcomes):
  1. Ability to apply knowledge of mathematics, science, and engineering to materials systems. (High coverage)
5. **Instructor** – Dr. Gerhard E. Fuchs
  - a. Office location: Rhines Hall, room 116
  - b. Telephone: 352-846-3317
  - c. E-mail address: gfuch@mse.ufl.edu
  - d. Class Web site: The course website can be found on the Canvas system <http://lss.at.ufl.edu>, there you can find the course syllabus, lecture notes, grades, and announcements. Check it frequently.
6. **Teaching Assistant** – Rachel Guariello and Puneet Jawali
7. **Office hours-** TBD
8. **Meeting Times-** MWF 4, period 4 (10:40am-11:30am)
9. **Meeting Location-** Weil 270
10. **Material and Supply Fees:** None
11. **Textbooks and Software Required-**  
Textbook Title: Fundamentals of Materials Science and Engineering: An Integrated Approach  
Author: William D. Callister and David G. Rethwisch, 4th Edition  
Publisher: Wiley, ISBN: **9781119035640**  
  
You are also required to have access to WileyPlus, the online resource tool. You should receive a WileyPlus access code when purchasing your book.
12. **Attendance and Expectations-** Lecture attendance is highly recommended. While attendance is not mandatory, experience has shown that those who attend lectures earn higher grades in the course. Arrival on time is expected. Please turn off all cell phones upon entering class. Reading of newspapers, work on assignments for this or other classes, or other activities that are not part of the class are not allowed during lecture. Students who do not comply with these requirements or who behave disorderly or disrespectfully may be asked to leave the classroom.
13. **Exams-** You will be given 3 exams throughout the semester, the exam content may change but the dates will not. There will be **NO** Final Exam. Each exam is weighted equally and each exam will be worth 25% of your final grade. Exams will be administered as evening assembly exams from 8:20pm to 10:10pm (periods E2-E3). Exam dates are as follows:

Exam #1: February 4<sup>th</sup>  
Exam #2: March 16<sup>th</sup>  
Exam #3: April 18<sup>th</sup>

Students have two weeks after test results are posted to resolve questions about scores/grades. No changes to your exam grade will be made after that time.

14. **Exam Conflicts with other course exams**- The official UF policy on exam conflict resolution states that when two exams conflict, the course with the higher number will take priority. There will be no exceptions to this rule.
15. **Make-up exams**- Make up exams will be provided only with the *prior approval of the instructor in accordance with university policies.* (<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>) In general, acceptable reasons for excused absence from an exam include illness, serious family emergencies, special curricular requirements, military obligation, court-imposed legal obligations, and religious holidays. In all cases, you will be required to provide written documentation, and obtain prior instructor approval. You will not be excused from any exam without following the policy above, with no exceptions. Students not in attendance for the scheduled exam will receive a score of zero. **Except in the case of an emergency, you must notify the instructor no less than 1 week of the scheduled exam of your planned intent and justification for missing the exam.**

Make-up exams for excused absences as well as exam conflicts must occur within 1 week of the missed exam, and may occur before the missed exam.

16. **Homework Exercises**- Homework exercises from the end of each chapter will be assigned. These homework questions are essential to your study and some exam and quiz questions will be adapted from them. The homework assignments represent 25% of your grade. Homework will be multiple-choice and will be posted, submitted, and graded through the WileyPlus companion web site. **No late homework assignments will be accepted.** Please see the TAs during office hours to discuss homework problems.
17. **Grading**– 75%: Three exams (equally weighted) and 25%: Homework

18. **Grading Scale-**

Percentage	≥92	≥88	≥84	≥80	≥76	≥72	≥68	≥65	≥62	≥59	≥56	<56
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0

A "C-" will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

19. **Honesty Policy** – All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.
- Note that failure to comply with this commitment will result in disciplinary action compliant with the UF Student Honor Code Procedures.  
See <http://www.dso.ufl.edu/sccr/procedures/honorcode.php>
20. **Accommodation for Students with Disabilities** – Students Requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.
21. **UF Counseling Services** –Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
  - Career Resource Center, Reitz Union, 392-1601, career and job search services.
22. **Software Use** – All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.