

Spring 2018 Syllabus: EMA 3010, Section 2963
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. Josephine Allen
 - a. Office location: Rhines Hall, room 152
 - b. Telephone: 352-846-3328
 - c. E-mail address: jallen@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** – Sara Mills
e-mail: smills16@ufl.edu
7. **Office hours-** Dr. Allen's office hours will be Monday 10:00am-11:00am in Rhines 152
The TA's will hold office hours in Rhines Hall room 155 on Monday and Wednesday 3:00pm-5:00pm
8. **Meeting Times-** Tuesday, period 7 (1:55pm-2:45pm)
Thursday, period 7 and 8 (1:55pm-2:45pm and 3:00pm-3:50pm)
9. **Meeting Location-** Physics Building (NPB) Room 1002
10. **Material and Supply Fees:** None
11. **Textbooks and Software Required-**
THERE IS NO REQUIRED HARD COPY TEXTBOOK FOR THIS COURSE
Students will have two options to gain access to required online materials and a digital textbook (ISBN: 9781119033660) for this course. Students will have the opportunity to “opt-in” to online access directly through Canvas at the start of classes at a reduced price of ~\$70.00. This option will be available until January 26, 2018. Students who choose not to opt-in are forgoing the chance to purchase the required materials at a discounted price and will be responsible for purchasing required materials on their own. The UF Bookstore will carry printed access codes as an alternative purchase option for students who do not opt-in; these access codes will be priced at regular retail and will not be offered at a discount. Both options will offer access to the same materials. There will also be a printed version of the text available in the UF Bookstore available at a discounted price for students who would like a printed resource in addition to their online materials. ****Do not purchase any additional books or access codes for this course.****

Calculators- Only scientific and non-graphing calculators will be permitted during exams. The permitted calculators are NCEES (National Council of Examiners for Engineering and Surveying) approved, and include the following:

- Hewlett Packard- HP 33s and HP 35s
- Casio – fx-115 ES, fx-115 MS, fx-115 MS Plus, fx-115 MS SR
- Texas Instruments – TI-30Xa, TI-30Xa SOLAR, TI-30Xa SE, TI-30XS Multiview, TI-30X IIB, TI-30X IIS, TI-36X II, and TI-36X SOLAR, TI 36X Pro

If you are unsure about your calculator, it is your responsibility to check with the instructor for approval. Calculators will not be provided if you forget or bring the wrong calculator.

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. 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 during our normal class schedule on Thursday. Exam dates are as follows:

Exam #1: February 8 (Thursday)
 Exam #2: March 22 (Thursday)
 Exam #3: April 19 (Thursday)

Students have one 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 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-**

Percent	Grade	Grade Points
93.4 – 100	A	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	B	3.00
80.0 - 83.3	B-	2.67
76.7 - 79.9	C+	2.33
73.4 - 76.6	C	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

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.