

MAE 686 – Materials Science and Engineering Seminar

Spring 2020 Course Syllabus

Credits: 1 Hr
Prerequisite: None
Textbook: None

Location: 251 Engineering Science Building

Meeting Time: Friday, 3 pm

Instructors

Instructor: Terence Musho: Office: 727 ESB, (304) 293-3256
 E-mail: tdmusho@mail.wvu.edu, Office Hours: By Appt.

Faculty Mentors: Faculty research advisors will serve as the mentors for this class. A list of faculty who can serve as mentors are available from the home department of the students.

Educational Objectives

1. Critical Skills. Students must demonstrate **mastery** of the following skills/knowledge to receive a passing grade in this course:
 - Ability to listen to scientific presentations and ask pertinent questions regarding the material presented.
2. Competency Skills. Students are expected to demonstrate some level of competency in the following skills. The semester grade will reflect the student's level of achievement of these objectives.
 - Ability to critically evaluate the research presented in peer-reviewed articles.
 - Ability to actively participate in a discussion of strengths and weaknesses of scientific publications and/or the scientific merit of the research presented.

Course Grading

Grades will be assigned based on the successful completion of the course requirements that will be described below. A minimum passing grade will be given to students who have completed the following requirements:

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|----|---|-----|
| 1. | Attendance: | 80% |
| 2. | 3 Page Summary/Literature Review on Favorite Talk | 20% |

Semester grades will be assigned according to the standard scale:

A (90 - 100); B (80 - 89); C (70 - 79); D (60 - 69); F: < 60.

Class Attendance

Due to the dependence on participation, students are required to attend all scheduled seminars given by invited speakers. A sign-up sheet will be passed around each class that must be initialized. For each unexcused absence you will be one letter reduction in grade.

Policies

- Professional and ethical behavior is expected in class and in carrying out assigned tasks and coming to class on time.
- Disruptive behavior such as reading newspapers, talking, using cell phones or other electronic devices is not permitted in class.

Participation in Class

It is encouraged that each student asks at a minimum of two or more questions to the invited speakers throughout the semester.

At the end of the semester you will be required to conduct a short summary and literature review on your favorite talk. The following criteria must be followed:

1. Literature review must follow the format style provided on Ecampus.
2. The literature review must include at a minimum of 10 citations from scholarly journals.
3. The literature review must include an introduction, discussion, and conclusion. Introduce the problem, discuss how people are studying the problem (with refs), and conclude how the problem will be solved in future.
4. Abstract must be less than 150 words. Keywords must be provided. One image can be provided in the text and will count towards page length.
5. Total document length excluding the reference section must not be greater than 3 pages. Follow strict formatting (double column, font, etc) using the provided template.
6. Grading Rubric – 40% Reference, 10% Abstract, 20% Intro, 30% Discussion.
7. The document will be due in my mailbox on 8th floor at the start of final for this course.

Academic Integrity

The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the West Virginia University Academic Catalog at:

<http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#academicintegritytext>

Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see me before the assignment is due to discuss the matter.

Inclusivity Statement

The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion. If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Accessibility Services (293-6700). For more information on West Virginia University's Diversity, Equity, and Inclusion initiatives, please see: <http://diversity.wvu.edu>.

Days of Special Concern

WVU recognizes the diversity of its students and the needs of those who wish to be absent from class to participate in Days of Special Concern, which are listed in the Schedule of Courses. Students should notify their instructors by the end of the second week of classes or prior to the first Day of Special Concern, whichever is earlier, regarding Day of Special Concern observances that will affect their attendance. Further, students must abide by the attendance policy of their instructors as stated on their syllabi. Faculty will make reasonable accommodation for tests or field trips that a student misses as a result of observing a Day of Special Concern.

Tentative Course Schedule

Date	Speaker	Institution
17-Jan	<i>Allan Manalo</i>	Southern Queensland
24-Jan	<i>Mihails Kusznezof</i>	Fraunhofer Institute
31-Jan	No Speaker	N/A
7-Feb	Aaron Mazzeo	Rutgers
14-Feb	Wing Kam Liu	Northwestern
21-Feb	Lian Li	West Virginia University
28-Feb	No Speaker	N/A
6-Mar	Xiao-Dong Zhou	University of Louisiana
13-Mar	Andrew Leville	Volvo
20-Mar	<i>NO CLASS</i>	SPRING BREAK
27-Mar	Jian Luo	UC San Diego
3-Apr	<i>Jianping Zheng</i>	University of Buffalo
10-Apr	NO CLASS	N/A
17-Apr	Aldo Romero	West Virginia University
24-Apr	<i>Zhiqun (Zee-Chin) Lin</i>	Georgia Tech
1-May	TBD	
8-May	NO CLASS	3 Page Summary Due at Start of Final Time