

MSE 529: Hard Materials Seminar, Spring 2021

Instructors:

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Schedule:

Thursdays 4:00 pm–4:50 pm via Zoom,

<https://illinois.zoom.us/j/93720743506?pwd=Y0tHWEtIcHV2UGsyeDJlWmtUdndmQT09>

Meeting ID: 937 2074 3506

Password: 050371

Course Websites:

- Class schedule, recordings, and gradebook: [MSE529 on Compass](#)
- Online discussion forums: MSE529 on Piazza

Objectives:

Students will be able to present their own scientific research to an audience of peers in an informative and accessible form. Furthermore, students will learn about contemporary materials science research projects from presenters that are already established in their professional careers.

Course Evaluation:

The seminar grade is based on attendance only. If you have more than 2 unexcused absences for the semester, you will receive an unsatisfactory grade. For those students that are scheduled to give a presentation, if you miss your presentation without notifying the instructors, you will also receive an unsatisfactory grade. Excused absences are for medical or professional reasons only, such as job interview, participation in conferences, or off-campus research activities. Please send a message to both course instructors through Piazza in the case of requesting an excused absence (except where confidentiality beyond that provided by a Piazza private message is needed – then please use email).

Presentations:

We will alternate from week to week longer presentations from non-student presenters one week with two shorter student presentations the following week. During the dates with student presentations, selected graduate students enrolled in the PhD program will present a 12–15 minute research seminar. The schedule of the presentations for this semester is located at the end of this document. If you have been selected to present on a given day and you have a schedule conflict, it is your responsibility to inform the instructor well in advance so that your presentation can be rescheduled. All presentations will be delivered via Zoom, and questions for

the presenter can be asked either directly by raising your hand and being called upon by the session chair (one of the instructors) or via the chat function of Zoom.

Grade Reporting:

Synchronous: Synchronous attendance is expected from all students in compatible time zones. All attendance will be determined from the automatically generated Zoom participant attendance list & statistics, and thus it will be important that you *join the meeting through your UIUC zoom account*, displaying either your name or your netID. Joining without being logged in risks losing attendance credit. Please do not join the meeting more than 15 minutes before its start time.

Asynchronous: Asynchronous attendance is permitted for students in non-compatible time zones and for synchronous students with excused absences. All attendance will be determined through Mediaspace statistics (Mediaspace hosts the videos). The videos will be posted on Compass after the seminar, and you will have 1 week from the post date to log in and view the video. *You must be logged in through your UIUC account with an up-to-date browser to gain attendance credit.*

For both: You will need to watch >75% of a video or be present for >75% of the zoom meeting in order to gain attendance credit for that week. All attendance records will be uploaded and stored on the Compass2g website. *Any errors in grade reporting appearing on Compass2g must be reported within 2 weeks of the due date of the assessment item or by the last day of class, whichever is earlier.*

Expectations:

To succeed in this class you will need to:

- Attend class regularly and participate through thoughtful questions;
- Prepare and practice your presentation;
- Seek out help when you have trouble.

Online Forum (Piazza):

This class uses Piazza for all communication between the instructors and students. Please visit MSE529 on Piazza to register. The class link will take you to the current page at any time.

Official class announcements will be sent via Piazza, so you must register with an email address that you regularly check. If you desire, you can post anonymously on Piazza or make a private post just to the instructors (this should be done rather than emailing the instructors directly).

E-mails sent directly to the instructors will not be answered, unless the student has a serious matter that requires confidentiality beyond a private Piazza message to the instructor.

Special accommodations:

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact their lecturer and the Disability Resources and Educational Services (DRES, disability.illinois.edu) as soon as possible.

Academic Integrity:

You are bound by the [University Honor Code](#) in this course. Any violation of the Honor Code will result in disciplinary action. Please report any concerns immediately to the instructors.

Inclusivity Statement from the College:

The Grainger College of Engineering is committed to the creation of an anti-racist, inclusive community that welcomes diversity along a number of dimensions, including, but not limited to, race, ethnicity and national origins, gender and gender identity, sexuality, disability status, class, age, or religious beliefs. The College recognizes that we are learning together in the midst of the Black Lives Matter movement, that Black, Hispanic, and Indigenous voices and contributions have largely either been excluded from, or not recognized in, science and engineering, and that both overt racism and micro-aggressions threaten the well-being of our students and our university community. The effectiveness of this course is dependent upon each of us to create a safe and encouraging learning environment that allows for the open exchange of ideas while also ensuring equitable opportunities and respect for all of us. Everyone is expected to help establish and maintain an environment where students, staff, and faculty can contribute without fear of personal ridicule, or intolerant or offensive language. If you witness or experience racism, discrimination, micro-aggressions, or other offensive behavior, you are encouraged to bring this to the attention of the course director if you feel comfortable. You can also report these behaviors to the Bias Assessment and Response Team (BART) (<https://bart.illinois.edu/>). Based on your report, BART members will follow up and reach out to students to make sure they have the support they need to be healthy and safe. If the reported behavior also violates university policy, staff in the Office for Student Conflict Resolution may respond as well and will take appropriate action.

Sexual Misconduct Reporting Obligation:

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX Office. In turn, an individual with the Title IX Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options. A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: wecare.illinois.edu/resources/students/#confidential. Other information about resources and reporting is available here: wecare.illinois.edu.

Religious Observances:

Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to admissions, class attendance, and the scheduling of examinations and work requirements. You should examine this syllabus at the beginning of the semester for potential conflicts between course deadlines and any of your religious observances. If a conflict exists, you should notify your instructor of the conflict and follow the procedure at <https://odos.illinois.edu/community-of-care/resources/students/religious-observances/> to request appropriate accommodations. This should be done in the first two weeks of classes.

Family Educational Rights and Privacy Act (FERPA):

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <https://registrar.illinois.edu/academic-records/ferpa/> for more information on FERPA.

Changes to the syllabus:

Changes may occur as deemed necessary by the instructors; they will be announced.

Schedule for presentations

Date	Speaker	PI or Affiliation	Title of presentation
2/4/2021	Yifan Yao	Schleife	
	Kaustubh Panse	Zhang	
2/11/2021	Chris Leighton	University of Minnesota	
2/18/2021	Zoë Tucker	Krogstad	
	Zach Riedel	Shoemaker	
2/25/2021	Amanda Neukirch	Los Alamos National Laboratory	
3/4/2021	Xioyang Li	Cahill	
	Soumayajit Jana	Bellon	
3/11/2021	Jennifer Rupp	MIT	
3/18/2021	Chiao-hao Lee	Huang	
	Aravind Baby	Rodriguez Lopez	
3/25/2021	Emmanuelle Marquis	University of Michigan	
4/1/2021	Brian Robinson	Schleife	
	Hyewon Jeong	Braun	
4/8/2021	Roopali Kukreja	UC Davis	
4/15/2021	Sourav Das	Dillon	
	Justin Sanghyun Bae	Huang	
4/22/2021	Kunal Mukherjee	Stanford	
4/29/2021	Robin Klause	Hoffmann	
	Erick Hernandez	Smith	