

Subject	Subject Title	Instructors	Contact	Method of Delivery	Description of Delivery
3.006	NEET Seminar: Advanced Materials Machines	Elsa Olivetti, Justin Lavallee	elsao@mit.edu	Entirely online	Synchronous course meetings on Zoom every month to share progress, with 1:1 office hours and lab support available upon request, and weekly or biweekly check-ins with each student, as appropriate. Lab assignment progress will be tracked via posts on Canvas, and Slack will be used for communication, informal progress sharing, and asynchronous lab support.
3.007	Introduction to Materials and Mechanical Design	Alice Nasto, Justin Lavallee	anasto@mit.edu	Entirely online	Lectures are given via Zoom at the scheduled time and video recordings are available on Canvas along with lecture slides. Attendance is mandatory and graded. Lab sessions and office hours are held over zoom. There are no quizzes and exams.
3.010	Structure of Materials	Caroline Ross, Elsa Olivetti, Jim LeBeau	caross@mit.edu	Entirely online	Lectures (Mondays and Wednesdays) will be offered synchronously and recorded for asynchronous viewing. Labs are synchronous and will be recorded; attendance will not be graded but there will be graded deliverables based on labs so students should work closely with the instructors if they cannot attend lab or effectively view the recordings. There will be small synchronous group opportunities during the lab sessions. Two different lab sections will be offered (am and pm on Fridays) and two different recitation times (Tuesdays) in addition to multiple office hours. All materials will be posted on a Canvas site. Exams will be taken at home during class times with accommodation made as needed.
3.013	Mechanics of Materials	Cem Tasan, Elsa Olivetti, Jim LeBeau	tasan@mit.edu	Entirely online	- Are lectures synchronous or asynchronous? Both. - Are synchronous lectures recorded? Yes. - Is attendance mandatory or graded? Not mandatory. - How will recitations and/or laboratory sessions be treated? Goodie bags & Online demonstrations. - How will quizzes and exams be administered? PDFs will be sent, exam will be carried out on zoom.
3.019	Introduction to Symbolic and Mathematical Computing	Craig Carter	ccarter@mit.edu	Entirely online	Lectures and recitations will be given online at scheduled time and recorded within zoom. Recording will be stored on zoom's cloud. Attendance is mandatory, unless a student has made arrangements (for example, because of time zone differences. In this case, students will be asked to do a 5 minute check in). Quizzes will be given and can be finished anytime in 24 hour period. Quizzes will be designed so that open book/open collaboration/open web is permissible.
3.032	Mechanical Behavior of Materials	Lorna Gibson	ljgibson@mit.edu	Entirely online	Lectures are on video, with Professor Gibson available at the regular lecture times (MWF 10) to answer questions. Attendance is not mandatory or graded. We will have two recitations per week to have a smaller group than usual, on zoom. The labs are being done by the lab instructors and videotaped. Students do not attend the scheduled lab session, but instead watch the material on their own time. Students will be sent data to be analyzed and will send back group lab reports. Instead of midterms, students will be asked to develop two test questions for each part of the subject and will be graded on how they develop the questions.
3.034	Organic and Biomaterials Chemistry	Rob Macfarlane	rmacfarl@mit.edu	Entirely online	Lectures will be virtual and synchronous. Recordings of lectures will be made available after lecture. Attendance is not mandatory but strongly encouraged. Recitations will also be handled virtually, and are also strongly encouraged but not mandatory. Labs will be handled remotely, with lab design and data analysis being done by students, but actual lab experiments being done by lab instructors. Students do not attend the scheduled lab session, but instead watch the material on their own time. Exams will be administered remotely as take-home exams to be completed over a 24 hr. period on the day of the exam.
3.042	Materials Project Laboratory	Mike Tarkanian	tarky@mit.edu	Online with an optional on-campus component	Lectures given online at scheduled time. Recordings of lectures will be available for later viewing. Attendance is mandatory, but we understand that attendance can often be difficult particularly for students off-campus, and we will be flexible. All class materials (and assignment uploads) will be posted to Canvas. Laboratory sessions, Tuesday and Thursday 2-5, should also be kept clear for the entire semester. These times are reserved for regular meetings between students and staff, team presentations, other curricular activities, laboratory work if in-person, and computational reviews for off-campus students. Students will not be allowed to double-book this time with other classes.
3.055/3.963	Biomaterials Science and Engineering	Darrel Irvine	djirvine@mit.edu	Entirely online	Lectures given online at scheduled time. Recordings will be made for later viewing. Exams will be administered over a 24 time window. (No recitation for this class).
3.056/3.64	Materials Physics of Neural Interfaces	Polina Anikeeva		Entirely online	Lectures and office hours will be given via Zoom at the scheduled times, video recordings will be made available on Canvas, along with detailed class notes and related materials. All design reviews (presentations and papers), and exams will be posted and submitted on Canvas. We will use Slack as a class discussion forum with channels dedicated to various topics.
3.064	Polymer Engineering	Niels Holten-Andersen	holten@mit.edu	Entirely online	Lectures via Zoom as scheduled, with recordings made available for later viewing. Psets will be available to be taken over a week-long period. Final assignment will be writing a (hypothetical) scientific paper addressing your own original research question based on topics covered during the course.
3.07	Introduction to Ceramics	Yet-ming Chiang	ychiang@mit.edu	Entirely online	Contact instructor.
3.080	Strategic Materials Selection	Randolph Kirchain	kirchain@mit.edu	Entirely online	Lectures will be a mixture of synchronous (given online at the scheduled time) and asynchronous. Synchronous lectures will focus on problem solving. All lectures will be recorded and available for later viewing. Exams will be take home with a specified due date and time.
3.087	Materials, Societal Impact, and Social Innovation	Christine Ortiz, Eilan Spero	cortiz@mit.edu	Entirely online	Information forthcoming.
3.091	Introduction to Solid-State Chemistry	Don Sadoway, Rafael Jaramillo; Laura von Bosau (Course Administrator)	vonbosau@mit.edu	Entirely online	Lectures will be pre-recorded and posted for viewing at any time. Quizzes and exams will be posted on Canvas to be taken within a 24-hour window. Recitations will be held live over Zoom, and attendance is mandatory. Office hours will be held live over Zoom, and attendance is optional.
3.156/3.46	Photonic Materials and Devices	Juejun Hu	hujuejun@mit.edu	Entirely online	Lectures given online via Zoom at scheduled time. Recordings of lectures will be available for later viewing. We will use Piazza as a staff-managed class discussion forum.
3.16/3.39	Industrial Challenges in Metallic Materials Selection	Tadeu Carneiro	tadeuc@mit.edu	Entirely online	Lectures given online via zoom at scheduled times. Lectures will not be recorded and attendance is mandatory. Presentations will be available and posted at the class page. There will be three assignments associated with a review and analysis of selected published papers. A final exam will be a project presented at the end of the course. Graduate students will have one additional assignment at the end of the semester. Plenty of zoom office hours will be offered.
3.171/3.371	Structural Materials and Manufacturing	Thomas Eagar	teagar@mit.edu	Entirely online	Lectures are asynchronous. Course Introduction and Recitations are synchronous via Zoom. There are no quizzes or exams. Only a presentation/paper and some assignments.
3.20	Materials at Equilibrium	Antoine Allanore	allanore@mit.edu	Entirely online	Information forthcoming.
3.23	Electrical, Optical, and Magnetic Properties of Materials	Geoffrey Beach	gbeach@mit.edu	Entirely online	Lectures and recitations will be given by Zoom at the scheduled times. Synchronous lectures will be recorded for later viewing. Exams will be proctored live using Zoom.
3.24	Structure of Materials	Frances Ross	fmross@mit.edu	Entirely online	Lectures given online at scheduled time. Recordings of lectures will be available for later viewing. All reading and problem sets will be posted on Canvas.

3.31J	Radiation Damage and Effects in Nuclear Materials	Michael Short	hereiam@mit.edu	Online with an optional on-campus component	Lectures will be given synchronously from 9:00-10:30AM on Fridays. They will be recorded for students who cannot attend for any reason. Recordings will be available within 1-2 days for later viewing. Copious Zoom and by-appointment office hours will be available. Lab activities will occur a few times during the semester, and for students who cannot attend they can complete the exercises using data from other students. The midterm and final exam are take-home, with 24 hours to complete the questions. Piazza will be used for online Q&A.
3.320	Atomistic Computer Modeling of Materials	Rafael Gomez-Bombarelli	rafagb@mit.edu	Entirely online	Lectures will be given synchronously at the scheduled times via Zoom and made available as password-protected recordings. Recitations will follow the same format with live hands-on simulation exercises on a provided simulation environment. Attendance and live participation via video and audio are strongly encouraged but will **not** be taken into account for grading. The grading will be based on P-sets and small-team projects presented via zoom at the end of the semester. Webforms will be used to collect feedback on the clarity of each lecture and Canvas will be used to post class materials (lecture notes, p-sets, reading materials), to upload submissions and for class discussions.
3.33J	Defects in Materials	Ju Li	liju@mit.edu	Entirely online	The online lectures are synchronous, and will be recorded. Students will be required to turn on camera to be more interactive. There will be a final exam in the final exams week.
3.38	Ceramics: Processing, Properties and Functional Devices	Jennifer Rupp	jrupp@mit.edu	Entirely online	Lectures are synchronous. Lectures will be recorded for those who cannot attend. Attendance is no longer mandatory. We will record sections of lab work and present that as a part of the lectures to make it lively. We will do open book quizzes and define a certain time range when these are held.
3.42	Electronic Materials Design	Harry Tuller	tuller@mit.edu	Entirely online	Contact instructor.
3.43J	Integrated Microelectronic Devices	Jesus Del Alamo	alamo@mit.edu	Entirely online	Lectures and recitations will be live via Zoom at the scheduled time. Attendance is required for students in same time zone. Lectures and recitation will be recorded for students in other time zones to view at their convenience. Additional online discussion sessions will be organized at various times with the goal of having all students participate. There are no hands-on activities.
3.44	Materials Processing for Micro- and Nano-Systems	Carl Thompson	cthomp@mit.edu	Entirely online	Synchronous lectures via Zoom with posted recordings. No recitations or lab sessions. Optional tutorials on background information as needed/requested. One 1.5 hr. quiz at mid-term and a 1.5 hr. second quiz during the finals period. Approximately 5 problem sets and a term paper/video. Quizzes will be sent as pdfs with passwords and they will be proctored using Zoom. Students will submit scanned or photographed images of their solutions in a pdf file.
3.903J	Seminar in Polymers and Soft Matter	Alfredo Alexander-Katz	aalexand@mit.edu	Entirely online	It will be synchronous, with no quizzes. This is a seminar.
3.942	Polymer Physics	Alfredo Alexander-Katz	aalexand@mit.edu	Entirely online	This class will have both asynchronous lectures complemented by synchronous discussions of the material as it relates to real life applications and phenomena. All lectures will be recorded. The class grading will be based on homework and a set of 3 quizzes that will be administered online.
3.982	The Ancient Andean World	Alexei Vranich	avranich@mit.edu	Entirely online	Lectures will be given at synchronous times. Lectures will be recorded. Attendance is not mandatory. Assignment will have a week period to complete. Exams will have a week period to complete.
3.986	The Human Past: Introduction to Archaeology	Max Price	maxprice@mit.edu	Entirely online	Lectures will be given at a scheduled time and videos of them posted. However, recitations will be in-person; they will also be recorded with students' permission. I will request that students who are attending from different time zones get in touch with me. I am hoping that the class can be done synchronously, however, I am preparing for asynchronous. In the event that students cannot participate in discussion, they will be asked to contribute more to the online discussion board. There will be no graded quizzes or exams in this class. Non-graded quizzes (to allow students to track their progress), will be administered via the honor system.
3.501/3.570	Special Subject, Ancient Engineering: Ceramic Technologies	Jennifer Meanwell	jmeanwel@mit.edu	Entirely online	Lectures given online at scheduled times and recordings will be made available on the class Canvas site. All class materials will be posted and submitted on Canvas, with the exception of the two textbooks, which are available in electronic format. We will have required online discussion postings each week.
3.502/3.572	Special Subject, Six Sigma Materials Processing	Lionel Kimerling	lckim@mit.edu	Entirely online	One hour asynchronous lecture recorded and posted for study prior to two hours of synchronous Case Study reports and discussion. Attendance is mandatory. Grading is based on the student's posted (.pptx file) content and presentation skills of the Case Study reports and class discussion. Assignments will be completed by student teams.
3.506	Special Subject, Casting a Tradition	Tara Fadenrecht	tfade@mit.edu	Entirely online	Office hours can be scheduled at the beginning of each synchronous class meeting. Lectures will be given via Zoom and video recordings will be made available on Canvas. In lieu of lab sessions, the course will offer instructor-guided independent study projects investigating contemporary art issues with a weekly group discussion on Zoom. Students will also continue the collective sculpture design work initiated by previous sessions of the course.