

# MIT Department of Physics

**Peter Fisher, Department Head** Professor of Physics

July 17, 2017

Dear Course 8 Majors,

I am writing to you today to tell you about teaching and learning in the Physics Department for Fall 2020. I hope this note finds you well and anticipating Fall term.

As you know, MIT Seniors will be invited to campus for Fall term while Sophomores and Juniors will be largely remote. For Fall, we have adopted the following principles for our educational program:

1. Anything that can be done remotely should be done online.
2. On-campus and off-campus students must have learning opportunities that are as equal as possible.
3. No one has to come to campus if they feel they cannot safely do so.

With these principles in mind, the Department has decided that all of our courses will be primarily delivered online. We will offer all of our standard required undergraduate and graduate subjects and the usual number of our elective subjects. Junior lab (8.13) will be primarily online, with some remotely controllable experiments and several data analysis projects using LIGO, LHC, and astrophysical data. Principles #1 and #3 informed our decision to make all of our subjects completely online.

Later in the summer, we will meet with the Space Planning Team to see what on-campus space is available for small meetings between Physics students and their instructors. These meetings will not be a required part of the course. Following Principle #2, if an instructor chooses to meet with on-campus students, they will also make the same amount of time available to meet with off-campus students in the same manner.

The Department learned a lot from our experience in the Spring. The Society of Physics Students, SPS, also met and has given the Department a summary of their views of what did and did not work during Spring term. Over the summer, we have been working on incorporating these lessons into our subjects for the Fall. In particular, we are planning a scaled-up version of the 8.02 mentoring program for students in our early subjects, we will flip several subjects that already have good online lecture videos, and we will work to minimize high-stakes exams and assignments.

UROP research will continue in the Fall and, with MIT moving to 50% lab occupancy soon, our undergraduates should be able to get access to labs needed for their research. The Physics Department will also continue to have the Colloquium, seminars and other virtual gatherings to learn about the progress in the field and to be with each other. The Department will support PGSC

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and SPS to plan events to help with graduate school applications and career choices for our seniors. In addition, the Office of Experiential Learning in making an experiential learning guarantee of \$1,900 for each off-campus student to be used for a UROP, teaching opportunity, or public service. See the Frequently Asked Questions pages, <https://covid19.mit.edu/undergraduate-students> for more details.

The #ShutDownSTEM strike awakened many in the Department and MIT to the problem of racial injustice and this has led to a very active effort with our student groups, the Physics Values Committee and the Department to address systemic racism, improve equity, and improve the climate for everyone. This work will continue into the Fall and we hope you will join in. The Department has also acted to add student members to two important standing committees, the Education Committee (undergrads and grad students) and the Graduate Admissions Committee (graduate students only). This will formally allow for student perspectives to be included in the decision-making of the Department, and we are looking forward to the strides that students, staff and faculty will make together.

Fall will be very different than usual and I suspect that reaching a new “normal” will take months or years. While this is difficult, we do still have our field of study that we are devoted to and that will continue to bring us joy. I am looking forward to Fall and having everyone together again, at least virtually.

Best regards,

A handwritten signature in cursive script that reads "Peter Fisher".

Peter Fisher, Physics Department Head