

LS50 FAQ

Is enrollment limited?

Yes, enrollment is limited to 30 students. Normally, more students are initially interested in taking the class, but when registration occurs after the first few lectures, the number of students who are interested in taking the class has fallen below 30, and we have not had to lottery to decide which 30 students can take LS50. This year, shopping occurs before classes officially start (9/2), and registration ends at 11:59pm on 8/26. More importantly, if you want to be considered for LS50, you have to let us know by the end of 8/21 so that we can run a lottery if there are more than 30 interested students

How can we learn about LS50 during shopping week (8/17-8/21)?

In three ways: visiting the course website and our associated project site, watching the first two lectures, and talking to us. We will have prerecorded at least the first two lectures of LS50 so that they are available during shopping week, we will set up sessions where you can talk to us and ask questions, which we'll attempt to answer, and you'll be able to talk to all three groups of people involved in teaching the class: the faculty, the teaching fellows, and the course assistants, who are all Harvard students who took LS50 in one of the last two years. The timing of those sessions will be listed on the course website. If you have questions about whether this is the right course for you, we *urge* you to talk to us before the registration deadline.

Can we talk to you before we make a decision on LS50?

Yes you can, via virtual office hours during shopping week, as described in the preceding answer, and we strongly suggest that you do.

If you have a lottery and I lottery in, am I committed to taking LS50?

Not absolutely, but you should try and get the information you need to make a decision before you tell us that you want to take the course. If you lottery in and then decide not to take the class, we have to contact people on the wait list, who may have lotteried for other classes, and you can see how it's easy for this to become a big mess. Bottom line: get informed, make decision on whether LS50 is for you or not, stick to it, at least for the first few classes.

Is it true that LS50 and Expos add up to 5 of the 8 classes I can take in my freshman year?

Yes, it's true.

I'm not a freshman but I really want to take LS50, can I?

No, sorry, you can't.

If I take LS50A (fall), must I take LS50B (spring)?

The two classes are formally separate, so taking LS50A doesn't irrevocably commit you to taking LS50B. But they are designed to function as a single, coordinated, year-long course and so you get less than half the benefit of the class if you only take LS50A. Each year we've taught the class, between one and five students have elected not to take LS50B.

What happens if I want to drop LS50A?

We have an informal agreement that up to the add/drop deadline you can leave LS50 and join LS1a. But since LS50 is a double class and LS1a is a single class, you would need to add one other class.

Does filling the LS50 survey represent a commitment to take LS50?

Absolutely not! It's just a way of letting us know that you're potentially interested and giving us information about you that can help us chat to you as you think about taking the class.

Do I have to fill in the survey to be eligible to take LS50?

No, but filling it in helps us help you.

Do I have to let you know I'm interested in taking LS50?

It depends on whether or not more than 30 students end shopping week wanting to take the class. If so, we have to hold a lottery and we need to hear from you so we can put your name in the lottery, if not, you can register for the class without ever talking to us. Should you take that chance? No, talk to us!

I like the idea of original lab-based research, but how will that work with Covid?

The fall research will be computational biology, with Sergey Ovchinnikov, a John Harvard Distinguished Science Fellow. The experimentation is digital, inside your computer so you can do original research online. The spring research is on bacterial membranes and antibiotic resistance with Emma Nagy, a Harvard College Fellow. We can't tell what the spring semester will look like, but we have back up plans for doing research on this topic online if you're still not allowed to enter labs.

What math background do I need to take LS50?

The course has only one formal prerequisite, a knowledge of calculus. If you've never done calculus, you won't survive LS50, but if your calculus is rusty and you're prepared to work hard, we have a couple of back-up-to speed calculus lectures and can offer some additional help to get you ready to deal with material later in the semester. In terms of recommendations from the Math Placement Test, many students who've been recommended to take Math1b have done fine in LS50, as have some students who were recommended to take Math1a, and at least one who was recommended to take Math Ma/b. If you're in the last two categories, please talk to us rather than just signing up for LS50.

What about the other subjects?

We don't have formal prerequisites for biology, chemistry, or physics and students who worried about their background in at least one of these subjects have done well in LS50, as long as they were prepared to make up ground quickly. We advertise that everyone who takes LS50 will find some of the material challenging, but different students find different parts of the class challenging depending on a mixture of their previous studies and the sort of problems they find easiest to think about.

You're going to have us write computer programs. Is it OK if I've never done that?

Yes, it's totally OK. We assume that you've never done this before because the range of people's backgrounds in this area is enormous.

The CUE guide says the course is very demanding, but also rewarding if you put in the effort. True?

The best people to ask are the Course Assistants who were LS50 students last year or the year before. Our goal is to present modern science as a single integrated whole trying to make sure that you genuinely understand its central concepts. This means that we cover a lot of ground and to do that, we move quickly, requiring you to absorb and understand a lot of material. But LS50 is supposed to be collaborative not competitive and supportive not a hazing ritual.

If I'm struggling in LS50, how can I get help?

There are multiple options. The faculty have regular office hours and can arrange to chat to you at other times if you can't make those. The teaching fellows hold a discussion each week, have office hours, and run a PSet session each week, and can be available at other times. The course assistants hold office hours and participate in the PSet session. In previous years, students have formed study groups and been a useful resource for each other. Finally, the Academic Resource Center can help with general questions about strategies for dealing with the intellectual demands of college and also find individual tutors for LS50.

I want to take LS50A and CS50 (or some other very demanding course). Good idea?

Some of your predecessors have done this, with some surviving and others thriving. Our general advice is that if you're planning on taking a double class that's regarded as being demanding in both time and mental effort during your first semester in college, it *might* make sense to not make one of your other classes as demanding, but it's your call.

Some people say LS50 has too much biology, others not enough. Who's right?

Hard to say. We use biology as an integrating theme to illustrate the concepts from other branches of science, so you learn a good deal of biology as you learn about natural science in general, but less than you would if you took four biology classes. By our count, 51 of the 100 lectures are primarily about biology, although many of them are also illustrating concepts from other branches of science.