

FALL 2024

General Information

Location of Class Meetings: North West Building B101

Harvard College/GSAS: 110450

Meeting Time: Tu/Thu 1:30-2:45 PM EDT.

Prerequisite: LS 1A, LPS A, or LS 50 (or tested out of either of these courses)

****Information on website subject to change****

Please check the course website regularly for updated information.

Section Times and Locations (Mandatory, Begins 9/11)

SECTION 1: Wed 10:30 AM - 11:45 AM

BioLabs 1087

TF: Teresa Augustin

SECTION 2: Wed 12 noon - 1:15 PM

BioLabs 2062/2064

TF: Logan Brown

SECTION 3: Wed 6:00 PM - 7:15 PM

BioLabs 1087

TF: Andrew ByunNote:

Sections will not be held the week of Thanksgiving.

Locations of BioLabs and Northwest Building

The BioLabs

16 Divinity Avenue

Northwest

52 Oxford Street

Office Hours

Course Head

Alain Viel (aviel@fas.harvard.edu); Northwest Building, Rm 152

in person: by appointment only

Zoom office hours can also be scheduled by student request.

Preceptor/CPM

Michele Markstein (mmarkstein@g.harvard.edu)

Zoom office hours: Monday, TBD

Teaching Fellows

Teresa Augustin

teresa_augustin@fas.harvard.edu

Zoom Office hours: Tuesday 10 AM [link](#)

Logan Brown

loganbrown@g.harvard.edu

Office hours TBD

Andrew Byun

jinsobyun@g.harvard.edu

Office hours TBD

Note: Office hours will not be held the week of Thanksgiving.

Links to Key Pages

[Course Information](#)

Click on "course information" to access the syllabus and other important information about the structure of the course.

Each week's module will be unlocked at the end of Friday and will list the required coursework for the following week. Note: you'll need to be already logged in to LabXchange before clicking through the module.

Class code for LabXchange class:

Under "Learner Dashboard", navigate to the "Classes" tab, and click "Join a Class". Enter the class code for MCB 63. This will send a request to Alain, and he'll add you to the class within 48 hours.

[Learning Goals and Objectives](#)

[Pathway and Lecture Slides](#)

[Section Handouts](#)

[Problem Sets](#)

[Short Video Assignment](#)

[Short Graded Assessments LOs and Answer Keys](#)

[Final Team Presentation](#)

[Registrar Information on Course Registration/Enrollment](#)

COURSE DESCRIPTION

The course integrates an introduction to the structure of macromolecules and a biochemical approach to cellular function. Topics addressing protein function will include enzyme kinetics, the characterization of major metabolic pathways and their interconnection into tightly regulated networks, and the manipulation of enzymes and pathways with mutations or drugs. An exploration of simple cells (red blood cells) to more complex tissues (muscle and liver) is used as a framework to discuss the progression in metabolic complexity. Students will also develop problem solving and analytical skills that are more generally applicable to the life sciences.