JANUARY 2027

HARVARD
DIVISION OF MEDICAL SCIENCES

J-Term:
Intensive Courses

1/11/2027 – 1/22/2027

IMPORTANT DATES		GSAS CALENDAR
J-Term Begins:	Jan. 11	https://registrar.fas.harvard.edu/calendars#upcoming
J-Term Add/Drop Deadline:	Jan. 13	
J-Term Ends:	Jan. 24	

REMINDERS

* J-Term courses are considered Spring term courses. Credits will be counted towards your Spring term credits.

* Register by going to **https://my.harvard.edu/**

* For questions, contact: **OGEPhD_Courses@hms.harvard.edu**

Updated 9/30/26

BCMP 301 Translational Pharmacology: The Science of Therapeutic Discovery and Development
David E. Golan, Mark N. Namchuk, Irene G. Wong
Jan 4 - Jan 22

DRB 330QC Experimental Approaches to Stem Cell, Developmental & Regenerative Biology
Trista North
Jan 11 – Jan 22

GENETIC 390QC Bootcamp: Experimental Approaches in Genetics
Scott Kennedy
Jan 11 – Jan 23

HBTM 301QC Case Studies in Human Biology & Translational Medicine
Marc Bonaca, Thomas Michel
Jan 11 – Jan 22

NEUROBIO 306QC Quantitative Methods for Biologists
Daniel Hochbaum, Jonathan Green
Jan 11 – Jan 22

VIROLOGY 301QC Advanced Topics in Virology: Viral Oncology
James DeCaprio
Jan 11 – Jan 21 (days/week vary)

Biological Chemistry & Molecular Pharmacology

BCMP 301 Translational Pharmacology: The Science of Therapeutic Discovery and Development

David E. Golan, Mark N. Namchuk, Irene G. Wong

4 units. Enrollment limited to 42. Instructor consent required.

Mon. – Fri., 9:00am to 12:00pm
Meeting Dates: Jan 4 – Jan 22
Meeting Location: Longwood campus - instructor to provide location

This intensive course, held during three weeks in January (13 class days), covers principles of pharmacology and their translation into new drug discovery and development. Students participate in project groups, composed primarily of graduate students, to propose a drug development strategy from target choice through clinical trials. Most sessions include lectures, panel discussions, and/or case studies presented by Harvard faculty and faculty experts from the pharmaceutical and biotechnology industries; several sessions provide scheduled time to work on the group project with expert facilitators from industry. Evaluation is based on written and oral presentations of the group project and on class participation. Enrollment may be limited.

Course Scheduling Note: Attendance at all sessions is mandatory, and students are expected to spend most afternoons preparing for the following day's sessions and working on the group project.

Course Co-Directors: David E. Golan, david_golan@hms.harvard.edu, Mark N. Namchuk, Mark_Namchuk@hms.harvard.edu, Irene G. Wong, irene_wong@hms.harvard.edu

Developmental & Regenerative Biology

DRB 330QC Experimental Approaches to Stem Cell, Developmental & Regenerative Biology

Trista North

2 units. Enrollment limited to 15. Consent of instructor required.

Mon. – Fri., 9:30am to 4:00pm *(specific times each day may change - see syllabus for exact info)*
Meeting Dates: Jan 11 – Jan 22 (no class on Jan 18)
Meeting Location: see syllabus for daily location; first and last days will be held on Longwood campus

This laboratory and lecture-based course is designed to provide a survey of model systems and technical approaches utilized in developmental, stem cell, and regenerative biology, as well as integrate students with the DRB community at Harvard. Students will complete a series of in-person mini-rotations with laboratories of DRB faculty across the Harvard campuses and affiliated hospitals. Students engage with faculty and trainees to gain experience with a variety of models, experimental techniques, and research areas. Each day of the course will consist of an overview lecture followed by lab tours, protocol observations or activities, and interactive discussions and/or case study sessions or hands-on laboratory activities and interactive discussions, designed to facilitate student, lab member, and PI interactions. The course will culminate in short, informal student-led (5 minutes, 5 slides) brainstorming sessions inspired by a lab session of their choosing.

Course Note: Open to first-year and second-year BBS students. Not repeatable for credit.
Class Notes: Syllabus will be shared with students in late December with all locations and times. A sample syllabus is available for those who are interested. Lunch may be provided each day, pending funding. There is no class on Jan. 1th due to a university holiday. Student final presentations *only* on Jan 22.

Course Director: Trista North (trista.north@childrens.harvard.edu)
Additional Instructor: Ognenka Avramovska (oavramovska@fas.harvard.edu)
Other Instructors (Labs visited): Trista North, Jeffrey Macklis, Ya-Chieh Hsu, April Craft, and more TBD

Genetics

GENETIC 390QC Bootcamp: Experimental Approaches in Genetics

Scott Kennedy

2 units. Enrollment limited to 8. Instructor Consent Required.

Schedule varies depending on session, 9:00am – 4:00pm for most sessions
Meeting Dates: Jan 11 – Jan 15 and Jan 18 – Jan 23 (note: one meeting held on Saturday, 1/23)
Meeting Location: Research labs across the Longwood Campus

The goal of this course is to provide you with a hands-on survey of major topics and themes in genetic and genomic analysis, as well as exposure to numerous experimental techniques and model organisms. Over the course of nine days, you will spend each day in a new lab across Longwood, learning directly from faculty, postdocs, and senior graduate students. You will gain experience using genetic approaches to address biologically relevant questions in a variety of experimental systems, including bacteria, yeast, nematodes, zebrafish, mice, human cells, and cancer models. You will also learn about clinical cytogenetics and protein structure prediction using AlphaFold. The course will combine short lectures, hands-on laboratory activities, and facility visits that emphasize experimental methods, hypothesis generation and testing, and data analysis.

You will be graded on a pass/fail basis. To receive credit for this course, you are expected to attend and arrive prepared for every session, complete daily evaluations of course activities as well as a final overall course evaluation, and give a short research-idea presentation at the end of the course.

The participating labs are as follows:

- van Opijnen Lab - Bacterial genetics
- Moazed Lab - Yeast genetics
- Kennedy Lab - Nematode genetics
- Harris Lab - Zebrafish genetics
- Sinclair Lab - Mouse genetics and aging
- Morton Lab - Human cytogenetics
- Naxerova Lab - Cancer genetics
- Walter Lab - Frog genetics and Protein structure prediction with AlphaFold

Course Note: Priority will be given to first-year graduate students.
Prerequisite: Genetics 201 or permission from the Course Director/Curriculum Fellow
Course Director: Scott Kennedy (scott_kennedy@hms.harvard.edu)
Curriculum Fellow: Lorenzo Gesuita (Lorenzo_Gesuita@hms.harvard.edu)

Human Biology & Translational Medicine

HBTM 301QC Case Studies in Human Biology & Translational Medicine

Marc Bonaca, Thomas Michel

2 units. Restricted to Leder students only. Enrollment limited to 20. Instructor consent required.

Mon - Fri, 9:00am-10:30am
Meeting Dates: Jan 11 – Jan 22 (no class on Jan 18)
Meeting Location: Longwood campus - instructor to provide location

Two-week course that is required of and restricted to first-year LHB students. This course will review models of therapeutic development from epidemiologic observations through clinical development with a focus on lipid lowering therapies and diabetes. Students will be engaged in interactive workshops and will attend lectures led by leading clinical researchers.

Course Notes: This is an intensive January term course. Restricted to Leder students only. **Students will add this course to their cart and complete enrollment during the Spring Add/Drop period in January.**

Course Instructor: Marc Bonaca, mbonaca@partners.org
Other Instructors: Thomas Michel, Thomas_Michel@hms.harvard.edu

Neurobiology

NEUROBIO 306QC Quantitative Methods for Biologists

Daniel Hochbaum, Jonathan Green

2 units. Enrollment limited to 60. Instructor consent required.

M/W/F, 10:00am-4:00pm EST (one-hour break from 2pm-3pm)
T/Th, 2:00pm-4:00pm EST (drop-in/homework)
Meeting Dates: January 11 – January 22
Meeting Locations:
M/W/F: Cambridge campus - TBD
T/TH: Longwood - instructor to provide location

The goal of this camp is to introduce you to programming in the PYTHON environment and to show you the power this provides for analyzing data and for gaining intuition about the behavior of complex systems through the use of numerical simulations. Some of you, upon

encountering in the previous sentence words like “programming” and “numerical simulations,” will feel the cold hand of fear grip your stomach, because you have never done any programming and, in fact, have tried to avoid math as much as possible. If so, YOU ARE PRECISELY THE PERSON WE HAD IN MIND as we were planning the course. We are aiming to help you break through this barrier of darkness and fear into the radiant sunshine of quantitative enlightenment. The true beauty of PYTHON, as we will personally demonstrate, is that it allows people who are not mathematically adept (e.g. some of the instructors of this course) to use powerful numerical methods and visualization tools to gain an understanding of concepts that are very difficult to grasp analytically.

Course Notes: The camp is primarily designed for those of you with no prior programming experience. If you fit this description, you should definitely plan to take the course. It is critical to be familiar with a scientific programming language with which to improve your quantitative literacy throughout graduate school.

Course Instructor: Daniel Hochbaum, dhochbau@bidmc.harvard.edu, Jonathan Green, jgreen@molbio.mgh.harvard.edu

Virology

VIROLOGY 301QC Advanced Topics in Virology: Viral Oncology

James DeCaprio

2 units. Enrollment limited to 14. Instructor consent required.

M/T/W/TH 4:30pm - 6:00pm
Meeting Dates: January 11 (M), 13 (W), 14 (TH), 19 (T), 20 (W), & 21 (TH)
Meeting Location: Longwood campus - instructor to provide location – course to be held in-person

Introduction to viral oncology and critical evaluation of key papers in viral oncology. Requirements include presentations, written critiques, and class participation.

Course Notes: This is an intensive January course, limited to Virology students. Other interested students may request approval from the course instructor to enroll.
Course Instructor: James DeCaprio, james_decaprio@dfci.harvard.edu