FALL 2026 QC'S

HARVARD
DIVISION OF MEDICAL SCIENCES

Fall 2026

Half Term Quarter Courses (QCs)

Fall Session 1 (Half-Term QC's): September 2 – October 16
Fall Session 2 (Half-Term QC's): October 19 – December 4

ENROLLMENT DEADLINES

Returning Student Crimson Carts Open	Mar 18
Returning Student (G2+) Reg. Opens	April 1
Returning Student (G2+) Reg. Closes	April 15
Check-In Opens (ALL students)	Aug. 17
Incoming Student (G1) Reg. Opens	Aug. 17
Incoming Student (G1) Reg. Closes	Aug. 28
ADD/DROP Period (ALL students)	Aug. 8 – Sept. 9
Check-in Deadline (ALL students)	Sept. 2
Full Term	Sept. 2 – Dec. 4
Fall 1 Opens	Sept. 2
Fall 1 drop date	Sept. 17
Fall 1 Closes	Oct. 16
Fall 2 Opens	Oct. 19
Fall 2 drop date	Nov. 5
Fall 2 Closes	Dec. 4

ACADEMIC CALENDAR

https://registrar.fas.harvard.edu/gsas-academic-calendar

REMINDERS

You **cannot register** for courses until all the holds have been lifted from your account. Information about registration holds and how to remove them can be found here: https://registrar.fas.harvard.edu/enrollment#holds.

Incoming Students: meet with your advisor or speak with your Program Admin regarding your course load so that advisors can lift the "Advising Hold" from your cart.

Check-In opens August 17
FAS Registrar Info: https://registrar.fas.harvard.edu/check-in
GSAS Info: https://gsas.harvard.edu/policy/check-and-registration-resident-students

Register for **16 credits is required** for full-time student status and health insurance eligibility **by the beginning of the term, Sept. 2.** Register by going to **https://my.harvard.edu/**

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

Revised 3/31/26

BBS 330QC Critical Thinking and Research Proposal Writing
April Craft, Jessica Lehoczky

CELLBIO 302QC Advanced Experimental Design for Biologists
David Glass, Catherine Dubreuil

CELLBIO 306QC Teaching 100: The Theory & Science of Teaching
Taralyn Tan

HBTM 302QC Imaging and Microscopy Methods in Biology & Medicine
Lev Perelman

IMMUN 306QC Systems Immunology
Nir Hacohen, Martin Hemberg, Christophe Benoist

IMMUN 307QC Cancer Immunology
Kai Wucherpfennig, Stephanie Dougan, Judith Agudo, Mohammad Rashidian

MED-SCI 300QC Responsible Conduct of Science (REQUIRED for G2 Students)
Rosalind Segal, Aimee Hollander

MED-SCI 302QC Responsible Conduct of Science Refresher (REQUIRED for G6 Students)
Rosalind Segal, Aimee Hollander

NEUROBIO 315QC Human Neuroanatomy & Neuropathology
Matthew Frosch, Jean Augustinack

NEUROBIO 325QC Advanced Topics in Sensory Neuroscience
David Ginty, Rachel Wilson, Michael Do, Sandeep Robert Datta

Biological & Biomedical Sciences

BBS 330QC Critical Thinking and Research Proposal Writing

April Craft, Jessica Lehoczky

2 units

Meeting Dates:
Session 1 (in-person lecture): Thursday Sept 3, 2:00PM-3:00PM
Session 2 (in-person small group mtgs): dates and time vary - scheduled by faculty section instr.
Session 3 (in-person lecture): Thursday October 15, 2:00PM-3:00PM
Session 4 (in-person lecture): Thursday October 22, 2:00PM-3:00PM
Session 5 (in-person small group mtgs): dates and time vary - scheduled by faculty section instr.
Meeting Locations: Veritas Science Ctr. (formerly NRB), Rm. 350

A small group tutorial systematically guiding students in the writing of original, hypothesis-driven research proposals from initial topic selection through completion of a final draft.

Course Notes: This course is required for second year BBS students. Others need permission of the instructors. Dates, times and locations for small group sessions are determined by the faculty running the small group sessions. Three in person lectures will provide guidelines for preparing drafts and peer reviews. Two small group sessions vary as scheduled by faculty instructors.

Enrollment Note: Students will submit preferences for small group sessions. Students will receive preferencing instructions after enrollment closes.

Recommended Prep: Check course website for downloadable material

Course Heads: April Craft, april.craft@childrens.harvard.edu, Jessica Lehoczky, jlehoczky@bwh.harvard.edu
Faculty section instructors: TBD

Cell Biology

CELLBIO 302QC Advanced Experimental Design for Biologists

David Glass, Catherine Dubreuil

Fall 1
2 units. Enrollment limited to 25. Instructor consent required.

W, 5:30pm – 7:30pm
Meeting Dates: September 3 – October 14
Meeting Location: Longwood – instructor to provide location

This course will focus on both the theory and practice of experimental design. The emphasis is on project planning and vetting, individual experimental design, and trouble-shooting. Special focus will be placed on methods to avoid experimental bias, and potential sources of inappropriate interpretation. Also the importance of system validation is especially emphasized.

Course Note: Special consent required - preference given to Therapeutics Certificate Program students.

Course Head: David Glass, david_glass@hms.harvard.edu
Other Instructors: Catherine Dubreuil, catherine_dubreuil@hms.harvard.edu

CELLBIO 306QC: Teaching 100: The Theory & Science of Teaching

Taralyn Tan

2 units. Enrollment limited to 20 per section (total enrollment 40). Instructor consent required.

In-person section
W., 2:00pm - 4:00pm
Meeting Dates: September 16 – November 11 (first asynchronous module released 9/2; final assignment due 11/18)
Meeting Location: Longwood campus - instructor to provide location

Remote section (only for Master's students)
W., 8:00am - 10:00am, ET
Meeting Dates: September 16 – November 11 (first asynchronous module released 9/2; final assignment due 11/18)
Meeting Location: Zoom information provided by instructor

Course materials to be released beginning Sept. 2. The final class meeting is on 11/11 and the final assignment is due 11/18.

For many graduate students and medical educators, teaching will be part of their career, whether as mentoring, formal classroom teaching, or teaching in the hospital. In addition, the theory and research evidence accumulating in the disciplines of cognitive psychology, neuroscience, and from STEM classrooms, has turned the question of "How do we best teach science and medicine?" into its own scientific discipline. The Theory and Science of Teaching focuses on understanding why certain teaching methods are effective by examining the scientific research and theoretical frameworks that support these methods. We will read and discuss foundational educational and cognitive psychology texts and primary literature, and then develop course materials that allow us to put these ideas into practice.

Class Note: Class will meet for 2 hours of synchronous discussion and learning activities each week. The remote section will meet Wednesdays from 8:00am-10:00 am over Zoom and is reserved for master's students. The in-person section will meet Wednesdays from 2:00pm-4:00pm in Longwood and is intended for PhD students who must take their classes in-person. The content of the sections will be the same and both will share identical asynchronous learning components. This will include watching videos, reading a variety of materials, participating in discussion boards, creating sample materials, and writing learning reflections. The synchronous and asynchronous components combine to meet the course objectives and are equally important to students' learning.
Class begins September 2nd with the release of the first asynchronous module, which students will complete and discuss in short, individually scheduled small group meetings with the course instructor during the week of Sept. 7, in place of a synchronous class session that week. The first synchronous class meeting is September 16. The course concludes with the final synchronous class session on November 11 and the final capstone assignment due November 18.

Required Prep: Make It Stick, by Brown, Roediger and McDaniel is required pre-reading and should be completed before the first day of class on September 16. A required asynchronous 'module 0' will be released on Canvas on September 2.

Course Head: Taralyn Tan, Taralyn_Tan@hms.harvard.edu

Human Biology & Translational Medicine

HBTM 302QC Imaging and Microscopy Methods in Biology & Medicine

Lev Perelman

2 units. Enrollment limited to 15. Instructor consent required.

TH, 3:00pm - 5:00pm
Meeting Dates: September 10 – November 19
Meeting Location: Longwood campus - instructor to provide location

This quarter course will introduce students to modern imaging modalities used in biology and medicine, with emphasis on modalities most frequently employed in cellular and molecular biology. The course will offer an overview of the basic principles of light and electron microscopy and explain their resolution limits and sources of contrast. We will discuss modality-specific functionally relevant fluorescence molecular probes which can be used for live cell imaging. The course will provide a detailed review and theory of operation of modern advanced light microscopy techniques such as confocal, line-scanning, light sheet, STED, light scattering, multi-photon and superresolution microscopy. We will then discuss Raman and light scattering spectroscopy methods for monitoring induced pluripotent stem cell differentiation, genetic targeting in microscopy and CRISPR-based photoactivatable transcription systems and basic concepts of optogenetics. We will review specific optogenetic actuators and sensors, modern light delivery techniques and various applications from investigating brain functions to cardiac optogenetics. We will also offer an overview of medical imaging techniques, such as ultrasound, X-ray CT, MRI, PET/SPECT, and ultrasound imaging, along with emerging optical imaging and spectroscopy methods. Lectures will be supplemented by visual demonstrations of the microscopy systems and hands-on laboratory work and discussions of the operation principles of those systems.

Course Head: Lev Perelman, ltperel@bidmc.harvard.edu

Immunology

IMMUN 306QC Systems Immunology

Nir Hacohen, Martin Hemberg, Christophe Benoist

2 units. Instructor consent required.

F., 9:30am – 10:30am and 1:00pm – 3:00pm
Meeting Dates: October 9 – December 11
Lecture/Discussion: 9:30am – 10:30am
Meeting Location: Longwood campus - instructor to provide location
Hands-on Computational Workshop: 1:00pm-3:00pm
Meeting Location: Longwood campus - instructor to provide location

The course will cover the application of computational and systems biology methods to important questions in immunology, with a focus on immunogenetics, transcriptomics, epigenomics, proteomics, TCR/BCR repertoires, and tissue architecture. Classes will consist of lectures, discussion of recent publications and hands-on computational workshops.

Course Heads: Nir Hacohen, nhacohen@mgh.harvard.edu, Martin Hemberg, mhemberg@bwh.harvard.edu, Christophe Benoist, cb@hms.harvard.edu

IMMUN 307QC Cancer Immunology

Kai Wucherpfennig, Stephanie Dougan, Judith Agudo, Mohammad Rashidian

Fall 2
2 units. Enrollment limited to 20. Instructor consent required.

M, 4:00pm - 6:00pm
Meeting Dates: October 26 – December 7 (7 sessions)
Meeting Location: Longwood campus - instructor to provide location

There have been many exciting recent developments in the cancer immunology field, and multiple therapeutic approaches have shown efficacy against diverse types of cancer. This course will emphasize new mechanistic insights, in particular on the following topics: Mechanisms of protective anti-tumor immunity, innate immune pathways, inflammation and

tumor microenvironment, immunosuppressive mechanisms, checkpoint blockade, CAR T cell therapy and cancer vaccines.

Course Note: Must be PhD student at Harvard or postdoctoral fellow

Course Head: Kai Wucherpfennig, kai_wucherpfennig@dfci.harvard.edu
Other Instructors: Stephanie Dougan, Judith Agudo, Mohammad Rashidian

Medical Sciences

MED-SCI 300QC Responsible Conduct of Science (REQUIRED for G2 students)

Rosalind Segal, Aimee Hollander

2 units

September 14, 2026 - the week of November 13, 2026 (total of 9wks)
Faculty Section Meeting Dates and Locations: 6 in-person (on-campus) classes, 90-minutes, see canvas page for dates and locations. Enroll in section during enrollment.
Zoom Lecture Dates: 3 live zoom lectures, 90-minutes, see canvas page for dates

This course is a required course for all OGE PhD students and all who receive support from NIH training grants. The goal of this course is to inform students about the appropriate conduct of research and the many ethical and social challenges that they may encounter during their research career in graduate school. The structure consists of highly interactive, in-person, small groups discussion sessions moderated by a faculty member, and live Zoom lectures. Challenges discussed include (but are not limited to) experimental design and practices, equity in research, conflict of interest, research misconduct, interactions with members of the laboratory and the mentor, and the ethical role of the scientist in society.

To select your schedule for the 6 in-person classes, you must take action to enroll in the faculty member's section of your choice during the Registration period. Sections are first come, first serve. Once the section is filled, **it will be closed**. We recommend enrolling as soon as possible. You may need to adjust your schedule as needed in order to find a section that works. Please **do not** place yourself in the "place-holder" section. Anyone in the place-holder section will automatically be put into an open section. You will be emailed a document with all faculty scheduled sections and enrollment instructions.

Please visit the Fall 2026 RCoS canvas site HERE, or paste the URL into your browser: https://canvas.harvard.edu/courses/168763 for a list of faculty sections with dates, times and

locations for each section and Zoom lecture registration links. You will need this information in order to enroll yourself into a section that works best for your schedule.

Course Notes: This class is graded SAT/UNSAT. This course is required for all current G2 students during the Fall semester. Please contact Bethany_Krevat@hms.harvard.edu, for inquiries. **Restricted to HILS graduate students within programs on the Longwood campus.**

Course Head: Rosalind Segal, Rosalind_Segal@dfci.harvard.edu
Co-Course Head: Aimee Hollander, Aimee_Hollander@hms.harvard.edu
Course Administrator: Bethany Krevat, Bethany_Krevat@hms.harvard.edu

MED-SCI 302QC Responsible Conduct of Science Refresher (REQUIRED for G6 students)

Rosalind Segal, Aimee Hollander

2 units

September 14, 2026 - the week of November 13, 2026 (total of 9wks)
Faculty Section Meeting Dates and Locations: 6 in-person (on-campus) classes, 90-minutes, see canvas page for dates and locations. Enroll in section during enrollment.
Zoom Lecture Dates: 3 live zoom lectures, 90-minutes, see canvas page for dates

This course is a required course for all OGE PhD students and all who receive support from NIH training grants. The goal of this course is to inform students about the appropriate conduct of research and the many ethical and social challenges that they may encounter during their research career in graduate school. The structure consists of highly interactive, in-person, small groups discussion sessions moderated by a faculty member, and live Zoom lectures. Challenges discussed include (but are not limited to) experimental design and practices, equity in research, conflict of interest, research misconduct, interactions with members of the laboratory and the mentor, and the ethical role of the scientist in society.

To select your schedule for the 6 in-person classes, you must take action to enroll in the faculty member's section of your choice during the Registration period. Sections are first come, first serve. Once the section is filled, **it will be closed**. We recommend enrolling as soon as possible. You may need to adjust your schedule as needed in order to find a section that works. Please **do not** place yourself in the "place-holder" section. Anyone in the place-holder section will automatically be put into an open section. You will be emailed a document with all faculty scheduled sections and enrollment instructions.

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https://canvas.harvard.edu/courses/168763 for a list of faculty sections with dates, times and locations for each section and Zoom lecture registration links. You will need this information in order to enroll yourself into a section that works best for your schedule.

Notes: This class is graded SAT/UNSAT. This course is required for all current G6 students during the Fall semester. Please contact Bethany_Krevat@hms.harvard.edu, for inquiries. **Restricted to HILS graduate students within programs on the Longwood campus.**

Course Head: Rosalind Segal, Rosalind_Segal@dfci.harvard.edu
Co-Course Head: Aimee Hollander, Aimee_Hollander@hms.harvard.edu
Course Administrator: Bethany Krevat, Bethany_Krevat@hms.harvard.edu

Neurobiology

NEUROBIO 315QC Human Neuroanatomy & Neuropathology

Matthew Frosch, Jean Augustinack

Fall 1
2 units. Enrollment limited to 20. Instructor consent required.

M, 8:00am – 12:30pm
W, 8:00am – 10:30am
F, 8:00am – 9:15am
Meeting Dates: September 28 – November 2
Meeting Location: Longwood - instructor to provide location

This course will cover human neuroanatomy in depth, with an emphasis on the functional implications of structure and medical implications of lesions. Teaching occurs through lectures, small group sessions, brain dissection and homework assignments.

Course Notes: Restricted to Graduate Students only. This course is offered as part of HT130. Students may not co-register for both courses.

Course Heads: Matthew Frosch, mfrosch@mgh.harvard.edu, Jean Augustinack, jaugustinack@mgh.harvard.edu

NEUROBIO 325QC Advanced Topics in Sensory Neuroscience

David Ginty, Rachel Wilson, Michael Do, Sandeep Robert Datta

Fall 1
2 units. Instructor consent required.

M/F, 10:00am – 11:30am
Meeting Dates: September 11 – November 2
Meeting Location: Longwood - instructor to provide location

Animals sense stimuli with diverse physical properties in their environments, from chemical cues such as odorants to mechanical cues such as light touch. This course explores how properties of molecules, cells, and circuits enable detection and perception across a wide variety of stimuli. Through discussion of primary literature, we will cover basic concepts in sensory transduction, information coding, and functional organization of sensory systems, with examples across systems, including specialized senses such as electroreception. We will also examine how sensory signals interact with each other and how sensory systems are embedded in tight feedback loops for appropriate motor control. This class offers students an opportunity to discuss and synthesize cutting edge work in sensory neuroscience.

Course Notes: Course offered every other year
Recommended Prep: Before enrolling in this course, students should have taken NB215A and NB215B or equivalent

Course Heads: David Ginty, david_ginty@hms.harvard.edu, Rachel Wilson, rachel_wilson@hms.harvard.edu, Michael Do, mdo@fas.harvard.edu, Sandeep Robert Datta, srdatta@hms.harvard.edu