

# Spring 2023 Quarter Courses

*\*Referred to as "Half Term" in GSAS Academic Calendar\**

**Spring Session 1 (Half-Term QC's): January 22 – March 8**

**Spring Session 2 (Half-Term QC's): March 18 – April 24**

## PRIORT TERM ENROLLMENT DEADLINES

Crimson Carts Open	Oct. 16
Course Registration Opens	Nov. 1
Course Registration Closes	Nov. 15
Check-In Open	Jan. 5
Check-in Closes	Jan. 22
Spring 1 Begins	Jan. 22
Spring 1 Add/Drop Deadline (no fee)	Feb. 1
Spring 1 Classes End	Mar. 8
Spring 2 Begins	Mar. 18
Spring 2 Course Reg. Deadline	Mar. 22
Spring 2 Add/Drop Deadline	Mar. 28
Spring 2 Classes End	Apr. 24

## GSAS ACADEMIC CALENDAR



<https://registrar.fas.harvard.edu/calendars>

## REMINDERS

You **cannot register** for courses until you **CHECK-IN** (or go to: <https://registrar.fas.harvard.edu/check-in>)

Register for **16 credits** for full-time student status and health insurance eligibility

Register by going to <https://my.harvard.edu/>

For questions, contact: [dms\\_courses@hms.harvard.edu](mailto:dms_courses@hms.harvard.edu)



## Spring 2024: Quarter Courses (QC's)



### **CELLBIO 302QC** Advanced Experimental Design for Biologists

David Glass, Randall King, Catherine Dubreuil

### **CELLBIO 314QC** The Science of Mindfulness

Neena Haider

### **GENETIC 305QC** CRISPR genome editing techniques and applications

Manda Arbab, Richard Sherwood

### **IMMUN 305QC** Neuroimmune interactions in health and disease

Isaac Chiu, Jun Huh

### **NEUROBIO 317QC** Comparative Neuroanatomy

Wei-Chung Lee, Mohini Lutchman



## Cell Biology

### **CELLBIO 302QC Advanced Experimental Design for Biologists**

David Glass, Randall King, Catherine Dubreuil

2 units. Enrollment limited to 25. Instructor consent required.  
Spring 1 QC

W., 6:30pm – 8:30pm

**Meeting dates:** Jan 24 – Mar 5

**Meeting Location:** TBD

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](mailto:david_glass@hms.harvard.edu)

**Other Instructors:** Randy King, [randy\\_king@hms.harvard.edu](mailto:randy_king@hms.harvard.edu), Catherine Dubreuil, [catherine\\_dubreuil@hms.harvard.edu](mailto:catherine_dubreuil@hms.harvard.edu)

### **CELLBIO 314QC The Science of Mindfulness: A research-based approach to understanding and practicing mindfulness**

Neena Haider

2 units.  
Spring 1 QC

W/F, 11:30am – 1:00pm

**Meeting Dates:** Feb 7 – Mar 29

**Meeting Location:** TBD



## Spring 2024: Quarter Courses (QC's)



This course February delves into the science behind mindfulness using a research- based approach to understand the impact of mindfulness on the mind and body. The course will include a discussion of published work as well as practical applications in a workshop format. Topics include power of breath, positive thinking, and impact of mindfulness on cognitive function. Workshop portions will include guided breath and guided meditation and learning how to focus the mind, and learn observation without judgment.

**Course Heads:** Neena Haider, [Neena\\_Haider@MEEI.HARVARD.EDU](mailto:Neena_Haider@MEEI.HARVARD.EDU)

## Genetics

### **GENETIC 305QC CRISPR genome editing techniques and applications**

Manda Arbab, Richard Sherwood

2 units. Instructor consent is required.  
Spring 2 QC

T/TH, 12:30pm – 2:00pm

**Meeting Dates:** Mar 18 – Apr 24

**Meeting Location:** TBD

CRISPR genome editing has revolutionized the study of genetics and has shown promise to treat genetic disease at its roots. This course will provide an overview on how CRISPR-based genome editing tools work, how they are used to unravel the genetics of complex disease, and how they are being deployed to ameliorate genetic diseases. The course will combine lectures from experts on the development and use of CRISPR-based tools with seminars on the practical application of and ethical issues surrounding genome editing.

**Course Notes:** Strong background in genetics expected. Course expected to be offered annually. The structure of this course also includes a discussion component. Any additional details about this component will be provided by the course faculty.

**Course Heads:** Richard Sherwood, [RSHERWOOD@BWH.HARVARD.EDU](mailto:RSHERWOOD@BWH.HARVARD.EDU); Mandana Arbab, [Mandana.Arbab@childrens.harvard.edu](mailto:Mandana.Arbab@childrens.harvard.edu)



## Immunology

### **IMMUN 305QC Neuroimmune interactions in health and disease**

Isaac Chiu, Jun Huh

2 units.

Spring 2 QC

T., 4:00pm – 6:00pm

**Meeting Dates:** Jan 30 – April 2

**Meeting Location:** TBD

It is increasingly clear that communication between the nervous system and the immune system plays a significant role in homeostasis and disease. This course will investigate current topics in neuro-immunology such as: Gut-brain axis, neuron-glia interactions, brain border tissues, CNS development, pain, itch, neurodegeneration, allergy, autoimmunity, and host defense. Neurons and immune cells crosstalk within the central nervous system and in peripheral tissues, mediating homeostasis, barrier protection, and host defense. Dysregulation in neuroimmune communication underlies both neurological and immunological diseases. Guest lecturers will give seminars on each topic in neuroimmunology, followed by class discussion on papers in the field.

**Class Note:** Each class will cover a specific topic in neuro-immunology. Students should be prepared to lead discussions on pre-selected papers for each session.

**Course Heads:** Isaac Chiu, [isaac\\_chiu@hms.harvard.edu](mailto:isaac_chiu@hms.harvard.edu), Jun Huh, [jun\\_huh@hms.harvard.edu](mailto:jun_huh@hms.harvard.edu)

## NEUROBIOLOGY

### **NEUROBIO 317QC Comparative Neuroanatomy**

Wei-Chung Lee, Mohini Lutchman

2 Units. Enrollment limited to 25. Instructor consent required.

Spring 1 QC



## Spring 2024: Quarter Courses (QC's)



M/F, 2:00 – 3:30pm

**Meeting dates:** Jan 22 – Mar 3

**Meeting location:** TBD

Neuroscientists employ diverse model systems and experimental approaches to study nervous system structure and function. Through a combination of lectures, hands-on activities and paper discussions, this quarter course will introduce students to principles of nervous system organization and will provide a conceptual understanding of the spatial and functional relationships among components of the nervous system. Modern experimental methods and online resources to study neural circuit structure and function across model organisms will also be highlighted.

**Course Notes:** The structure of this course also includes a discussion component. Any additional details about this component will be provided by the course faculty.

**Course Head:** Wei-Chung Lee, [wei-chung\\_lee@hms.harvard.edu](mailto:wei-chung_lee@hms.harvard.edu), Mohini Lutchman, [mohini\\_lutchman@hms.harvard.edu](mailto:mohini_lutchman@hms.harvard.edu)

