Biophysics

Overview

The Biophysics Graduate Group is an independent PhD program at UC Berkeley. The program trains graduate students for careers at the interface of the biological and physical sciences.

Approximately 60 faculty members, spanning over a dozen departments and groups at UC Berkeley, are affiliated with the Biophysics Group. Students can also work with faculty who are outside of the group.

Many of the tools and methods that drive progress in the biosciences are drawn from the physical and computational sciences. Current trends require that the next generation of scientists acquire expertise in both the biological and physical sciences, with research experience that overlaps traditional academic boundaries. The Biophysics Graduate Group strives to offer that experience to its PhD students.

Research within the group is conducted in the broad areas of structural biophysics and protein dynamics; systems neuroscience; molecular microscopy and optical probes; cell signaling and cellular physiology; computational biology and genomics; brain imaging and bioelectronics; and comparative biomechanics.

The Biophysics Graduate Group is a member of the QB3-Berkeley Program in Quantitative Biosciences (http://qb3.berkeley.edu/) (http://qb3.berkeley.edu/) and is also part of the Division of Biological Sciences (https://ls.berkeley.edu/biological_sciences/).

Graduate Program

Biophysics (https://guide.berkeley.edu/archive/2024-25/graduate/degree-programs/biophysics/): PhD

Biophysics

BIOPHY H196 Honors Research in Biophysics 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024 Supervised independent honors research on topics specific to biophysics, followed by brief written report and presentation at year-end student research colloquium.

Rules & Requirements

Prerequisites: Upper division standing; minimum GPA 3.2; consent of instructor

Repeat rules: Course may be repeated for credit up to a total of 12 units.

Hours & Format

Fall and/or spring: 15 weeks - 4 hours of independent study per week

Additional Details

Subject/Course Level: Biophysics/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

BIOPHY 292 Research 3 - 12 Units

Terms offered: Fall 2025, Summer 2025 10 Week Session, Spring 2025 Individual research under the supervision of a faculty member.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 3-12 hours of independent study per

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Summer: 10 weeks - 3-12 hours of independent study per week

Additional Details

Subject/Course Level: Biophysics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

BIOPHY 293A Research Seminar: Faculty Evening Research Presentations (FERPS) and Student Evening Research Presentations (SERPS) 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Seminar on presentation and evaluation of results in area of student's individual research interests.

Rules & Requirements

Prerequisites: 292

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Biophysics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only. This is part one of a year long series course. A provisional grade of IP (in progress) will be applied and later replaced with the final grade after completing part two of the series.

BIOPHY 293B Research Seminar: Faculty Evening Research Presentations (FERPS) and Student Evening Research Presentations (SERPS) 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023 Seminar on presentation and evaluation of results in area of student's individual research interests.

Rules & Requirements

Prerequisites: 293A, and 292

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Biophysics/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only. This is part two of a year long series course. Upon completion, the final grade will be applied to both parts of the series.