

# INTERDISCIPLINARY BIOLOGICAL SCIENCES PROGRAM PHD

---

## Degree Requirements

The following requirements are in addition to, or further elaborate upon, those requirements outlined in The Graduate School Policy Guide (<https://catalogs.northwestern.edu/tgs/academic-policies-procedures/>).

**Total Units Required: 11**

## Required Courses

- IBIS 411-0 Fundamentals in Biological Sciences: Biochem, Molecular Biology, and Genetics
- IBIS 412-0 Fundamentals in Biological Sciences: Genomics, Cell Bio, and Developmental Bio
- IBIS 432-0 Statistics for Life Sciences
- **IBIS 499-0 Independent Study** - one unit for each lab rotation for 3 total units
- **Electives or additional core courses:** 1 additional core course of choice, 2 electives and 2 special topic courses

## Non-credit Required Courses

- IBIS 421-0 Rigor & Reproducibility in Research
- IBIS 423-0 Ethics in Biological Research
- **IBIS 462-0 Seminar in Biological Sciences**

## Other PhD Degree Requirements

- **Examinations:** qualifying examination: one part during second year of study
- **Research/Projects:** laboratory research based on dissertation proposal
- **PhD Dissertation:** written dissertation; annual presentation of research-in-progress to thesis committee
- **Final Evaluations:** defense consisting of written dissertation, oral defense of dissertation to thesis committee, and public presentation of research accomplishments
- **Publication:** acceptance of at least one first-author data paper or two co-first author papers before defense
- **Teaching:** two quarters as a teaching assistant
- **Other:** three graded, 1-credit, laboratory rotations in first year, intended to assist student in selecting thesis advisor; regular participation in seminars, journal clubs, and annual scientific retreat