



# Master of Science in Integrative Biology

## Course Planning Tool for MS in IB Program

MS in IB course selection must include at least **32 total hours** comprised from:

- **Core Curriculum:** 12-14 credit hours from two of the following three disciplinary areas of Integrative Biology:
  - Area 1: Organismal and Evolutionary Biology
  - Area 2: Behavior, Ecology and the Environment
  - Area 3: Integrative Anatomy, Physiology and Molecular Biology
- **Additional Advanced Course Elective Hours:** 6-8 credit hours may be filled from these advanced courses, or from additional courses in any of the three disciplinary areas above
- **500-level Courses:** 12 credit hours

Also be sure to see more information including **syllabi** and future semester course offerings by visiting SIB's Graduate Course Schedule at <https://sib.illinois.edu/courses/graduate>

**AVAILABLE FALL 2022 COURSES** see <https://sib.illinois.edu/courses/semester>

Course Number	Course Name	Hours	Lab	Disciplinary Area
IB 401	Introduction to Entomology	3-4	LAB	Area 1
IB 411 ONL	Bioinspiration	3		
IB 426	Environmental and Evolutionary Physiology of Animals	3		Area 3
IB 431	Behavioral Ecology	3		Area 2
IB 436	Evolutionary Neuroscience	4		
IB 444	Insect Ecology	3-4		Area 2
IB 452	Ecosystem Ecology	3		Area 2
IB 471	General Mycology	4	LAB	Area 1
IB 478	Advanced Plant Genetics	3		
IB 479	Plant Growth and Development	3		
IB 496	Analysis of Biological Data in R	4		
IB 501	Programming for Genomics	4		
IB 513	Discussions in Plant Physiology	1		
IB 526 A	Seminar in Entomology	1		
IB 534	Evolution and Medicine (online)	4		
IB 546 A&B	Topics in Ecology & Evolution	1-2		
IB 590	Individual Topics	6 max		
IB 592*	Career and Skill Development in IB ( <b>*required for MS in IB students</b> )	2		

**SPRING 2023 COURSES** (expected) see <https://sib.illinois.edu/courses/semester>

Course Number	Course Name	Hours	Lab	Disciplinary Area
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IB 405	Evolution of Traits and Genomes	3		Area 2
IB 416	Population Genetics	3-4		
IB 420	Plant Physiology	3		Area 3
IB 432	Genes and Behavior	3		Area 2
IB 442	Evolution of Infectious Disease	3		
IB 451	Conservation Biology	4	LAB	Area 2
IB 453	Community Ecology	3		Area 2
IB 461	Ornithology	4	LAB	Area 1
IB 464	Herpetology (Reptiles/Amphibians)	4	LAB	
IB 467	Principles of Systematics	4	LAB	
IB 476	Applied GIS to Environmental Studies	3		
IB 483 ONL	Insect Pathology	3		
IB 484	Paleoclimatology	4		
IB 487	Math Modeling in Life Sciences	4		
IB 502	Biological Networks	2		
IB 505	Bioinformatics and Systems Biology	4		
IB 512	Plant Metabolomics	2		
IB 513	Discussions in Plant Physiology	1		
IB 526 A&B	Seminar in Entomology	1-2		
IB 531	Emerging Infectious Disease	4		
IB 542	Environmental Plant Physiology	4		
IB 546 A&B	Topics in Ecology & Evolution	1-2		
IB 590	Individual Topics	6 max		

**SUMMER 2023 COURSES** (expected) see <https://sib.illinois.edu/courses/semester>

Course Number	Course Name	Hours	Lab	Disciplinary Area
IB 506	Applied Bioinformatics	4		
IB 533	Human Genome & Bioinformatics	4		
IB 590	Individual Topics	6 max		