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(2009). Professor of Biology and Department Co-Chair. B.S. and M.S., Southern Illinois University Edwardsville; Ph.D., Florida Institute of Technology.

(2004). Professor of Biology and Department Co-Chair. B.S. and M.S., Murray State University; Ph.D., University of Tennessee.

(2006). Associate Dean of Arts and Sciences and University Professor of Biology. B.A., Hanover College; Ph.D., University of North Carolina; Additional study, Michigan State University; Penn State College of Medicine.

(2015). Associate Professor of Biology. B.S., Bryan College; M.S. and Ph.D., University of Tennessee, Knoxville.

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1. BIO 112, 200, 210, 211, 301, 312, 316, 336—32 hours
  2. Select one from: BIO 304, 310, 315, 317, 323, 325, 326—4 hours
  3. Select one from: BIO 318 or 328, 329, 356, 357—3 or 4 hours
  4. BIO 425, 426, 437, 498—4 hours
- (Majors are required to take CHE 111 from Group A list of laboratory science options in the general core. CHE 112 is also a prerequisite for BIO 316.)

1. BIO 112, 211; 210 or 215—12 hours
2. BIO 315, 323, 325, 397—15 hours
3. Three of BIO 307, 309, 310, 316, 317, 320, 326—12 hours
4. One 300-level BIO Elective—3 or 4 hours
5. CHE 111, 112, 314, 315, 326, 319, 329—26 hours
6. BIO 425, 426, 437, 498—4 hours
7. No minor is required

1. Prerequisites or Corequisites: CHE 111; 2 MAT courses 111 or higher
2. BIO 112, 200, 210, 215; PHY 112 or higher—20 hours
3. BIO 303, 304, 305, 318 or 328, 335, 355—20 hours
4. BIO 425, 426, 437, 498—4 hours
5. Two of BIO 337, 358, 359—8 hours
6. Four of BIO 301, 312, 315, 316, 329, 336, 356, 357—14–16 hours
7. No minor is required.

1. BIO 112, 211, 215, 329, 337, 358, 359—28 hours
  2. Select three electives (at least one from each group):  
Group A: BIO 304, 318 or 328, 355  
Group B: BIO 315, 323, 325
  3. BIO 425, 426, 437, 498—4 hours
- (Majors are required to take CHE 111 from Group A list of laboratory science options in the general core. CHE 112 is also a prerequisite for BIO 316.)

Biology majors are required to take two terminal courses as a requirement for graduation: BIO 419, Research Experience for Educators or BIO 437 Research Experience; and BIO 498, Seminar. The Department may administer the Major Field Examination, or a Senior Exit Questionnaire to senior biology majors in BIO 419 and 437.

Union's Biology department has formed a local chapter of , which is an honorary society for students, particularly

serves students interested in exploring the world of biology beyond the classroom. BIOME is designed primarily for biology majors and minors but is open to anyone with an interest in biology.

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Prerequisites: BIO 112, 210, and a 4 hour BIO course applicable to the BIO major.

Students will develop practical vocational skills by working within a framework of designing, performing, and communicating novel scientific research as we explore the diversity, natural history, physiology, and behavior of invertebrate animals. Three hours lecture and 3 hours laboratory/week.

Prerequisites: BIO 112, 211, and a 4 hour BIO course applicable to the BIO major; CHE 314/324 is recommended.  
Structure and function of the immune system and some diseases related to the immune system. Laboratory will focus



Ecological and theoretical foundations for ecosystem and biotic community restoration. This course develops ecological principles for ecosystem restoration and applies them to redeeming and restoring degraded and damaged ecosystems and endangered species. Field studies include analysis of restoration and rehabilitation work with the Kirtland Warbler, an officially designated wild river, coastal dunes, kettle-hole bogs, deforested lands, degraded residential and farming sites, and abandoned oil wells. A practical field laboratory is included in which techniques are applied to a specific site. Prerequisite: one year of biology and one course in ecology or field biology, or permission of professor.

All courses and their applications must be defined and approved prior to registering.

All courses and their applications must be defined and approved prior to registering.

All courses and their application must be defined and approved prior to travel.

All courses and their applications must be defined and approved prior to travel.

Lower-level group studies that do not appear in the regular departmental offerings.

Upper-level group studies that do not appear in the regular departmental offerings.

Upper-level group studies that do not appear in the regular departmental offerings.

Individual research under the guidance of a faculty member(s).