

# BIOLOGICAL SCIENCES

## Secondary Teacher Certification

College of Arts and Sciences • Department of Biological Sciences

### Degrees Available at SIUE

- B.S., Biological Sciences + Secondary Teaching certification

### Why Secondary Teaching Certification in Biological Sciences?

Secondary Biological Sciences Education certification is an ideal career choice for those who have a strong interest in science coupled with the desire to foster the understanding and love of science through teaching at the middle and high school level.

### Why at SIUE

SIUE's Department of Biological Sciences partners with the College of Education to provide a comprehensive program leading to secondary teacher certification. Students participate in a wide range of courses to establish a firm foundation in biological sciences. Students also learn interpersonal communication skill and educational methods designed to enhance the interest of high school students. All students enrolled in the secondary education certification program in the Department of Biological Sciences also will be assigned student teaching opportunities to expand upon knowledge learned in the classroom as well as to provide practical experience within a middle or high school setting.

### Career Outlook

Because the field of biological sciences encompasses courses in biology, chemistry and physics, SIUE students who pursue a degree in biology with an emphasis on secondary teacher certification will have a well-rounded, comprehensive background that appeals to school districts seeking to enhance science curriculum. This certification prepares students to teach courses in all of the science disciplines at the middle and high school levels.

### Admission Requirements

Students admitted to programs offered in the Department of Biological Sciences shall have met the University admission requirements and the following additional Department requirements:

- completion of all Academic Development courses required by the University
- completion of any courses required to address Department of Biological Sciences high school deficiencies
- maintenance of a cumulative grade point average of at least 2.0 in all courses
- application to a major and acceptance by the department

### Exit Requirements

Satisfactory completion of all university, program and departmental requirements as outlined in the undergraduate catalog.

### Other Biology Programs at SIUE

Integrative Biology, Genetic Engineering, Medical Sciences, Medical Technology, Ecology, Evolution & Environment, Combined Bachelor of Science and Doctor of Dental Medicine Program

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### Faculty

#### Professors

**Ralph W. Axtell, Ph.D.**

1958, University of Texas – Austin

**Richard B. Brugam, Ph.D.**

1975, Yale University

**Paul W. Ferguson (Provost), Ph.D.**

1981, University of California – Davis

**Dennis J. Kitz, Ph.D.**

1980, University of Iowa

**Kevin G. Krajniak, Ph.D.**

1990, University of Florida

**Steven A. McCommas, Ph.D.**

1982, University of Houston

**Aldemaro Romero (Dean), Ph.D.**

1984, University of Miami

**Kurt E. Schulz, Ph.D.**

1991, University of Wisconsin - Madison

**Paul E. Wanda, Ph.D.**

1978, Pennsylvania State University

#### Associate Professors

**Elaine M. AbuSharbain, Ph.D.**

1992, Southern Illinois University Carbondale

**Paul E. Brunkow, Ph.D.**

1996, Arizona State University

**David D. Duvernell, Ph.D.**

1998, Virginia Tech

**Elizabeth J. Esselman, Ph.D.**

1996, The Ohio State University

**LuciAnn P. Kohn, Ph.D.**

1989, University of Wisconsin

**Zhi-Qing Lin, Ph.D.**

1996, McGill University

**Peter R. Minchin, Ph.D.**

1984, University of Tasmania

**William A. Retzlaff, Ph.D.**

1987, Clemson University

**Christopher W. Theodorakis, Ph.D.**

1994, University of Tennessee

#### Assistant Professors

**Kelly J. Barry, Ph.D.**

1992, University of Hawaii

**Richard L. Essner, Jr., Ph.D.**

2003, The Ohio State University

**Thomas J. Fowler, Ph.D.**

1993, The Ohio State University

**David H. Jennings, Ph.D.**

1997, University of Colorado

**Faith L.W. Liebl, Ph.D.**

2005, University of Illinois at Chicago

**Darron R. Luesse, Ph.D.**

2006, Indiana University, Bloomington

**Vance J. McCracken, Ph.D.**

2001, University of Illinois at Urbana-Champaign

**Jason Williams, Ph.D.**

2005, Miami University

SOUTHERN ILLINOIS UNIVERSITY  
**EDWARDSVILLE**

COLLEGE OF ARTS & SCIENCES



## Sample Four-Year Curriculum - BS

	FALL	SPRING
YEAR 1	<b>CHEM 121A</b> General Chemistry I (INSM) (4) <b>CHEM 125A</b> General Chemistry Lab I (1) ENG 101 English Composition I (3) <b>MATH 125</b> Pre-Calc Math (INSM) (3) <b>PHIL 106</b> , MATH 106, or FL 106 (3) Introductory Fine Arts & Humanities (IFAH) (3) Total 17	<b>BIOL 150</b> Biol I (4) <b>CHEM 121B</b> General Chemistry II (DNSM) (4) <b>CHEM 125B</b> General Chemistry Lab II (1) ENG 102 English Composition II (3) <b>STAT 244</b> (Recommended), <b>STAT 107</b> , or <b>CMIS 108</b> (3-4) Intro Fine Arts & Humanities (IFAH) or Social Sciences (ISS) (3) Total 18-19
YEAR 2	<b>BIOL 151</b> Biol II (4) <b>CHEM 241A</b> Organic Chemistry I (3) <b>GEOG 210</b> Physical Geography (3) <b>PSYC 111</b> Foundations of Psychology (ISS) (3) <b>SPC 103</b> Interpersonal Communication (IGR) (3) Distribution Fine Arts and Humanities (DFAH) (3) Total 19 *	<b>BIOL 220</b> Genetics (4) <b>CHEM 241B</b> Organic Chemistry II (3) <b>CHEM 245</b> Organic Chemistry Lab (2) <b>CI 200</b> Introduction to Education (2) <b>PHYS 118</b> Astronomy (3) Distribution Social Sciences (DSS) (3) Total 17 *
YEAR 3	BIOL 319 Cell & Molecular Biology (Fall Only) (4) BIOL 365 Ecology (Fall Only) (4) <b>PHYS 131A</b> College Physics I or <b>PHYS 151</b> University Physics and <b>151L Lab</b> (5) Interdisciplinary Studies (IS) (3) Total 13	BIOL 327 Evolution (3) BIOL 340 Animal Physiology (4) <b>PHYS 131B</b> College Physics II or <b>PHYS 152</b> University Physics and <b>152L Lab</b> (5) SCI 451 Integrated Science (3) SPE 400 The Exceptional Child (3) Total 18
YEAR 4	BIOL 494 Methods of Teaching Biology (3) BIOL 400-Level Elective (With Lab) (4) CI 315A Methods of Teaching in The Secondary School (2) CI 440 Teaching Reading in the Secondary School (3) <b>EPFR 315</b> Educational Psychology (3) EPFR 320 Foundations of Education in a Multicultural Society (3) Total 18	BIOL 497 Senior Assignment (2) CI 315B Methods of Teaching in the Secondary School (2) CI 352B Secondary Student Teaching - Biology (10) Total 14

**TRANSFER STUDENTS** Maximize your transfer experience - complete the **bolded** courses/requirements pre-transfer **AND** satisfy the Illinois Articulation Initiative (IAI) General Ed Core or receive an AA, AS, or AAT (early childhood, special ed, or math) degree from an IAI community college. If 'Minor' requirements are shown, discuss careful course selection with the academic advising contact listed. Transfer Credit Equivalency Guides are located at [siue.edu/transfer/](http://siue.edu/transfer/)

In order to be admitted into the teacher certification program, students must have:

- Received a grade of C or above in **ENG 101** and **ENG 102**
- Completed 43 semester hours of course credit and have a cumulative grade point average of 2.5 or higher (this includes work at other institutions)
- Successfully completed the introductory course **CI 200**
- **Passed the ICTS Basic Skills Test.** Information about this test is available at [www.icts.nesinc.com](http://www.icts.nesinc.com)

### Academic Advising Information

College of Arts and Sciences Undergraduate Advising  
 Southern Illinois University Edwardsville  
 Campus Box 1609, Edwardsville, IL 62026-1609  
 618.650.5525  
[bhinter@siue.edu](mailto:bhinter@siue.edu)

### Contact Info

Department of Biological Sciences  
 College of Arts and Sciences  
 Southern Illinois University Edwardsville  
 Campus Box 1651, Edwardsville, IL 62026  
 618.650.3927

