



# Life Sciences Education



**Major:** *B.S. Life Sciences Teaching* (Natural Sciences Dept., College of Arts & Sciences)

**Licensure:** *Life Science gr 9-12, General Science gr 5-8* (Urban Teacher Program)

**Total Credits: 84 to 94**

<b>MAJOR COURSES</b> (38 to 48 cr Science + 8cr SCED = 46 to 56 total credits)	<b>URBAN EDUCATION COURSES</b> (30cr)
<p align="center"><b>Prerequisites</b></p> <p>Credits not included in the major; credits count towards University graduation requirements.            MATH 115 College Algebra <u>or</u> MATH 120 Precalculus</p>	<p align="center"><b>Pre-Professional Education Courses (6cr)</b></p> <p>The following courses are open to all students and are required for admission to the Urban Teacher Program along with several other admission requirements, including at least 40 hours working with youth in an urban setting. Contact the UTP Academic Advisor <a href="mailto:UTP-Admissions@metrostate.edu">UTP-Admissions@metrostate.edu</a> for more information about program admission requirements.</p> <p>EDU 200 Introduction to Urban Education and Reflective Teaching (3 cr, <i>summer, fall, spring</i>)</p> <p>EDU 203 Multicultural Education (3 cr, <i>summer, fall, spring</i>)</p>
<p align="center"><b>Foundation Courses (20cr)</b></p> <p>The Prerequisite and Foundation courses are required for admission to the Life Sciences Teaching Major and for admission to the Urban Teacher Program.</p> <p>BIOL 111 General Biology I (5cr, <i>fall, spring</i>)            BIOL 112 General Biology II (5cr, <i>fall, spring</i>)            CHEM 111 General Chemistry I (5cr, <i>fall, spring</i>)            CHEM 112 General Chemistry II (5cr, <i>fall, spring</i>)</p>	<p align="center"><b>Professional Education Courses (24cr)</b></p> <p>The following courses are open to students who are admitted to the Urban Teacher Program.</p> <p>EDU 300 Assessment of Learning and Teaching in Diverse Urban Classrooms (3 cr, <i>fall</i>)</p> <p>EDU 306 Urban Middle School &amp; High School Teaching Methods (4 cr, <i>fall, spring</i>)</p> <p><u>Co-requisite:</u>            EDU 311 Urban Teaching Practicum (0-1cr)</p> <p>EDU 310 Teaching and Assessing Students with Disabilities (3 cr, <i>fall</i>)</p> <p>EDU 383 Information Technology for K-12 Learning and Teaching (2 cr, <i>summer, fall, spring</i>)</p> <p>EDU 400 Literacy Education in Urban Schools (3 cr, <i>spring</i>)</p> <p>EDU 415 Managing Learning in Diverse Urban Classrooms (3 cr, <i>spring</i>)</p> <p>EDU 430 Historical &amp; Cultural Foundations of Urban Education (3 cr, <i>fall, spring</i>)</p> <p>EDU 435 Teaching ELL Students in Content Area Classrooms (3 cr, <i>fall, spring</i>)</p> <p>EDU 450 Advanced Urban Teaching Practicum and Seminar (0-1cr, <i>fall, spring</i>)</p>
<p align="center"><b>Core Courses (18-28cr)</b></p> <p>Students do not need to be admitted to the UTP to take these courses. Each course has prerequisites. See catalog for details.</p> <p><b>Earth Science</b> (choose one of the following options, 4-8cr)            GEOL 110 Intro to Earth Science (4 cr)<sup>1</sup>  <u>OR</u>            GEOL 101 Intro to Geology (4cr) <u>AND</u> PHYS 101 Intro to Astronomy (4cr)<sup>2</sup></p> <p><b>Physics</b> (choose from the following options, 4-10 cr)            PHYS110 Intro to Physics (4 cr)<sup>2</sup>  <u>OR</u>            PHYS 111 &amp; 112 General Physics I &amp; II (10 cr)<sup>1</sup>  <u>OR</u>            PHYS 211 &amp; 212 Calc-based Physics I &amp; II (10 cr)<sup>1</sup></p> <p><b>Ecology</b> (choose <u>one</u> of the following courses, 5cr)            BIOL 310 Ecology (5 cr)      BIOL 312 Evolution (5 cr)            BIOL 315 Limnology (5 cr)      BIOL 318 Spatial Ecology (5 cr)            BIOL 320 Ecosystem and Global Ecology (5 cr)</p> <p><b>Genetics &amp; Cell Biology</b> (choose <u>one</u> of the following courses, 5cr)            BIOL 301 Genetics (5 cr)            BIOL 302 Cell Biology and Histology (5 cr)            BIOL 304 Molecular Biology (5 cr)</p> <p>NOTES:  <sup>1</sup> courses recommended for those planning to teach in high school  <sup>2</sup> courses recommended for those planning to teach in middle school</p>	<p align="center"><b>Science Education Methods Courses (8cr)</b></p> <p>The following courses are required for the major. It is strongly recommended that they be taken during the two semesters prior to student teaching.  <u>Prerequisites:</u> EDU 300, EDU 306 and at least 28 credits of science courses in the Life Sciences Teaching major.  <u>Co-requisite:</u> EDU 450 Advanced Urban Teaching Practicum and Seminar (0-1cr)</p> <p>SCED 445 Practice of Science (4 cr, <i>spring</i>)            SCED 450 Science Methods for Urban Grades 5-12 Classrooms &amp; Labs (4 cr, <i>fall</i>)</p> <p align="center"><b>Student Teaching (8cr total, 12 weeks full-time)</b></p> <p>Teacher Candidates must notify the UTP Field Experience Coordinator two semesters before the intended student teaching semester and submit a student teaching application packet.</p> <p>EDU 460 Student Teaching in the Urban Middle School <u>OR</u> EDU 470 Student Teaching in the Urban High School</p>

For more information, visit <http://choose.metrostate.edu/utp>, email [UTP-Info@metrostate.edu](mailto:UTP-Info@metrostate.edu) or call 651-999-5920.  
Note: Course requirements subject to change; contact the program to verify this is the most up-to-date information.