

**INTEGRATED SCIENCE LICENSURE**  
**For Students Entering Fall 2018**  
(Total Semester Hours Varies)

09/05/2018

**This license can only be completed in conjunction with another science area concentration. It is not a stand-alone program. Select a single or dual field concentration and complete all of those requirements plus the following courses. The integrated science license can only be approved by UD, after the single or dual field concentration license has been issued.**

**Pedagogy Requirements: (4 sem. hrs. req.)**

EDT 434 Science Methods For AYA .....	3
EDT 434L Science Methods For AYA Lab .....	1
STANDER SYMPOSIUM Presentation and Participation in Science <a href="https://stander.udayton.edu">https://stander.udayton.edu</a>	

**Biology Requirements: (8 sem. hrs. req.)**

BIO 151 Concepts of Biology I	3
BIO 151L Biology Laboratory Investigation I .....	1
BIO 152 Concepts of Biology II .....	3
BIO 152L Biology Laboratory Investigations II .....	1

**Earth Science Requirements: (8 sem. hrs. req.)**

GEO 115 Physical Geology .....	3
GEO 115L Physical Geology Laboratory .....	1
GEO 116 Geological History of the Earth .....	3
GEO 116L Geological History of the Earth Laboratory .....	1

**Chemistry Requirements: (12 sem. hrs. req.)**

CHM 123 General Chemistry I .....	3
CHM 123L General Chemistry I Laboratory .....	1
CHM 124 General Chemistry II .....	3
CHM 124L General Chemistry II Laboratory .....	1
CHM 313 Organic Chemistry I .....	3
CHM 313L Organic Chemistry Laboratory .....	1

**Physics Requirements: (8 sem. hrs. req.)**

PHY 201 General Physics I .....	3
PHY 201L General Physics I Laboratory .....	1
PHY 202 General Physics II .....	3
PHY 202L General Physics II Laboratory .....	1

**Mathematics Requirements: (6 sem. hrs. req.)**

MTH 148 Introductory Calculus I .....	3
MTH 149 Introductory Calculus II .....	3

**Computer Requirements:** Use of computers is required in BIO 151L, BIO 152L, PHY 210L, and PHY 211L. Students who do not possess needed skills should take CPS 111 or a higher level CPS course.

**Integrated Science License:** Requires a single and/or dual field concentration area, and the Integrated Science state of Ohio teaching license will be processed by the University of Dayton once ODE has issued the single and/or double field concentration license.