LIFE SCIENCE / CHEMISTRY LICENSURE Fall 2016
REQUIRES A TOTAL OF 71 SEMESTER HOURS

Pedagogy Requirements: (4 sem. hrs. req.)
EDT 434  Science Methods For AYA ...................................3
EDT 434L Science Methods For AYA Lab ............................1
STANDER SYMPOSIUM Presentation & Participation in Science
https://stander.udayton.edu

Biology Requirements: (27 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
BIO 301   Evolution ....................................................3
BIO 309   Comparative Anatomy ......................................3
BIO 309L  Comparative Anatomy Laboratory .....................1
BIO 310   Ecology .....................................................3
BIO 310L  Ecology Laboratory .........................................1
BIO 314   Plant Biology ................................................3
BIO 314L  Plant Biology Laboratory ................................1
BIO 411   General Microbiology .......................................3
BIO 411L  General Microbiology Laboratory .......................1

Chemistry Requirements: (20 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 201   Quantitative Analysis .....................................3
CHM 201L  Quantitative Analysis Laboratory ......................1
CHM 313   Organic Chemistry I ......................................3
CHM 313L  Organic Chemistry I Laboratory .......................1
CHM 314   Organic Chemistry II ....................................3
CHM 314L  Organic Chemistry II Laboratory ......................1

Earth Science & Physics Requirements: (12 sem. hrs. req.)
GEO 115   Physical Geology ...........................................3
GEO 115L  Physical Geology Laboratory ............................1
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

Math Requirements: (8 sem. hrs. req.)
MTH 168   Analytic Geometry and Calculus I ....................4
MTH 169   Analytic Geometry and Calculus II ....................4

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

LIFE SCIENCE / PHYSICS LICENSURE Fall 2016
REQUIRES A TOTAL OF 80 SEMESTER HOURS

Pedagogy Requirements: (4 sem. hrs. req.)
EDT 434  Science Methods For AYA ...................................3
EDT 434L Science Methods For AYA Lab ............................1
STANDER SYMPOSIUM Presentation & Participation in Science
https://stander.udayton.edu

Biology Requirements: (27 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
BIO 301   Evolution ....................................................3
BIO 309   Comparative Anatomy ......................................3
BIO 309L  Comparative Anatomy Laboratory .....................1
BIO 310   Ecology .....................................................3
BIO 310L  Ecology Laboratory .........................................1
BIO 314   Plant Biology ................................................3
BIO 314L  Plant Biology Laboratory ................................1
BIO 411   General Microbiology .......................................3
BIO 411L  General Microbiology Laboratory .......................1

Physics Requirements: (20 sem. hrs. req.)
PHY 206   General Physics I—Mechanics .........................3
PHY 207   General Physics II—Electricity and Magnetism ....3
PHY 208   General Physics III—Mechanics of Waves ...........3
PHY 210L  General Physics Laboratory I ..........................1
PHY 211L  General Physics Laboratory II ........................1
PHY 250   Descriptive Astronomy ....................................3
PHY 321   Atomic and Nuclear Physics ............................3
PHY 395   Research Participation I ................................1
Select additional courses to total 20 hours in Physics:
PHY 303   Intermediate Mechanics I ..............................3
PHY 333   Digital and Analog Electronics for Scientists ....3

Chemistry & Earth Science Requirements: (16 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 I Laboratory .......................1
GEO 115   Physical Geology ...........................................3
GEO 115L  Physical Geology Laboratory ............................1

Math Requirements: (12 sem. hrs. req.)
MTH 168   Analytical Geometry and Calculus I ..................4
MTH 169   Analytical Geometry and Calculus II ..................4
MTH 218   Analytical Geometry and Calculus III .................4

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.

09/21/2016