

College of Letters and Sciences B.S. Degree Requirements For Secondary Education Licensure in Physics

- 1) Communications & Calculations Skills (12 units or waivers)
 - a) ___ ENGLISH 101
 - b) ___ ENGLISH 102
or ___ ENGLISH 105 Freshmen Honors
(replaces both 101 and 102)
 - c) ___ SPEECH 110
 - d) ___ MATH 140 or 141

- 2) B.S. Degree Requirements (32 units)
 - a) Quantitative and Technical Reasoning (7-11 units)
 - (1) ___ A 4-5 unit laboratory science designated *GL*
 - (2) ___ 3 – 6 units of science, math or computer science courses designated *GL* or *GM* from at least 1 subject area other than the laboratory science course used in Area 2.a.1 (Astronomy, Biology, Chemistry, Geology, Computer Science, Physical Geography, Math Physics)
 - b) Cultural Heritage (6 units)
 - 1) ___ GENED 110
 - 2) ___ GENED 390
 - c) Communities (6 units)
 - 1) ___ GENED 130
 - 2) ___ GENED 120 or 140
 - d) Personal Health and Well-being (1-2 units)
 - 1) ___ PEGNRL 192
 - 2) ___ 0-1 unit in HPRC courses designated *GP*
 - e) ___ Electives (7-12 units)
 - 1) ___ Additional electives designated *GA, GE, GH, GI, or GS*; no more than 1 course from any one discipline may be counted in electives

- 3) Diversity (3 units)
 - a) ___ Any diversity course listed in 2010-12 Catalog pg 38.

- 1) Physics Major (34 units)
 - a) Select 1 group

___ PHYSICS 180	or	___ PHYSICS 140
___ PHYSICS 181		___ PHYSICS 141
 - b) Select 2 units of ___ Physics 190
 - c) Required physics courses
 - (1) ___ PHYSICS 221
 - (2) ___ PHYSICS 305
 - (3) ___ PHYSICS 310
 - (4) ___ PHYSICS 324
 - (5) ___ PHYSICS 344
 - (6) ___ PHYSICS 489
 - d) Select remaining units from ASTRONOMY 112 and courses numbered 300 or 400 with no more than 3 units from 490-499
 - e) Writing (3 units)
 - 1) ___ ENGLISH 370 or ___ ENGLISH 372 RLS
 - f) ___ Departmental Exit Interview

- 2) Licensure (41 units)
 - a) Educational Foundations
 - 1) ___ EDFOUND 212
 - 2) ___ EDFOUND 243
 - 3) ___ EDFOUND 425
 - 4) ___ EDFNDPRC 210
 - b) Curriculum and Instruction
 - 1) ___ SECNDED 429
 - 2) ___ SECNDED 466
 - 3) ___ CIFLD 492 (select 3 units)
 - c) Student Teaching
 - (1) ___ CIFLD 402 (2 units) & CIFLD 414 (12 units)
or select
 - (2) ___ CIFLD 404 (2 units) & CIFLD 412 (12 units)
 - d) Interdepartmental
 - 1) ___ SPECED 205 (select 3 units)
 - e) Select one of the following (3 units)
 - 1) ___ GEOGRPHY 252 or ___ BIOLOGY 214

- 3) Mathematics Secondary Ed Emphasis Minor (24 units)
 - a) ___ MATH 253
 - b) ___ MATH 254
 - c) ___ MATH 280
 - d) ___ MATH 359
 - e) ___ MATH 353

Choose one:	___ MATH 355 or 452
Recommended:	___ MATH 255 ___ MATH 361