

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester One:					
PHYS 1310 & 1310L (General Physics, 160 & 160L)	4	4	4		C
PHYS 1311* (Prob in Gen Physics, 167)					CR
MATH 1512 (Calculus I, 162)	4	4	3		C
CHEM 1215 & 1215L (Gen Chem I, 121 & 123L)	4	4	3		C
Gen Ed Second Language	3		3		C
Total:	15	12	13	0	
<i>Advisement: Try a Freshman Learning Community - 2 core classes combined</i> <i>At time of registration</i>					

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester Three:					
PHYS 2310 & 2310L (General Physics, 262 & 262L)	4	4			C
PHYS 2311* (Prob in Gen Physics, 267)					CR
MATH 2530 (Calculus III, 264)	4	4			C
BIOL 2110C (Principles of Bio.: Cell. and Molecular Lecture and Lab, 201L)	4	4			C
Gen Ed Communication (COMM 1130, ENGL 2210 or 2120, PHIL 1120)	3		3		C
Total	15	12	3	0	
<i>Transition to Major Status</i> <i>(once semester grades are in)</i>					

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester Five:					
PHYC 366 (Mathematical Methods of Physics)	4	4		4	C
PHYC 303 (Analytical Mechanics I)	3	3		3	C
PHYC 313* (Prob in Analytical Mechanics I)					CR
BIOL 303/303L (Ecology & Evolution and Lab)	4	4		3	C
Biophysics Elective 1	3	3		3	C
Gen Ed Humanities	3		3		C
Total	17	14	3	13	
<i>Visit Career Services</i>					

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester Seven:					
PHYC 301 (Thermodynamics and Stat Mech)	3	3		3	C
PHYC 311* (Prob Thermo & Stat Mech)					CR
Biophysics Elective 3	3	3		3	C
Gen Ed Social and Behavioral Sciences	3		3		C
Gen Ed Arts and Design	3		3		C
Upper Division Elective	3			3	D-
Total	15	6	6	9	
<i>Advisement: Departmental Check-In / Senior Visit</i>					

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester Two:					
PHYS 1320 & 1320L (General Physics, 161 & 161L)	4	4			C
PHYS 1321* (Prob in Gen Physics, 168)					CR
MATH 1522 (Calculus II, 163)	4	4			C
CHEM 1225 & 1225L (Gen Chem II, 122 & 124L)	4	4			C
Gen Ed Communication (2nd English Composition, ENGL 1120)	3		3		C
Total:	15	12	3	0	
<i>Advisement: Enhanced Degree Audit skills</i>					

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester Four:					
PHYS 2415 (Computational Physics, 290)	3	3			C
PHYC 330 (Intro Modern Physics)	3	3		3	C
PHYC 331* (Prob in Modern Physics)					CR
MATH 316 (Applied Ordinary Diff Equas)	3	3		3	C
BIOL 2410C (Princip. of Bio.: Genetics Lecture and Lab, 202L)	4	4			C
Total	13	13	0	6	

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester Six:					
PHYC 304 (Analytical Mechanics II)	3	3		3	C
PHYC 314* (Prob in Analytical Mechanics II)					CR
PHYC 405 (Electricity and Magnetism I)	3	3		3	C
PHYC 415* (Prob in Electricity and Magnetism I)					CR
BIOL 304/304L (Plant Animal Form & Function)	4	4		4	C
Biophysics Elective 2	3	3		3	C
Gen Ed Choice	3		3		C
Total	16	13	3	13	
<i>Complete Graduation Workshop & Apply for degree</i> <i>(after 4th week)</i>					
<i>Advisement: Departmental Check-In</i>					

Course Subject and Title	Credit Hrs.	Major	Gen Ed	Upper Div.	Min. Grade
Semester Eight:					
PHYC 307L (Junior Lab)	3	3		3	C
Biophysics Elective 4	3	3		3	C
Elective Any Level (if Recitations not taken)	5				D-
Upper Division Elective	3			3	D-
Total	14	6	0	9	
<i>Advisement: Senior Visit</i>					
<i>Visit Graduation Fair</i>					

Degree Total **120 88 31 50**

The New Mexico General Education Curriculum (31 units)

Communication: (6 credit hours)

Mathematics and Statistics: (3 credit hours)

Physical and Natural Sciences: (4 credit hours)

Social and Behavioral Sciences: (3 credit hours)

Humanities: (3 units)

Second Language: (3 credit hours)

Arts and Design: (3 credit hours)

Student Choice: (6 credit hours)

Arts and Sciences College Minimum Requirements

Total credit hours = 120

300/400 level credit hours = 48

Minimum credit hours taught in A&S = 90

University Residence Requirements

a. Minimum hours = 30

b. Senior standing = 15 past 92

c. In major = One half

d. In minor = One quarter

Minimum graduation GPA = 2.00

Keep in mind that minimum grades on road map are for individual coursework only. Students must maintain a minimum of a 2.0 cumulative grade point average for admission to and graduation from the College of Arts and Sciences. Minimums listed for the individual courses do NOT meet the cumulative minimum. Scholarships will have different requirements. Please see your advisor for questions.

Minor options

No minor is required for the B.S. in Physics with Biophysics Concentration, although an optional minor or second major may be selected.

Contact Information

Major Advisor:

Email:

Website: physics.unm.edu

Minor Advisor:

Email:

Website:

College Advisor:

Email:

Website: artsci.unm.edu/advisement/index.html

*Physics 1311, 1321, 2311, 331, 311, 313, 311, 415, 416, 496, and 497 are all one credit hour Recitation Sections associated with Physics 1310, 1320, 2310, 330, 301, 303, 304, 405, 406, 491, and 492, respectively. These recitation sessions are practice in solving problems from the associated lecture courses. They are very useful and strongly recommended for the major.

Notes:

1. There is room for up to 6 bio electives, if upper div electives in Sems 7 and 8 are used.
2. It is possible to satisfy the pre-med requirements of the UNM Med School by an appropriate choice of the electives. The Premed Advisement document gives the required classes.
3. Students planning to go to grad school in physics or biophysics are strongly advised to take Physics 491 and 492 (QM I and II) for their upper-division electives.

BIOPHYSICS ELECTIVES:

BIOC 423 Introductory Biochemistry (pre-req Chem 302)

BIOL 425 Molecular genetics

BIOL 429 Molecular Cell Biology (additional pre-reqs - Chem 212 (or Chem 301 and 303L))

BIOL 492 Introductory Mathematical Biology

BIOL 446 Laboratory Methods in Molecular Biology

BIOL 547 Advanced Techniques in Light Microscopy

BME 517 Applied Biology for Biomedical Engineers

BME 544 Thermodynamics of Biological Systems

PHYC 302 Introduction to Photonics

PHYC 302L Optics Lab

PHYC 410 Chemistry and Physics at the Nanoscale

PHYC 480 Special topics in Biophysics

CHEM 301 and 303L Organic Chem I with Lab

CHEM 302 and 304L Organic Chem II with Lab

CHEM 315 Introductory Physical Chemistry

Note: Physics 301 may provide good preparation for these classes