

# B.S. in Biophysics

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(127 credits)

**First Year**

<b>1st Semester</b>		<b>Term Credits</b>
HUM 101	English Composition: Writing, Speaking, Thinking I	3
PHYS 111	Physics I	3
PHYS 111A	Physics I Laboratory	1
MATH 111	Calculus I	4
CS 113 or CS 115	Introduction to Computer Science or Intro. to CS I in C++	3
CHEM 121 or CHEM 125	Fundamentals of Chemical Principles I or General Chemistry I	3
FRSH SEM	Freshman Seminar	0
<b>Term Credits</b>		<b>17</b>

**2nd Semester**

PHYS 114	Introduction to Data Reduction with Applications	3
PHYS 121	Physics II	3
PHYS 121A	Physics II Laboratory	1
MATH 112	Calculus II	4
CHEM 122 or CHEM 126	Fundamentals of Chemical Principles II or General Chemistry II	3
CHEM 124	General Chemistry Laboratory	1
Physical Education:GUR Elective		1
<b>Term Credits</b>		<b>16</b>

**Second Year****1st Semester**

R120 101	General Biology	4
MATH 225	Survey of Probability and Statistics	1
PHYS 234	Physics III	3
PHYS 231A	Physics III Laboratory	1
CHEM 243	Organic Chemistry I	3
MATH 211	Calculus III A	3
Physical Education:GUR Elective		1
<b>Term Credits</b>		<b>16</b>

**2nd Semester**

MATH 222	Differential Equations	4
MATH 328	Mathematical Methods for Scientists and Engineers	3
PHYS 335	Introductory Thermodynamics	3
R120 201	Foundations Of Biology	3
R120 202	Foundations Of Biology Lab	1
English Composition and Cultural History (lower-level):GUR Elective		3
<b>Term Credits</b>		<b>17</b>

**Third Year****1st Semester**

R120 102	General Biology	4
PHYS 430	Classical Mechanics I	3
PHYS 432	Electromagnetism I	3
Social Sciences (lower-level):GUR Elective		3
Social Sciences (lower-level):GUR Elective		3
<b>Term Credits</b>		<b>16</b>

**2nd Semester**

OPSE 310	Virtual Instrumentation	3
PHYS 433	Electromagnetism II	3
R120 360	Biochemistry	3
Humanities and Social Sciences (upper-level):GUR Elective		3
English Composition and Cultural History (lower-level):GUR Elective		3

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<b>Term Credits</b>	<b>15</b>
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**Fourth Year****1st Semester**

Open Elective in Humanities and Social Sciences (upper-level):GUR Elective		3
PHYS 442	Introduction to Quantum Mechanics	3
PHYS 418	Fundamentals of Optical Imaging	3
300 or 400 level Physics Elective		3
PHYS 350	Biophysics I	3

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<b>Term Credits</b>	<b>15</b>
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**2nd Semester**

Management:GUR Elective		3
PHYS 451	Biophysics II	3
PHYS 450	Advanced Physics Laboratory	3
OPSE 410	Biophotonics	3
Humanities and Social Sciences (upper-level) Capstone Seminar:GUR Elective		3

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<b>Term Credits</b>	<b>15</b>
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<b>Total Credits</b>	<b>127</b>
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**GUR Electives**

Refer to the **General University Requirement** section of this catalog for further information on GUR electives.

*This curriculum represents the maximum number of credits per semester for which a student is advised to register. A full-time credit load is 12 credits.*

*First-year students are placed in a curriculum that positions them for success which may result in additional time needed to complete curriculum requirements. Continuing students should consult with their academic advisor to determine the appropriate credit load.*