

# BIOLOGY B.S. WITH A CONCENTRATION IN BIOMEDICAL SCIENCE

## Four Year Plan

**Disclaimer:** This sample Four Year Plan is provided as a guide for the recommended sequencing of courses. Vanguard University requires that students complete a minimum of 120 units of required course work as outlined on the Requirements tab in order to receive a bachelor's degree. It is the student's responsibility to confirm with the department the course rotation before enrolling in courses. Questions, contact the Department of Biology.

**Study Abroad Participation:** Students interested in participating in the university's Study Abroad programs are encouraged to reach out to the Global Education and Outreach Office (studyabroad@vanguard.edu) for more information and collaboration in their academic course planning. Students using Education and Training Benefits through the U.S. Department of Veteran Affairs are encouraged to also reach out to the School Certifying Official (veteranscertifyingofficial@vanguard.edu) for more information regarding how benefits can be applied.

Course	Title	Units
<b>Year 1 Term 1</b>		
CORE-100C	Cornerstone	1
BIOL-111	Principles of Cell and Molecular Biology	3
BIOL-111L	Principles of Biology Lab, Principles of Cell/ Molecular Biology Lab	1
CHEM-120	General Chemistry I	3
CHEM-120L	General Chemistry I Lab	1
NT-101C	New Testament Survey	3
ENGL-120C	Persuasive Writing	3
<b>Units</b>		<b>15</b>
<b>Year 1 Term 2</b>		
BIOL-112	Principles of Organismal Biology	3
BIOL-112L	Principles of Organismal Biology Lab	1
CHEM-121	General Chemistry II	3
CHEM-121L	General Chemistry II Lab	1
PSYC-103C	Introduction to Psychology	3
MATH-180C	Calculus 1	4
<b>Units</b>		<b>15</b>
<b>Year 2 Term 1</b>		
BIOL-220	Cell Biology	3
BIOL-220L	Cell Biology Lab	1
CHEM-304	Organic Chemistry I	3
CHEM-304L	Organic Chemistry Techniques I	1
ENGL-220C	Researched Writing	3
THEO-PLHD	Theology Core Requirement	3

KINE-148C	Lifetime Fitness and Wellness Lecture	3
<b>Units</b>		<b>17</b>
<b>Year 2 Term 2</b>		
CHEM-305	Organic Chemistry II	3
CHEM-305L	Organic Chemistry Technqs II	1
OT-201C	Old Testament Survey	3
FINA-PLCR	Fine Arts Core Curriculum Requirement	3
BIOL-311	Genetics	3
BIOL-311L	Genetics Laboratory	1
BIOL-STATS	Statistics Option	3
<b>Units</b>		<b>17</b>
<b>Year 3 Term 1</b>		
BIOL-302	Comparative Vertebrate Anatomy	3
BIOL-302L	Comp Vertebrate Anatomy Lab	1
PSCI-PLGP1	Physics 1 Requirement	4
BIOL-309	Microbiology	3
BIOL-309L	Microbiology Laboratory	1
COMM-201C	Speech Composition and Presentation	3
<b>Units</b>		<b>15</b>
<b>Year 3 Term 2</b>		
PSCI-PLGP2	Physics 2 Requirement	4
BIOL-304	Human Physiology	3
BIOL-304L	Human Physiology Lab	1
BIOL-PLHD4	Biology Elective	4
BIOL-485	Undergrad Biological Research	1-4
HIST-PLCR1	History Core Req (US Hist Or Democracy)	3
<b>Units</b>		<b>16-19</b>
<b>Year 4 Term 1</b>		
CHEM-430	Biochemistry	3
CHEM-430L	Experimental Tech/Biochemistry	1
HIST-PLCR2	History Core Requirement (World Civ)	3
THEO-300C	Developing a Christian World View	3
BIOL-PLHD4	Biology Elective	4
SOC-PLCR	Social Science Core Curriculum Reqm't	3
<b>Units</b>		<b>17</b>
<b>Year 4 Term 2</b>		
BIOL-499C	Capstone Seminar in Biology	2
CHIS-400C	Christian Heritage	3
ENGL-230C	Literature and the Human Experience	3
BIOL-PLHD4	Biology Elective	4
<b>Units</b>		<b>12</b>
<b>Total Units</b>		<b>124-127</b>

### Notes:

- Year 1, Term 1: Must pass the respective Chemistry and/or Math placement exam(s).
- Year 1, Term 2: PSYC-103C Introduction to Psychology is a Social Science requirement for this major.

