

# BIOLOGY B.S. WITH A CONCENTRATION IN NEUROBIOLOGY

## 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 of Arts, Bachelor of Music, Bachelor of Science, or Bachelor of Science in Nursing degree. It is the student's responsibility to confirm with the department the course rotation before enrolling in courses. If applicable, please note the footnotes at the bottom of the page for additional information related to courses listed in a particular year and term. 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 for more information regarding how benefits can be applied.

Course	Title	Units
<b>Year 1 Term 1</b>		
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
CORE-100C	Cornerstone	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
MATH-180C	Calculus 1	4
PSYC-103C	Introduction to Psychology	3
<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

KINE-148C	Lifetime Fitness and Wellness Lecture	3
OT-201C	Old Testament Survey	3
<b>Units</b>		<b>17</b>

### Year 2 Term 2

BIOL-311	Genetics	3
BIOL-311L	Genetics Laboratory	1
BIOL-PLHD4	Biology Elective	4
MATH-265C	Intro to Statistical Methods	3
THEO-101C	Foundations of Christian Life	3
HIST-PLCR1	History Core Req (US Hist Or Democracy)	3
<b>Units</b>		<b>17</b>

### Year 3 Term 1

BIOL-432	Neuroscience	3
BIOL-432L	Neuroscience Lab	1
BIOL-309	Microbiology	3
BIOL-309L	Microbiology Laboratory	1
PSCI-130C	General Physics I	3
PSCI-130CL	General Physics I Lab	1
COMM-201C	Speech Composition and Presentation	3
<b>Units</b>		<b>15</b>

### Year 3 Term 2

BIOL-353	Neuropharmacology	3
PSCI-131	General Physics II	3
PSCI-131L	General Physics II Lab	1
BIOL-PLHD4	Biology Elective	4
HIST-PLCR2	History Core Requirement (World Civ)	3
FINA-PLCR	Fine Arts Core Curriculum Requirement	3
<b>Units</b>		<b>17</b>

### Year 4 Term 1

BIOL-365	Neurobiology of Learning and Memory	3
BIOL-440	Molecular Biology	3
BIOL-440L	Techniques in Molecular Biology	1
THEO-300C	Developing a Christian World View	3
BIOL-PLHD4	Biology Elective	4
<b>Units</b>		<b>14</b>

### Year 4 Term 2

BIOL-406	Research Methods in Neurobiology	3
BIOL-499C	Capstone Seminar in Biology	2
CHIS-400C	Christian Heritage	3
ENGL-230C	Literature and the Human Experience	3
SOC-PLCR	Social Science Core Curriculum Req'm't	3
<b>Units</b>		<b>14</b>

**Total Units 124**

### 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 required Social Science for this major.

