



**B.S. Degree  
Biology Major  
2018/2019 Catalog**

This program plan is valid only if the student registers for, and completes, a term at Brenau by summer 2019. If the student defers admission to fall 2019 or after, the student must contact the adviser to be changed to the subsequent catalog.

Student Name _____
S. SSN/Id No _____
S. Phone (w) _____ (h) _____
Adviser _____
Previous Degree: _____ A.A. _____ A.S. _____ Bachelor's
Where/term degree earned _____

**Liberal Education:**

The Liberal Education program is divided into four portals: Communication & Language Fluency, Artistic & Creative imagination, Scientific and Analytic Curiosity and, World Understanding. Please see the Brenau University catalog or the Brenau University web site for a list of applicable courses for each requirement. Some majors have more than one course that can satisfy a LE requirement. In those cases, only one of those courses will list on the LE portion of the plan, however, all the courses will be noted on the reverse side of this plan. **If the student earned a previous degree (must be A.A., A.S., or Bachelor's Degree) from a regionally accredited institution, the Liberal Education section of the student's program is considered complete.**

<b>World Understanding</b>	<b>Term</b>	<b>Grade</b>	<b>Course Number &amp; Title</b>
Historical Perspective (3 hrs)	_____	_____	_____
Global Awareness (3 hrs)	_____	_____	_____
Civic Engagement (3 hrs)	_____	_____	_____
<b>Scientific &amp; Analytic Curiosity</b>			
Mathematics (3 hrs)	Satisfied by major course.		
Science (7-8 hrs)	Satisfied by major course.		
	Satisfied by major course.		
Reasoning (3-4 hrs)	Satisfied by major course.		
<b>Artistic &amp; Creative Imagination</b>			
Fine Arts (3 hrs)	_____	_____	_____
Literature (3 hrs)	_____	_____	_____
Lifetime Fitness (3 hrs)	_____	_____	HL _____ Title: _____
<small>(Undergraduate students not enrolled in the Women's College may take HS 105 (3 hours) to satisfy this requirement.)</small>	_____	_____	LS/or LF _____ Title: _____
	_____	_____	LS/LF/ or HL _____ Title: _____
<small>Note: For Lifetime Fitness, Women's College students must take the three, one-hour courses as outlined above.</small>			
<b>Communication &amp; Language Fluency</b>			
Writing (6 hrs)	_____	_____	EH 101 Written Communication EH 102 Reading & Research Writing
Speaking (3 hrs)	_____	_____	_____
Modern Language (0-3 hrs)	_____	_____	CH/IN/FH/or SH 102/or 115 (or higher)
	<small>Must complete language through the high beginner level (102 or equivalent. If 101 &amp; 102 are taken, 101 can be applied toward the Communication requirement or used as a general elective. May be placed into 102 via WebCape or exempted by competency exam (BYU FLAT test or CLEP).</small>		
Communication (3 hrs)	_____	_____	_____

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Needs math placement exam.  
Needs English placement exam.

Program Plan Revised by: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Date \_\_\_\_\_  
\_\_\_\_\_

# B.S. Degree – 2018/2019

## Major: Biology

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**Note: Students must earn a cumulative grade point average of 2.0 and a major grade point average of 2.5. Students must earn a grade of “C” or better in all major courses.**

### MAJOR CORE:

Term	Grade	Course # & Title
_____	_____	HS 205 Science Writing & Research Skills (3)
_____	_____	BY 111 Biological Science I for majors <sup>LE</sup> (4)
_____	_____	BY 112 Biological Science II for majors <sup>LE</sup> (4)
_____	_____	BY 206 Microbiology <sup>LE</sup> (4)
_____	_____	BY 301 Genetics (3)
_____	_____	BY 407 Cell and Molecular Biology (4)
_____	_____	BY 490 Internship (1-6) <i>(may take up to 6 hrs.)</i>
_____	_____	BY 499 Senior Seminar (3)

### OTHER MAJOR REQUIREMENTS:

_____	_____	MS 205 Introduction to Statistics <sup>LE</sup> (3)
_____	_____	MS 210 Calculus & Analytical Geometry <sup>LE</sup> (3)
_____	_____	CY 121 General Chemistry I <sup>LE</sup> (4)
_____	_____	PS 121 General Physics I <sup>LE</sup> (4)
_____	_____	CY 122 General Chemistry II <sup>LE</sup> (4)
_____	_____	PS 122 General Physics II <sup>LE</sup> (4)
_____	_____	CY 201 Organic Chemistry I(4)
_____	_____	CY 202 Organic Chemistry II(4)
_____	_____	CY 305 Biochemistry (3)

<sup>LE</sup> –Liberal Education course. All LE courses are noted on the plan whether satisfying a LE requirement or not.

### Pre-Exercise Science: (20 hours)

_____	_____	AY 101 Intro to Anthropology <sup>LE</sup> (3)
_____	_____	BY 209 Anatomy & Physiology I <sup>LE</sup> (4)
_____	_____	BY 210 Anatomy & Physiology II <sup>LE</sup> (4)
_____	_____	EX 201 Exercise Science Practicum (3)
_____	_____	HS 102 Careers-Helping Profess <sup>LE</sup> (3)
_____	_____	PY 101 Intro to Psychology <sup>LE</sup> (3)

### Pre-Professional Healthcare: (26 hours)

_____	_____	BY 209 Anatomy & Physiology I <sup>LE</sup> (4)
_____	_____	BY 210 Anatomy & Physiology II <sup>LE</sup> (4)
_____	_____	HS 200 Medical Terminology (1)
_____	_____	HS 301 Intro to History Taking & Phys Exam (3)
_____	_____	HS 415 Pathophysiology (3)
_____	_____	PY 101 Intro to Psychology <sup>LE</sup> (3)
_____	_____	PY 202 Human Growth & Development (3)
_____	_____	PY 309 Abnormal Psychology (3)

*Electives:* Electives are not listed on the program plan by the Admissions Office, however all courses are posted to the student's transcript. Electives needed for graduation can be calculated simply by:

Adding  
 The total number of hours on the student's transcript  
 (available in CampusWEB)  
 - hours earned for courses taken at the developmental level  
 + courses currently registered for  
 + courses still outstanding.

A minimum of 120 semester hours is required to graduate from Brenau University. After completing liberal education and major requirements, if the total number of hours on the student's transcript is not at 120, then the student must take enough general elective hours to reach a cumulative total of 120 hours. If a course is repeated, it is the student's responsibility to contact the Registrar's Office to adjust the earned hours on their transcript so that they are not short hours at graduation. Due to placement, a student may graduate with more than 120 semester hours.

### CONCENTRATION:

**Choose one of the following:** Biomedical Science, Organismal Biology, Pre-Exercise Science, Pre-Professional Healthcare, Pre-Physical Therapy (Pre-PT)

#### Biomedical Science Concentration: (17 – 20 hours)

\_\_\_\_\_ BY 209 Anatomy and Physiology I <sup>LE</sup>(4)  
 \_\_\_\_\_ BY 210 Anatomy and Physiology II <sup>LE</sup>(4)  
 Choose three from the list below.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

BY 300 Applied Kinesiology (4)	HS 413/L CI Hum An: Cavities/Syst (4)
HS 100 Medical Prof Sem (3)	HS 415 Pathophysiology (3)
HS 201 Clinical Medical Com (3)	PY 101 Intro to Psychology (3)
HS 301 Into Hist Taking/Phys Exam (4)	PY 202 Hum Growth & Dev (3)
HS 410/L CI Hum An: Head/Neck/Extr (4)	PY 309 Abnormal Psychology (3)

#### Organismal Biology Concentration: (21 – 24 hours)

\_\_\_\_\_ BY 304 Plant Sciences (4)  
 \_\_\_\_\_ BY 305 Animal Behavior (3)  
 \_\_\_\_\_ BY 310 General Zoology (4)  
 Choose three from the list below.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

BY 207 Wildlife Management (3)	BY 340 Island Microcosms (4)
BY 270/370/470 Res Proj (all 3)	IC 303 Green Sp: Dev/Need/Impact (3)
BY 302 Ecology (3)	PS 180 Cities & the Environment (3)

#### Pre-PT Concentration: (21 hours)

\_\_\_\_\_ BY 209 Anatomy and Physiology I <sup>LE</sup>(4)  
 \_\_\_\_\_ BY 300 Applied Kinesiology (3)  
 \_\_\_\_\_ PY 101 Intro to Psychology <sup>LE</sup>(3)  
 \_\_\_\_\_ PY 202 Human Growth & Dev (3)  
 or PY 309 Abnormal Psychology (3)

Choose two from the list below.

\_\_\_\_\_  
 \_\_\_\_\_

BY 210 Anatomy and Physiology II <sup>LE</sup> (4)	HS 410/L CI Hum An: head/neck/Ext (4)
	HS 413/L CI Hum An: Cavities/Systems (4)

*Note: Financial aid recipients cannot receive aid for courses repeated unnecessarily or for courses not specifically required for their degree.*

#### Residency requirement:

A residency requirement of 30 semester hours is required to graduate from Brenau University. This includes a major residency of 21 semester hours.

*Note:* This program plan is not an official document. It is a tool to assist the student and adviser in schedule planning.

*This program plan was prepared by the Registrar's Office.  
Revised 04/2018*