

## B.S., Concentration in Microbiology (Starting with ENGL 102 and MATH 115E)

**MINIMUM TOTAL UNITS TO DEGREE: 120 units**

Course	Course Title	Units	
FALL (Yr 1, Semester 1)			
E	BIOL 130	Connecting to Biology	2
LD Major	PHYS 125	Principles of Physics I	4
Prereq/B4	MATH 115E	Algebra with support	5
^C1		Student choice	3
E		Student choice	1
		TOTAL:	15

<b>FALL (Yr 2, Semester 3)</b>			
B1	CHEM 111	General Chemistry I	3
B1	CHEM 111L	General Chemistry I Lab	2
LD Major	BIOL 140B	Principles of Organismal Biology	5
LD Major	MATH 130	Calculus I	4
A3	PHIL 100	Workshop in Critical Thinking	3
		<b>TOTAL:</b>	<b>17</b>

<b>FALL (Yr 3, Semester 5)</b>			
LD Major	CHEM 331	Organic Chemistry I	5
UD Major	BIOL 330	General Microbiology	5
UD Major	BIOL 320	Evolutionary Biology	3
^C1		Student choice	3

		<b>TOTAL:</b>	<b>16</b>
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<b>FALL (Yr 4, Semester 7)</b>			
UD Major	CHEM 340	Survey of Biochemistry	3
**UD Maj Elec 3		Student Choice	3-4
**UD Maj Elec 4		Student Choice	3-4
^F		Student choice	3
^UD-C		Student Choice	3
		<b>TOTAL:</b>	<b>15-17</b>

Course	Course Title		Units
SPRING (Yr 1, Semester 2)			
B2/LD Major	BIOL 140A	Principles of Cell & Mol. Biology	5
LD Major	PHYS 126	Principles of Physics II	4
Prereq/B4	MATH 120	Precalculus	3
A2	ENGL 102	Accel. College Writing (Eng Comp)	3
		TOTAL:	15

<b>SPRING (Yr 2, Semester 4)</b>			
B3	CHEM 112	General Chemistry II	5
UD Major	BIOL 310	Genetic Analysis I	4
A1		Student choice	3
2nd Comp	ENGL 201	College Writing II	3
^D1/CODE 1		Student choice	3
		<b>TOTAL:</b>	<b>18</b>

<b>SPRING (Yr 3, Semester 6)</b>			
LD Major	CHEM 332	Organic Chemistry II	5
**UD Maj Elec 1		Student Choice	3-4
**UD Maj Elec 2		Student Choice	3-4
UWR		Student Choice	3
^C2		Student choice	3
		<b>TOTAL:</b>	<b>17-19</b>

<b>SPRING (Yr 4, Semester 8)</b>			
Capstone	BIOL 430	Microbial Biochem and Metabolism	3
**UD Maj Elec 5		Student Choice	3-0
^D2/CODE 2		Student choice	3
^C3		Student choice	3
^UD-B		Student Choice	3
^UD-D		Student Choice	3
		<b>TOTAL:</b>	<b>15-18</b>

*\*Is a prerequisite for a required major course; does not count toward major unit count.*

*\*\*A minimum of 15 upper division elective units required*

*\*\*As part of your breadth/GE requirements, you need to satisfy the following overlays: Diversity, Social Justice, and Sustainability. You can double count an overlay with one of the required letter-based GE requirements (e.g., C2/Diversity, UD-D/Social Justice, UD-B/Sustainability)*

*Note: Placement of GE courses are suggestions and may be moved following consultation with an advisor*