

**Biology, B.S.**  
**College of Science and Mathematics**  
**8 Semester Plan**

GENERAL TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (14 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
STAT 3125- Biostatistics	3	PHYS 1111- Introduction to Physics I* [D2]	3
BIOL 3300- Genetics †	3	PHYS 1111L- Introduction to Physics I Lab* [D2]	1
BIOL 3300L- Genetics Lab	1	CHEM 3361- Modern Organic Chemistry I	3
CHEM 1212- Principles of Chemistry II †	3	CHEM 3361L- Modern Organic Chemistry I Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	BIOL 3410- Cell Biology	3
TOTAL	14	TOTAL	14
Year 3 - Fall (17 credits)	Credits	Year 3 - Spring (14 credits)	Credits
General Education- U.S. History [E2]	3	General Education- Cultural Perspectives [B2]	3
General Education- Social Sciences [E4]	3	BIOL 3370- Ecology	3
PHYS 1112- Introduction to Physics II* [D2]	3	BIOL 3370L- Ecology Lab	1
PHYS 1112L- Introduction to Physics II Lab* [D2]	1	Upper-Division Track Elective (2 of 7)	3
CHEM 3362- Modern Organic Chemistry II	3	Upper-Division Track Elective (3 of 7)	4
CHEM 3362L- Modern Organic Chemistry II Lab	1		
Upper-Division Track Elective (1 of 7)	3		
TOTAL:	17	TOTAL:	14
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (16 credits)	Credits
General Education- Literature of the World [C1]	3	Upper-Division Track Elective (6 of 7)	4
General Education- World History [E3]	3	Upper-Division Track Elective (7 of 7)	3
BIOL 4399- Seminar	1	Free Elective (1 of 3)	3
Upper-Division Track Elective (4 of 7)	4	Free Elective (2 of 3)	3
Upper-Division Track Elective (5 of 7)	4	Free Elective (3 of 3)	3
TOTAL:	15	TOTAL:	16

Program Total: 120 Credit Hours

**\*Recommended General Education Course**      †**Milestone**

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

This academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Missing milestones could delay your program. Also see the current undergraduate catalog for a complete list of requirements, electives, and pre-requisites. This map is not a substitute for academic advisement. Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.

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CELL, MOLECULAR, & DEVELOPMENTAL TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
STAT 3125- Biostatistics	3	PHYS 1111- Introduction to Physics* [D2]	3
BIOL 3300- Genetics †	3	PHYS 1111L- Introduction to Physics Lab* [D2]	1
BIOL 3300L- Genetics Lab	1	CHEM 3361- Modern Organic Chemistry I	3
CHEM 1212- Principles of Chemistry II †	3	CHEM 3361L- Modern Organic Chemistry I Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	Upper-Division Track Elective (1 of 4)	4
TOTAL	14	TOTAL	15
Year 3 - Fall (17 credits)	Credits	Year 3 - Spring (15 credits)	Credits
General Education- U.S. History [E2]	3	General Education- Cultural Perspectives [B2]	3
General Education- Social Sciences [E4]	3	BIOL 3370- Ecology	3
PHYS 1112- Introduction to Physics II* [D2]	3	BIOL 3370L- Ecology Lab	1
PHYS 1112L- Introduction to Physics II Lab* [D2]	1	BIOL 4100K- Molecular Genetics	4
CHEM 3362- Modern Organic Chemistry II †	3	BIOL 4390K- Developmental Biology	4
CHEM 3362L- Modern Organic Chemistry II Lab	1		
BIOL 3410- Cell Biology	3		
TOTAL:	17	TOTAL:	15
Year 4 - Fall (14 credits)	Credits	Year 4 - Spring (15 credits)	Credits
General Education- Literature of the World [C1]	3	Upper-Division Track Elective (3 of 4)	3
General Education- World History [E3]	3	Upper-Division Track Elective (4 of 4)	3
BIOL 4399- Seminar	1	Free Elective (1 of 3)	3
CHEM 3500- Biochemistry	3	Free Elective (2 of 3)	3
CHEM 3500L- Biochemistry Lab	1	Free Elective (3 of 3)	3
Upper-Division Track Elective (2 of 4)	3		
TOTAL:	14	TOTAL:	15

Program Total: 120 Credit Hours

**\*Recommended General Education Course** †Milestone

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

This academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Missing milestones could delay your program. Also see the current undergraduate catalog for a complete list of requirements, electives, and pre-requisites. This map is not a substitute for academic advisement. Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.

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ECOLOGY & ENVIRONMENTAL TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
STAT 3125- Biostatistics	3	PHYS 1111- Introduction to Physics* [D2]	3
BIOL 3300- Genetics †	3	PHYS 1111L- Introduction to Physics Lab* [D2]	1
BIOL 3300L- Genetics Lab	1	CHEM 3361- Modern Organic Chemistry I	3
CHEM 1212- Principles of Chemistry II †	3	CHEM 3361L- Modern Organic Chemistry I Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	BIOL 3370- Ecology	3
		BIOL 3370L- Ecology Lab	1
TOTAL	14	TOTAL	15
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (16 credits)	Credits
General Education- U.S. History [E2]	3	General Education- Cultural Perspectives [B2]	3
PHYS 1112- Introduction to Physics II* [D2]	3	BIOL 3410- Cell Biology	3
PHYS 1112L- Introduction to Physics II Lab* [D2]	1	Upper-Division Techniques Course (1 of 3)	3
CHEM 3362- Modern Organic Chemistry II †	3	Upper-Division Track Course (1 of 2)	4
CHEM 3362L- Modern Organic Chemistry II Lab	1	Free Elective (1 of 3)	3
Upper-Division Organismal Course (1 of 2)	4		
TOTAL:	15	TOTAL:	16
Year 4 - Fall (14 credits)	Credits	Year 4 - Spring (16 credits)	Credits
General Education- Literature of the World [C1]	3	General Education- Social Sciences [E4]	3
General Education- World History [E3]	3	Upper-Division Techniques Course (3 of 3)	3
BIOL 4399- Seminar	1	Upper-Division Track Course (2 of 2)	4
Upper-Division Organismal Course (2 of 2)	4	Free Elective (2 of 3)	3
Upper-Division Techniques Course (2 of 3)	3	Free Elective (3 of 3)	3
TOTAL:	14	TOTAL:	16

Program Total: 120 Credit Hours

**\*Recommended General Education Course**      †**Milestone**

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

This academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Missing milestones could delay your program. Also see the current undergraduate catalog for a complete list of requirements, electives, and pre-requisites. This map is not a substitute for academic advisement. Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.

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PRE-PROFESSIONAL TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
PHYS 1111- Introduction to Physics I* [D2]	3	PHYS 1112- Introduction to Physics II* [D2]	3
PHYS 1111L- Introduction to Physics I Lab* [D2]	3	PHYS 1112L- Introduction to Physics II Lab* [D2]	1
STAT 3125- Biostatistics	1	BIOL 3300- Genetics †	3
CHEM 1212- Principles of Chemistry II †	3	BIOL 3300L- Genetics Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	CHEM 3361- Modern Organic Chemistry I	3
		CHEM 3361L- Modern Organic Chemistry I Lab	1
TOTAL	14	TOTAL	15
Year 3 - Fall (16 credits)	Credits	Year 3 - Spring (14 credits)	Credits
General Education- U.S. History [E2]	3	General Education- Cultural Perspectives [B2]	3
General Education- Social Sciences [E4]	3	BIOL 3370- Ecology	3
CHEM 3362- Modern Organic Chemistry II	3	BIOL 3370L- Ecology Lab	1
CHEM 3362L- Modern Organic Chemistry II Lab	1	BIOL 3340-Microbiology	3
BIOL 3410- Cell Biology	3	BIOL 3340L- Microbiology Lab	1
BIOL 4431- Human Physiology	3	CHEM 3500- Biochemistry	3
TOTAL:	16	TOTAL:	14
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (16 credits)	Credits
General Education- Literature of the World [C1]	3	Upper-Division Track Elective (2 of 3)	4
General Education- World History [E3]	3	Upper-Division Track Elective (3 of 3)	3
BIOL 4399- Seminar	1	Free Elective (1 of 3)	3
BIOL 4350K <i>or</i> Upper-Division Track Elective Ø	4	Free Elective (2 of 3)	3
Upper-Division Track Elective (1 of 2)	4	Free Elective (3 of 3)	3
TOTAL:	15	TOTAL:	16

Program Total: 120 Credit Hours

**\*Recommended General Education Course** †**Milestone** Ø Students in the Pre-D.V.M. Track are required to take BIOL 4350K

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

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PLANT BIOLOGY TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
PHYS 1111- Introduction to Physics I* [D2]	3	PHYS 1112- Introduction to Physics II* [D2]	3
PHYS 1111L- Introduction to Physics I Lab* [D2]	3	PHYS 1112L- Introduction to Physics II Lab* [D2]	1
STAT 3125- Biostatistics	1	BIOL 3370- Ecology †	3
CHEM 1212- Principles of Chemistry II †	3	BIOL 3370L- Ecology Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	CHEM 3361- Modern Organic Chemistry I	3
		CHEM 3361L- Modern Organic Chemistry I Lab	1
TOTAL	14	TOTAL	15
Year 3 - Fall (17 credits)	Credits	Year 3 - Spring (14 credits)	Credits
General Education- U.S. History [E2]	3	General Education- Cultural Perspectives [B2]	3
General Education- Social Sciences [E4]	3	BIOL 3410- Cell Biology	3
BIOL 3300- Genetics †	3	BIOL 3320K- Plant Morphology	4
BIOL 3300L- Genetics Lab	1	BIOL 4322- Plant Systematics	4
CHEM 3362- Modern Organic Chemistry II	3		
CHEM 3362L- Modern Organic Chemistry II Lab	1		
Upper-Division Track Elective (1 of 3)	3		
TOTAL:	17	TOTAL:	14
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (15 credits)	Credits
General Education- Literature of the World [C1]	3	Upper-Division Track Elective (2 of 3)	3
General Education- World History [E3]	3	Upper-Division Track Elective (3 of 3)	3
BIOL 4399- Seminar	1	Free Elective (1 of 3)	3
BIOL 4420K- Plant Physiology	4	Free Elective (2 of 3)	3
BIOL 4422K- Plant Ecology	4	Free Elective (3 of 3)	3
TOTAL:	15	TOTAL:	15

Program Total: 120 Credit Hours

**\*Recommended General Education Course**      †Milestone

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

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MICROBIOLOGY TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
PHYS 1111- Introduction to Physics I* [D2]	3	PHYS 1112- Introduction to Physics II* [D2]	3
PHYS 1111L- Introduction to Physics I Lab* [D2]	3	PHYS 1112L- Introduction to Physics II Lab* [D2]	1
STAT 3125- Biostatistics	1	BIOL 3300- Genetics †	3
CHEM 1212- Principles of Chemistry II †	3	BIOL 3300L- Genetics Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	CHEM 3361- Modern Organic Chemistry I	3
		CHEM 3361L- Modern Organic Chemistry I Lab	1
TOTAL	14	TOTAL	15
Year 3 - Fall (17 credits)	Credits	Year 3 - Spring (15 credits)	Credits
General Education- U.S. History [E2]	3	General Education- Cultural Perspectives [B2]	3
General Education- Social Sciences [E4]	3	BIOL 3370- Ecology	3
CHEM 3362- Modern Organic Chemistry II	3	BIOL 3370L- Ecology Lab	1
CHEM 3362L- Modern Organic Chemistry II Lab	1	BIOL 3341K- Advanced Microbiology	4
BIOL 3340- Microbiology	3	Upper-Division Track Elective (1 of 5)	4
BIOL 3340L- Microbiology Lab	1		
BIOL 3410- Cell Biology	3		
TOTAL:	17	TOTAL:	15
Year 4 - Fall (14 credits)	Credits	Year 4 - Spring (15 credits)	Credits
General Education- Literature of the World [C1]	3	Upper-Division Track Elective (4 of 5)	3
General Education- World History [E3]	3	Upper-Division Track Elective (5 of 5)	3
BIOL 4399- Seminar	1	Free Elective (1 of 3)	3
Upper-Division Track Elective (2 of 5)	4	Free Elective (2 of 3)	3
Upper-Division Track Elective (3 of 5)	3	Free Elective (3 of 3)	3
TOTAL:	14	TOTAL:	15

Program Total: 120 Credit Hours

**\*Recommended General Education Course**      †Milestone

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

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BIOTECHNOLOGY TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
PHYS 1111- Introduction to Physics I* [D2]	3	PHYS 1112- Introduction to Physics II* [D2]	3
PHYS 1111L- Introduction to Physics I Lab* [D2]	3	PHYS 1112L- Introduction to Physics II Lab* [D2]	1
STAT 3125- Biostatistics	1	BIOL 3300- Genetics †	3
CHEM 1212- Principles of Chemistry II †	3	BIOL 3300L- Genetics Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	CHEM 3361- Modern Organic Chemistry I	3
		CHEM 3361L- Modern Organic Chemistry I Lab	1
TOTAL	14	TOTAL	15
Year 3 - Fall (17 credits)	Credits	Year 3 - Spring (15 credits)	Credits
General Education- U.S. History [E2]	3	General Education- Cultural Perspectives [B2]	3
General Education- Social Sciences [E4]	3	BIOL 3370- Ecology	3
CHEM 3362- Modern Organic Chemistry II	3	BIOL 3370L- Ecology Lab	1
CHEM 3362L- Modern Organic Chemistry II Lab	1	BIOL 4100K- Molecular Genetics	4
BIOL 3301K-Introduction to Biotechnology	4	CHEM 3500- Biochemistry	3
BIOL 3410- Cell Biology	3	CHEM 3500L- Biochemistry Lab	1
TOTAL:	17	TOTAL:	15
Year 4 - Fall (14 credits)	Credits	Year 4 - Spring (15 credits)	Credits
General Education- Literature of the World [C1]	3	Upper-Division Track Elective (2 of 3)	3
General Education- World History [E3]	3	Upper-Division Track Elective (3 of 3)	3
BIOL 4399- Seminar	1	Free Elective (1 of 3)	3
BIOL 3340- Microbiology	3	Free Elective (2 of 3)	3
BIOL 3340L- Microbiology Lab	1	Free Elective (3 of 3)	3
Upper-Division Track Elective (1 of 3)	3		
TOTAL:	14	TOTAL:	15

Program Total: 120 Credit Hours

**\*Recommended General Education Course** †Milestone

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

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BIOINFORMATICS TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
PHYS 1111- Introduction to Physics I* [D2]	3	PHYS 1112- Introduction to Physics II* [D2]	3
PHYS 1111L- Introduction to Physics I Lab* [D2]	3	PHYS 1112L- Introduction to Physics II Lab* [D2]	1
STAT 3125- Biostatistics	1	BIOL 3300- Genetics †	3
CHEM 1212- Principles of Chemistry II †	3	BIOL 3300L- Genetics Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	CHEM 3361- Modern Organic Chemistry I	3
		CHEM 3361L- Modern Organic Chemistry I Lab	1
TOTAL	14	TOTAL	15
Year 3 - Fall (15 credits)	Credits	Year 3 - Spring (14 credits)	Credits
CSE 1321- Programming & Principles I	3	General Education- U.S. History [E2]	3
CSE 1321L- Programming & Principles I Lab	1	CHEM 3500- Biochemistry	3
CHEM 3362- Modern Organic Chemistry II	3	BIOL 4100K- Molecular Genetics	4
CHEM 3362L- Modern Organic Chemistry II Lab	1	BIOL 4510K- Bioinformatics II	4
BIOL 3410- Cell Biology	3		
BIOL 4500K- Bioinformatics I	4		
TOTAL:	15	TOTAL:	14
Year 4 - Fall (17 credits)	Credits	Year 4 - Spring (15 credits)	Credits
General Education- Literature of the World [C1]	3	General Education- Cultural Perspectives [B2]	3
General Education- World History [E3]	3	Upper-Division Track Elective (2 of 2)	3
General Education- Social Sciences [E4]	3	Free Elective (1 of 3)	3
BIOL 3370- Ecology	3	Free Elective (2 of 3)	3
BIOL 3370L- Ecology Lab	1	Free Elective (3 of 3)	3
BIOL 4399- Seminar	1		
Upper-Division Track Elective (1 of 2)	3		
TOTAL:	17	TOTAL:	15

Program Total: 120 Credit Hours

**\*Recommended General Education Course** †**Milestone**

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

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CYTOGENETICS TRACK

Year 1 - Fall (15 credits)	Credits	Year 1 - Spring (15 credits)	Credits
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3
ECON 1000- Contemporary Economic Issues [B1]	2	MATH 1190- Calculus or Higher [D1]	4
MATH 1113- Pre-Calculus or Higher [A2]	3	CHEM 1211- Principles of Chemistry I †	3
SCM 2000- Culture & Success in Science & Mathematics	3	CHEM 1211L- Principles of Chemistry I Lab	1
BIOL 1107- Biological Principles I †	3	BIOL 1108- Biological Principles II †	3
BIOL 1107L- Biological Principles I Lab	1	BIOL 1108L- Biological Principles II Lab	1
TOTAL	15	TOTAL	15
Year 2 - Fall (14 credits)	Credits	Year 2 - Spring (15 credits)	Credits
POLS 1101- American Government [E1]	3	General Education- Arts & Culture of the World [C2]	3
PHYS 1111- Introduction to Physics I* [D2]	3	PHYS 1112- Introduction to Physics II* [D2]	3
PHYS 1111L- Introduction to Physics I Lab* [D2]	3	PHYS 1112L- Introduction to Physics II Lab* [D2]	1
STAT 3125- Biostatistics	1	BIOL 3300- Genetics †	3
CHEM 1212- Principles of Chemistry II †	3	BIOL 3300L- Genetics Lab	1
CHEM 1212L- Principles of Chemistry II Lab	1	CHEM 3361- Modern Organic Chemistry I	3
		CHEM 3361L- Modern Organic Chemistry I Lab	1
TOTAL	14	TOTAL	15
Year 3 - Fall (17 credits)	Credits	Year 3 - Spring (14 credits)	Credits
General Education- U.S. History [E2]	3	BIOL 3327- Medical Genetics	3
General Education- Social Sciences [E4]	3	BIOL 4300K- Chromosome Preparation & Analysis	4
BIOL 3370- Ecology	3	BIOL 4399- Seminar	1
BIOL 3370L- Ecology Lab	1	Upper-Division Track Elective (1 of 2)	4
CHEM 3362- Modern Organic Chemistry II	3	Upper-Division Track Elective (2 of 2)	2
CHEM 3362L- Modern Organic Chemistry II Lab	1		
BIOL 3410- Cell Biology †	3		
TOTAL:	17	TOTAL:	14
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (15 credits)	Credits
General Education- Literature of the World [C1]	3	General Education- Cultural Perspectives [B2]	3
General Education- World History [E3]	3	BIOL 4310L- Cytogenetics Practicum	6
BIOL 4310L- Cytogenetics Practicum	6	Free Elective (2 of 3)	3
Free Elective (1 of 3)	3	Free Elective (3 of 3)	3
TOTAL:	15	TOTAL:	15

Program Total: 120 Credit Hours

**\*Recommended General Education Course**      †**Milestone**

**Note:** Students must complete CHEM 3361/L- Modern Organic Chemistry I by Year 3 Spring Term

This academic map is a suggested four-year schedule of courses based on degree requirements in the undergraduate catalog. This sample schedule serves as a general guideline to help build a full schedule each term. Missing milestones could delay your program. Also see the current undergraduate catalog for a complete list of requirements, electives, and pre-requisites. This map is not a substitute for academic advisement. Note: Requirements are continually under revision, and there is no guarantee they will not be changed or revoked; contact the department and/or program area for current information.