

# Biological Sciences - AS-T

2021-22

## Program map for Biological Sciences Associate in Science-Transfer (AS-T)

The biological sciences study living organisms and fundamental life processes that form the basis for careers in healthcare, research, teaching and related fields. Begin studies toward a bachelor's degree in general or molecular biology, botany, ecology, fisheries, genetics, marine science, soil science, wildlife management or zoology.

See also:

- [Degree Requirements for Science, Technology, Engineering and Math programs](#)
- [Course descriptions in LCC Catalog](#)
- [Distribution lists in LCC Catalog](#)

***Please note that many course sequences only begin in fall quarter. Please check with your program advisor for more information.***

***Please review both the "By Quarter Overview" and "Detailed Class Sequence" tabs below.***

## By Quarter Overview

### First Quarter

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- COLL 101: College Success 101 (2 credits)
- CHEM& 161: General Chemistry w/ Lab I (5 credits)
- MATH& 141: Precalculus I (6 credits)

[Meet with faculty advisor](#)

[Apply for FAFSA](#)

### Second Quarter

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- CHEM& 162: General Chemistry w/ Lab II (5 credits)
- MATH& 142: Precalculus II (5 credits)
- Choose one:
  - ANTH& 206: Cultural Anthropology (5 credits)
  - ART& 100: Art Appreciation (5 credits)
  - CMST& 250: Intercultural Communication (5 credits)
  - HIST& 128: World Civilization III (5 credits)
  - HUM 104: Ethics and Cultural Values (5 credits)
  - HUM 210: Myths and Rites (5 credits)
  - SOC& 101: Intro to Sociology (5 credits)

**Meet with faculty advisor**

**Decide on transfer university; research transfer requirements; contact transfer university advisor**

**Third Quarter**

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- CHEM& 163: General Chemistry w/ Lab III (5 credits)
- ENGL& 101: English Composition I (5 credits)
- Choose one:
  - ANTH& 204: Archaeology (5 credits)
  - CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
  - ECON 105: Introduction to Economics (5 credits)
  - HIST& 128: World Civilization III (5 credits)
  - POLS& 202: American Government (5 credits)
  - PSYC& 100: General Psychology (5 credits)
  - SOC& 101: Intro to Sociology (5 credits)

**Meet with faculty advisor**

**Fourth Quarter (Summer)**

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- Choose one:
  - ART& 100: Art Appreciation (5 credits)
  - HUM 104: Ethics and Cultural Values (5 credits)
  - MUSC& 105: Music Appreciation (5 credits)

**Fifth Quarter**

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- BIOL& 221: Majors Ecology/Evolution w/ Lab (5 credits)
- MATH& 151: Calculus I (5 credits)
- CHEM& 261: Organic Chemistry w/ Lab I (5 credits)

**Meet with faculty advisor**

**Apply for FAFSA**

**Contact transfer university advisor**

**Apply to transfer university**

**Sixth Quarter**

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- BIOL& 222: Majors Cell/Molecular w/ Lab (5 credits)
- MATH& 152: Calculus II (5 credits)
- CHEM& 262: Organic Chemistry w/ Lab II (5 credits)

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**Meet with faculty advisor**

**Apply for Spring graduation**

## **Seventh Quarter**

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- BIOL& 223: Majors Organismal Phys w/ Lab (5 credits)
- Choose one:
  - MATH&153: Calculus III (5 credits)
  - MATH& 246: Probability and Statistics (5 credits)
- CHEM& 263: Organic Chemistry w/ Lab III (5 credits)

**Spring Graduation**

## **Detailed Class Sequence**

### **1. College Success**

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COLL 101: College Success 101 (2 credits)

### **2. Pre-Major Requirement**

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CHEM& 161: General Chemistry w/ Lab I (5 credits)

- *Prerequisites: CHEM& 100 or high school chemistry and MATH 098.*

### **3. Prerequisite Coursework / Elective**

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MATH& 141: Precalculus I (6 credits)

- *Prerequisites: C or better in MATH 098, B or better in ABE 092, or placement.*

### **4. Pre-Major Requirement**

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CHEM& 162: General Chemistry w/ Lab II (5 credits)

- *Prerequisites: CHEM& 161*

### **5. Prerequisite Coursework / Elective**

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MATH& 142: Precalculus II (5 credits)

- *Prerequisites: C or better in MATH& 141.*

### **6. Diversity Requirement**

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Choose one of the following recommended courses:

- ANTH& 206: Cultural Anthropology (5 credits)
  - *Fulfills [DIVR] requirement at WSU*
- ART& 100: Art Appreciation (5 credits)
- CMST& 250: Intercultural Communication (5 credits)
  - *Fulfills [DIVR] requirement at WSU*
- HIST& 128: World Civilization III (5 credits)
  - *Fulfills [ROOT] requirement at WSU*
- HUM 104: Ethics and Cultural Values (5 credits)
- HUM 210: Myths and Rites (5 credits)
- SOC& 101: Intro to Sociology (5 credits)

## 7. Pre-Major Requirement

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CHEM& 163: General Chemistry w/ Lab III (5 credits)

- *Prerequisites: CHEM& 162*

## 8. Communications Requirement

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ENGL& 101: English Comp I (5 credits)

- *Prerequisites: College level reading and writing skills or completion of ENGL 099 or TECH 105 with a grade of C or better.*

## 9. Social Science Requirement

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Choose one of these recommended courses:

- ANTH& 204: Archaeology (5 credits)
- CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
- ECON 105: Introduction to Economics (5 credits)
- HIST& 128: World Civilization III (5 credits)
  - *Fulfills [ROOT] requirement at WSU*
- POLS& 202: American Government (5 credits)
- PSYC& 100: General Psychology (5 credits)
- SOC& 101: Intro to Sociology (5 credits)

## 10. Humanities Requirement

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Choose one of these recommended courses:

- ART& 100: Art Appreciation (5 credits)
- HUM 104: Ethics and Cultural Values (5 credits)
- MUSC& 105: Music Appreciation (5 credits)

## 11. Pre-Major Requirement

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BIOL& 221: Majors Ecology/Evolution w/ Lab (5 credits)

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## 12. Math Requirement

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MATH& 151: Calculus I (5 credits)

- *Prerequisite: MATH& 142 with a grade of C or better.*

## 13. Pre-Major Requirement

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CHEM& 261: Organic Chemistry w/ Lab I (5 credits)

- *Prerequisite: CHEM& 163 or instructor permission.*

## 14. Pre-Major Requirement

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BIOL& 222: Majors Cell/Molecular w/ Lab (5 credits)

- *Prerequisite: BIOL& 221 with 2.0 or better.*

## 15. Math Requirement

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MATH& 152: Calculus II (5 credits)

- *Prerequisite: MATH& 151 with a grade of C or better.*

## 16. Pre-Major Requirement

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CHEM& 262: Organic Chemistry w/ Lab II (5 credits)

- *Prerequisite: CHEM& 261*

## 17. Pre-Major Requirement

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BIOL& 223: Majors Organismal Phys w/ Lab (5 credits)

- *Prerequisite: BIOL& 222 with 2.0 or better.*

## 18. Pre-Major Requirement

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Choose one:

- MATH& 153: Calculus III (5 credits)
  - *Prerequisite: MATH& 152 with a grade of C or better.*
- MATH 246: Probability and Statistics (5 credits)
  - *Prerequisites: MATH 125 or MATH& 141 with a grade of C or better or placement.*
  - *Recommended course for transferring to UW*

## 19. Suggested Elective

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CHEM& 263: Organic Chemistry w/ Lab III (5 credits)

- *Prerequisite: CHEM& 262*

## Program Maps for Science, Technology, Engineering and Math (STEM)

- Bioengineering and Chemical Pre-Engineering - AS-T (Bioengineering Option)
- Bioengineering and Chemical Pre-Engineering - AS-T (Chemical Engineering Option)
- Biological Sciences - AS-T
- Biology - DTA/MRP
- Chemistry - AS-T
- Computer and Electrical Pre-Engineering - AS-T (2 Year Option)
- Computer and Electrical Pre-Engineering - AS-T (3 Year Option)
- Computer Science - AST
- Computer Science - AST (WSUV)
- Earth Sciences - AA-DTA
- Earth Sciences - AS-T
- Environmental Science - AS-T
- Mechanical, Civil, Aeronautical, Industrial, Materials Science Engineering (2 Year Option)
- Mechanical, Civil, Aeronautical, Industrial, Materials Science Engineering (3 Year Option)
- Mechanical Engineering Technology AS-T
- Physics - AS-T
- Physics - AS-T (Math Transfer Option)