# BIOLOGY, ASSOCIATE OF SCIENCE TRANSFER

The Associate of Science Transfer - Biology is a degree that SWOCC offers, and that is connected to the State of Oregon Biology Major Transfer Map (MTM). The MTM outlines Oregon community colleges' coursework to complete in order to transfer seamlessly to any Oregon four-year public university to earn a Bachelor of Science (B.S.) in Biology. This program is intended for students who know they want to transfer and earn a B.S. in Biology, but who may be unsure of their intended transfer destination. This program provides students with the foundations needed to transfer to a 4-year institution and complete studies for a bachelor's degree in biology, and possibly beyond.

## PROGRAM ENTRY REQUIREMENTS

AST pre-reqs apply: WR90R (Academic Literacy) or college-level placement AND MTH 98 (Math Literacy) or college-level placement. Please give the reason/justification for creating this program. The Biology Major Transfer Map (MTM) for Biology outlines Oregon community colleges' coursework to complete in order to transfer seamlessly to any Oregon four-year public university to earn a Bachelor of Science (B.S.) in Biology. The Associate of Science Transfer - Biology has been created in connection with the state mandated MTM, and in response to recent updates issued by the H.E.C.C., regarding the MTM and the transfer crosswalk document for Biology. This degree provides SWOCC students with one more viable option for transfer to one of the seven public 4-year institutions in Oregon, to complete a bachelor's degree.

## PROGRAM OUTCOMES

At the completion of this curriculum, students should be able to:

- Fulfill the student learning outcomes for an AST degree.
- Participate in recommended science courses that could include introductions to biology in preparation for transfer into a biology Bachelor's degree program or related.
- Use basic principles, identify and understand the foundations of biology.
- Critical Thinking: Collect and analyze data using classical methods and modern instrumentation and evaluate experimental results using the principles of the scientific method.
- Information Literacy: Locate, summarize, and critique scientific articles, as well as synthesize scientific information from various sources to communicate the results of their own experiments.

In addition to Program Outcomes, standards have been established for Student Learning Outcomes in General Education Courses in the following categories: Arts and Letters, Cultural Literacy, Mathematics, Science or Computer Science, Social Science, Speech and Oral Communication, Writing, and Information Literacy. Coursework in each of these areas supports student achievement of these outcomes.

| Course | Title | Credits |
|---|---|---|
| **Prerequisites** | | |
| MTH98 | Math Literacy (or college level placement) | 4 |
| WR90R | Academic Literacy (or college level placement) | 4 |
| | **Credits** | **8** |
| | **Total Credits** | **8** |

| Course | Title | Credits |
|---|---|---|
| **First Year** | | |
| **Fall** | | |
| BI221Z | Principles of Biology: Cells | 5 |
| CHEM221Z | General Chemistry I | 4 |
| CHEM227Z | General Chemistry I Laboratory | 1 |
| MTH111Z | Precalculus I: Functions | 4 |
| WR121Z | Composition I | 4 |
| | **Credits** | **18** |
| **Winter** | | |
| Arts and Letters Course [1] | | 3-4 |
| BI222Z | Principles of Biology: Organisms | 5 |
| CHEM222Z | General Chemistry II | 4 |
| CHEM228Z | General Chemistry II Laboratory | 1 |
| WR227Z | Technical Writing | 4 |
| | **Credits** | **17-18** |
| **Spring** | | |
| BI223Z | Principles of Biology: Ecolo/Evolut | 5 |
| CHEM223Z | General Chemistry III | 4 |
| CHEM229Z | General Chemistry III Laboratory | 1 |
| HE250 | Personal Health [2] | 3 |
| MTH112Z | Precalculus II: Trigonometry | 4 |
| | **Credits** | **17** |
| **Second Year** | | |
| **Fall** | | |
| Cultural Literacy Course [3] | | 3-4 |
| MTH251Z | Differential Calculus | 4 |
| PH201<br>or PH211 | General Physics I: Mechanics<br>or General Physics with Calculus I | 5 |
| Social Science Course [4] | | 3-4 |
| | **Credits** | **15-17** |
| **Winter** | | |
| Arts and Letters Course [1] | | 3-4 |
| MTH252Z | Integral Calculus | 4 |
| PH202<br>or PH212 | General Physics II: Heat, Waves, Relativity<br>or General Physics with Calculus II | 5 |
| | **Credits** | **12-13** |
| **Spring** | | |
| PH203<br>or PH213 | Gen Physics III: Elect & Magnetism<br>or General Physics with Calculus III | 5 |
| Social Sciences Course | | 3-4 |
| Elective (or university requiement to reach 90 credits) | | 6-8 |
| | **Credits** | **14-17** |
| | **Total Credits** | **93-100** |

[1] Select from MUS205, 206, PHL 102, 103 or ART204, 205, 206, 253, 256 or COMM100Z, 111Z, 218Z or ENG106Z, 109, 104Z, 105Z, 253, 254, 255

[2] or Health, Wellness, and Fitness Course from the AAOT list

[3] At least 1 Core Transfer Requirement course must also satisfy Cultural Literacy outcomes for AAOT. Select from list below.

[4] Select from PS201, 202, 203 or PSY201Z, 202Z, 237, 239, 243 or SOC205Z, 206Z, 208, 213, ANTH 222, 223

## AAOT CULTURAL LITERACY COURSES

| Code | Title | Credits |
|---|---|---|
| ANTH201 | Physical Anthropology and Evolution | 3 |
| ANTH202 | Introduction to Archaeology | 3 |
| ANTH203 | Language and Culture | 3 |
| ANTH221 | Intro to Cultural Anthropology | 3 |
| ANTH222 | Cultural Anthropology II | 3 |
| ANTH223 | Cultural Anthropology III | 3 |
| ANTH224 | Intro to Medical Anthropology | 3 |
| ANTH230 | Native North Americans: Oregon | 3 |
| ANTH231 | Native North Americans: PNW | 3 |
| ANTH232 | Native North Americans | 3 |
| ENG107 | World Literature | 3 |
| ENG108 | World Literature | 3 |
| ENG109 | World Literature | 3 |
| GEOG105 | Cultural Geography | 3 |
| HDFS140 | Contemporary American Families | 3 |
| HUM204 | World Mythology & Religion | 3 |
| HUM205 | World Mythology & Religion | 3 |
| HUM206 | World Mythology & Religion | 3 |
| HST104 | History of the Middle East | 3 |
| MUS205 | Intro to Jazz History | 3 |
| MUS206 | Intro to History of Rock and Roll | 3 |
| PSY216 | Social Psychology | 3 |
| PSY231 | Human Sexuality | 3 |
| SOC208 | Sociology of Sport | 3 |
| SOC210 | Marriage and Family | 3 |
| SOC213 | Racial and Ethnic Relations | 3 |
| SOC218 | Sociology of Gender | 3 |
| COMM220 | Gender And Communication | 4 |