

SCIENCE & CULTURE OF THE OLYMPIC ECOSYSTEM (SCOPE) - AS

This is the Associate in Science, Science and Culture of the Olympic Peninsula Ecosystem (SCOPE) program map in the Math & Science Area of Study. This path emphasizes courses with a regional focus, many of which also include a field science component. It is also aligned to Western Washington University's Huxley on the Peninsulas Program. This map is intended as a general guide. Please work with your academic advisor regarding your specific goals and transfer requirements. If you are not eligible yet for college level Math or English courses, please consult your advisor for changes in your progression through this pathway.

| Order | Category | Course | Credits |
|--------------------|--|--|---------|
| FALL YR 1 | | | |
| 1 | Humanities/Social Science I | IS: 109: Introduction to Indigenous Humanities | 5 |
| 2 | Additional Requirements | MATH& 141: Precalculus I | 5 |
| 3 | Pre-Major Program (<i>Huxley Requirement</i>) | CHEM& 161: General Chemistry with Lab | 5 |
| WINTER YR 1 | | | |
| 4 | Communication Skills | ENGL& 101: Composition I | 5 |
| 5 | Additional Requirements | MATH& 142: Precalculus II | 5 |
| 6 | Pre-Major Program (<i>Huxley Requirement</i>) | CHEM& 162: General Chemistry with Lab II | 5 |
| SPRING YR I | | | |
| 7 | Humanities/Social Science 3 | ECON& 201: Microeconomics | 5 |
| 8 | Pre-Major Program (<i>Huxley Requirement</i>) | CHEM& 163: General Chemistry with Lab III | 5 |
| 9 | Humanities/Social Science 2 | POLS& 202: American Government <i>(Huxley Recommended)</i> Or FILM 110: Literature and Film | 5 |
| SUMMER | | | |
| Optional | Optional Summer Capstone | BIOL 290-294: Undergraduate Research in Biology | 1 - 5 |
| FALL YR 2 | | | |
| 10 | Remaining Credits | BIOL 290-294: Undergraduate Research in Biology | 1 - 5 |
| 11 | Biology Sequence (<i>Huxley Requirement</i>) | BIOL& 221: Ecology & Evolution | 5 |

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|---------------------------------|--|---|-------|
| 12 | Quantitative Skills (<i>Huxley Requirement</i>) | MATH& 151: Calculus I | 5 |
| 13 | Additional Requirements (<i>Huxley Requirement</i>) | PHYS& 114: General Physics I with Lab | 5 |
| WINTER YR 2 | | | |
| 14 | Remaining Credits | BIOL 290-294: Undergraduate Research in Biology | 1 - 5 |
| 15 | Biology Sequence (<i>Huxley Requirement</i>) | BIOL& 222: Molecular & Cellular Biology | 5 |
| 16 | Pre-Major Program | MATH& 146: Statistics | 5 |
| 17 | Quantitative Skills | MATH& 152: Calculus II | 5 |
| SPRING YR 2 | | | |
| 18 | Remaining Credits | BIOL 290-294: Undergraduate Research in Biology | 1 - 5 |
| 19 | Biology Sequence (<i>Huxley Requirement</i>) | BIOL& 223: Organismal Biology | 5 |
| 20 | Remaining Credits (<i>Huxley Requirement</i>) | GEOG 120: Introduction to Physical Geography | 5 |
| 21 | Remaining Credits (<i>Huxley Requirement</i>) | ENGL& 102: Composition II | 5 |
| Total credits required: 90 - 95 | | | |

Math & Science

Area of Study Outcomes

Communication Competencies

- Comprehend the difference between written opinions vs ideas supported by scientific inquiry.
- Demonstrate the ability to communicate scientific ideas and the process of science.

Quantitative Reasoning

- Manipulate numbers (large and small), use common measurement systems, and solve simple linear algebraic problems.
- Recognize functional relationships between and among measurable phenomena.
- Apply systematic approaches and logic to solving quantitative problems.
- Translate mathematical symbols into words and words into mathematical symbols.
- Demonstrate the ability to use modeling and simulation to solve scientific problems.

Information Competencies

- Recognize the difference between questions of high scientific impact vs those unlikely to provide critical information about a scientific phenomenon or process.
- Ability to apply the process of science.

Critical Thinking

- Identify and troubleshoot scientific problems
- Demonstrate the ability to use quantitative reasoning and analyze data.
- Demonstrate the ability to apply the process of science.

Personal and Interpersonal Competencies

- Gain an understanding of the relationships between science and society.
- Gain familiarity with and an appreciation for the interdisciplinary nature of science.
- Demonstrate the ability to collaborate and understand the importance of collaboration in science.

Career Pathways

By earning a degree or certificate in the area of Math & Science you'll be on your way to any of the following career opportunities listed below:

- astronomer
- atmospheric scientist
- bioengineer
- biologist
- chemist
- computer scientist
- engineer
- environmental scientist
- mathematician
- materials scientist
- physicist
- sustainable agriculturist

Program Notes

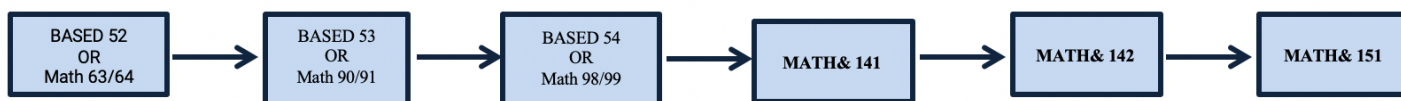
Please note that many universities require a foreign language as an admissions criterion.

A Passion for a Unique Educational Opportunity

Our Honors program is for highly motivated students who seek to be engaged in an intensive learning process where they make connections among ideas while developing critical thinking skills as they pursue an Associate of Arts or Associate of Science degree. Students discover their intellectual interests, and the gateway to a culminating capstone experience. This distinct Honors Program leads to sustained academic success after transfer, and lifelong success after college. Contact Barbara Blackie, Honors Program Coordinator, at bblackie@pencol.edu for more information.

Math Information

If you are not ready for college level Math, please contact your advisor about adjusting your course sequence as needed. See below for Math sequence for this pathway:



Please note, if you change your pathway from an Associates of Arts to an Associates of Science or to a Professional Technical pathway, the Math pathway will change also.

English Composition Information

If you are not ready for college level English courses, please contact your advisor about adjusting your course sequence as needed. See below for English pathway options:



Chemistry Information

CHEM& 121 or a 2.0 in high school Chemistry is a prerequisite for CHEM& 161. If needed, CHEM& 121 could be counted as an additional requirement.