

**PROGRAM REVISION FORM**

**Program Title:** Life Sciences

**Program Type:** \_\_\_ AAS \_\_\_ AAS-T X AST \_\_\_ ATA \_\_\_ Certificate \_\_\_ Other

**Revised Catalog Description** (one paragraph):  
Unchanged – see attached

**Requested by:** Bernice Portervint **Date:** April 24, 2014

**Dean of Academics:** \_\_\_\_\_ **Date:** \_\_\_\_\_

*\* Attach copy of program description as in current catalog*

*\* Attach copy of revised program, marking changes. New courses must be approved prior to approval of revised program.*

**Rationale for Changes:** Incorporation of foundational courses into program of study

**FORM MUST BE ACCOMPANIED BY PROGRAM OUTCOMES**

Approval Signatures:

\_\_\_\_\_  
*Curriculum Committee Chair*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Vice President for Instruction and Student Services*

\_\_\_\_\_  
*Date*

## Associate of Science Transfer in Life Sciences

This program of study provides core courses in science and mathematics in the context of a Native American Studies curriculum for students interested in pursuing careers in marine biology, health sciences or natural resources. The Life Sciences degree is designed to meet most of the prerequisites for entrance into a four-year college or university science program in Washington State. The number of required non-science courses is reduced therefore transfer students must complete additional General University Requirements (GUR/GER) after transfer. Students completing the Life Sciences degree will be given priority status for admission by most Washington State baccalaureate granting institutions and will be given junior status. Students need to consult with their advisor before selecting courses to ensure that they meet the requirements of the college or university to which they plan to transfer.

### NORTHWEST INDIAN COLLEGE REQUIREMENTS

HMDV 110	Introduction to Successful Learning (NE)	4
CMPS 101	Introduction to Computers or above (TE)	3
CMST 101 OR	Introduction to Oral Communication (CS) OR	
CMST 210 OR	Interpersonal Communication (CS, HT) OR	4
CMST 220	Public Speaking (CS, HT)	
<b>TOTAL NORTHWEST INDIAN COLLEGE REQUIREMENTS</b>		<b>11</b>

### NORTHWEST INDIAN COLLEGE FOUNDATIONAL REQUIREMENTS

CSOV 101	Introduction to Cultural Sovereignty (HT)	5
CSOV 102	The Language of Our Ancestors (HT) or approved Native language courses*	5
CSOV 120	Reclaiming Our History (SS)	5
POLS 225	History of Federal Indian Policy (SS)	5
<b>TOTAL NORTHWEST INDIAN COLLEGE FOUNDATIONAL REQUIREMENTS</b>		<b>20</b>

\* One or more Native language courses totaling at least 5 credits. Consult with an advisor regarding satisfying general education requirements. Requires approval by the Dean of Academics and Distance Learning.

### GENERAL EDUCATION REQUIREMENTS

ENGL 101	English Composition I (CS)	5
Quantitative Skills - All 10 credits required met by MATH 124 and MATH 125 in core		0
Humanities and Social Sciences Distribution - All 15 credits required met in Foundational Requirements		0
<b>TOTAL GENERAL EDUCATION REQUIREMENTS</b>		<b>5</b>

### CORE PROGRAM REQUIREMENTS

BIOL 201	Cell Biology	5
BIOL 202	Plant Biology	5
BIOL 203	Animal Biology	5
CHEM 111	Inorganic Chemistry	5
CHEM 112	Organic Chemistry	5
CHEM 113	Biochemistry	5
MATH107	Elementary Statistics I	5
MATH 124	Calculus & Analytic Geometry I	5
MATH 125	Calculus & Analytic Geometry II	5
<b>TOTAL CORE PROGRAM REQUIREMENTS</b>		<b>45</b>

**ELECTIVES** - Additional credits in Biology, Chemistry, Physics, Mathematics, Environmental, and other Sciences chosen in consultation with a faculty advisor **9**

**TOTAL DEGREE REQUIREMENTS** **90**

# PROGRAMS OF STUDY

## ASSOCIATE OF SCIENCE TRANSFER DEGREE IN LIFE SCIENCES

This program of study provides core courses in science and mathematics in the context of a Native American Studies curriculum for students interested in pursuing careers in marine biology, health sciences or natural resources. The Life Sciences degree is designed to meet most of the prerequisites for entrance into a four-year college or university science program in Washington State. The number of required non-science courses is reduced therefore transfer students must complete additional General University Requirements (GUR/GER) after transfer. Students completing the Life Sciences degree will be given priority status for admission by most Washington State baccalaureate granting institutions and will be given junior status. Students need to consult with their advisor before selecting courses to ensure that they meet the requirements of the college or university to which they plan to transfer.

### NORTHWEST INDIAN COLLEGE REQUIREMENTS

BIOL 104	Biology and Natural History of Place (meets NSL requirement)	5
CMPS 101	Introduction to Computers, or above	3
ENGL 236	Survey of Native American Literature (meets HT requirement)	5
HIST 111	Pre-contact Native American History (meets SS requirement)	2
HIST 112	Post-contact Native American History (meets SS requirement)	3
HMDV 110	Introduction to Successful Learning	4
NASD 105A-C	105A-C Northwest Indian College Seminar (1 credit per quarter for 3 quarters)	3
NASD 110	Introduction to Native American Studies (meets SS requirement)	3
POLS 225	History of Federal Indian Policy (meets SS requirement)	5
<b>TOTAL NORTHWEST INDIAN COLLEGE REQUIREMENTS</b>		<b>33</b>

### GENERAL EDUCATION REQUIREMENTS

ENGL 101	English Composition I	5
Humanities (All credits met in Northwest Indian College Requirements)		0
Social Sciences (All credits met in Northwest Indian College Requirements)		0
Natural Sciences (All credits met in Northwest Indian College Requirements)		0
Native American Studies (All credits met in Northwest Indian College Requirements)		0
<b>TOTAL NORTHWEST INDIAN COLLEGE REQUIREMENTS</b>		<b>5</b>

### CORE LIFE SCIENCES REQUIREMENTS

BIOL 201	Cell Biology	5
BIOL 202	Plant Biology	5
BIOL 203	Animal Biology	5
CHEM 111	Inorganic Chemistry	5
CHEM 112	Organic Chemistry	5
CHEM 113	Biochemistry	5
MATH 107	Elementary Statistics I	5
MATH 124	Calculus & Analytic Geometry I	5
MATH 125	Calculus & Analytic Geometry II	5
Additional credits in Biology, Chemistry, Physics, Mathematics, Environmental and other Sciences chosen in consultation with faculty advisor		10
<b>TOTAL CORE LIFE SCIENCES REQUIREMENTS</b>		<b>55</b>

**TOTAL AS TRANSFER DEGREE IN LIFE SCIENCES REQUIREMENTS 93**

# PROGRAMS OF STUDY

## ASSOCIATE OF SCIENCE TRANSFER DEGREE IN LIFE SCIENCES

### PROGRAM OUTCOMES

#### **BODIES OF KNOWLEDGE** STUDENTS WILL BE ABLE TO:

- Demonstrate knowledge of scientific methods and concepts; including collecting scientific data, formulating hypotheses, using experiments to test hypotheses; drawing conclusions, and reporting results.
- Demonstrate foundational knowledge of chemistry.
- Demonstrate foundational knowledge of biology.
- Demonstrate knowledge of local ecosystems, and the importance of local plants and animals for traditional indigenous uses.
- Articulate indigenous ways of knowing the natural world.
- Articulate the importance of ethics and values in the practice of science, including Native American cultural values.

#### **COMMUNICATION SKILLS** STUDENTS WILL BE ABLE TO:

- Communicate scientific concepts orally and in writing, using scientific terminology.
- Present scientific data with written reports, tables and figures, and oral presentations.

#### **TECHNICAL SKILLS** STUDENTS WILL BE ABLE TO:

- Perform biological laboratory techniques .
- Utilize library, Internet, and other resources to research scientific topics.

#### **QUANTITATIVE SKILLS** STUDENTS WILL BE ABLE TO:

- Collect, organize and interpret data.
- Calculate answers to problems using algebra and calculus.
- Apply methods of mathematics to analyze, understand, and explore life sciences problems.

#### **READING SKILLS** STUDENTS WILL BE ABLE TO:

- Demonstrate comprehension of literature in the life sciences.
- Extend knowledge of scientific concepts and vocabulary through readings in the life sciences.



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