

Biological Sciences

Associate in Arts & Sciences – Direct Transfer (DTA) Associate of Science

GENERAL INFORMATION

Biological Sciences include the study of diverse types of living organisms at all levels of their organization. Specialties include **Cellular and Molecular Biology, Botany, Zoology, Microbiology, Genetics, Physiology, Evolutionary Biology and Ecology**. Students whose eventual goal is medical, dental or veterinary school usually major in some area of the biological sciences; separate EvCC guides are also available for those programs. In all of these cases, the student will need to finish at least a baccalaureate (4-year) degree. The first two years of courses (or more if pre-college level courses are required) can be taken at the community college, and the junior and senior year completed at a 4-year college or university.

EvCC offers two degrees that are part of a statewide agreement that smooths the transfer process for students. Both degrees offer qualified students priority for admission with junior status at most 4-year institutions in Washington. Students interested in colleges and universities outside of Washington may also find the requirements of these degrees to be appropriate. It is essential to speak with a program advisor before selecting the degree path, as each university has different requirements.

The **Associate of Science** degree requires that the student complete all freshman and sophomore math and science courses and a limited number of courses in English, Humanities and Social Science. Upon transfer, the student will be eligible for junior level science courses, but will need to complete the remaining distribution requirements before graduation with a baccalaureate degree.

The **Associate of Arts and Sciences - DTA** degree enables the student to complete basic distribution requirements in Math, English, Humanities, Social Sciences and Natural Sciences, and to begin the major course of study. However, the student will have to take additional freshman and sophomore level science courses at the university before being eligible for junior level courses in a science major.

PROGRAM ADVISORS

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CAREER OPTIONS

Students pursuing an undergraduate (baccalaureate) degree in Biology have a broad variety of career options. They may eventually work in field or laboratory research or consulting, teach secondary level biology, pursue further academic work in the biological sciences (masters or doctorate degree), or enter medical, dental, veterinary or other health professional graduate programs.



SUGGESTED PREPARATION

To begin college study in the biological sciences, students should have solid writing and communication skills, a strong algebra background, and high school courses in biology, chemistry and physics. Students who do not have that background may gain it at the community college before starting the courses that will count toward their degree.

During the first two years of college study, students should develop a strong background in English (2 quarters), Math (calculus and statistics) and Chemistry (one year inorganic and one year organic), as well as a year of introductory Biology (see recommended courses on the next page). Most transfer institutions will also require two to three quarters of college level foreign language; in some cases study of a foreign language in high school will be accepted as a substitute. For specific requirements in your area of interest or for the school to which you wish to transfer, it is strongly recommended that you contact an EvCC biology advisor (below) and contact the transfer institution.

Websites of biology departments at common transfer institutions:

Central Washington University:

www.cwu.edu/biology/

Eastern Washington University:

www.ewu.edu/cstem/programs/biology

The Evergreen State College:

www.evergreen.edu/studies/biology

University of Washington:

www.biology.washington.edu

University of Washington, Bothell:

www.uwb.edu/stem

Washington State University: <https://sbs.wsu.edu/>

Washington State University (Vancouver):

<https://cas.vancouver.wsu.edu/biology>

Western Washington University:

<https://cse.wvu.edu/biology>

(Links updated June 2018)

GETTING STARTED AT EVCC

Our Enrollment Services Office provides information about application, advising, orientation and registration for new and continuing students. New degree-seeking students must meet with an advisor prior to registering for first quarter classes.

Contact:

- ◆ Enrollment Services, Parks 201, 425-388-9219 admissions@everettcc.edu
- ◆ Advising Center, Rainier 108, 435-388-9339, www.everettcc.edu/advising

SUGGESTED COURSE SEQUENCE

This plan assumes the student is academically ready for college level Math, English and Chemistry courses. Most students take 3 years to complete all of these courses, in addition to any lower level English or Math courses they may have to take as prerequisites.

Note that the two degrees require basically the same courses, with the difference being the amount of math and the number of Humanities and Social Science courses required. English & 102 is not required for the AS degree, but it is strongly recommended before transfer to a university.

Fall CHEM& 161 ENGL&101 or 101D MATH& 141	Winter CHEM& 162 BIOL& 221 MATH& 142	Spring CHEM& 163 BIOL& 222 MATH& 151	Summer MATH 152 ENGL& 102 or 102D
Fall BIOL& 223 CHEM& 261 ENGL& 102 or 102D	Winter MATH& 153 or 146 CHEM& 262 SOCIAL SCIENCE	Spring CHEM& 263 HUMANITIES SOCIAL SCIENCE	Summer HUMANITIES HUMANITIES SOCIAL SCIENCE
Fall PHYS 114 optional BIOL& 260 optional	Winter PHYS 115 optional	Spring	

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Associate of Science - Biology

This checklist is targeted at transfer students with an interest in **Biology who are transferring to University of Washington only**. Other universities in Washington prefer completion of the AAS degree (see below). Students should meet with an advisor and maintain this checklist while at Everett Community College. The quarter before expected completion, this checklist should be submitted with a diploma application to the Enrollment Services Office. Note: Though courses in a foreign language are not required in the Associate of Science degree, some universities may require two or three quarters of foreign language for admission or for graduation.

Student: _____

COMPLETION of Diversity Course

	(Where Completed/Course Title)		(Year Completed)	(Grade)
Course Number	Course Title	Credits	Quarter Completed	Grade
COMMUNICATION SKILLS (5 credits)				
*ENGL& 101	English Composition I	5	_____	_____
MATHEMATICS (15 credits selected from MATH& 151, 152, 153, 254, 146 including at least one from MATH& 153, 254, 146. The UW strongly recommends 3 quarters of calculus, and statistics.)				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
HUMANITIES AND SOCIAL SCIENCE (15 credits, in three different disciplines, selected from both the Humanities and Social Science course list for the Associate of Science – see separate guide.)				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
SCIENCE (See Note 1.)				
*BIOL& 221	Majors Ecology/Evolution	5	_____	_____
*BIOL& 222	Majors Cell/Molecular	5	_____	_____
*BIOL& 223	Majors Organismal Phys	5	_____	_____
*CHEM& 161	General Chemistry with Lab I	5.5	_____	_____
*CHEM& 162	General Chemistry with Lab II	5.5	_____	_____
*CHEM& 163	General Chemistry with Lab III	5.5	_____	_____
*CHEM& 261	Organic Chemistry with Lab I	6	_____	_____
*CHEM& 262	Organic Chemistry with Lab II	6	_____	_____
*CHEM& 263	Organic Chemistry with Lab III	6	_____	_____
PHYS& 114	General Physics I	5	_____	_____
PHYS& 115 or 116	General Physics II, III	5	_____	_____
(both recommended for WWU and UW)				
BOTANY 113 (for Botany majors)	Plants of the Pacific Northwest	5	_____	_____
BIOL 130 (optional for Zoology majors)	Marine Biology of the Pacific NW	5	_____	_____

Total: minimum 90 credits required, minimum 2.0 GPA. See Note 2.

Note 1. Prerequisites: This program of study assumes the student has college level English and math skills. All new students are required to take the EvCC English and Math placement tests. All science courses require completion of ENGL 098 or placement into ENGL& 101. Chemistry courses require completion of Math 096 or equivalent placement, as well as completion of CHEM& 140 or a high school chemistry course, completed within the last three years. BIOL& 221 may be taken after or concurrently with CHEM& 161; High school biology or BIOL&100 is also required. BIOL& 222 and 223 must be taken after CHEM& 161. CHEM& 261, 262, 263 is offered in a sequence of Fall, Winter, Spring only; students must start in the Fall. Students who initially place in a high level math course do not need to take math courses below that level.

Note 2: Completion of required and recommended courses may result in more than 90 credits being earned for the degree. The advantage is that the completion of these courses will enable you to progress more efficiently in your major at a university. Alternatively, some of the more advanced courses may be done at the university instead. Please consult with an advisor to decide the best option for you.

* Required

Associate of Arts and Sciences – DTA

This checklist is targeted at transfer students with an interest in pursuing a **Biology** degree at a four-year institution. Students should meet with an advisor and maintain this checklist while at Everett Community College. The quarter before expected completion, this checklist should be submitted with a diploma application to the Enrollment Services Office. This checklist refers to requirements listed in the curriculum guide titled “Associate in Arts and Sciences – DTA”, which lists all the courses which are approved for the various categories of requirements. Note: Though courses in a foreign language are not required in the DTA degree, some universities may require two or three quarters of foreign language for admission or for graduation.

Student Name: _____

COMPLETION of [College Success Course](#)

Where completed/Course Title	Year Completed	Grade
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COMPLETION of Diversity Course

Where completed/Course Title	Year Completed	Grade
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Course Number	Course Title	Credits	Quarter Completed	Grade
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BASIC COMMUNICATIONS SKILLS (Minimum of 10 credits from approved list.)

*ENGL& 101	English Composition I	5		
ENGL& 102	_____	5		

BASIC QUANTITATIVE SKILLS (5 credits)

MATH& 141	Precalculus: College Algebra	5		
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HUMANITIES (15 credits from the [DTA approved Humanities List](#). See Note 1.)

SOCIAL SCIENCE (15 credits from the [DTA approved Social Science List](#). See Note 1.)

SCIENCE AND MATH (See Notes 1 and 2.)

*BIOL& 221	Majors Ecology/Evolution	5		
*BIOL& 222	Majors Majors Cell/Molecular	5		
*BIOL& 223	Majors Organismal Physiology	5		
*CHEM& 161	General Chemistry with Lab I	5.5		
*CHEM& 162	General Chemistry with Lab II	5.5		
*CHEM& 163	General Chemistry with Lab III	5.5		
*CHEM& 261	Organic Chemistry with Lab I	6		
*CHEM& 262	Organic Chemistry with Lab II	6		
*CHEM& 263	Organic Chemistry with Lab III	6		
+MATH& 144	Pre-Calculus I & II: A Review	5		
+MATH& 151	Calculus I	5		
+MATH& 152	Calculus II	5		
+MATH& 146	Introduction to Statistics	5		
PHYS& 114	General Physics I	5		
PHYS& 115 or 116	General Physics II,III	5		
BOTANY 113 (for Botany majors)	Plants of the Pacific Northwest	5		
BIOL 130 (for Zoology majors)	Marine Biology of the Pacific NW	5		

Minimum 90 credits required, with minimum 2.0 GPA. See Note 3.

Note 1: Courses must be from three different disciplines. No more than 10 credits in any one discipline may be used in Humanities, Social Science and Science.

Note 2: Prerequisites: This program of study assumes the student has college level English and math skills. All new students are required to take the EvCC English and Math placement tests. All science courses require completion of ENGL 098 or placement into ENGL& 101. Chemistry courses require completion of MATH 096 or equivalent placement, as well as completion of CHEM& 140 or a high school chemistry course, completed within the last three years. BIOL& 221 may be taken after or concurrently with CHEM& 161. High school biology or BIOL&100 is also required. BIOL& 222 and 223 must be taken after CHEM& 161. Chemistry 261, 262, 263 are offered in a sequence of Fall, Winter, Spring only; students must start in the Fall. Students who initially place in a high level math course do not need to take math courses below that level. It may be advisable to complete physics in the junior year.

Note 3: Completion of required and recommended courses may result in more than 90 credits being earned for the degree. Please discuss this option, comparing it with the Associate of Science degree option, with an advisor.

*** Required +Recommended**