

## Bachelor of Science in Marine & Conservation Biology (MCON)

2024-25 Catalog

In order to earn the Bachelor of Science in Marine & Conservation Biology degree, students must complete at least 180 quarter credits with a cumulative and major grade point average of 2.0, including these courses:

			prereqs	credits	quarter?
<b>I. Core Curriculum Requirements:</b>	UCOR 1100	Academic writing seminar	–	5	
	UCOR 1300	Creative expression and interpretation	–	5	
	UCOR 1400	Inquiry seminar in humanities	–	5	
	UCOR 1600	Inquiry seminar in social sciences	–	5	
	UCOR 2100	Theological explorations	UCOR 1100	5	
	UCOR 2500	Philosophy of the human person	UCOR 1100	5	
	UCOR 2900	Ethical reasoning	UCOR 2500	5	
	UCOR 3100	Religion in a global context	UCOR 2100	5	
	UCOR 3400	Humanities and global challenges	75 credits + UCOR 1400	5	
UCOR 3600	Social Science and global challenges	75 credits + UCOR 1600	5		

Note: UCOR 1200 and UCOR 1800 are not listed above; they are fulfilled by other Biology major requirements.

<b>II. Major Curriculum Requirements: *§</b>	BIOL 1400	Biology First Year Experience	1	F	
	BIOL 1610+1611	Cell and Molecular Biology + Lab	4+1	WS	
	BIOL 1620+1621	Evolution and Ecology + Lab	4+1	FW	
	BIOL 1630+1631	Physiology and Development + Lab	4+1	SF	
	BIOL 2600	Ecology	5	FS	
	BIOL 2700	Genetics	5	FWS	
	BIOL 3500	Evolution	5	W	
	BIOL 3650	Marine Biology	5	S	
<b>Comparative Biodiversity</b>	BIOL 2350, 2520, or 2530	Invertebrate Zoology, Plant Systematics*, or Marine Botany*	5	F/S/ Su	
<b>Biodiversity Function</b>	BIOL 3250, 3300, 3800, 3820, 3850, 3880, or 3890	Comp. Vert. Anatomy, Developmental Biology, Animal Behavior, Neurobiology, Plant Phys.*, Animal Phys., or Environmental Physiology	5	W/S/ S/W/W/ F/Su	
<b>Biodiversity Conservation</b>	BIOL 4650, 4620, 4640, or 4660	Conservation Biology, Marine Ecology, Aquatic Ecology, or Tropical Ecology	5	W/Su/ Su/Su	
		<i>Natural Sciences Elective</i> (ex: BIOL≥2350, CHEM>2000, PHYS>2000; ENSC>3000)	10		
		<i>Social Sciences or Humanities Elective</i> (ex: EVST 3500, HIST 3510, PLSC 3000)	5		
<b>Senior Synthesis:</b> (6 req'd credits; 2 per Q)	BIOL 4991	Senior Synthesis I	2	F	
	BIOL 4992	Senior Synthesis II	2	W	
	BIOL 4993	Senior Synthesis III	1	S	
	BIOL 4996	Biology Senior Synthesis Seminar	1	S	

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**Biology and major elective requirements:**

**72**

Notes: \* 56 credits in biology are required, which must include one plant science (either BIOL 2520, 2530, or 3850).

In prerequisite courses, grades of at least C are required in biology and at least a C- are required in other sciences.

§ Candidacy is required to apply an education abroad experience towards Biology Senior Synthesis credit. See p. 2.

<b>III. Other Major Requirements:*</b>	CHEM 1500+1501	General Chemistry I + Lab I	4+1	FW	
	CHEM 1510+1511	General Chemistry II + Lab II	4+2	WS	
	CHEM 1520 or 1590	General Chemistry III or Research-Focused GC III	4-5	SF//S	
	MATH 1210	Statistics for Life Sciences	5	FWS	
	MATH 1230 or 1334	Calculus for Life Sciences <b>OR</b> Calculus I	5	FS/FW	

<b>Physics</b> (pick a or b)	<b>a:</b>	PHYS 1050+1051	Mechanics	4+1	F	
		PHYS 1060+1061	Waves, Sound, Electricity, and Magnetism	4+1	W	
		PHYS 1070+1071	Thermodynamics, Optics, and Modern Physics	4+1	S	
	<b>b:</b>	PHYS 1210+1211	Mechanics	4+1	WS	
		PHYS 1220+1221	Electricity and Magnetism	4+1	SF	
		PHYS 1230+1231	Waves and Optics	4+1	FW	

**Chemistry/Math/Physics requirements:**

**40**

**\*\*\* Total Major Curriculum Requirement credits required for graduation:**

**112**

## Blakely Island Field Station & Study Abroad Opportunities

MCON students are encouraged to take courses at Blakely Island Field Station north of Seattle (during summer quarter for SU) or another more distant site for an extended time (for example, during summer+fall or winter+spring quarters).

Approval of programs and courses from more distant sites for transfer credit at SU should be requested from the Biology Department before application to these programs.

At left are the verified SU course numbers for the indicated courses. Note that Blakely Island courses are offered in conjunction with Seattle Pacific University, which has a different course numbering system. The course names are similar between institutions.

MCON Candidacy is required in order to apply an education abroad research experience towards Biology Research credit. Candidacy is achieved by successfully completing: BIOL 1610+1611, 1620+1621, 1630+1631, 2600, 2700, 3500, 3650, 4650 with a C or better; CHEM 1520/1590 with a C- or better; and a minimum biology major grade point average of 2.8.

### SUMMER QUARTER

(COURSES AT BLAKELY ISLAND ARE OFFERED ONLY IN SUMMER QUARTER.)

#### **Blakely Island Field Station – San Juan Islands, WA**

(All are 2-week intensive 5 credit courses. Only some courses are offered each year.)

BIOL 2530	Marine Botany
BIOL 3650	Marine Biology
BIOL 3800	Animal Behavior
BIOL 3890	Environmental Physiology
BIOL 4620	Marine Ecology
BIOL 4640	Aquatic Ecology
BIOL 4650	Conservation Biology
BIOL 4660	Forest Ecology

<https://www.seattleu.edu/scieng/biology/student-resources/blakely-island-field-station-and-others/>

<https://spu.edu/depts/biology/blakely/>