



NAME & DATE \_\_\_\_\_

- I. Complete all Institutional Graduation Requirements...
II. Program Requirements: 84-87 (Ecological Biology Concentration) or 99-102 (Pre-Health Profession & Molecular Biology Concentration) graded credit hours...

BIOLOGY REQUIRED CORE COURSES:

Table with 5 columns: Course #, GEC, COURSE TITLE, Cr, Term, Gr. Rows include BIOL 211 & 211L SMI, BIOL 212 & 212L SMI, BIOL 213 & 213L SMI, BIOL 341 + L, BIOL 342 + L, BIOL 357 & 358 UWR Gen Ecology + Lab (4/1), BIOL 490 UWR Evolution (Capstone) (3).

TOTAL BIOLOGY: 31

CHEMISTRY REQUIRED COURSES:

Table with 5 columns: Course #, GEC, COURSE TITLE, Cr, Term, Gr. Rows include CHEM 204 + L SMI General Chemistry (5), CHEM 205 + L SMI General Chemistry (5), CHEM 206 + L SMI General Chemistry (5), CHEM 334 Organic Chemistry I (4), CHEM 335 Organic Chemistry II (4).

TOTAL CHEMISTRY: 23

MATHEMATICS & PHYSICS REQUIRED COURSES:

Table with 5 columns: Course #, GEC, COURSE TITLE, Cr, Term, Gr. Rows include PHYS 201 SMI General Physics (4), MATH 241 SMI Survey of Calculus (4), STAT 243 or \*STAT 327 Elementary Statistics (4/5), STAT 352 Statistics (4).

\*Note: If STAT 327 is taken, STAT 352 does not need to be taken.

TOTAL MATH&PHYS: 13-16

CHOOSE ONE OF THE FOLLOWING CONCENTRATIONS:

ECOLOGICAL BIOLOGY:

Table with 5 columns: Course #, GEC, COURSE TITLE, Cr, Term, Gr. Rows include CHEM 360 Envir. Chem (4), BIOL 313 Riparian Biology (2), BIOL 320 Ornithology (3), BIOL 334 Plant Taxonomy (5), BIOL 415 Forest Ecology (3).

TOTAL FOR CONCENTRATION: 17

OR:

PRE-HEALTH PROFESSION & MOLECULAR BIOLOGY:

Table with 5 columns: Course #, GEC, COURSE TITLE, Cr, Term, Gr. Rows include CHEM 336 Organic Chemistry III (4), CHEM 450 Structural Biochemistry (4), BIOL 323 General Microbiology (5), BIOL 345 Molecular Biology (3), BIOL 431 Cell Structure & Fx (5), BIOL 432 UWR Animal Physiology (5), BIOL 462 Cellular Neurobiology (3), BIOL 445 Immunology (3).

TOTAL FOR CONCENTRATION: 32

ADVISER SIGNATURE & DATE:

\_\_\_\_\_

## Pre-Professional Programs

**PRE-HEALTH PROFESSIONS:** These courses are NOT required for the Biology Degree but should be taken to prepare students on their pre-dental, pre-veterinary, or pre-medical tracks for their entrance exams.

Course #	GEC	COURSE TITLE	Cr	Term	Gr
PHYS 202	SMI	General Physics (4)	4	/	/
PHYS 203	SMI	General Physics (4)	4	/	/
CHEM 451		Metabolic Chemistry (4)	4	/	/
CHEM 454		Biochemistry Lab (2)	2	/	/

**PRE-MEDICINE:** In addition to the courses listed above, for proper preparation for the MCAT, completion of the following courses is recommended:

Course #	GEC	COURSE TITLE	Cr	Term	Gr
SOC 204	SSC	General Sociology (5)	5	/	/
SOC 205	SSC	Gen Soc Problems (5)	5	/	/
PSY 201	SSC	General Psychology (5)	5	/	/
PSY 202	SSC	General Psychology (5)	5	/	/
ANTH 203	SSC	Cultural Anthropology (5)	5	/	/
BIOL 317		Vertebrate Structure (5)	5	/	/
BIOL 445		Immunology (3)	3	/	/
BIOL 462		Cellular Neurobiology (3)	3	/	/

**PRE-DENTAL, PRE-PHARMACY:** In addition to courses listed in the pre-health professions category above, dental and pharmacy schools generally require the following courses as prerequisites for admission (some schools have additional prerequisites; check the desired school for their requirements):

Course #	GEC	COURSE TITLE	Cr	Term	Gr
BIOL 231+L		Human Anat & Phys (4)	4	/	/
BIOL 232+L		Human Anat & Phys (4)	4	/	/
BIOL 233+L		Human Anat & Phys (4)	4	/	/
WR 121	GTW	Expos. Prose Writing (4)	4	/	/

**PRE-PHYSICAL THERAPY:** The following courses are recommended for completion of prerequisites for admission into physical therapy programs:

Course #	GEC	COURSE TITLE	Cr	Term	Gr
BIOL 231+L		Human Anat & Phys (4)	4	/	/
BIOL 232+L		Human Anat & Phys (4)	4	/	/
BIOL 233+L		Human Anat & Phys (4)	4	/	/
PSY 201	SSC	General Psychology (5)	5	/	/
PSY 202	SSC	General Psychology (5)	5	/	/
PHYS 202	SMI	General Physics (4)	4	/	/
PHYS 203	SMI	General Physics (4)	4	/	/
WR 121	GTW	Expos. Prose Writing (4)	4	/	/

**PRE-PHYSICIAN ASSISTANT:** The following courses are recommended for completion of prerequisites for admission into physician assistant programs:

Course #	GEC	COURSE TITLE	Cr	Term	Gr
BIOL 231+L		Human Anat & Phys (4)	4	/	/
BIOL 232+L		Human Anat & Phys (4)	4	/	/
BIOL 233+L		Human Anat & Phys (4)	4	/	/
PSY 201	SSC	General Psychology (5)	5	/	/
PSY 202	SSC	General Psychology (5)	5	/	/

## **ECOLOGICAL BIOLOGY**

The Ecological concentration emphasizes understanding of ecosystems and organisms. Students develop broad knowledge of global ecological principles as they also acquire practical field skills while engaging in outdoor experiences in the beautiful Blue Mountains of northeast Oregon. Courses are investigative in structure and are designed to prepare students for career opportunities in resource management, including with US Forest Service, Oregon Dept. of Fish and Wildlife, Oregon State Police (Fish & Game enforcement), Environmental Protection Agency, Department of Environmental Quality, Bureau of Land Management, and other public agencies, private consulting firms and non-profit organizations. Students also are prepared for careers in secondary science education and graduate programs in biology. Abundant opportunities exist for students to participate in original research projects and internships related to their areas of interest.

## **FISHERIES AND WILDLIFE**

EOU offers two years of transferable course work in the area of fisheries and wildlife with most students then transferring to Oregon State University or another university offering the full degree program. Students interested in pursuing the Fish and Game Management option, however, should transfer after one year at EOU. Typical coursework includes one- year sequences of general biology with lab and general chemistry with lab, in addition to courses such as mathematics, statistics, speech, writing, and physical education. Additional courses within chemistry and/or physics may be required, depending upon the school to which a student will be transferring. Students are strongly encouraged to obtain prerequisite information from the schools to which they will be applying and to work closely with their EOU pre-fisheries and wildlife advisor when selecting appropriate coursework to meet the prerequisite requirements.

## **FORESTRY**

EOU offers the first year of course work in forestry which can then be transferred to Oregon State University or another college offering the full degree program. In case of inadequate preparation, two years of coursework may be necessary. Typical prerequisite coursework includes an introductory course in forestry, plant taxonomy, and one year sequences of general biology with lab and general chemistry with lab. Prerequisites also include coursework in mathematics, economics, speech, writing, and physical education. Students are strongly encouraged to obtain prerequisite information from the schools to which they will be applying and to work closely with their EOU pre-forestry advisor when selecting appropriate coursework to meet the prerequisite requirement.