

**Prerequisite Coursework for Admission to the
High School MAT Program
BIOLOGY Endorsement**

I. GENERAL ADMISSIONS REQUIREMENTS FOR ALL MIDDLE/HIGH AREAS

A. LETTERS OF RECOMMENDATION BASED ON EXPERIENCES WORKING WITH YOUTH

Letters of recommendation documenting two successful experiences working with groups of children or adolescents. **Experiences in public schools are preferred, and experiences working with students at the Middle and High School ages are recommended for this level.**

The School of Education recommends students consider taking one or two undergraduate courses related to Education, such as Ed 251, Ed 252, or Ed 253 that offer academic and/or field-based opportunities for students to explore interests in the teaching profession.

B. BACHELOR’S DEGREE

Program participants must have a Bachelor’s degree from a regionally accredited college or university in a field appropriate to the specialty endorsement area (see “Degree Major” below).

C. GRADE POINT AVERAGE

Applicants should have a cumulative GPA of 3.0 in the most recent 90 quarter or 60 semester hours of undergraduate work, and a 3.0 GPA for courses completed in the selected endorsement area. Applicants who have a GPA lower than 3.0 may apply for post-baccalaureate admission.

II. REQUIREMENTS SPECIFIC TO THE *BIOLOGY ENDORSEMENT*

DEGREE MAJOR

A degree in biology or the equivalent of a biology major for a degree including at least 45 quarter hours with a laboratory and field course work in:

	<u>Has</u>	<u>Needs</u>
Plant Diversity	_____	_____
Animal Diversity	_____	_____
Genetics	_____	_____
Evolution	_____	_____
Ecology	_____	_____
Cell or Molecular Biology	_____	_____
Physiology	_____	_____

Recommended:

Microbiology	_____	_____
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28 quarter hours of other required science/math courses:

General Chemistry	_____	_____
Organic Chemistry	_____	_____
Physics or Geology	_____	_____

Mathematics requirement:

Mathematics through trigonometry and statistics	_____	_____
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Work in biology as a **minor area** will include the following certification prerequisites:

Plant Diversity	_____	_____
Animal Diversity	_____	_____
Genetics	_____	_____
Evolution	_____	_____
Ecology	_____	_____
Microbiology	_____	_____
Cell or Molecular Biology	_____	_____
Developmental Biology	_____	_____
Physiology	_____	_____

Examples of courses at SOU that fill the required biology subject areas:

1. Plant Diversity
 - Bi 332 Algae and Fungi
 - Bi 432 Origins and Diversity of Land Plants
 - Bi 433 Plant Systematics
 - Bi 434 Plant Form and Function
 - Bi 444 Vascular Plant Identification and Field Botany
2. Animal Diversity
 - Bi 318 Invertebrate Natural History
 - Bi 415 Mammalogy
 - Bi 450 Fishery Biology
 - Bi 466 Entomology
 - Bi 470 Herpetology
 - Bi 471 Ornithology
 - Bi 480 Animal Behavior
3. Genetics
 - Bi 341 Genetics
4. Evolution
 - Bi 446 Evolution
5. Ecology
 - Bi 340 Introductory Ecology
 - Bi 454 Plant Ecology
 - Bi 475 Aquatic Ecology
6. Microbiology
 - Bi 214 Elementary Microbiology
 - Bi 351 Microbiology
7. Cell of Molecular Biology
 - Bi 342 Cell Biology
 - Bi 425 Molecular Biology
8. Physiology
 - Bi 231, 232, 233 Human Anatomy and Physiology
 - Bi 314 Comparative Animal Physiology
 - Bi 331 Plant Physiology
 - Bi 413 Physiological Ecology of Animals
 - Bi 414 Advanced Animal Physiology

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TESTING

Admission to the MAT Middle/High School Program requires a passing score on either a Basic Skills test OR a Subject Knowledge test. (NOTE: Passing scores on both types of tests are required for program completion, though either can be used for admission purposes). Information about these tests is provided below.

Basic Skills Tests: an applicant can choose either the:

California Basic Educational Skill Test (CBEST). Information at www.cbest.nesinc.com

OR

Praxis I Pre-Professional Skills Test (PPST). Information at www.ets.org/praxis

Subject Knowledge Tests:

Beginning September 1, 2010, candidates for Oregon teacher licensure at the Middle/High level must pass the Pearson National Evaluation Series (NES) test in their chosen endorsement area (test has replaced the previously required PRAXIS II Subject Knowledge Test). Information about the NES tests (including registration, the location of test centers, passing scores, and sample test questions) can be found online at

http://www.orela.nesinc.com/PageView.aspx?f=GEN_Tests.html

NOTE: If a person passed the required PRAXIS II Subject Knowledge Tests prior to September 1, 2010, these scores can be used to satisfy the subject knowledge testing requirements for the Oregon teacher license.

CONTACTS:

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