

UNIVERSITY OF SOUTHERN MAINE  
COLLEGE OF ARTS AND SCIENCES  
CATALOG YEAR 2008-2009

**BIOLOGY WITH EMPHASIS IN BIOTECHNOLOGY**

**MINIMUM PROFICIENCY REQUIREMENTS**

Writing Proficiency (Area A) \_\_\_\_\_  
Mathematics Proficiency (Area B) \_\_\_\_\_

**Basic Competence**

*These requirements should be completed in a student's first year,  
but must be completed before a student completes 60 credits.*

English Composition (Area C) \_\_\_\_\_  
Quantitative Decision Making (Area D) \_\_\_\_\_  
Skills of Analysis/Philosophy (Area E) \_\_\_\_\_

**Methods of Inquiry/Ways of Knowing**

Performance Centered Fine Art (Area F – different department from G) \_\_\_\_\_  
History Centered Fine Art (Area G – different department from F) \_\_\_\_\_  
Literature (Area H – different prefix from I) \_\_\_\_\_  
Other Times/Other Cultures (Area I – different prefix from H) \_\_\_\_\_  
Social Science (Area J – different department from other J) \_\_\_\_\_  
Social Science (Area J – different department from other J) \_\_\_\_\_  
Natural Sciences-Lecture (Area K) \_\_\_\_\_  
Natural Sciences-Lab (Area K-must correspond to K lecture) \_\_\_\_\_  
Writing Intensive Requirement (Area W) \_\_\_\_\_

**MAJOR REQUIREMENTS<sup>†</sup>**

BIO 105K <sup>††</sup> _____	BIO 311/312W _____	**BIO 409/410 _____
BIO 106K <sup>††</sup> _____	BIO 408 _____	<b>or</b>
BIO 107 _____	BIO 431 _____	**AMS 530/531 _____
BIO 201 _____	AMS 551 _____	

**DEPARTMENTAL REQUIREMENTS<sup>†</sup>**

CHY 113K _____	CHY 461 _____	*PHY 111K _____	*PHY 114K _____
CHY 114K _____	CHY 462 _____	*PHY 112 _____	*PHY 116 _____
CHY 115 _____	CHY 463 _____	<b>or</b>	
CHY 116 _____		*PHY 121K _____	*PHY 114K _____
CHY 251 _____	MAT 152D _____	*PHY 123 _____	*PHY 116 _____
CHY 252 _____	MAT 220 _____		
CHY 253 _____			
CHY 254 _____			

**ELECTIVES**

\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_  
\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_

<sup>†</sup> Grades of C- or higher are required in all courses.

<sup>††</sup> Students must complete areas A & B (writing and math proficiency) before taking these courses.

\*\* Biotechnology majors may take either BIO 409/410 **or** AMS 530/531. They may substitute BIO 441 for no more than one AMS course.

\* Biology majors may take **either** PHY 111K/114K **and** PHY 112/116 **or** PHY 121K/114K **and** PHY 123/116.

**NOTE:** The University catalog states,

- “There can be no more than one overlap between the courses a student takes to fulfill the Core curriculum requirements and the courses that count toward the student’s major. “Overlap” is defined in terms of each course’s three-letter prefix (e.g. ENG, SOC, WST); that is, a student may take only one course toward the Core that has the prefix of the student’s major. (The overlapping Core course may itself also count toward the major or it may just share a prefix with the major.)”
- “For all baccalaureate degrees at the University, a minimum of 30 credit hours including at least 9 hours in the major field, must be completed while registered in the school or college from which the degree is sought (15 credit hours for associate degree programs). A student may earn no more than six of these credit hours at another campus of the University of Maine System. Unless special permission is granted by the dean of the school or college concerned to pursue work elsewhere, the work of the senior or final year must be completed at this University.” **The College of Arts and Sciences considers the last 30 credits as a student’s senior or final year.**
- “In addition to the minimum requirements of 120 credits for a baccalaureate degree and 60 credits for an associate degree, a candidate must (a) receive passing grades in courses required by the school or college, and the major department; (b) accumulate the number of credit hours required by the school or college in which the student is registered; (c) achieve an accumulative average of not less than 2.00; (d) meet the requirements of the major department; (e) complete an Application for Degree form with the Office of the Registrar at the beginning of the semester of graduation. **Responsibility for successfully completing the requirements of the program resides with the student.**”