

BIOLOGICAL SCIENCES DEGREE: Teacher Licensure Plan effective Fall 2006

01. Written and Oral Communication (8 hrs minimum; at least 4 courses)		Credit Hours
01. ENG 101	Composition One	3
02. ENG 102	Composition Two	3
03. Senior Capstone Experience	See Major Requirements (over)	
04. Upper level Writing Intensive (WI) course		3
ENG 332 or	Advanced Composition	
ENG 333	Technical Writing	
05. Speech Communication (3 hrs) [BSC Department Requirement]		
SCM 111	Oral Communication	3
02. Basic Science and Mathematics (Select 3 hrs)		
01. Laboratory Sciences	See Major Requirements (over)	
02. Mathematics:	Calculus Competency**	
MAT 314 or	Calculus for Arts and Science	3
MAT 167	Calculus I with Analytical Geometry	3
<p>** The pre-requisite for Calculus is high school trigonometry. Students lacking the appropriate background may take MAT 101 College Algebra / MAT 101E Explorations in College Algebra OR MAT 103 Plane Trigonometry OR MAT 128 Precalculus Mathematics before enrolling in a Calculus course. Note that the Mathematics Department states that certain courses, including MAT 101, MAT 103, MAT 128, “are open only to freshmen. Other students desiring to take these courses must have approval from the Chair of the Department of Mathematics. Only two of the following courses can be taken for credit: MAT 101, MAT 103, MAT 128.”</p>		
03. Computing Competency	See Other Required Courses (over)	
03. Global History and Culture (12 hrs)		
01. <i>Social Sciences</i> (Select 3 hrs)		
ANT101	The Human Experience	3
GHY 101	World Regional Geography	3
SOC 101	Understanding Society	3
<i>Humanities</i> (9 hrs)		
02. ENG 203	World Literature	3
03. HIS 101	World Civilizations: Beginnings to 1500 C.E.	3
04. HIS 102	World Civilizations: 1500 to the Present	3
04. Aesthetic Values (Select 3 hrs)		
ART 130	The Art Experience	3
DAN 130	Dance Appreciation	3
MUS 365	The Enjoyment of Music	3
THE 100	Theatrical Expressions	3
05. Decision Making and Responsibility (3 hrs)		
PSY 110	General Psychology	3

Core Total: 33 hrs

Minimum of 124 Hours in Program

Minimum of 64 hours required from a four-year college; 45 hours at 300 or 400 level; last 32 hours taken at USM.

06. Major/Emphasis Requirements (33 Hrs)		Credit Hours
01.	BSC 110/BSC 110L Principles of Biological Science I	3/1
02.	BSC 111/BSC 111L Principles of Biological Science II	3/1
03.	BSC 201/BSC 201L General Zoology	2/1
04.	BSC 226/BSC 226L General Botany	2/1
05.	BSC 370 Genetics	4
06.	BSC 380/BSC 380L General Microbiology	3/1
07.	Physiology / Molecular Biology (Select 3 hours)	
	BSC 360 Cellular Physiology	3
	BSC 431 Plant Physiology	3
	BSC 450 Comparative Animal Physiology	3
	BSC 476 Molecular Biology	3
08.	Ecology (Select at least 3 hours)	
	BSC 340 Environmental Biology	3
	BSC 382 Microbial Ecology	3
	BSC 435/435L Plant Ecology	3/1
	BSC 436/436L Conservation Biology	3/1
	BSC 440/440L Ecology	3/1
	BSC 441/441L Population & Community Ecology	3/1
	BSC 442/442L Behavioral Ecology	3/1
	BSC 443/443L Freshwater Biology	3/1
09.	BSC 495/495L Application of Basic Concepts for Secondary School	3/2
07. Other Required Courses (28 hrs)		
01.	CHE 106/CHE 106L General Chemistry I	3/1
02.	CHE 107/CHE 107L General Chemistry II	3/1
03.	CHE 255/CHE 255L Organic Chemistry	3/1
04.	CHE 256/CHE 256L Organic Chemistry	3/2
05.	PHY 111/PHY 111L General Physics I	3/1
06.	PHY 112/PHY 112L General Physics II	3/1
07.	Computing Competency (Select 3 hrs)	
	CSS 240 FORTRAN Programming	3
	CSS 330 Introduction to Programming	3
	CSS 333 Problem Solving Using C, I	3
	CSS 211 Statistical Methods I	3
	PSY 360 Introduction to Statistics for the Behavioral Sciences	3
08. Teacher Education Requirements (29 hrs)		
01.	PSY 374 Educational Psychology	3
02.	REF 469 Tests and Measurements	3
03.	SPE 400 The Psychology and Education of the Exceptional Individual	3
04.	CIS 313 Principles of Teaching High School	3
05.	SCE 460 Methods in Teaching Science - Secondary	3
06.	SCE 489 Student Teaching in Science I	7
	SCE 490 Student Teaching in Science II [Senior Capstone Experience]	7

09. Minor Area of Study (Optional)

10. Electives (0-1 hrs)

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