

**GEORGE MASON UNIVERSITY**  
**COLLEGE OF SCIENCE**  
**B.S. DEGREE IN BIOLOGY (with a CONCENTRATION IN BIOLOGY EDUCATION)**  
**(3005 David King Hall, 703-993-1050)**  
<http://cos.gmu.edu/academics/undergraduate/majors/biology>  
**2011-2012 CATALOG**

	<u>Department(s) &amp; Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<b>GENERAL EDUCATION REQUIREMENTS (21)</b>			
a. Written Communication: ENGL 101 (100), ENGL 302 (C or better) (3,3)		___ ___	___ ___
b. Oral Communication: COMM 100 or 101 (please circle choice) (3)		_____	_____
c. Quantitative Reasoning (satisfied by completion of major requirements)			
d. Literature (3)			
e. Arts (3)	_____	_____	_____
f. Western Civilization (3)	_____	_____	_____
g. Social & Behavioral Science (3) (satisfied by completion of licensure requirements)			
h. Natural Science (satisfied by completion of major requirements)			
i. Global Understanding (3)	_____	_____	_____
j. Information Technology (satisfied by completion of major requirements)			
k. Synthesis (3) (satisfied by completion of licensure requirements)			

Go to: <http://chss.gmu.edu/general-education/all-requirements> to link to information on general education requirements.

<b>MAJOR REQUIREMENTS (38 hours required)</b>			
a. Twenty-two credits in biology core courses (22)			
1. BIOL 213 (4) (grade of C or better required)		1. _____	_____
2. BIOL 214 (4) (grade of C or better required)		2. _____	_____
3. BIOL 311 (4) (grade of C or better required)		3. _____	_____
4. BIOL 308 (writing intensive course) (5) (grade of C or better required)		4. _____	_____
5. BIOL 310 (5) (grade of C or better required)		5. _____	_____
b. Eight credits of anatomy and physiology (8)			
1. BIOL 430 (4)		1. _____	_____
2. BIOL 431 (4)		2. _____	_____
b. Eight credits in biology elective courses (list course number) (8) (may not be BIOL 124 and/or BIOL 125)			
1. BIOL _____		1. _____	_____
2. BIOL _____		2. _____	_____
3. BIOL _____		3. _____	_____

<b>OTHER SCIENCE AND TECHNOLOGY (30-38)</b>			
a. Thirteen credits of chemistry (13)			
1. CHEM 211, CHEM 212 (4,4)		1. ___ ___	___ ___
2. CHEM 313, CHEM 315 (3,2)		2. ___ ___	___ ___
b. One of the following options:			
1. CHEM 314 & CHEM 318 (please circle choice) (3,2) <b>OR</b>		1. ___ ___	___ ___
2. GEOL 101 and GEOL 102 (4,4) <b>OR</b>		2. ___ ___	___ ___
3. One additional three-credit chemistry course at the 300 or 400 level (not CHEM 314)		3. _____	_____
c. PHYS 243/244 and PHYS 245/246 (3/1, 3/1)		c. ___ ___	___ ___
d. One course from (circle choice): MATH 111 (3), 113 (4), 114 (4)		d. _____	_____
e. IT 103 or CDS 130 (circle choice) (3)		e. _____	_____

Students must earn a minimum grade of C in all Biology core courses and a minimum GPA of 2.0 in biology course work and supporting courses. No more than eight hours of 100-level BIOL courses may be applied to toward the required BIOL courses.

<b>TEACHER LICENSURE REQUIREMENTS (21 hours required)</b>			
a. EDCI 473, EDCI 483 (3,3)		a. ___ ___	___ ___
b. EDCI 490, EDRD 419 (6,3)		a. ___ ___	___ ___
c. EDUC 372, EDUC 422 (3,3)		c. ___ ___	___ ___

<b>GENERAL ELECTIVES (List courses)</b>			
_____	_____	___ ___	___ ___
_____	_____	___ ___	___ ___

**MINIMUM HOURS TO GRADUATE: 120**

**UPPER DIVISION HOURS (minimum 45):**

# COURSE LISTS (BIOLOGY, BS, CONCENTRATION IN BIOLOGY EDUCATION)

## University General Education Requirements

Written Communication: ENGL 101 (or 100) and ENGL 302

Oral Communication: COMM 100 or COMM 101

Quantitative Reasoning: MATH 111 or 113. (The Math Placement Test is required to take a MATH course. See this web site for more information: [http://cos.gmu.edu/academics/undergraduate/math\\_placement\\_testing](http://cos.gmu.edu/academics/undergraduate/math_placement_testing))

Literature: ARAB 325; CHIN 310, 311, 325, 328; CLAS 250, 260, 340, 350, 360, 380; ENGL 201, 202, 203, 204; FREN 325, 329; FRLN 330; GERM 325; ITAL 325; PHIL 253; RELI 235; RUSS 325, 326, 327; SPAN 325

Arts: ARTH 101, 102, 103, 200, 201, 203, 204, 321, 322, 324, 333, 334, 335, 340, 341, 342, 344, 345, 360, 362, 372, 373, 376; AVT 103, 104, 215, 222, 232, 243, 252, 253, 262, 272; DANC 101, 119, 125, 131, 145, 161, 225, 231, 245, 301, 390, 391; ENGL 372, 396; MUSI 100, 101, 102, 107, 301, 302, 380, 381, 382, 383, 384, 385, 387, 389, 485; PHIL 156; THR 101, 150, 151, 210, 230, 395, 411, 412.

Western Civilization: HIST 100 or 125; transfer students may substitute the following courses for HIST 100 or 125: HIST 101, 102, 301, 302, 304, 305, 306, 308, 309, 314, 321, 322, 388, 435, 436, 480.

Social and Behavioral Sciences: AFAM 200; ANTH 114, 120, 135, 396; CONF 101; CONS 410; CRIM 100; ECON 100, 103, 104, 105, 110, 111 (110 and 111 must be taken together); **EDUC 372**; GGS 103; GOVT 101, 103; HEAL 230; HIST 121, 122; LING 326; PSYC 100, 211, 231; SOCI 101; SOM 100; TOUR 311; WMST 200

Natural Sciences: CHEM 211 & 212

Global Understanding: ANTH 302, 304, 306, 307, 308, 309, 311, 312, 313, 331, 332, 385; ARTH 319, 320, 380, 382, 383, 384, 385, 386; CEIE 100; COMM 305, 456; CRIM 405; DANC 118, 318; ECON 360, 361, 362, 380, 390; ENGL 362, 366; GCH 205; GGS 101; GLOA 101; GOVT 132, 133; HIST 130, 251, 252, 261, 262, 271, 272, 281, 282, 328, 329, 356, 358, 360, 364, 365, 387, 460, 462; JAPA 310; MSOM 305; MUSI 103, 431; PSYC 379; RELI 100, 211, 212, 313, 315, 341, 374; RUSS 354; SOCI 120, 320, 332; SPAN 322; SYST 100; THR 359, TOUR 210; WMST 100

Information Technology: IT 103 or CDS 130

Synthesis: ANTH 400; ARTH 394; AVT 497, 498; BINF 354; BIOL 301; BIS 490; CEIE 490; COMM 326, 362, 454; CONF 490; CONS 490; CRIM 495; CS 306; DANC 490; ECE 447, 492, 493; ECON 309; **EDCI 490**; ENGL 305; EVPP 335; FAVS 352; FRLN 385; GEOL 420; GGS 303, 304; GOVT 490, 491; HAP 465; HIST 300, 499; IT 492; LAS 499; MATH 400; MUSI 490; NCLC 308; PHIL 309, 343, 377, 378; PSYC 405, 406; RELI 490; RUSS 353; SOCI 377, 483; SOCW 323, SOM 498; SPAN 388; SYST 495; THR 440, 496; PROV 342; UNIV 442