

**GEORGE MASON UNIVERSITY**  
**COLLEGE OF SCIENCE**  
**B.S. DEGREE IN CHEMISTRY WITH CONCENTRATION IN BIOCHEMISTRY**  
**(303 Planetary Hall, 703-993-1075)**  
<http://chemistry.gmu.edu/undergrad.html>  
**2014-2015 CATALOG**

	<u>Department(s) &amp; Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<b><u>MASON CORE REQUIREMENTS (*27)</u></b>			
a. Written Communication: ENGH 101 (100), ENGH 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)			
h. Natural Science (satisfied by completion of major requirements)			
i. Global Understanding (3)			
j. Information Technology (3)			
k. Synthesis (3)			

Go to: <http://provost.gmu.edu/gened/general-education-requirements/> to link to information on Mason Core requirements.

**MAJOR REQUIREMENTS (72 hours required)**

a. CHEM 211, CHEM 212 (4,4)		a. ___ ___	___ ___
b. CHEM 313, CHEM 314 (3,3)		b. ___ ___	___ ___
c. CHEM 315, CHEM 318 (2,2)		c. ___ ___	___ ___
d. CHEM 321 (4)		d. ___ ___	___ ___
e. CHEM 331 (3)		e. ___ ___	___ ___
f. CHEM 336 (writing intensive course) (2)		f. ___ ___	___ ___
g. CHEM 446 (3)		g. ___ ___	___ ___
h. CHEM 463 (4)		h. ___ ___	___ ___
i. CHEM 464 (3)		i. ___ ___	___ ___
j. CHEM 465 (writing intensive course) (2)		j. ___ ___	___ ___
k. BIOL 213 (4)		k. ___ ___	___ ___
l. BIOL 305 (3)		l. ___ ___	___ ___
m. BIOL 306 (1)		m. ___ ___	___ ___
n. MATH 113 (4)		n. ___ ___	___ ___
o. MATH 114 (4)		o. ___ ___	___ ___
p. PHYS 243, 244; PHYS 245, 246 (3,1, 3,1)		p. ___ ___	___ ___
OR			
PHYS 160/161; PHYS 260/261 (3,1; 3,1)		___ ___	___ ___
q. Nine hours of approved science electives chosen from chemistry or biology courses at the 302-level or above. Courses from other disciplines may be submitted as electives, subject to the approval of the coordinator (list courses)(9)			
1. _____		___ ___	___ ___
2. _____		___ ___	___ ___
3. _____		___ ___	___ ___

**Students majoring in chemistry must complete the chemistry program requirements with a minimum GPA of 2.30 and present no more than two courses with a grade of D (1.00) in CHEM coursework at graduation.**

**GENERAL ELECTIVES** (List courses)

		___ ___	___ ___
		___ ___	___ ___
		___ ___	___ ___

**MINIMUM HOURS TO GRADUATE: 120**

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

This planning form is intended to be used in consultation with your academic advisor and reflects the requirements for the 2014-2015 Catalog; the University Catalog is the official reference for program requirements.

# COURSE LISTS (CHEMISTRY, BS, CONCENTRATION IN BIOCHEMISTRY)

## Mason Core Requirements

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

Oral Communication: COMM 100 or COMM 101

Quantitative Reasoning: MATH 113. (The Math Placement Test is required to take MATH 113. See this web site for more information: [http://math.gmu.edu/placement\\_test.htm](http://math.gmu.edu/placement_test.htm))

Literature: ARAB 325; CHIN 310, 311, 325, 328; CLAS 250, 260, 340, 350, 360, 380; ENGH 201, 202, 203, 204; FREN 325, 329; FRLN 330; GERM 325; ITAL 320, 325; JAPA 340; 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, 370, 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, 354, 445, 390, 391; ENGH 370, 372, 396; FAVS 225; GAME 101; MUSI 100, 101, 102, 107, 280, 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: HIST 101, 102, 301, 302, 304, 305, 306, 308, 309, 312, 314, 322, 388, 435, 436, 480; and the following courses for HIST 125: HIST 202, 387.

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, 367; HEAL 230; HIST 121, 122; LING 306; PSYC 100, 211, 231; SOCI 101, 352, 355; SOM 100; TOUR 311; WMST 200

Natural Sciences: CHEM 211 & 212

Global Understanding: ANTH 302, 304, 306, 307, 308, 309, 311, 312, 313, 316, 331, 332, 385; ARTH 319, 320, 380, 382, 383, 384, 385, 386; CEIE 100; COMM 305, 456; CRIM 405; DANC 118, 318, 418; ECON 360, 361, 362, 380, 390; ENGH 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; PHIL 243; PSYC 379; RELI 100, 211, 212, 313, 315, 341, 374; RUSS 354; SOCI 120, 320, 332; SPAN 322; SYST 202; THR 359, TOUR 210; WMST 100

Information Technology: **One of these courses**: ANTH 395, CDS 130, CHEM 350, CS 100, GOVT 300, HIST 390, IT 103, MUSI 259 **or Course(s) from a) and one course from b)**: **a)** AVT 180; CS 112; PHYS 251; PSYC 300, 301, & 372 (all three must be taken and in sequence); SOCI 410 **b)** CDS 151, CEIE 409, CS 105, ENGR 107, IT 304, PHIL 112

Synthesis: ANTH 400; ARTH 394; AVT 385, 497, 498; BENG 492, 493; 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; ENGH 305; EVPP 335, 480; FAVS 352; FRLN 385; GAME 490; GCH 465; GEOL 420; GGS 303, 304; GOVT 490, 491; HAP 465; HIST 300, 499; IT 492; LAS 499; MATH 400; MUSI 490; NCLC 308; NURS 465; PHIL 309, 343, 377, 378, 379; PHYS 346; PROV 342; PSYC 405, 406, 427; RELI 490; RUSS 353; SOCI 377, 483; SOCW 323, SOM 498; SPAN 388; SYST 495; THR 440, 496; UNIV 442