

**UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN
NO. 8**

**---REQUIREMENTS---
Fall 2011**

The requirements listed below reflect the undergraduate major curricular changes approved by the Catalog Subcommittee since approval of the last Undergraduate Major Change Bulletin. All changes are underlined. Deletions are crossed out. The column to the far right indicates the date each change becomes effective.

Department	Proposed	Effective Date
Communication, revise minor in Communication	<p>The minor in communication requires a minimum of 18 hours, 9 of which must be at the 300-400 level and selected from the following courses: Adver <u>COMSTRAT380, 409</u>, Best <u>COMJOUR 333, 351, 466, 481, COM 101, 102, 105, 210, 230, 245, 295*, 321, 340, 403, 409, 410, 415, 420, 440, 450, 460, 470, 471, ComSt COMSOC 102, 185, 235, 302, 321, 324, 334, 351, 401, 421, 488, Jour 305, 405, 481</u>. Nine hours of upper-division work must be taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. Students may apply to certify in the minor after they have certified in a major outside the Murrow College of Communication and completed three lower division communication courses. Students must apply to enroll in Com 295 and other select courses. Check with the <u>Murrow College</u> Student Services Office for additional information.</p>	8-12
Communication, Extend minor in Communication to Vancouver	<p>The minor in communication requires a minimum of 18 hours, 9 of which must be at the 300-400 level and selected from the following courses: COMSTRAT 380, 409, COMJOUR 333, 351, 466, 481, COM 101, 102, 105, 210, 230, 245, 295, 410, 415, 420, 440, 460, 470, 471, COMSOC 235, 302, 321, 324, 421. Nine hours of upper-division work must be taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. Students may apply to certify in the minor after they have certified in a major outside the Murrow College of Communication. Students must apply to enroll in select courses. Check with the Murrow College Student Services Office for additional information.</p>	8-12

<p>Mechanical and Materials Engineering, revise graduation requirements for BS Mechanical Engineering</p>	<p>Third Year</p> <p>First Term Hours</p> <p>E E 304 2</p> <p>ME 301 3</p> <p>ME 303 3</p> <p>ME 313 3</p> <p>MATH/STAT 370 3</p> <p>MSE 201 3</p> <p>Second Term Hours</p> <p>Arts & Humanities [H,G] (GER) 3</p> <p>ME 305 2</p> <p>ME 310 3<u>2</u></p> <p><u>ME 311</u> <u>1</u></p> <p>ME 316 [M] 3</p> <p>ME 348 3</p> <p>ME 404 3</p> <p>Fourth Year</p> <p>First Term Hours</p> <p>Intercultural Studies [I,G,K] (GER) 3</p> <p>ME 401 3</p> <p>ME 402 3</p> <p>ME 414 3</p> <p>Technical Elective¹ 3</p> <p>Second Term Hours</p> <p>ENGLISH 402 [W] (GER) 3</p> <p>ME 406 [M] 3</p> <p>ME 416 <u>[T] GER</u> 3</p> <p>Technical Elective¹ 3</p> <p>Tier III Humanities or Social Sciences Course [T] -(GER) 3</p> <hr/> <p>Footnotes</p> <p>¹ Technical Elective in ME or MSE. (MSE 440 excluded).</p>	<p>8-12</p>
<p>Mechanical and Materials Engineering, revise graduation requirements for BS Material Science and Engineering</p>	<p>Materials Science and Engineering Degree Program(131 Hours)</p> <p>Second Year</p> <p>Second Term Hours</p> <p>CE 215 3</p> <p>CPT S 251 or E E 221 2</p>	<p>8-12</p>

ECONS 102 [S] (GER)	3
Intercultural Studies [I,G,K] (GER)	3
MATH 315	3
MSE ME 220	1
Complete Writing Portfolio	
Third Year	
First Term	Hours
ME 310	3 <u>2</u>
MSE 302	3
MSE 316	3
MSE 320	3
MSE 402	3
STAT 360 or 370	3
Second Term	Hours
E E 304	2
MSE 321	3
MSE 323	2
MSE 401	3
MSE 403	3
Engineering and Science Elective⁺	3
Fourth Year	
First Term	Hours
ME 416 [T]	3
MSE 403	3
MSE 413	3
MSE 425 [M]	2 <u>3</u>
Engineering and Science Elective ¹	6
Second Term	Hours
ENGLISH 402 [W] (GER)	3
MSE 426 [M]	2
MSE Elective ²	3
Technical Elective ³	3
Tier III Humanities or Social Sciences Course [T] (GER)	3
Footnotes	
¹ Any three from BIOLOGY 301, BIO ENG 481, CE 341, E E 214, ME 212, 303, 313, 316, 348, 404, 414, 449, 461, 472, CHEM 331, 332, 336, 345, 346, 347, PHYSICS 303, 304, 463, MBIOS303, any 400 or 500-level MSE, or any 500-level ME (except Tier III courses in MSE).	
² Any 400 or 500-level MSE course.	

	³ Upper-division CE, CHE, CHEM, CPT S, E E, MATH, MSE, ME, PHYSICS, or STAT course (except Tier III courses in Engineering).	
Molecular Biosciences, Change name of option from Biochemistry - Biochemistry/ Molecular Biology to Biochemistry - Molecular Biology and revise graduation requirements in Biochemistry - Molecular Biology	<p>Biochemistry - Biochemistry/Molecular Biology Option(120 Hours) A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail.</p> <p>First Year</p> <p>First Term Hours</p> <p>BIOLOGY 106 [BSCI] [B](GER)-or 107 [BSCI] 4</p> <p>CHEM 105 [P](GER) [PSCI] 4</p> <p>ENGLISH 101 [W](GER) [WRITG] 3</p> <p>GenEd 110 [A](GER) 3</p> <p><u>MATH 106 (accelerated)</u></p> <p><u>MATH 108 (accelerated)</u> 2</p> <p>Second Term Hours</p> <p>BIOLOGY <u>106</u> or 107 [B](GER) 4</p> <p>CHEM 106 [P](GER) 4</p> <p>GenEd 111 [A](GER) 3</p> <p><u>Roots of Contemporary Issues [ROOT]</u></p> <p>MATH 140 [QUAN] [N] or 171 [N](GER) [QUAN] 4</p> <p>Second Year</p> <p>First Term Hours</p> <p>Arts & Humanities [H,G] (GER) 3</p> <p><u>Communication [COMM]</u></p> <p>CHEM 345⁺ 4</p> <p>MBIOS 301 4</p> <p>PHYSICS 101 [P] or 201 [P](GER) 4</p> <p>Second Term Hours</p> <p>CHEM 346 <u>348</u> 43 4</p> <p>MBIOS 303 4</p> <p>PHYSICS 102 [P] or 202 [P](GER) 4</p> <p>Social Sciences [S,K](GER) [SSCI] 3</p> <p>Complete Writing Portfolio</p> <p>Third Year</p> <p>First Term Hours</p> <p>Arts & Humanities [H,G] or Social Sciences [S,K] (GER) 3</p> <p><u>Humanities [HUM]</u></p> <p>Communication Proficiency [C,W] (GER) 3</p> <p><u>Creative & Professional Arts [ARTS]</u></p>	8-12

	<p>MATH 172, STAT 212 [N] (GER), or STAT 412 3 or 4</p> <p>MBIOS 304 [M] 305 3</p> <p>MBIOS 404 Elective 3</p> <p>Second Term Hours</p> <p>Intercultural Studies [I,G,K] (GER) 3</p> <p>Diversity [DIVR]</p> <p>MBIOS 305 304 3</p> <p>MBIOS 306 401 3</p> <p>MBIOS 465 3</p> <p>Science Elective²</p> <p><u>Humanities [HUM], Social Sciences [SSCI] or Creative & Professional Arts [ARTS]</u> 3</p> <p>Elective 3</p> <p>Fourth Year</p> <p>First Term Hours</p> <p>Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER) 3</p> <p>MBIOS 413 or 513 3</p> <p>MBIOS 454 [M] 404 3</p> <p>MBIOS 494 Lab Elective¹ 3 or 4</p> <p>Electives 5</p> <p>Second Term Hours</p> <p>Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER) 3</p> <p>MBIOS 494 [M] [CAPS]</p> <p>MBIOS 401 454 [M] 3</p> <p>MBIOS 414 3</p> <p>Tier III Course [T] (GER) 3</p> <p><u>Lecture Elective²</u> 3</p> <p>Elective 3</p> <hr/> <p>Footnotes</p> <p>¹ Pre-med students and those interested in advanced degrees should take CHEM 345, 346, and 348 (a one year course in organic chemistry). Lab Elective: minimum of 3 credits from MBIOS 402, 411, 430, 498, 499; BIOLOGY 251, 315, 353.</p> <p>² 3 hours Lecture elective: select one from MBIOS 410, 423, 426, 440, 442, 450, 466, 478, 498-499; PHYSICS 466.</p>	
Molecular Biosciences, Change name of option from	Biochemistry - Biochemistry /Biophysics Option(120 Hours) A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken	8-12

Biochemistry - Biochemistry/ Biophysics to <u>Biochemistry –</u> <u>Biophysics and</u> revise graduation requirements in <u>Biochemistry -</u> <u>Biophysics</u>	pass/fail.	
	First Year	
	First Term	Hours
	<u>CHEM 105 [P](GER) [PSCI]</u>	4
	<u>ENGLISH 101 [W](GER) [WRTG]</u>	3
	<u>GenEd 110 [A](GER)</u>	3
	<u>MATH 106 (accelerated)</u>	
	<u>MATH 108 (accelerated)</u>	<u>2</u>
	<u>MATH 171 [N](GER)</u>	4
	<u>BIOLOGY 106 [BSCI] or 107 [BSCI]</u>	
	Second Term	Hours
	<u>BIOLOGY 106 or 107 [B](GER)</u>	4
	<u>CHEM 106 [P](GER)</u>	4
	<u>GenEd 111 [A](GER)</u>	3
	<u>Roots of Contemporary Issues [ROOT]</u>	
	<u>MATH 472-171 [QUAN]</u>	4
	Second Year	
	First Term	Hours
	<u>Arts & Humanities [H,G](GER)</u>	3
	<u>Communication [COMM]</u>	
	<u>BIOLOGY 107 [B](GER)</u>	4
	<u>MATH 172</u>	
	<u>CHEM 345</u>	4
	<u>PHYSICS 201 [P](GER)</u>	4
	<u>MBIOS 301</u>	
	Second Term	Hours
	<u>CHEM 346 348</u>	<u>43</u>
	<u>CHEM 347</u>	<u>2</u>
	<u>MBIOS 301 303</u>	4
	<u>PHYSICS 202 [P](GER) 201</u>	4
	<u>Social Sciences [S,K](GER) [SSCI]</u>	3
	Complete Writing Portfolio	
	Third Year	
First Term	Hours	
<u>Arts & Humanities [H,G] or Social Sciences [S,K](GER)</u>	3	
<u>Humanities [HUM]</u>		
<u>CHEM 220</u>	<u>32</u>	
<u>Creative and Professional Arts [ARTS]</u>		
<u>CHEM 222</u>	<u>42</u>	
<u>PHYSICS 202</u>	<u>42</u>	
<u>MBIOS 303 305</u>	<u>34</u>	

	<p>MBIOS 304 [M] 3 Second Term Hours</p> <p>Communication Proficiency [C,W] (GER) 3 <u>Diversity [DIVR]</u></p> <p>Intercultural Studies [I,G,K] (GER) 3 <u>CHEM 347</u></p> <p>MBIOS 454 [M] <u>304</u> 3 MBIOS 465 3 MBIOS 305 <u>401</u> 3</p> <p>Fourth Year</p> <p>First Term Hours</p> <p>Arts & Humanities, [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER) 3 <u>Humanities [HUM], Social Sciences [SSCI], or Creative & Professional Arts [ARTS]</u></p> <p>MBIOS 413 <u>or 513</u> 3 MBIOS 466 <u>or PHYSICS 466</u> 3 MBIOS 494 [M] <u>CHEM 220</u> 2 <u>CHEM 222</u> 2 Electives 36</p> <p>Second Term Hours</p> <p>Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER) 3 <u>MBIOS 494 [M] [CAPS]</u></p> <p>MBIOS 414 3 <u>Science Lab Elective</u>¹ 3 Tier III Course [T] (GER) 3 <u>MBIOS 454 [M]</u> 3 Elective 3</p> <hr/> <p>Footnotes ¹ <u>Science Lab Elective: minimum of 3 credits selected from MBIOS 401, 404, 478, 402, 411, 430, 498, 499, or PHYSICS 466.; BIOLOGY 251, 315, 353.</u></p>	
Molecular Biosciences, Change name of option from Genetics and Cell Biology to Genetics and Cell Biology - Molecular	Genetics and Cell Biology – <u>Molecular Biology Option</u> (120 Hours) A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. First Year First Term Hours	8-12

Biology and revise graduation requirements in Genetics and Cell Biology - Molecular Biology	BIOLOGY 106 [BSCI] or 107 [B]-(GER) [BSCI]	4
	CHEM 105 [P]-(GER) [PSCI]	4
	ENGLISH 101 [W]-(GER) [WRITG]	3
	GenEd 110 [A]-(GER)	3
	<u>MATH 106 (accelerated)</u>	
	<u>MATH 108 (accelerated)</u>	2
	Second Term	Hours
	BIOLOGY <u>106</u> or 107 [B]-(GER)	4
	CHEM 106 [P]-(GER)	4
	GenEd 111 [A]-(GER) <u>Roots of Contemporary Issues [ROOT]</u>	3
	MATH 140 [QUAN] [N]-(GER) [QUAN]	4
	Second Year	
	First Term	Hours
	Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K]-(GER)	3
	<u>Humanities [HUM], Social Sciences [SSCI], or Creative & Professional Arts [ARTS]</u>	
	CHEM 345 ¹	4
	MBIOS 301	4
	PHYSICS 101 [P] or 201 [P]-(GER)	4
	Second Term	Hours
	MBIOS 303	4
	MBIOS 304 [M]	3
	<u>Creative & Professional Arts [ARTS]</u>	
	PHYSICS 102 [P] or 202 [P]-(GER)	4
	Social Sciences [S,K]-(GER) [SSCI]	3
	Complete Writing Portfolio	
	Third Year	
	First Term	Hours
	Arts & Humanities [H,G] or Social Sciences [S,K]-(GER)	3
	<u>Humanities [HUM]</u>	
Communication Proficiency [C,W]-(GER) [COMM]	3	
Lab Elective²	3 or 4	
<u>MBIOS 304</u>		
MATH 172, STAT 212 [N]-(GER), or 412	3 or 4	
MBIOS 305	3	
Second Term	Hours	
Intercultural Studies [I,G,K]-(GER)	3	
<u>Diversity [DIVR]</u>		
Lecture Elective ^{3,2}	3	
MBIOS 401	3	

	<p>MBIOS 454 [M] 3</p> <p>Electives <u>6</u> 3 or 4</p> <p>Fourth Year</p> <p>First Term Hours</p> <p>Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER) 3 or 4</p> <p><u>Lab Elective</u>³</p> <p>MBIOS 402 [M] <u>423</u> 3</p> <p>MBIOS 404 3</p> <p>MBIOS 478 3</p> <p>Elective 3</p> <p>Second Term Hours</p> <p>Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER) <u>MBIOS 442 or BIOLOGY 476</u> 3</p> <p>MBIOS 494 <u>[M] [CAPS]</u> <u>34</u></p> <p>Tier III Course [T] (GER) <u>MBIOS 402 [M]</u> 3</p> <p>Electives <u>640</u></p> <hr/> <p>Footnotes</p> <p>¹ Pre-med students and those interested in advanced degrees should take CHEM 345, 346, and 348 recommended for professional or graduate degrees. (a one year course in organic chemistry).</p> <p>²³ Lab Elective: minimum of 3 hrs. credits selected from MBIOS <u>411, 430, 454, 498, 499; BIOLOGY 251, 315, 320, 321, 353, 372, 420E Mic 586/587.</u></p> <p>³² Lecture elective: select one from BIOLOGY 325 476, 519; MBIOS <u>410, 413, 423, 426, 427, 440, 442, 450503.</u></p>	
<p>Molecular Biosciences</p> <p>Change name of option from Microbiology and Medical Technology to Microbiology – Molecular Biology option and revise graduation requirements in Microbiology - Molecular</p>	<p>Microbiology and Medical Technology – <u>Molecular Biology Option (422 120 Hours)</u></p> <p>A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail.</p> <p>First Year</p> <p>First Term Hours</p> <p>BIOLOGY 106 <u>[BSCI]</u> or 107 [B] (GER) <u>[BSCI]</u> 4</p> <p>CHEM 105 [P] (GER) <u>[PSCI]</u> 4</p> <p>ENGLISH 101 [W] (GER) <u>[WRTG]</u> 3</p> <p>GenEd 110 [A] (GER) 3</p>	8-12

biology	<u>MATH 106 (accelerated)</u>	
	<u>MATH 108 (accelerated)</u>	<u>2</u>
	Second Term	Hours
	<u>BIOLOGY 106 or 107 [B]-(GER)</u>	4
	<u>CHEM 106 [P]-(GER)</u>	4
	<u>GenEd 111 [A]-(GER)</u>	3
	<u>Roots of Contemporary Issues [ROOT]</u>	
	<u>MATH 140 [QUAN] [N] or 171 [N]-(GER) [QUAN]</u>	4
	Second Year	
	First Term	Hours
	<u>Arts & Humanities [H,G]-(GER) [HUM]</u>	3
	<u>CHEM 345¹</u>	4
	<u>MBIOS 301</u>	4
	<u>PHYSICS 101 [P]-(GER)</u>	
	<u>Creative & Professional Arts [ARTS]</u>	<u>34</u>
	Second Term	Hours
	<u>MBIOS 303</u>	4
	<u>PHYSICS 102 [P]-(GER) MBIOS 305</u>	<u>34</u>
	<u>Social Sciences [S,K]-(GER) [SSCI]</u>	3
	<u>Humanities [HUM], Social Sciences [SSCI], or Creative & Professional Arts [ARTS]</u>	<u>3</u>
	Elective	<u>34</u>
Complete Writing Portfolio		
Third Year		
First Term	Hours	
<u>Arts & Humanities [H,G] or Social Sciences [S,K]-(GER)</u>	3	
<u>Communication Proficiency [C,W]-(GER) [COMM]</u>	3	
<u>MBIOS 304 [M]</u>	3	
<u>MBIOS 305</u>	<u>43</u>	
<u>PHYSICS 101</u>		
<u>MBIOS 306</u>	<u>3 or 4</u>	
<u>STAT 212 or 412</u>	<u>2</u>	
Elective	3	
Second Term	Hours	
<u>Intercultural Studies [I,G,K]-(GER)</u>		
<u>Diversity [DIVR]</u>	3	
<u>Lecture Elective²</u>		
<u>PHYSICS 102</u>	<u>43</u>	
<u>MBIOS 410</u>	3	
<u>MBIOS 411 450</u>	<u>32</u>	
Elective	<u>34</u>	

	<p>Fourth Year</p> <table border="0"> <tr> <td>First Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER)</td> <td style="text-align: right;">3</td> </tr> <tr> <td><u>Elective</u></td> <td></td> </tr> <tr> <td>Lab Lecture Elective³²</td> <td style="text-align: right;"><u>34</u></td> </tr> <tr> <td>MBIOS 404</td> <td style="text-align: right;">3</td> </tr> <tr> <td>MBIOS 430 (or MBIOS 411) [M]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>MBIOS 440</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Second Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER)</td> <td style="text-align: right;">3</td> </tr> <tr> <td>MBIOS 401 <u>Lab Elective</u>³</td> <td style="text-align: right;">3 or 4</td> </tr> <tr> <td>MBIOS 442</td> <td style="text-align: right;">3</td> </tr> <tr> <td>MBIOS 496 494 [M] [CAPS]</td> <td style="text-align: right;"><u>34</u></td> </tr> <tr> <td>Tier III Course [T] (GER)</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Electives</td> <td style="text-align: right;"><u>62</u></td> </tr> </table> <hr/> <p>Footnotes</p> <p>¹ Pre-med students and those interested in advanced degrees should take CHEM 345, 346, and 348 (a one-year course in organic chemistry) are recommended for professional or graduate degrees.</p> <p>² Lecture elective: select one from MBIOS 342, 401, 413, 426, 446, 448, 450; <u>BIOLOGY 418, ENTOM 343, FS 416.</u></p> <p>³ Lab Elective: <u>minimum of 3 credits selected one</u> from MENTOM 343 and 344 (taken concurrently), <u>BIOLOGY 418, MBIOS 444 and 445 (taken concurrently); MBIOS 402, 411 or 430, 454, 498, 499; for Medical Technology option take BIOLOGY 418 BIOLOGY 251, 315, 353; ENTOM 344; FS 417.</u></p>	First Term	Hours	Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER)	3	<u>Elective</u>		Lab Lecture Elective ³²	<u>34</u>	MBIOS 404	3	MBIOS 430 (or MBIOS 411) [M]	3	MBIOS 440	3	Second Term	Hours	Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER)	3	MBIOS 401 <u>Lab Elective</u> ³	3 or 4	MBIOS 442	3	MBIOS 496 494 [M] [CAPS]	<u>34</u>	Tier III Course [T] (GER)	3	Electives	<u>62</u>	
First Term	Hours																													
Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER)	3																													
<u>Elective</u>																														
Lab Lecture Elective ³²	<u>34</u>																													
MBIOS 404	3																													
MBIOS 430 (or MBIOS 411) [M]	3																													
MBIOS 440	3																													
Second Term	Hours																													
Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER)	3																													
MBIOS 401 <u>Lab Elective</u> ³	3 or 4																													
MBIOS 442	3																													
MBIOS 496 494 [M] [CAPS]	<u>34</u>																													
Tier III Course [T] (GER)	3																													
Electives	<u>62</u>																													
<p>Molecular Biosciences, Change name of option from Microbiology and Medical Technology to Microbiology - Medical Technology option and revise graduation requirements in Microbiology -</p>	<p>MicroBiology and Medical Technology – <u>Medical Technology Option</u> (422 <u>121</u> Hours)</p> <p>A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail.</p> <p>First Year</p> <table border="0"> <tr> <td>First Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>BIOLOGY 106 [BSCI] or 107 [B]-(GER) [BSCI]</td> <td style="text-align: right;">4</td> </tr> <tr> <td>CHEM 105 [P]-(GER) [PSCI]</td> <td style="text-align: right;">4</td> </tr> <tr> <td>ENGLISH 101 [W]-(GER) [WRTG]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>GenEd 110 [A]-(GER)</td> <td style="text-align: right;">3</td> </tr> </table>	First Term	Hours	BIOLOGY 106 [BSCI] or 107 [B]-(GER) [BSCI]	4	CHEM 105 [P]-(GER) [PSCI]	4	ENGLISH 101 [W]-(GER) [WRTG]	3	GenEd 110 [A]-(GER)	3	<p>8-12</p>																		
First Term	Hours																													
BIOLOGY 106 [BSCI] or 107 [B]-(GER) [BSCI]	4																													
CHEM 105 [P]-(GER) [PSCI]	4																													
ENGLISH 101 [W]-(GER) [WRTG]	3																													
GenEd 110 [A]-(GER)	3																													

Medical Technology	<u>MATH 106 (accelerated)</u>	
	<u>MATH 108 (accelerated)</u>	<u>2</u>
	Second Term	Hours
	<u>BIOLOGY 106 or 107 [B]-(GER)</u>	4
	<u>CHEM 106 [P]-(GER)</u>	4
	<u>GenEd 111 [A]-(GER)</u>	3
	<u>Roots of Contemporary Issues [ROOT]</u>	
	<u>MATH 140 [QUAN] [N] or 171 [N]-(GER) [QUAN]</u>	4
	Second Year	
	First Term	Hours
	<u>Arts & Humanities [H,G]-(GER) [HUM]</u>	3
	<u>CHEM 345¹</u>	4
	<u>MBIOS 301</u>	4
	<u>PHYSICS 101 [P]-(GER)</u>	
	<u>Creative & Professional Arts [ARTS]</u>	<u>34</u>
	Second Term	Hours
	<u>MBIOS 303</u>	4
	<u>PHYSICS 102 [P]-(GER)</u>	
	<u>MBIOS 305</u>	<u>34</u>
	<u>Social Sciences [S,K]-(GER) [SSCI]</u>	3
	<u>Humanities [HUM], Social Sciences [SSCI], or Creative & Professional Arts [ARTS]</u>	<u>3</u>
<u>Elective</u>	<u>34</u>	
Complete Writing Portfolio		
Third Year		
First Term	Hours	
<u>Arts & Humanities [H,G] or Social Sciences [S,K]-(GER)</u>	3	
<u>Communication Proficiency [C,W]-(GER) [COMM]</u>	3	
<u>MBIOS 304 [M]</u>	3	
<u>MBIOS 305</u>		
<u>PHYSICS 101</u>	<u>43</u>	
<u>MBIOS 306</u>	<u>3 or 4</u>	
<u>STAT 212 or 412</u>	<u>2</u>	
<u>Elective</u>	3	
Second Term	Hours	
<u>Intercultural Studies [I,G,K]-(GER)</u>		
<u>Diversity [DIVR]</u>	3	
<u>Lecture Elective²</u>		
<u>PHYSICS 102</u>	<u>43</u>	
<u>MBIOS 410</u>	3	
<u>MBIOS 411 450</u>	<u>32</u>	

Elective	<u>34</u>
Fourth Year	
First Term	Hours
Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER) <u>Elective</u>	3
Lab <u>BIOLOGY 418</u>	4
MBIOS 404	3
MBIOS 430 [M]	3
MBIOS 440	3
Second Term	Hours
Arts & Humanities [H,G], Intercultural Studies [I,G,K], or Social Sciences [S,K] (GER)	3
MBIOS 401 <u>MBIOS 411 [M]</u>	3
MBIOS 442	3
MBIOS 496 <u>494 [M] [CAPS]</u>	<u>34</u>
Tier III Course [T] (GER)	3
Electives	<u>52</u>
<hr/>	
Footnotes	
¹ Pre-med students and those interested in advanced degrees should take CHEM 345, 346, and 348 (a one-year course in organic chemistry) are recommended for professional or graduate degrees.	

UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 8
Spring 2012

---COURSES---

The courses listed below reflect the undergraduate major curricular changes approved by the Catalog Subcommittee since approval of the last Undergraduate Major Change Bulletin. All new and revised courses are printed in their entirety under the headings Current and Proposed, respectively. The column to the far right indicates the date each change becomes effective.

Prefix	Course Number	New Revise Drop	Current	Proposed	Effective Date
CS	224	Revise	Programming Tools 2 Prereq CS 122 with a C or better. Debugging tools, scripting languages, UNIX programming tools, introduction to graphical user interface programming.	Programming Tools 3 Course Prerequisite: CS 122 with a C or better. Debugging tools, scripting languages, UNIX programming tools, introduction to graphical user interface programming.	8-12
CS	458	New	--N/A--	Mobile Application Development 3 Course Prerequisite: CS 360 with a C or better. Design and development of mobile applications; introduction to mobile application frameworks, including user interface, sensors, event handling, data management and network communication.	8-12
MSE	426	Revise	[M] Senior Thesis II 2 (0-6) Prereq MSE 320, 323, senior in materials science engineering. Research in materials science and engineering.	[M] Senior Thesis II 3 (0-9) Course Prerequisite: MSE 320; MSE 323, senior standing; certified major in Materials Science Engineering. Research in materials science and engineering.	8-12
Neuro	490	Revise	Senior Project 1 Prereq senior standing; certified neuroscience major; may be taken c// with Neuro 495 or 499. Research project poster or oral presentation. S, F grading.	Senior Project 3 Course Prerequisite: <u>Senior standing; certified Neuroscience major.</u> Research project poster <u>and</u> oral presentation. S, F grading.	8-12
Neuro	491	New	--N/A--	Senior Project-Poster 1 Course Prerequisite: Senior standing; certified Neuroscience major. Research project poster or oral presentation. S, F	8-12

				grading.	
--	--	--	--	----------	--