

UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 2
Fall 2017

--REQUIREMENTS--

Faculty Senate Approved October 5, 2017

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. Note: Items marked {S} have been streamlined and do not require Catalog Subcommittee review.

Dept	Proposed	Effective Date
Biological Sciences Revise graduation requirements for Bachelor of Science in Biology - General Option	<p>Biology - General Option (120 Hours)</p> <p>Third Year</p> <p><i>First Term</i> <i>Hours</i></p> Diversity [DIVR] 3 PHYSICS 102 or 202 4 Foreign Language, if needed, or Electives ² 4 Program Option Courses or Electives ³ 5 or 6 <p><i>Second Term</i> <i>Hours</i></p> BIOLOGY 403 or 405 3 Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3 Foreign Language, if needed, or Electives ² 3 or 4 Program Option Courses or Electives ³ 6 <p>Fourth Year</p> <p><i>First Term</i> <i>Hours</i></p> BIOLOGY 352 or MBIOS 401 3 Program Option Courses or Electives ³ 13 <p><i>Second Term</i> <i>Hours</i></p> <u>BIOLOGY Integrative Capstone [CAPS] or HONORS 450⁴</u> 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Courses or Electives ³ 10 Complete School of Biological Sciences Exit Survey <hr/> <p>Footnotes</p> <p>¹ MATH 106 may be taken as a pre-/co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed.</p> <p>² Two years of high school foreign language or at least two semesters of college-level foreign language are required by the College of Arts and Sciences for graduation.</p>	<p align="center">8-18</p>

	<p>³ Biology General Program option courses should be selected in consultation with a biology advisor and include coursework to fulfill the University requirement of 40 upper division credits. All biology majors must complete 21 semester credits of biological coursework including 15 upper-division credits, 6 of which must be a BIOLOGY subject (prefix) taken in residence at WSU. Approved courses include 200-400-level BIOLOGY courses except those used to fulfill core requirements (BIOLOGY 106, 107, 301, 372, 403, or 405, <u>BIOLOGY [CAPS] or HONORS 450</u>), and any courses approved by advisor. A maximum of 4 credits of coursework graded S/F may be used toward fulfilling departmental requirements or program options and must be approved by advisor. Coursework must include a total of two BIOLOGY [M] courses.</p> <p>⁴ <u>Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.</u></p>																																															
<p>Biological Sciences Revise graduation requirements for Bachelor of Science in Biology - Education Option</p>	<p>Biology – Education Option (120 Hours)</p> <p>Third Year</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><i>First Term</i></th> <th style="text-align: right;"><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>BIOLOGY 372 [M]</td> <td style="text-align: right;">4</td> </tr> <tr> <td>Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>PHYSICS 101 or 201</td> <td style="text-align: right;">4</td> </tr> <tr> <td>Program Electives³</td> <td style="text-align: right;">4</td> </tr> <tr> <th style="text-align: left;"><i>Second Term</i></th> <th style="text-align: right;"><i>Hours</i></th> </tr> <tr> <td>PHYSICS 102 or 202</td> <td style="text-align: right;">4</td> </tr> <tr> <td>TCH LRN 465</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Program Option Requirements⁴</td> <td style="text-align: right;">3 or 4</td> </tr> <tr> <td>Program Electives³</td> <td style="text-align: right;">4</td> </tr> </tbody> </table> <p>Fourth Year</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><i>First Term</i></th> <th style="text-align: right;"><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>BIOLOGY/TCH LRN 430</td> <td style="text-align: right;">3</td> </tr> <tr> <td>STAT 212, 412, or PSYCH 311</td> <td style="text-align: right;">3 or 4</td> </tr> <tr> <td>TCH LRN 467 [M]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>TCH LRN 470</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Program Electives³</td> <td style="text-align: right;">4</td> </tr> <tr> <th style="text-align: left;"><i>Second Term</i></th> <th style="text-align: right;"><i>Hours</i></th> </tr> <tr> <td>BIOLOGY [CAPS] or <u>HONORS 450</u>⁵</td> <td style="text-align: right;">3</td> </tr> <tr> <td>BIOLOGY 403 or 405</td> <td style="text-align: right;">3</td> </tr> <tr> <td>BIOLOGY/TCH LRN 431</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Program Option Requirements⁴</td> <td style="text-align: right;">3 or 4</td> </tr> <tr> <td>Program Electives or Electives³</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Complete School of Biological Sciences Exit Survey</td> <td></td> </tr> </tbody> </table> <hr/> <p>Footnotes</p>	<i>First Term</i>	<i>Hours</i>	BIOLOGY 372 [M]	4	Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3	PHYSICS 101 or 201	4	Program Electives ³	4	<i>Second Term</i>	<i>Hours</i>	PHYSICS 102 or 202	4	TCH LRN 465	3	Program Option Requirements ⁴	3 or 4	Program Electives ³	4	<i>First Term</i>	<i>Hours</i>	BIOLOGY/TCH LRN 430	3	STAT 212, 412, or PSYCH 311	3 or 4	TCH LRN 467 [M]	3	TCH LRN 470	3	Program Electives ³	4	<i>Second Term</i>	<i>Hours</i>	BIOLOGY [CAPS] or <u>HONORS 450</u> ⁵	3	BIOLOGY 403 or 405	3	BIOLOGY/TCH LRN 431	3	Program Option Requirements ⁴	3 or 4	Program Electives or Electives ³	3	Complete School of Biological Sciences Exit Survey		<p>8-18</p>
<i>First Term</i>	<i>Hours</i>																																															
BIOLOGY 372 [M]	4																																															
Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3																																															
PHYSICS 101 or 201	4																																															
Program Electives ³	4																																															
<i>Second Term</i>	<i>Hours</i>																																															
PHYSICS 102 or 202	4																																															
TCH LRN 465	3																																															
Program Option Requirements ⁴	3 or 4																																															
Program Electives ³	4																																															
<i>First Term</i>	<i>Hours</i>																																															
BIOLOGY/TCH LRN 430	3																																															
STAT 212, 412, or PSYCH 311	3 or 4																																															
TCH LRN 467 [M]	3																																															
TCH LRN 470	3																																															
Program Electives ³	4																																															
<i>Second Term</i>	<i>Hours</i>																																															
BIOLOGY [CAPS] or <u>HONORS 450</u> ⁵	3																																															
BIOLOGY 403 or 405	3																																															
BIOLOGY/TCH LRN 431	3																																															
Program Option Requirements ⁴	3 or 4																																															
Program Electives or Electives ³	3																																															
Complete School of Biological Sciences Exit Survey																																																

	<p>¹ MATH 106 may be taken as a pre-/co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed.</p> <p>² The College of Arts and Sciences requires two years of high school foreign language or two semesters of college-level foreign language.</p> <p>³ Beyond the core requirements (BIOLOGY 106, 107, 301, 372, and 403 or 405, <u>BIOLOGY [CAPS] or HONORS 450</u>), all biology majors must complete 21 semester credits of biological coursework including 15 upper-division credits, 6 of which must be a BIOLOGY prefix taken in residence at WSU. Approved courses include 200-400-level BIOLOGY courses except those used to fulfill core requirements, and any courses approved by advisor. A maximum of 4 credits of coursework graded S/F may be used toward fulfilling departmental requirements or program options and must be approved by advisor.</p> <p>⁴ Program Option requirements include one Biology Plant Elective (BIOLOGY 332[M], 401[CAPS], 409, or 420) and one Biology Animal Elective (BIOLOGY 322[M], 324, 423, 428, 432[M], or 438[M]). To obtain an additional general science endorsement students need to pass a general science exam (e.g., Chemistry, Physics, Biology, Earth and Space science). Students may consider taking one or more of the following courses to prepare them for general science endorsement exam: ASTRONOM 135, GEOLOGY 102, 210.</p> <p>⁵ Degree requirements include a [CAPS] course with a BIOLOGY prefix. Students in Honors College complete HONORS 450 in lieu of BIOLOGY [CAPS] course.</p>																																			
<p>Biological Sciences Revise graduation requirements for Bachelor of Science in Biology - Pre-Physical Therapy/Pre-Occupational Therapy/Pre-Physician Assistant Option</p>	<p>Biology - Pre-Physical Therapy / Pre-Occupational Therapy / Pre-Physician Assistant Option (120 Hours)</p> <p>Third Year</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><i>First Term</i></th> <th style="text-align: right;"><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>BIOLOGY 315 or 354</td> <td style="text-align: right;">4</td> </tr> <tr> <td>BIOLOGY 393 [M], 490 [M], or BIOLOGY [M]^{2,3,4}</td> <td style="text-align: right;">2 - 4</td> </tr> <tr> <td>Foreign Language, if needed, or Program Emphasis Requirements^{2,3,4,5}</td> <td style="text-align: right;">3 or 4</td> </tr> <tr> <td>PHYSICS 102 or 202</td> <td style="text-align: right;">4</td> </tr> <tr> <td>PSYCH 333</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Second Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>BIOLOGY 372 [M]</td> <td style="text-align: right;">4</td> </tr> <tr> <td>Creative & Professional Arts [ARTS]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>H D 101 or PSYCH 361^{2,3,6}</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Foreign Language, if needed, and/or Electives^{5,6}</td> <td style="text-align: right;">6</td> </tr> <tr> <td>Fourth Year</td> <td></td> </tr> <tr> <td>First Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>ENGLISH 402 [WRTG]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Program Emphasis Requirements or Electives^{2,3,4,6}</td> <td style="text-align: right;">12</td> </tr> <tr> <td>Second Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>BIOLOGY 403 or 405</td> <td style="text-align: right;">3</td> </tr> </tbody> </table>	<i>First Term</i>	<i>Hours</i>	BIOLOGY 315 or 354	4	BIOLOGY 393 [M], 490 [M], or BIOLOGY [M] ^{2,3,4}	2 - 4	Foreign Language, if needed, or Program Emphasis Requirements ^{2,3,4,5}	3 or 4	PHYSICS 102 or 202	4	PSYCH 333	3	Second Term	Hours	BIOLOGY 372 [M]	4	Creative & Professional Arts [ARTS]	3	H D 101 or PSYCH 361 ^{2,3,6}	3	Foreign Language, if needed, and/or Electives ^{5,6}	6	Fourth Year		First Term	Hours	ENGLISH 402 [WRTG]	3	Program Emphasis Requirements or Electives ^{2,3,4,6}	12	Second Term	Hours	BIOLOGY 403 or 405	3	<p>8-18</p>
<i>First Term</i>	<i>Hours</i>																																			
BIOLOGY 315 or 354	4																																			
BIOLOGY 393 [M], 490 [M], or BIOLOGY [M] ^{2,3,4}	2 - 4																																			
Foreign Language, if needed, or Program Emphasis Requirements ^{2,3,4,5}	3 or 4																																			
PHYSICS 102 or 202	4																																			
PSYCH 333	3																																			
Second Term	Hours																																			
BIOLOGY 372 [M]	4																																			
Creative & Professional Arts [ARTS]	3																																			
H D 101 or PSYCH 361 ^{2,3,6}	3																																			
Foreign Language, if needed, and/or Electives ^{5,6}	6																																			
Fourth Year																																				
First Term	Hours																																			
ENGLISH 402 [WRTG]	3																																			
Program Emphasis Requirements or Electives ^{2,3,4,6}	12																																			
Second Term	Hours																																			
BIOLOGY 403 or 405	3																																			

	<p><u>BIOLOGY [CAPS] or HONORS 450⁷</u> 3</p> <p><u>Integrative Capstone [CAPS]</u> 3</p> <p>Program Emphasis Requirements or Electives^{2,3,4,6} 10</p> <p>Complete School of Biological Sciences Exit Survey</p> <hr/> <p>Footnotes</p> <p>¹ MATH 106 may be taken as a pre-/co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed.</p> <p>² Pre-Occupational Therapy Program emphasis (13 credits) includes ANTH 203, BIOLOGY 220, BIOLOGY 393 [M], COM 102, H D 101.</p> <p>³ Pre-Physical Therapy Program emphasis (8-9 credits) includes BIOLOGY 393 [M] or 490 [M], KINES 380 or BIOLOGY 350 or BIOLOGY 352, PSYCH 361 or H D 101.</p> <p>⁴ Pre-Physician Assistant Program emphasis (14-15 credits) includes CHEM 370 or MBIOS 303, MBIOS 304 or 306, MBIOS 305, PSYCH 361 or H D 101. Students in this emphasis will also need to complete a BIOLOGY [M] course to fulfill the University requirement of 2 [M] courses.</p> <p>⁵ Two years of high school foreign language or at least two semesters of college-level foreign language are required by the College of Arts and Sciences for graduation.</p> <p>⁶ Pre-Physical Therapy / Pre-Occupational Therapy / Pre-Physician Assistant Program emphasis courses should be selected in consultation with a biology advisor and include coursework to fulfill the University requirement of 40 upper division credits. In addition to core biology courses (BIOLOGY 106, 107, 301, 372, and 403 or 405, <u>BIOLOGY [CAPS] or HONORS 450</u>) all biology majors must complete 21 semester credits of biological coursework including 15 upper-division credits, 6 of which must be a BIOLOGY prefix taken in residence at WSU. Approved program electives include CHEM 370, KINES 380, MBIOS 303, 304, 305, 306, PHIL 365, and 200-400-level BIOLOGY courses except those used to fulfill core requirements, and any courses approved by advisor. A maximum of 4 credits of coursework graded S/F may be used toward fulfilling departmental requirements.</p> <p>⁷ <u>Students in Honors College complete HONORS 450 in lieu of BIOLOGY [CAPS] course.</u></p>																							
<p>Biological Sciences Revise graduation requirements for Bachelor of Science in Biology - Entomology Option</p>	<p>Biology - Entomology Option (120 Hours)</p> <p>Third Year</p> <table border="0"> <thead> <tr> <th><i>First Term</i></th> <th><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>BIOLOGY 322 [M], 350, or 418</td> <td>4</td> </tr> <tr> <td>BIOLOGY 372 [M]</td> <td>4</td> </tr> <tr> <td>Humanities [HUM]</td> <td>3</td> </tr> <tr> <td>Electives³</td> <td>5</td> </tr> <tr> <th><i>Second Term</i></th> <th><i>Hours</i></th> </tr> <tr> <td>CHEM 370 or MBIOS 303</td> <td>3 or 4</td> </tr> <tr> <td>Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]</td> <td>3</td> </tr> <tr> <td>Social Sciences [SSCI]</td> <td>3</td> </tr> <tr> <td>STAT 212, 412, or PSYCH 311</td> <td>3 or 4</td> </tr> <tr> <td>Program Option Elective²</td> <td>3</td> </tr> </tbody> </table>	<i>First Term</i>	<i>Hours</i>	BIOLOGY 322 [M], 350, or 418	4	BIOLOGY 372 [M]	4	Humanities [HUM]	3	Electives ³	5	<i>Second Term</i>	<i>Hours</i>	CHEM 370 or MBIOS 303	3 or 4	Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3	Social Sciences [SSCI]	3	STAT 212, 412, or PSYCH 311	3 or 4	Program Option Elective ²	3	<p>8-18</p>
<i>First Term</i>	<i>Hours</i>																							
BIOLOGY 322 [M], 350, or 418	4																							
BIOLOGY 372 [M]	4																							
Humanities [HUM]	3																							
Electives ³	5																							
<i>Second Term</i>	<i>Hours</i>																							
CHEM 370 or MBIOS 303	3 or 4																							
Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3																							
Social Sciences [SSCI]	3																							
STAT 212, 412, or PSYCH 311	3 or 4																							
Program Option Elective ²	3																							

	<p>Fourth Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>BIOLOGY 332 [M] or 420 3 or 4</p> <p>Foreign Language, if needed, and/or Electives^{3,4} 13</p> <p><i>Second Term</i> <i>Hours</i></p> <p>BIOLOGY 403 or 405 3</p> <p><u>BIOLOGY [CAPS] or HONORS 450⁵</u> <u>3</u></p> <p>Integrative Capstone [CAPS] 3</p> <p>Foreign Language, if needed, and/or Electives^{3,4} 10</p> <p>Complete School of Biological Sciences Exit Survey</p> <hr/> <p>Footnotes</p> <p>¹ MATH 106 may be taken as a pre-/co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed.</p> <p>² Entomology Program option electives include 6 credits of 300-400-level ENTOM courses excluding ENTOM 343.</p> <p>³ Additional electives should be selected in consultation with a biology advisor. All biology majors must complete 21 semester credits of biological coursework including 15 upper-division credits, 6 of which must be a BIOLOGY prefix taken in residence at WSU. Approved courses include 200-400-level BIOLOGY and ENTOM courses except those used to fulfill core requirements (BIOLOGY 106, 107, 301, 372, 403 or 405, <u>BIOLOGY [CAPS] or HONORS 450</u>), and any courses approved by advisor. A maximum of 4 credits of coursework graded S/F may be used toward fulfilling departmental requirements or program options and must be approved by advisor.</p> <p>⁴ Two years of high school foreign language or at least two semesters of college-level foreign language are required by the College of Arts and Sciences for graduation.</p> <p>⁵ <u>Students in Honors College complete HONORS 450 in lieu of BIOLOGY [CAPS] course.</u></p>	
<p>Biological Sciences Revise graduation requirements for Bachelor of Science in Biology - Botany Option</p>	<p>Biology - Botany Option (120 Hours)</p> <p>Third Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>BIOLOGY 372 [M] 4</p> <p>BIOLOGY 420 3</p> <p>Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3</p> <p>STAT 212, 412, or PSYCH 311 3 or 4</p> <p><i>Second Term</i> <i>Hours</i></p> <p>BIOLOGY 332 [M] 4</p> <p>BIOLOGY 462 3</p> <p>Diversity [DIVR] 3</p> <p>Foreign Language or Electives 4</p>	<p>8-18</p>

	<p>Program Option Courses or Electives² 2 or 3</p> <p>Fourth Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>BIOLOGY 403 or 405 3</p> <p>BIOLOGY 409 4</p> <p>Program Option Courses or Electives² 6</p> <p>Electives 3</p> <p><i>Second Term</i> <i>Hours</i></p> <p><u>BIOLOGY [CAPS] or HONORS 450³</u> <u>3</u></p> <p>Integrative Capstone [CAPS] 3</p> <p>Program Option Courses or Electives² 12</p> <p>Complete School of Biological Sciences Exit Survey</p> <hr/> <p>Footnotes</p> <p>¹ MATH 106 may be taken as a pre-/co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed.</p> <p>² Botany Program option courses should be selected in consultation with a biology advisor and include coursework to fulfill the University requirement of 40 upper division credits. All biology majors must complete 21 semester credits of biological coursework including 15 upper-division credits, 6 of which must be a BIOLOGY prefix taken in residence at WSU. Approved courses include 200-400-level BIOLOGY courses except those used to fulfill core requirements (BIOLOGY 106, 107, 301, 372, 403 or 405, <u>BIOLOGY [CAPS] or HONORS 450</u>), and any courses approved by advisor. A maximum of 4 credits of coursework graded S/F may be used toward fulfilling departmental requirements or program options and must be approved by advisor.</p> <p>³ <u>Students in Honors College complete HONORS 450 in lieu of BIOLOGY [CAPS] course</u></p> <p>±</p>	
<p>Biological Sciences Revise graduation requirements for Bachelor of Science in Zoology - Pre-Veterinary/Animal Care Option</p>	<p>Zoology - Pre-Veterinary/Animal Care Option (120 Hours)</p> <p>Second Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>BIOLOGY 301 4</p> <p>CHEM 345 4</p> <p>Communication [COMM] or Written Communication [WRTG] 3</p> <p>Humanities [HUM] 3</p> <p>Social Sciences [SSCI] 3</p> <p><i>Second Term</i> <i>Hours</i></p> <p><u>CHEM 370 or MBIOS 303 or Elective²</u> <u>3 or 4</u></p> <p>Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3</p>	<p>8-18</p>

MBIOS 303 or Elective ²	4
PHYSICS 101 or 201	4
Program Option Courses, Foreign Language, or Electives ³	3
STAT 212, 412, or <u>PSYCH 311</u>	3 or 4
Complete Writing Portfolio	

Third Year

<i>First Term</i>	<i>Hours</i>
BIOLOGY 321 [M], 322 [M], or 324	4
PHYSICS 102 or 202	4
Program Option Courses, Foreign Language, or Electives ³	6
<i>Second Term</i>	<i>Hours</i>
BIOLOGY 321 [M], 322 [M], or 324	4
BIOLOGY 372 [M]	4
Diversity [DIVR]	3
Electives	3 4

Fourth Year

<i>First Term</i>	<i>Hours</i>
BIOLOGY 350 or 353	4
BIOLOGY 403 or 405	3
Program Option Courses or Electives ³	3
Electives	3
<i>Second Term</i>	<i>Hours</i>
<u>BIOLOGY [CAPS] or HONORS 450</u> ⁴	<u>3</u>
Integrative Capstone [CAPS]	3
Program Option Courses or Electives ³	10
Electives	3
Complete School of Biological Sciences Exit Survey	

Footnotes

¹ MATH 106 may be taken as a pre-/co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed.

² A biochemistry course is required for admittance to U.S. veterinary colleges.

³ Zoology, Pre-Veterinary/Animal Care Program Option electives should be selected in consultation with a biology advisor and must include 12 credits selected from BIOLOGY 352, 360, 393 [M], 412, 423, 428, 432, 438 [M], 495, CHEM 370 or MBIOS 303, 304, 305, NATRS 431, or as approved by advisor. Beyond the core requirements (BIOLOGY 106, 107, 301, 372, and 403 or 405, BIOLOGY [CAPS] or HONORS 450) all zoology majors must complete 21 semester credits of biological coursework including 15 upper-division credits, 6 of which must be a BIOLOGY prefix taken in residence at WSU. Approved courses include 200-400-level BIOLOGY courses not used to fulfill core requirements, and any courses approved by advisor. A maximum of 4 credits of coursework graded S/F may be used toward

	<p>fulfilling departmental requirements or program options and must be approved by advisor.</p> <p>⁴ <u>Students in Honors College complete HONORS 450 in lieu of BIOLOGY [CAPS] course.</u></p>																											
<p>Chemistry Revise graduation requirements for minor in Chemistry</p>	<p>Chemistry</p> <p>The minor in chemistry requires at least 16 hours <u>credits</u> selected from the courses below. All courses used for the minor must be completed with a grade of C or better. At least 9 of the hours <u>credits</u> must be upper-division taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. Courses must be selected from at least two of the following areas (note that some courses have prerequisites): Organic: CHEM 345, 346, 347, 348, 370, 540. Analytical: CHEM 220, 222, 425, 426, 520. Physical/Inorganic: CHEM <u>301</u>, 330, 331, 332, 333, 334, <u>338</u>, 401, 480, 501, 531. CHEM 499/495 – may be used for up to 4 hours. MBIOS 303 and other MBIOS courses may be substituted <u>for CHEM 370</u> with approval. <u>Other 500-level Chemistry courses and courses outside of Chemistry may be used with the department’s permission.</u></p>	8-18																										
<p>Chemistry Revise graduation requirements for Bachelor of Science in Chemistry - Professional Option</p>	<p>Chemistry - Professional Option (120 Hours)</p> <p>The requirements for all chemistry options are the same through the first semester of the junior year.</p> <p>Third Year</p> <table> <thead> <tr> <th><i>First Term</i></th> <th><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>CHEM 222</td> <td>1</td> </tr> <tr> <td>CHEM 330</td> <td>1</td> </tr> <tr> <td>CHEM 331</td> <td>3</td> </tr> <tr> <td>CHEM 370 or MBIOS 303</td> <td>3 or 4</td> </tr> <tr> <td>CHEM 398</td> <td>1</td> </tr> <tr> <td>Diversity [DIVR]</td> <td>3</td> </tr> <tr> <td><u>Electives</u></td> <td><u>2</u></td> </tr> <tr> <th><i>Second Term</i></th> <th><i>Hours</i></th> </tr> <tr> <td>CHEM 332</td> <td>3</td> </tr> <tr> <td>CHEM 333 or 335</td> <td>1</td> </tr> <tr> <td>CHEM 425</td> <td>2</td> </tr> <tr> <td>CHEM 499 or Elective</td> <td>4</td> </tr> </tbody> </table>	<i>First Term</i>	<i>Hours</i>	CHEM 222	1	CHEM 330	1	CHEM 331	3	CHEM 370 or MBIOS 303	3 or 4	CHEM 398	1	Diversity [DIVR]	3	<u>Electives</u>	<u>2</u>	<i>Second Term</i>	<i>Hours</i>	CHEM 332	3	CHEM 333 or 335	1	CHEM 425	2	CHEM 499 or Elective	4	8-18
<i>First Term</i>	<i>Hours</i>																											
CHEM 222	1																											
CHEM 330	1																											
CHEM 331	3																											
CHEM 370 or MBIOS 303	3 or 4																											
CHEM 398	1																											
Diversity [DIVR]	3																											
<u>Electives</u>	<u>2</u>																											
<i>Second Term</i>	<i>Hours</i>																											
CHEM 332	3																											
CHEM 333 or 335	1																											
CHEM 425	2																											
CHEM 499 or Elective	4																											

	Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3 Electives 6 Fourth Year <i>First Term</i> <i>Hours</i> CHEM 334 [M] 2 CHEM 401 3 CHEM 426 [M] 2 CHEM 499 2 Foreign Language and/or Electives 6 <i>Second Term</i> <i>Hours</i> Advanced CHEM Electives ² 3 CHEM 410- [M] 3 <u>CHEM 485 [M] [CAPS]</u> 3 CHEM 495 4 ENGLISH 301 [WRTG], 402 [WRTG] [M], or Communication <u>COM 400 [COMM]</u> 3 Integrative Capstone [CAPS] 3 Foreign Language or Electives 3 or 4 Exit Interview	
	Footnotes ¹ Students who have taken CHEM 101 must take CHEM 105 and 106, or 102 and 106. Highly qualified students are encouraged to take CHEM 116 in place of CHEM 106. ² Advanced CHEM Electives include: CHEM 490, MATH 315, or any 500-level CHEM course.	
Chemistry Revise graduation requirements for Bachelor of Science in Chemistry - Materials Option	Chemistry - Materials Option (120 Hours) Third Year <i>First Term</i> <i>Hours</i> CHEM 222 1 CHEM 330 1 CHEM 331 3 CHEM 370 or MBIOS 303 3 or 4 CHEM 398 1 Diversity [DIVR] 3 Foreign Language (if needed) 0 or 4 <i>Second Term</i> <i>Hours</i> CHEM 332 3 CHEM 333 or 335 1 Computational Elective: Math 300 [M] <u>CPT S 121</u> 3 <u>or 4</u> or course approved by advisor	8-18

	<p>Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3</p> <p>MSE 201 3</p> <p>Foreign Language, if necessary, or Elective 3 or 4</p> <p>Fourth Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>CHEM 334 [M] 2</p> <p>CHEM 401 3</p> <p>CHEM 480 3</p> <p>CHEM 499 2</p> <p>MSE 302 3</p> <p>MSE 320 [M] 3</p> <p><i>Second Term</i> <i>Hours</i></p> <p>CHEM 410 [M] 3</p> <p><u>CHEM 485 [M] [CAPS]</u> 3</p> <p>CHEM 495 4</p> <p>ENGLISH 301 [WRTG], 402 [WRTG] [M], or Communication <u>COM 400 [COMM]</u> 3</p> <p>Integrative Capstone [CAPS] 3</p> <p>MSE 321 3</p> <p>Electives² 23</p> <p>Exit Interview</p> <hr/> <p>Footnotes</p> <p>¹ Students who have taken CHEM 101 must take CHEM 105 and 106, or 102 and 106. Highly qualified students are encouraged to take CHEM 116 in place of CHEM 106.</p> <p>² CHEM 503 or any 300-400-level MSE course not used to satisfy major requirements</p> <p>.</p>	
<p>Economic Sciences Add certification requirement for all options to the Schedules of Studies for Bachelor of Science in Economic Sciences</p>	<p>Certification Requirement for all options in Bachelor of Science in Economic Sciences, to be added to all schedules of studies.</p> <p><u>Certification Requirement:</u></p> <ol style="list-style-type: none"> 1. <u>Completion of at least 24 semester hours of coursework.</u> 2. <u>Minimum WSU cumulative GPA of 2.0.</u> 3. <u>To maintain certification, a cumulative GPA of 2.0 or higher in ECONS 301, 302, and 311 is required.</u> 	<p>8-18</p>

<p>English {S} Revise minor in Creative Writing to correct typo in original paperwork.</p>	<p>Creative Writing</p> <p>The Creative Writing minor requires a minimum of 16 credits, <u>at least 9 of which must be upper-division and taken in residence at WSU or through WSU-approved education abroad or educational exchange courses.</u></p> <p>Required courses include ENGLISH 251 or 252; 9 credits to be chosen from ENGLISH 351, 352, 353, 354, 355, 357, 358, 359, 446, 451, 452, 453; 3 credits of any 300-400 level ENGLISH course; and 1 credit of ENGLISH 357 <u>358</u>, 498, 499. Credit hours for the minor must include 9 hours of upper division coursework must be taken in residence and WSU or through WSU approved education abroad or educational exchange courses.</p>	<p>8-16</p>
<p>Environment New interdisciplinary undergraduate certificate: Water Resources Science and Management</p>	<p>Water Resources Science and Management</p> <p>The Certificate in Water Resources Science and Management, administered by the School of the Environment, is an interdisciplinary certificate for students interested in water resources. The certificate includes 15 credits and an experiential requirement. Students must complete a minimum of one course from each of four water cluster areas listed below. Courses listed under more than one cluster area will not count toward two cluster areas simultaneously. Note that listed courses may require prerequisites. To ensure an interdisciplinary experience, selected courses must represent two or more different subject areas. A final grade of “C” or better is required for each course applied to the certificate and a cumulative GPA of 3.0 or better is required for the certificate program as a whole.</p> <p>1) Subsurface and Surface Hydrology: CE 351, 402, 460, CE/GEOLOGY 475; ENVR SCI 250, 463; GEOLOGY 303, 315; SOIL SCI 414;</p>	<p>8-18</p>

	<p>2) Water Chemistry/Ecology/Biology: AGTM 315; BIOLOGY 390, 465, 469; BSYSE 554; CE 341, 418; ENVR SCI 275, 410, 417, 463, 465, 492; NATRS 300, 411, 419, 454, 464;</p> <p>3) Water Methods & Analysis: CE 315, 341, 351, 415, 416, 418, 419, 442, 450, 451; ENVR SCI 310; SOIL SCI 468; and</p> <p>4) Water Policy & Management: CE 405, 456; CROP SCI 360; ECONS 330, 430, 431; ENVR SCI 444; HISTORY 422; NATRS 438; NATRS 460; SOC 331, 332.</p> <p>Experiential Requirement: In addition to the course requirements described above, the certificate also includes an experiential requirement of required attendance at a minimum of three water-related activities hosted by the certificate program. Participants in the program are required to attend Water Meeting and Social and Water Research Center Invited Lecture Event, both of which are conducted every Fall and Spring semester. Additional activities that may fulfill the Experiential Requirement include: field trips, documentary film screenings with discussion, and water-related internships. These additional activities require committee approval and/or competitive application.</p>	
<p>General Studies – Liberal Arts Revise graduation requirements for Bachelor of Arts in Social Sciences or Humanities Major - Plan A Option</p>	<p>I. Social Sciences or Humanities Major - Plan A Option (120 Hours)</p> <p>A. Chow, Coordinator</p> <p>This division of general studies is for students whose primary interest in the humanities or social sciences requires programs and course selections which are not possible within single academic units or established curricula. Students who wish to earn a Bachelor of Arts in Humanities or a Bachelor of Arts in Social Sciences will devise an approved, coherent program of study, which fulfills an academic or career goal and includes prerequisites consistent with the 300-400-level course work. In addition, each student will satisfy the UCOREs and any additional requirements of the College of Arts and Sciences.</p>	<p>8-18</p>

Plan A—Primary/Secondary Concentration

Primary concentration: a minimum of 24 semester credits, including at least 15 300-400-level credits, must be completed in a single humanities or social sciences department or published program with a minimum 2.00 primary concentration GPA. The degree (Gen H or Gen S) will depend on the primary concentration.

Secondary concentration: a minimum of 15 semester credits, including at least 6 300-400-level credits, must be completed in another academic department, program or area published in the catalog with a minimum 2.00 GPA.

Per Academic Regulation 54, students may not be certified in or awarded an additional major or minor if it carries the same name as one of the areas of study or options, concentrations or sub-plans within a major. In addition, students pursuing a Business major or minor may not also be certified in an option, concentration or subplan of Administrative Studies.

For a list of approved Plan A areas, please contact the Liberal Arts General Studies office.

First Year

<i>First Term</i>	<i>Hours</i>
Biological Sciences [BSCI] with lab or SCIENCE 101 [SCI] ¹	4
Creative & Professional Arts [ARTS]	3
ENGLISH 101 [WRTG]	3
Humanities [HUM]	3
Quantitative Reasoning [QUAN]	3

<i>Second Term</i>	<i>Hours</i>
Communication [COMM] or Written Communication [WRTG]	3
HISTORY 105 [ROOT]	3
Physical Sciences [PSCI] with lab or SCIENCE 102 [SCI] ¹	4
Social Sciences [SSCI]	3
Foreign Language, if necessary, or Elective	3 or 4

Second Year

<i>First Term</i>	<i>Hours</i>
Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3

Primary Concentration	3
Secondary Concentration	3
Foreign Language, if necessary, and/or Elective	6
<i>Second Term</i>	<i>Hours</i>
Diversity [DIVR]	3
Primary Concentration	3
Secondary Concentration	3
Electives	4
Complete Writing Portfolio	
Third Year	
<i>First Term</i>	<i>Hours</i>
300-400-level Primary Concentration ²	3
Primary Concentration	3
Secondary Concentration	3
Electives	6
<i>Second Term</i>	<i>Hours</i>
300-400-level Primary Concentration ²	3
300-400-level Secondary Concentration ²	3
Integrative Capstone [CAPS]	3
Electives	6
Fourth Year	
<i>First Term</i>	<i>Hours</i>
300-400-level Primary Concentration ²	6
300-400-level Secondary Concentration ²	3
Electives ²	6
<i>Second Term</i>	<i>Hours</i>
300-400-level Primary Concentration ²	3
Electives ²	12

Footnotes

¹ To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCI] course with lab or SCIENCE 101 [SCI] and SCIENCE 102 [SCI]. SCIENCE 101 [SCI] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCI]. SCIENCE 102 [SCI] is offered Spring semester.

² Students must take a total of 40 ~~hours~~ credits of upper-division (300-400 level). 21 upper-division ~~hours~~ credits must be taken within the designated concentration areas. The UCORE requirements include 3 upper-division ~~hours~~ credits. The remaining 16 hours may be taken in the electives, the UCOREs, or by electing to take more than the minimum required in the areas. Among the 300-400 level course work in the areas, two courses, each at 3 ~~hours~~ credits, must have an [M] designation. Only 6 credits of internship or P, F credits are allowed to count towards major requirements.

General Studies – Liberal Arts
 Revise graduation requirements
 for Bachelor of Arts in Social
 Sciences or Humanities Major -
 Plan B Option

**II. Social Sciences or Humanities Major - Plan B
 Option (120 Hours)**

8-18

A. Chow, Coordinator

Humanities: A combination of humanities courses totaling at least 39 hours involving three academic areas with a minimum of 9 hours in each of the three areas. At least 21 of the 39 hours must be at the 300-400 level and the GPA for the 39 hours must be a 2.00 minimum. Students declare the General Humanities major (Gen H) and receive a Bachelor of Arts in Humanities.

Social Sciences: A combination of social sciences courses totaling at least 39 hours involving three academic areas with a minimum of 9 hours in each of the three areas. At least 21 of the 39 hours must be at the 300-400 level and the GPA for the 39 hours must be a 2.00 minimum. Students declare the General Social Sciences major (Gen S) and receive a Bachelor of Arts in Social Sciences.

Per Academic Regulation 54, students may not be certified in or awarded an additional major or minor if it carries the same name as one of the areas of study or options, concentrations or sub-plans within a major. In addition, students pursuing a Business major or minor may not also be certified in an option, concentration or subplan of Administrative Studies.

For a list of approved Plan B areas, please contact the Liberal Arts General Studies office.

First Year

<i>First Term</i>	<i>Hours</i>
Biological Sciences [BSCI] with lab or SCIENCE 101 [SCI] ¹	4
Creative & Professional Arts [ARTS]	3
HISTORY 105 [ROOT]	3
Humanities [HUM]	3
Quantitative Reasoning [QUAN]	3
<i>Second Term</i>	<i>Hours</i>
Communication [COMM] or Written Communication [WRTG]	3
ENGLISH 101 [WRTG]	3
Physical Sciences [PSCI] with lab or SCIENCE 102 [SCI] ¹	4
Social Sciences [SSCI]	3
Electives	3

Second Year***First Term*** ***Hours***

Area 1	3
Area 2	3
Foreign Language, if necessary, and/or Elective	7

Second Term ***Hours***

Area 1	3
Area 3	3
Diversity [DIVR]	3
Foreign Language, if necessary, and/or Electives	6
Complete Writing Portfolio	

Third Year***First Term*** ***Hours***

300-400-level Area 1 ²	3
Area 2	3
Area 3	3
Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
Electives	3

Second Term ***Hours***

300-400-level Area 2 ²	3
300-400-level Area 3 ²	3
Integrative Capstone [CAPS]	3
Electives	6

Fourth Year***First Term*** ***Hours***

300-400 Any Area ²	9
Electives ²	6

Second Term ***Hours***

300-400 Any Area ²	3
Electives ²	12

Footnotes

¹ To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCI] course with lab or SCIENCE 101 [SCI] and SCIENCE 102 [SCI]. SCIENCE 101 [SCI] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCI]. SCIENCE 102 [SCI] is offered Spring semester.

² Students must take a total of 40 ~~hours~~ credits of upper-division (300-400 level). 21 upper-division ~~hours~~ credits must be taken within the designated

	<p>concentration areas. The UCORE requirements include 3 upper-division hours credits. The remaining 16 hours credits may be taken in the electives, the UCOREs, or by electing to take more than the minimum required in the areas. Among the 300-400 level course work in the areas, two courses, each at 3 hours credits, must have a [M] designation. <u>Only 6 credits of internship or P, F credits are allowed to count towards major requirements.</u></p>	
<p>General Studies – Sciences {S} Revise General Studies – Physical Sciences Plan A and Plan B for clarification.</p>	<p>General Studies – Physical Sciences. This degree has two plans of study (Plan A and Plan B). Both require CHEM 105 and 106, MATH 171 and 172, and PHYSICS 201 and 202.</p> <p>Plan A students must have a primary and secondary concentration. For the primary concentration students are required to complete minimum of 24 credits (minimum 15 credits at the 300-400 level) from one of the following areas: <u>applied technologies (computer science, engineering, or other technical disciplines)</u>, astronomy, civil engineering, chemical engineering, chemistry, computer science, geology, mathematics, mechanical engineering, materials science engineering, physics, or statistics. <u>Students will work with the academic advisor for this program in the Department of Physics and Astronomy.</u> For the secondary concentration a minimum of 15 semester credits (including a minimum 6 at the 300-400-level), must be completed in another academic department, program, or area published in the catalog. Both concentration areas require a minimum 2.0 GPA.</p> <p>Plan B students must complete 39 credits (minimum of 21 credits in the 300-400 level) in three or more physical sciences with a minimum of 9 credits in each concentration area and a minimum 2.0 GPA in each concentration area.</p>	<p>8-17</p>
<p>Human Development {S} Revise requirements for certificate in Early Childhood Education to remove one course the department mistakenly included in requirements</p>	<p>Early Childhood Education</p> <p>The Department of Human Development offers a Certificate in Early Childhood Education. The certificate is only available to students who (a) are living in the state of Washington; (b) are currently majoring in Human Development or who have completed the Human Development major within the past 10 years; and (c) have satisfied the necessary prerequisites. Students must maintain an overall GPA of 2.6 in courses required for the certificate. Required courses to complete the certificate include H D 220, 302, 306, 341, 342, 446, 482.</p>	<p>8-18</p>

<p>Mechanical and Materials Engineering Revise graduation requirements for Bachelor of Science in Mechanical Engineering</p>	<p>Mechanical Engineering (125 125 127 Hours)</p> <p>Third Year</p> <table border="0"> <thead> <tr> <th><i>First Term</i></th> <th><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>E E 304 or 261</td> <td>2 or 3</td> </tr> <tr> <td>ME 301</td> <td>3</td> </tr> <tr> <td>ME 303</td> <td>3</td> </tr> <tr> <td>ME 313</td> <td>3</td> </tr> <tr> <td>MSE 201</td> <td>3</td> </tr> <tr> <td>MATH/STAT 370</td> <td>3</td> </tr> <tr> <td colspan="2"> </td> </tr> <tr> <th><i>Second Term</i></th> <th><i>Hours</i></th> </tr> <tr> <td><u>E E 262</u></td> <td><u>1</u></td> </tr> <tr> <td>ENGLISH 402 [WRTG]</td> <td>3</td> </tr> <tr> <td>ME 304</td> <td>3</td> </tr> <tr> <td>ME 306</td> <td>2</td> </tr> <tr> <td>ME 310</td> <td>2</td> </tr> <tr> <td>ME 311</td> <td>1</td> </tr> <tr> <td>ME 316</td> <td>3</td> </tr> <tr> <td>ME 348</td> <td>3</td> </tr> </tbody> </table>	<i>First Term</i>	<i>Hours</i>	E E 304 or 261	2 or 3	ME 301	3	ME 303	3	ME 313	3	MSE 201	3	MATH/STAT 370	3	 		<i>Second Term</i>	<i>Hours</i>	<u>E E 262</u>	<u>1</u>	ENGLISH 402 [WRTG]	3	ME 304	3	ME 306	2	ME 310	2	ME 311	1	ME 316	3	ME 348	3	<p>8-18</p>
<i>First Term</i>	<i>Hours</i>																																			
E E 304 or 261	2 or 3																																			
ME 301	3																																			
ME 303	3																																			
ME 313	3																																			
MSE 201	3																																			
MATH/STAT 370	3																																			
<i>Second Term</i>	<i>Hours</i>																																			
<u>E E 262</u>	<u>1</u>																																			
ENGLISH 402 [WRTG]	3																																			
ME 304	3																																			
ME 306	2																																			
ME 310	2																																			
ME 311	1																																			
ME 316	3																																			
ME 348	3																																			
<p>Molecular Biosciences Revise graduation requirements for minor in Genetics and Cell Biology</p>	<p>Genetics and Cell Biology</p> <p>A minor in genetics and cell biology requires 16 hours <u>credits</u> under the genetics and cell biology degree program at the 300-400-level, including MBIOS 301, 401, and 423 <u>478</u>. Additional credits may be selected from <u>BIOLOGY 321</u>, MBIOS 402, 404, 423, 426, 478, and <u>no more than one from ANIM SCI 330, BIOLOGY 321, 335, CROP SCI/HORT 445, NEUROSCI 305, PHIL 365</u>. 9 hours <u>credits</u> of upper-division work must be taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. A grade of C or better is required in all course work for the minor.</p>	<p>8-18</p>																																		
<p>Sociology New interdepartmental undergraduate certificate: Sustainable Organizational Leadership; (Sociology and Business). For all Campuses:</p>	<p>Sustainable Organizational Leadership</p> <p>The Certificate in Sustainable Organizational Leadership at WSU is open to all majors. This interdisciplinary certificate provides value to students by building synergies</p>	<p>8-18</p>																																		

<p>Everett, Global, Pullman, Spokane, Tri-Cities, Vancouver</p>	<p>across two strongly complementary units: the Department of Sociology and the Carson College of Business.</p> <p>Environmental and resource sustainability is an important social problem and an increasingly common issue across for-profit, not-for-profit, and governmental workplaces. Achieving sustainability requires attention to the intersections of three key domains – financial, environmental, and social. This certificate will develop student expertise and skills in these three arenas and the intersections between them, producing leaders who can act to achieve sustainability goals across a diversity of organizational settings.</p> <p>The Certificate in Sustainable Organizational Leadership requires 15 credits including SOC 332, 340, and MGMT 301, and three electives drawn from: HBM 381 or MGMT 401; MGMT 483, 487; SOC 335, 336, 430, 474.</p>	
<p>Teaching and Learning {S} Extend undergraduate Add-On Endorsement - Reading [graduate courses] to Global Campus</p>	<p>Specific Subject Teacher Certificate (0 Hours)</p> <p>ADD-ON ENDORSEMENTS</p> <p>Reading [graduate courses]: TCH LRN 528, 537, 544, 546, 551, 553, 558.</p>	<p>8-17</p>