UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 2

Fall 2024

Faculty Senate approved October 31, 2024

--REQUIREMENTS-

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.

Department	Proposed	Effective Date
Biological Sciences Revise requirements for BS in Biology - Basic Medical Sciences	Biology – Basic Medical Sciences Option (120 Credits) Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level. Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of college-level foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 4918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a	8-25

Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 1918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Term	Credits
BIOLOGY 106 [BSCI] or 107 [BSCI]	4
CHEM 105 [PSCI]	4
Diversity [DIVR]	3
ENGLISH 101 [WRTG]	3
Second Term	Credits
BIOLOGY 106 or 107	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4
Second Year	
First Term	Credits

Arts [ARTS]	3
Bio logy- Core ¹	4 or 3
CHEM 345	3 or 4 4
Electives ²	4
	•
Second Term Bio logy Core ¹	Credits 4 or 3
CHEM 348	4 01 3
Social Sciences [SSCI]	3
Electives ²	6
Complete Writing Portfolio	
Third Year	
First Term	Credits
Bio logy Core ¹	3 or 4
Communication [COMM] or Written Communication [WRTG]	3
Program Option Course ³	3 or 4
Foreign Language or Electives ^{2,4}	4
<u>Electives</u>	<u>1</u>
Second Term	Credits
CHEM 370 or MBIOS 303	3 or 4
Humanities [HUM] ⁵	3
Program Option Course ³	3 or 4
Foreign Language or Electives ^{2,4}	4
Fourth Year	
First Term	Credits
Equity and Justice [EQJS]	3
Program Option Course ³	3 or 4
Electives ²	12
Second Term	Credits
BIOLOGY Capstone [CAPS] [M] or HONORS 450	3
Electives ²	12
Footnotes	
¹ Biology Core (11 credits required): BIOLOGY 301, 370 [M] or 372 [M], and 395 or BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one or 405	
 or 405. Students should consult with their advisor for additional courses in Physics or Statisti required for entrance to a graduate or professional program. <u>Must include sufficient 3 courses to meet University Requirement of 40 credits of Upper Division coursework.</u> 	

- ³ Program Option Courses (9 credits minimum required): Approved courses are BIOLOGY 251, 315, 321, 324, 333 350, 352, 353, 354, 393, 418; MBIOS 304, 305, 306, 401, 405, 413, 414, 423, 440, 442, 446; NEUROSCI 301, 403, 404, 430; PSYCH 372. Students should consult with their advisor as some professional schools require junior-level physiology or higher.
- 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.
- ⁵ PHIL 365 [HUM] may be required for admission to some graduate and professional programs.

Biological Sciences Revise requirements for BS in Biology Ecology and Evolutionary Biology Option

Biology – Ecology and Evolutionary Biology (120 Credits)

Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 1918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Year

First Term	Credits
BIOLOGY 106 [BSCI] or 107 [BSCI] ¹	4
CHEM 105 [PSCI]	4
Diversity [DIVR]	3
ENGLISH 101 [WRTG]	3
Second Term	Credits

BIOLOGY 106 or 107 [‡]	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4
Second Year	
First Term	Credits
BioCore ¹	3 or 4
BIOLOGY 301-1	4
CHEM 345	4
Humanities [HUM]	3
Social Sciences [SSCI]	3
Second Term	Credits
Arts [ARTS]	3
BioCore ¹	3 or 4
BIOLOGY 395, 403, or 405 ¹	3
Program Option Course: Ecology or Evolution Emphasis ²	3 or 4
STAT 212, 412, or PSYCH 311	3 or 4
Electives	3 <u>or 4</u>
Complete Writing Portfolio	
Third Year	
First Term	Credits
BioCore ¹	4 or 3
BIOLOGY 370 [M] or 372 [M] ¹	4
PHYSICS 101 or 201	3
PHYSICS 111 or 211	1
Program Option Course: Physiology Emphasis ²	3 or 4
Foreign Language or Electives ³	4
Second Term	Credits
Communication [COMM] or Written Communication [WRTG]	3
PHYSICS 102 or 202	3
PHYSICS 112 or 212	1
Program Option Course, Ecology or Evolution Emphasis ²	3 or 4
Foreign Language or Electives ³	4
Electives	3
Fourth Year	
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

BIOLOGY 473 [CAPS] [M], 483 [CAPS] [M], or 489 [CAPS] [M] ⁴	3	
BIOLOGY Capstone [CAPS] [M]	<u>3</u>	
Program Option Course: Ecology or Evolution Emphasis ^{2,54}	3 or 4	
Electives	9 10	
Second Term	Credits	
Equity and Justice [EQJS]	3	
Program Option Course: Ecology or Evolution Emphasis, or Electives ^{2,54}	3	
Electives	9	
Complete School of Biological Sciences Exit Survey		
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- All biology majors must complete 19 credits of Biology Core courses (BIOLOGY 106; 107; 301; 370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements or electives. These must include 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. 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 and sufficient 300-400 level coursework to meet the University requirement of 40 upper division credits. BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.
- Ecology and Evolution Option requirements include one course from the Physiology Emphasis area (BIOLOGY 350 or BIOLOGY 420); 12 total credits from the Ecology Emphasis (BIOLOGY 330, 410, 462, 469, 483 [CAPS]) and the Evolution/Organismal Emphasis (BIOLOGY 322, 324, 332, 335, 408 [CAPS], 409, 412, 418, 423, 428, 432, 438). At least one course must be from the Ecology Emphasis and one course from the Evolution/Organismal Emphasis.
- ³ 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.
- ⁴ Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.
- 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, 370 [M] or 372 [M], one from 395, 403, or 405), 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 and sufficient 300-400-level coursework to meet the University requirement of 40 upper division credits.

Biological SciencesRevise requirements for BS in Biology Education Option

Biology – Education Option (120 Credits)

Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of college-

level foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 1918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

Students completing this degree will earn a B.S. in Biology. In order to obtain teaching credentials in the State of Washington, students must complete additional requirements. Completion of the Master in Teaching (MIT) program at WSU will meet state certification requirements (for details, please see https://education.wsu.edu/graduate/mit/). A 3.0 is the minimum GPA for admission to the MIT program at WSU. Students obtaining Biology Education Option would also be competitive for other post-baccalaureate teacher certification programs.

First Term	Credits
Arts [ARTS]	3
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI] ⁴	4
HISTORY 105 [ROOT]	3
Second Term	Credits
BIOLOGY 107	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
ENGR 120	2
Humanities [HUM]	3
Second Year	
First Term	Credits
BioCore ¹	<u>3 or 4</u>
BIOLOGY 301	4

CHEM 345	4	
Diversity [DIVR]	3	
TCH LRN 301	3	
Foreign Language , if needed ² or Electives	0 - 4	
Second Term	Credits	
BioCore ¹	3 or 4	
CHEM 370 or MBIOS 303	3 or 4	
Communication [COMM] or Written Communication [WRTG]	3	
MATH 140 [QUAN] or 171 [QUAN] ¹	4	
PSYCH 105 [SSCI]	3	
Foreign Language ² , if needed, or Electives ²	3 or 4	
Complete Writing Portfolio		
Third Year		
First Term	Credits	
BioCore ¹	<u>4 or 3</u>	
BIOLOGY 370 [M] or 372 [M]	4	
Equity and Justice [EQJS]	3	
PHYSICS 101 or 201	3	
PHYSICS 111 or 211	1	
Program Electives ³	<u>3 or </u> 4	
Second Term	Credits	
PHYSICS 102 or 202	3	
PHYSICS 112 or 212	1	
TCH LRN 465	3	
Program Option Requirements ⁴ -Course ³	3 or 4	
Program-Electives ³	<u>46</u>	
Fourth Year		
First Term	Credits	
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	
Second Term	Credits	
BIOLOGY <u>Capstone</u> [CAPS][M] or HONORS 450 ⁵	3	
BIOLOGY 403 or 405	3	
BIOLOGY/TCH LRN 431	3	

PSYCH 105 [SSCI]	<u>3</u>
Program Option Requirements Course 43	3 or 4
Program Electives or Electives ³	3 <u>or 4</u>
Complete School of Biological Sciences Exit Survey	

- ¹ MATH 106 may be taken as a pre /co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed. BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.
- 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.
- Beyond the core requirements (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], one from 395, 403, or 405, BIOLOGY [CAPS] or HONORS 450), 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.
- ⁴³ Program Option <u>FR</u>equirements include one Biology Plant <u>Electivecourse</u> (BIOLOGY 332[M], 401[CAPS], 409, or 420) and one Biology Animal <u>Electivecourse</u> (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, <u>GEOLOGY SOE</u> 102, 210.
- ⁵ Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.

Biological SciencesRevise requirements

Revise requirements for BS in Biology -Entomology Option

Biology – Entomology Option (120 Credits)

Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 1918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified

by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Term Credits BIOLOGY 106 [BSCI] or 107 [BSCI] [†] 4 CHEM 105 [PSCI] 4 Diversity [DIVR] 3 ENGLISH 101 [WRTG] 3 Second Term Credits BIOLOGY 106 or 107 [†] 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 Second Year Credits First Term Credits Arts [ARTS] 3 BioCore ¹ 3 or 4 BIOLOGY 301 [‡] 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore ¹ 4 or 3 BIOLOGY 395, 403, or 405 [‡] 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis ^{2,3} 3 or 4 Complete Writing Portfolio Third Year First Term Credits BioCore ¹ 3 or 4	First Year	
CHEM 105 [PSCI] 4 Diversity [DIVR] 3 ENGLISH 101 [WRTG] 3 Second Term Credits BIOLOGY 106 or 107 ¹ 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 Second Year Credits First Term Credits Arts [ARTS] 3 BioCore ¹ 3 or 4 BIOLOGY 301 [‡] 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore ¹ 4 or 3 BIOLOGY 395, 403, or 405 [‡] 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Courses: Biochemistry Emphasis ^{2,3} 3 or 4 Complete Writing Portfolio Third Year First Term Credits	First Term	Credits
Diversity [DIVR] 3 ENGLISH 101 [WRTG] 3 Second Term Credits BIOLOGY 106 or 107 [‡] 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 Second Year First Term Credits Arts [ARTS] 3 BioCore [‡] 3 or 4 BIOLOGY 301 [‡] 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore [‡] 4 or 3 BIOLOGY 395, 403, or 405 [‡] 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis ^{2,3} 3 or 4 Complete Writing Portfolio Third Year First Term Credits Cr	BIOLOGY 106 [BSCI] or 107 [BSCI] ¹	4
ENGLISH 101 [WRTG] 3 Second Term Credits BIOLOGY 106 or 107 [‡] 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 Second Year Credits First Term Credits Arts [ARTS] 3 BioCore¹ 3 or 4 BHOLOGY 301 [‡] 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore¹ 4 or 3 BIOLOGY 395, 403, or 405 [‡] 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis².³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	CHEM 105 [PSCI]	4
Second Term Credits BIOLOGY 106 or 107 ¹ 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 Second Year First Term Credits Arts [ARTS] 3 BioCore ¹ 3 or 4 BIOLOGY 301 ¹ 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore ¹ 4 or 3 BIOLOGY 395, 403, or 405 ¹ 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis ^{2,3} 3 or 4 Complete Writing Portfolio Third Year First Term Credits	Diversity [DIVR]	3
BIOLOGY 106 or 107 [‡] CHEM 106 HISTORY 105 [ROOT] MATH 140 [QUAN] or 171 [QUAN] Second Year First Term Credits Arts [ARTS] BioCore ¹ BIOLOGY 301 [‡] CHEM 345 ENTOM 343 Second Term Credits BioCore ¹ 4 or 3 BIOLOGY 395, 403, or 405 [‡] Humanities [HUM] Social Sciences [SSCI] STAT 212, 412, or PSYCH 311 Program Option Course: Biochemistry Emphasis ^{2,3} Complete Writing Portfolio Third Year First Term Credits	ENGLISH 101 [WRTG]	3
CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 Second Year First Term Credits Arts [ARTS] 3 BioCore¹ 3 or 4 BHOLOGY 301⁴ 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore¹ 4 or 3 BHOLOGY 395, 403, or 405⁴ 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis².³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	Second Term	Credits
HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4	BIOLOGY 106 or 107 ⁴	4
MATH 140 [QUAN] or 171 [QUAN] 4 Second Year First Term Credits Arts [ARTS] 3 BioCore¹ 3 or 4 BIOLOGY 301⁴ 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore¹ 4 or 3 BIOLOGY 395, 403, or 405⁴ 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis².³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	CHEM 106	4
Second Year First Term Credits Arts [ARTS] 3 3 BioCore¹ 3 or 4 4 BIOLOGY 301¹ 4 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore¹ 4 or 3 BIOLOGY 395, 403, or 405¹ 3 3 Humanities [HUM] 3 3 Social Sciences [SSCI] 3 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis².³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	HISTORY 105 [ROOT]	3
First Term Credits Arts [ARTS] 3 BioCore¹ 3 or 4 BIOLOGY 301⁴ 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore¹ 4 or 3 BIOLOGY 395, 403, or 405⁴ 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis².³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	MATH 140 [QUAN] or 171 [QUAN]	4
Arts [ARTS] 3 BioCore¹ 3 or 4 BIOLOGY 301¹ 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore¹ 4 or 3 BIOLOGY 395, 403, or 405¹ 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis².³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	Second Year	
BioCore¹ 3 or 4 BIOLOGY 301¹ 4 CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore¹ 4 or 3 BIOLOGY 395, 403, or 405¹ 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis²,³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	First Term	Credits
## BIOLOGY 301 [‡]	Arts [ARTS]	3
CHEM 345 4 ENTOM 343 3 Second Term Credits BioCore1 4 or 3 BIOLOGY 395, 403, or 4051 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis2,3 3 or 4 Complete Writing Portfolio Third Year First Term Credits	BioCore ¹	3 or 4
ENTOM 343 Second Term Credits BioCore¹ 4 or 3 BIOLOGY 395, 403, or 405¹ 3 Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis²,³ 3 or 4 Complete Writing Portfolio Third Year First Term Credits	BIOLOGY 301 ⁴	4
Second Term BioCore¹ BioLoGY 395, 403, or 405⁴ Humanities [HUM] Social Sciences [SSCI] STAT 212, 412, or PSYCH 311 Program Option Course: Biochemistry Emphasis²,³ Complete Writing Portfolio Third Year First Term Credits	CHEM 345	4
BioCore¹ BIOLOGY 395, 403, or 405⁴ Humanities [HUM] Social Sciences [SSCI] STAT 212, 412, or PSYCH 311 Program Option Course: Biochemistry Emphasis²,³ Complete Writing Portfolio Third Year First Term Credits	ENTOM 343	3
BIOLOGY 395, 403, or 405 ¹ Humanities [HUM] Social Sciences [SSCI] STAT 212, 412, or PSYCH 311 Program Option Course: Biochemistry Emphasis ^{2,3} Complete Writing Portfolio Third Year First Term Credits	Second Term	Credits
Humanities [HUM] 3 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Course: Biochemistry Emphasis ^{2,3} 3 or 4 Complete Writing Portfolio Third Year First Term Credits	BioCore ¹	<u>4 or 3</u>
Social Sciences [SSCI] STAT 212, 412, or PSYCH 311 Program Option Course: Biochemistry Emphasis ^{2,3} Complete Writing Portfolio Third Year First Term Credits	BIOLOGY 395, 403, or 405 ¹	3
STAT 212, 412, or PSYCH 311 Program Option Course: Biochemistry Emphasis ^{2,3} Complete Writing Portfolio Third Year First Term Credits	Humanities [HUM]	3
Program Option Course: Biochemistry Emphasis ^{2,3} Complete Writing Portfolio Third Year First Term Credits	Social Sciences [SSCI]	3
Complete Writing Portfolio Third Year First Term Credits	STAT 212, 412, or PSYCH 311	3 or 4
Third Year First Term Credits	Program Option Course: Biochemistry Emphasis ^{2,3}	3 or 4
First Term Credits	Complete Writing Portfolio	
	Third Year	
$\underline{\text{BioCore}^1} \qquad \underline{3 \text{ or } 4}$		Credits
	<u>BioCore¹</u>	3 or 4

	BIOLOGY 370 [M] or 372 [M] ¹	4	
	PHYSICS 101 or 201	3	
	PHYSICS 111 or 211	1	
	Program Option Course: Animal Biology Emphasis ³²	4	
	Foreign Language ³ or Electives ⁴	4	
	Second Term	Credits	
	Equity and Justice [EQJS]	3	
	PHYSICS 102 or 202	3	
	PHYSICS 112 or 212	1	
	Program Option Course: Plant Biology Emphasis ³²	3	
	Foreign Language ³ or Electives ⁴	<u>64</u>	
	Fourth Year		
	First Term	Credits	
	BIOLOGY 473 [CAPS] [M], 483 [CAPS] [M], or 489 [CAPS] [M]	⁵ 3	
	BIOLOGY Capstone [CAPS] [M]	<u>3</u>	
	Communication [COMM] or Written Communication [WRTG]	3	
	Program Option Course: Entomology Emphasis ³²	3	
	Electives	<u>68</u>	
	Second Term	Credits	
	Program Option Course: Entomology Emphasis ³²	3	
	Electives	12 13	
	Complete School of Biological Sciences Exit Survey		
	Footnotes		
	All biology majors must complete 19 credits of Biology Core courses (BIOLOGY 106; 370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements of These must include 15 upper division credits, 6 of which must be a BIOLOGY prefix tal residence at WSU. Approved courses include 200-400 level BIOLOGY courses except to fulfill core requirements. A maximum of 4 credits of coursework graded S/F may be a fulfilling departmental requirements or program options and must be approved by advised Coursework must include a total of two BIOLOGY [M] courses and sufficient 300-400-coursework to meet the University requirement of 40 upper division credits. BioCore (10 required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.	or electives. ken in hose used used toward or. level) credits	
	² Entomology Program option electives include 6 credits of 300 400 level ENTOM course ENTOM 343.	-	
	³² Entomology Option Requirements include one course from the Biochemistry Emphasis or MBIOS 303); one course from the Plant Biology Emphasis area (BIOLOGY 332[M] course from the Animal Biology Emphasis area (BIOLOGY 322, 350, or 418) and two-ecredits from the Entomology Emphasis (any ENTOM-prefix, upper division 300-400-levex excluding ENTOM 343).	or 420); one courses <u>six</u>	
	⁴³ 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.		
	⁵ Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] cou	irse.	
Biological Sciences	Biology – General Option (120 Credits)		8-25

for BS in Biology -General Option

Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 1918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Term	Credits
BIOLOGY 106 [BSCI] or 107 [BSCI] ⁴	4
CHEM 105 [PSCI]	4
Diversity [DIVR]	3
ENGLISH 101 [WRTG]	3
Second Term	Credits
BIOLOGY 106 or 107 ⁴	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4
Second Year	
First Term	Credits

Arts [ARTS]	3	
BioCore ¹	<u>3 or 4</u>	
BIOLOGY 301 ⁴	4	
CHEM 345	4	
Humanities [HUM]	3	
Second Term	Credits	
BioCore ¹	<u>4 or 3</u>	
BIOLOGY 370 [M] or 372 [M] ¹	4	
Program Option Course: Biochemistry Emphasis ²	3 or 4	
Social Sciences [SSCI]	3	
STAT 212, 412, or PSYCH 311	3 or 4	
$ $ Electives 3	3 <u>or 4</u>	
Complete Writing Portfolio		
Third Year		
First Term	Credits	
BioCore ¹	3 or 4	
BIOLOGY 395, 403, or 405 ¹	3	
Communication [COMM] or Written Communication [WRTG]	3	
PHYSICS 101 or 201	3	
PHYSICS 111 or 211	1	
Program Option Courses: Cell Biology Emphasis ²	3	
Foreign Language ⁴ or Electives ³	<u>3 or </u> 4	
Second Term	Credits	
Equity and Justice [EQJS]	3	
PHYSICS 102 or 202	3	
PHYSICS 112 or 212	1	
Program Option <u>Course²</u> or Electives ³	3 or 4	
Foreign Language ⁴ or Electives ³	4	
Fourth Year		
First Term	Credits	
BIOLOGY 473 [CAPS] [M] , 483 [CAPS] [M], or 489 [CAPS] [M]	3	
Program Option or Electives ⁵³	6 - 8	
Electives ³	<u>68</u>	
Second Term	Credits	
Program Option <u>Course</u> ² or Electives ⁵ 3	6 - 8	
Electives ³	9	
Complete School of Biological Sciences Exit Survey		

- All biology majors must complete 19 credits of Biology Core courses (BIOLOGY 106; 107; 301; 370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements or electives. These must include 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. 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 and sufficient 300-400 level coursework to meet the University requirement of 40 upper division credits. BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.
- ² General Biology Option Requirements include one course from the Biochemistry Emphasis (CHEM 370 or MBIOS 303); and one course from the Cell Biology Emphasis (BIOLOGY 352 or MBIOS 405).
- General Biology Option Electives include a minimum of 15 credits of Biological Science selected in consultation with a biology advisor. These should include coursework to fulfill the University requirement of 40 upper division credits.
- ³⁴ 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.
- ⁴ Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.
- General Biology Option Electives include a minimum of 15 credits of Biological Science selected in consultation with a biology advisor. These should include coursework to fulfill the University requirement of 40 upper division credits.

Biological SciencesRevise requirements for BS in Biology Plant Biology Option

Biology – Plant Biology Option (120 Credits)

Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 1918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey.

Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Bi		
First Year		
First Term	Credits	
BIOLOGY 106 [BSCI] or 107 [BSCI] ⁺	4	
CHEM 105 [PSCI]	4	
Diversity [DIVR]	3	
ENGLISH 101 [WRTG]	3	
Second Term	Credits	
BIOLOGY 106 or 107 ¹	4	
CHEM 106	4	
HISTORY 105 [ROOT]	3	
MATH 140 [QUAN] or 171 [QUAN]	4	
Second Year		
First Term	Credits	
Arts [ARTS]	3	
BioCore ¹	3 or 4	
BIOLOGY 301 ¹	4	
CHEM 345	4	
Humanities [HUM]	3	
Second Term	Credits	
BioCore ¹	<u>4 or 3</u>	
BIOLOGY 370 [M] or 372 [M] ¹	4	
Social Sciences [SSCI]	3	
STAT 212, 412, or PSYCH 311	3 or 4	
Electives ²	<u>46</u>	
Complete Writing Portfolio		
Third Year		
First Term	Credits	
BioCore ¹	3 or 4	
BIOLOGY 395, 403, or 405 ¹	3	
BIOLOGY 420	3	
Communication [COMM] or Written Communication [WRTG]	3	
PHYSICS 101 or 201	3	
PHYSICS 111 or 211	1	
Program Option Course ³	3	
Foreign Language ⁴ or Electives ²	4	

	Second Term	Credits	
	BIOLOGY 332 [M]	4	
	Equity and Justice [EQJS]	3	
	PHYSICS 102 or 202	3	
	PHYSICS 112 or 212	1	
	Program Option Course ³	<u>3</u>	
	Foreign Language ⁴ or Electives ²	4	
	Fourth Year		
	First Term	Credits	
	BIOLOGY 409	4	
	BIOLOGY 473 [CAPS] [M], 483 [CAPS] [M], or 489 [CAPS] [M]. ^{1,3}	3	
	BIOLOGY Capstone [CAPS] [M]	3	
	Program Option Courses or Electives ⁴²	3 4	
	Electives ²	<u>69</u>	
	Second Term	Credits	
	BIOLOGY 462 or 469	3	
	Program Option Course ³	4	
	Program Option or Electives ⁴²	43	
	Electives	8	
	Complete School of Biological Sciences Exit Survey		
	Footnotes		
	All biology majors must complete 19 credits of Biology Core courses (BIOLOGY 106 370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements. These must include 15 upper division credits, 6 of which must be a BIOLOGY prefix to residence at WSU. Approved courses include 200-400 level BIOLOGY courses except to fulfill core requirements. A maximum of 4 credits of coursework graded S/F may be fulfilling departmental requirements or program options and must be approved by advicting Coursework must include a total of two BIOLOGY [M] courses and sufficient 300-400 coursework to meet the University requirement of 40 upper division credits. BioCore (required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 40 42 Plant Biology Option Electives include a minimum of 7 seven credits of Biological Sci	or electives. eaken in those used used toward sor. level 10 credits 5.	
	in consultation with a biology advisor. These should include coursework to fulfill the U requirement of 40 upper division credits.		
	² Program Option Courses are BIOLOGY 332[M], BIOLOGY 409, BIOLOGY 420, and 462 or BIOLOGY 469.	I BIOLOGY	
	²⁴ Two years of high school foreign language or at least two semesters of college-level fo language are required by the College of Arts and Sciences for graduation.	_	
	3 Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] ex		
	Plant Biology Option Electives include a minimum of 7 credits of Biological Science s consultation with a biology advisor. These should include coursework to fulfill the Uni requirement of 40 upper division credits.		
Biological Sciences	Biology – Pre-Physical Therapy / Pre-Occupational The	rapy / 8-	-2:
Revise requirements for BS in Biology -	Pre-Physician Assistant Option (120 Credits)		

Pre-Physical Therapy / Pre-Occupational Therapy / Pre-Physician Assistant Option Candidates for the Bachelor of Science in Biology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires a 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 1918 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework that includes eight credits of program options listed below is required and should be selected in consultation with your biology advisor. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU. Coursework must include two one additional BIOLOGY writing in the major courses (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Term	Credits
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI] [‡]	4
ENGLISH 101 [WRTG]	3
SOC 101 [SSCI]	3
Second Term	Credits
BIOLOGY 107	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN] ¹	4
Second Year	
First Term	Credits

ANTH 203 [DIVR] or Diversity [DIVR] ²	3
BIOLOGY 251 or 353	4
CHEM 345	4
Program Option Course ^{1,2,3,4}	<u>3</u>
PSYCH 105	3
Second Term	Credits
BIOLOGY 301	4
BioCore ⁵	<u>3 or 4</u>
PHIL 365 [HUM]	3
PHYSICS 101 or 201	3
PHYSICS 111 or 211	1
STAT 212, 412, or PSYCH 311	3 or 4
Complete Writing Portfolio	
Third Year	
First Term	Credits
BIOLOGY 315 or 354	4
BIOLOGY 393 [M], 490 [M], or BIOLOGY [M] ^{2,3,4}	2-4
Foreign Language ⁶ , if needed, or Program Emphasis Requirements Option Course ^{1,2,3,4,5}	3 or 4
PHYSICS 102 or 202	3
PHYSICS 112 or 212	1
Program Option Course ^{1,2,3,4}	2 or 4
PSYCH 333	3
Second Term	Credits
Arts [ARTS]	3
BioCore ⁵	<u>3 or 4</u>
BIOLOGY 370 [M] 372 [M]	4
H D 101 or PSYCH 361 ^{2,3,4}	3
Program Option Course ^{1,2,3,4}	<u>3</u>
Foreign Language ⁶ , if needed, or Electives ^{5,6}	<u>68</u>
Fourth Year	
First Term	Credits
ENGLISH 402 [WRTG]	3
Equity and Justice [EQJS]	3
Program Emphasis Requirements or Electives ^{2,3,4,6}	9
Program Option Course ^{1,2,3,4} or Electives	9
Second Term	Credits

BIOLOGY <u>Capstone</u> [CAPS] [M] or HONORS 450 ⁷	3
BioCore ⁵	<u>3</u>
BIOLOGY 395, 403, or 405 Diversity [DIVR]	<u>3</u>
Program Emphasis Requirements or Electives ^{2,3,4,6}	10
Program Option Course ^{1,2,3,4} or Electives	<u>7</u>
Complete School of Biological Sciences Exit Survey	

- + MATH 106 may be taken as a pre /co-requisite to CHEM 105 and other MATH courses. MATH 108 may also be needed.
- 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. 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.
- ² Pre-Occupational Therapy Program emphasis (13 credits) includes ANTH 203, BIOLOGY 220, BIOLOGY 393 [M], COM 102, H D 101.
- 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.
- 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.
- ⁵ BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.
- 56 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.
- 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, 370 [M] or 372 [M], one from 395, 403, or 405, BIOLOGY [CAPS] or HONORS 450), 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.
- ⁷ Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.

Biological SciencesRevise requirements for BS in Zoology Accelerated PreVeterinary Option

Zoology - Accelerated Pre-Veterinary Option (121 Credits)

The Accelerated Pre-Veterinary Option track allows qualified students to earn both a Bachelor of Science in Zoology and Doctor of Veterinary Medicine within a seven-year span. Interested students must be advised by faculty in the School of Biological Sciences, and should contact the school no later than the first semester of the sophomore year. Candidates for the Bachelor of Science in Zoology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Students must complete a minimum of 90 undergraduate credits, including 30 credits of 300-400 level coursework, and be accepted into the Veterinary Medicine program to complete this degree.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are

fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 19 18 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework selected in consultation with your biology advisor is required. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU, one additional BIOLOGY writing in the major course (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). VET MED credits fulfill other Program Option electives requirements. An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

For more information about the Accelerated Pre-Vet Option program contact the School of Biological Sciences.

First Term	Credits
BIOLOGY 106 [BSCI] or 107 [BSCI]- ¹	4
CHEM 105 [PSCI]	4
Diversity [DIVR]	3
ENGLISH 101 [WRTG]	3
Second Term	Credits
BIOLOGY 106 or 107 ⁴	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4
Second Year	
First Term	Credits
Arts [ARTS]	3
BioCore ¹	3 or 4
BIOLOGY 301 ¹	4
CHEM 345	4

STAT 212, 412, or PSYCH 311	3 or 4
Second Term	Credits
BioCore ¹	<u>3 or 4</u>
BIOLOGY 395, 403, or 405 ¹	3
CHEM 370 or MBIOS 303	3 or 4
Communication [COMM] or Written Communication [WRTG]	3
PHYSICS 101 or 201	3
PHYSICS 111 or 211	1
Complete Writing Portfolio	
Third Year	
First Term	Credits
BIOLOGY 321 [M] or BIOLOGY 322 [M] ¹²	4
Humanities [HUM]	<u>3</u>
PHYSICS 102 or 202	3
PHYSICS 112 or 212	1
Program Option Course: Development Emphasis; or Humanities [HUM] ²	3 or 4
Social Sciences [SSCI]	3
Foreign Language or Elective ³	4
Second Term	Credits
BIOLOGY 473 [CAPS] [M], 483 [CAPS] [M], or 489 [CAPS] [M]-4	3
BioCore ¹	<u>3</u>
BIOLOGY Capstone [CAPS] [M]	<u>3</u>
Equity and Justice [EQJS]	3
Program Option Course: Development Emphasis; or Humanities [HUM] ²	4 or 3
Foreign Language or Elective ³	<u>34</u>
Fourth Year	
First Term	Credits
VET MED 510	4
VET MED 511 ⁵⁴	5
VET MED 513	4
VET MED 568	2
VET MED 586	1
Second Term	Credits
VET MED 512	4
VET MED 520 ⁵⁴	5

VET MED 521	3
VET MED 534	3
VET MED 545	3
VET MED 580	1
Complete School of Biological Sciences Exit Survey	

- ¹ All zoology majors must complete 19 credits of Biology Core courses (BIOLOGY 106; 107; 301; 370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements or electives. These must include 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. 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 and sufficient 300 400 level coursework to meet the University requirement of 40 upper division credits. BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.
- ² Accelerated Pre-Vet Option Requirements include one course from the Development Emphasis area (BIOLOGY 321 or 322).
- 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.
- ⁴ Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.
- ⁵⁴ Accelerated Pre-Vet Option requirements fulfill Anatomy option requirement (VET MED 511) and Physiology option requirement (VET MED 520) toward the Zoology degree.

Biological Sciences Revise requirements for BS in Zoology -General Option

Zoology – General Option (120 Credits)

Candidates for the Bachelor of Science in Zoology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. Admission to the major requires 2.0 cumulative GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 19 18 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework selected in consultation with your biology advisor is required. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU, one additional BIOLOGY writing in the major course (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). VET MED credits fulfill other Program Option electives requirements. An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward

fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Year	
First Term	Credits
BIOLOGY 106 [BSCI] or 107 [BSCI] [‡]	4
CHEM 105 [PSCI]	4
Diversity [DIVR]	3
ENGLISH 101 [WRTG]	3
Second Term	Credits
BIOLOGY 106 or 107 [‡]	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4
Second Year	
First Term	Credits
BioCore ¹	<u>3 or 4</u>
RIOLOGY 301 ¹	4

First Term Credit BioCore¹ 3 or 4 BIOLOGY 301⁴ 4 CHEM 345 4 Humanities [HUM] 3 STAT 212, 412, or PSYCH 311 3 or 4

Second Term	Credits
Arts [ARTS]	3
BioCore ¹	4 or 3
BIOLOGY 370 [M] or 372 [M] ¹	4
Program Option Course: Anatomy/Invertebrate Biology Emphasis ²	4
Social Sciences [SSCI]	3
Complete Writing Portfolio	

Third Year

First Term	Credits
BioCore ¹	3 or 4
BIOLOGY 395, 403, or 405 ⁴	3
Communication [COMM] or Written Communication [WRTG]	3
PHYSICS 101 or 201	3
PHYSICS 111 or 211	1

	Program Option Course: Physiology Emphasis ²	4	
	Second Term	Credits	
	Equity and Justice [EQJS]	3	
	PHYSICS 102 or 202	3	
	PHYSICS 112 or 212	1	
	Program Option Course: Anatomy/Invertebrate Biology Emphasis ²	4	
	Electives	6	
	Fourth Year		
	First Term	Credits	
	BIOLOGY 473 [CAPS] [M], 483 [CAPS] [M], or 489 [CAPS] [M]	3	
	BIOLOGY Capstone [CAPS] [M]	<u>3</u>	
	Program Option Electives ⁴³	3 or 4	
	Foreign Language ⁴ or Electives ⁵ 3	4	
	Electives ³	6	
	Second Term	Credits	
	Program Option Electives ⁴³	6	
	Foreign Language ⁴ or Electives ⁵ 3	4	
	Electives ³	<u>67</u>	
	Complete School of Biological Sciences Exit Survey		
	Footnotes		
	All zoology majors must complete 19 credits of Biology Core courses (BIOLOGY 106; 1370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements. These must include 15 upper division credits, 6 of which must be a BIOLOGY prefix tak residence at WSU. Approved courses include 200-400 level BIOLOGY courses except the fulfill core requirements. A maximum of 4 credits of coursework graded S/F may be us fulfilling departmental requirements or program options and must be approved by adviso Coursework must include a total of two BIOLOGY [M] courses and sufficient 300-400 lecoursework to meet the University requirement of 40 upper division credits. BioCore (10 required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405. Zoology General Program Option requirements include two courses from the Anatomy/In biology emphasis (BIOLOGY 321, 322 or 418428, and 324) and one course from the Physical Course of the supplementary of the supplement	r electives. ten in tose used sed toward r. evel credits	
	emphasis (BIOLOGY 350 or 353).		
	 Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] count General Zoology Program Option Elective requirements include a minimum of 9 credits Biological Science selected in consultation with a biology advisor. These should include to fulfill the University requirement of 40 upper division credits. Approved program electinclude ANIM SCI 314; BIOLOGY 352, 393, 407, 410, 412, 418, 423, 428, 432, 438, 46495; ENTOM 340, 343, 344, 448; MBIOS 303. Two years of high school foreign language or at least two semesters of college-level fore 	of coursework tives 9, 486,	
	language are required by the College of Arts and Sciences for graduation.		
Biological Sciences Revise requirements	Zoology – Pre-Medicine/Pre-Dentistry Option (120 Credit	(s) 8-2	25
for BS in Zoology -	Candidates for the Bachelor of Science in Zoology must fulfill the U	niversity	
Pre-Medicine / Pre-	and the College of Arts and Sciences requirements for graduation as	described	
Dentistry Option	in the WSU general catalog. Admission to the major requires 2.0 cum	nulative	

GPA at the college level.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of collegelevel foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 19 18 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework selected in consultation with your biology advisor is required. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU, one additional BIOLOGY writing in the major course (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). VET MED credits fulfill other Program Option electives requirements. An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Term	Credits
BIOLOGY 106 [BSCI] or 107 [BSCI] ¹	4
CHEM 105 [PSCI]	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4
Second Term	Credits
BIOLOGY 106 or 107 [‡]	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
STAT 212, 412, or PSYCH 311	3 or 4
Second Year	
First Term	Credits
Arts [ARTS]	3
CHEM 345	4

PHYSICS 101 or 201	3
PHYSICS 111 or 211	1
Program Option Course: Microbiology/Invertebrate Biology Emphasis ² 1	3 or 4
Second Term	Credits
CHEM 348	4
PHYSICS 102 or 202	3
PHYSICS 112 or 212	1
Social Sciences [SSCI]	3
Electives	5
Complete Writing Portfolio	
Third Year	
First Term	Credits
BioCore ²	<u>3 or 4</u>
BIOLOGY 301 ¹	4
Communication [COMM] or Written Communication [WRTG]	3
MBIOS 303 (recommended) or CHEM 370	4 or 3
Foreign Language ³ or Electives ³	4
Second Term	Credits
PHIL 365 [HUM]	3
Program Option Course: Anatomy/Development Emphasis ²	3 or 4
Program Option Course: Physiology Emphasis ²	3
Program Option Courses ¹	<u>7 or 8</u>
Foreign Language ³ or Electives ³	3 or 4
Electives	3 <u>or 4</u>
Fourth Year	
First Term	Credits
BioCore ²	<u>3 or 4</u>
BIOLOGY 395, 403, or 405 ¹	3
Diversity [DIVR]	3
Program Option Course: Microbiology/Invertebrate Biology	3 or 4
Emphasis ²¹ Electives	6
Second Term	Credits
BioCore ²	4 or 3
BIOLOGY Capstone [CAPS] [M]	
BIOLOGY 370 [M] or 372 [M] ¹	<u>3</u>
DIOLOGI 3/0 [M] OI 3/2 [M]	•

BIOLOGY 473 [CAPS] [M], 483 [CAPS] [M], or 489 [CAPS] [M]	3
Equity and Justice [EQJS]	3
Program Option Course: Anatomy/Development Emphasis ² 1	3
Electives	3
Complete School of Biological Sciences Exit Survey	

- Pre-Med/Pre-Dent Zoology Program Option Requirements include two courses from the Anatomy/Development Biology requirement (BIOLOGY 315, 321, or 324); two courses from the Microbiology/Invertebrate Biology requirement (MBIOS 305 and MBIO 304 or 306) or (MBIOS 305, or BIOLOGY 322, or BIOLOGY 418) and one course from the Physiology Requirement (BIOLOGY 353 and (352 or MBIOS 401).
- ⁴² All zoology majors must complete 19 credits of Biology Core courses (BIOLOGY 106; 107; 301; 370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements or electives. These must include 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. 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 and sufficient 300 400 level coursework to meet the University requirement of 40 upper division credits. BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.
- Pre-Med/Pre-Dent-Zoology Program Option Requirements include two courses from the Anatomy/Development Biology requirement (BIOLOGY 315, 321, or 324); two courses from the Microbiology/Invertebrate Biology requirement (MBIOS 305 and MBIO 304 or 306) or (MBIOS 305, or BIOLOGY 322, or BIOLOGY 418) and one course from the Physiology Requirement (BIOLOGY 353 and (352 or MBIOS 401)).
- ³ 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.
- Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.

Biological Sciences Revise requirements for BS in Zoology -Pre-Veterinary / Animal Care Option

Zoology – Pre-Veterinary/Animal Care Option (120 Credits)

Candidates for the Bachelor of Science in Zoology must fulfill the University and the College of Arts and Sciences requirements for graduation as described in the WSU general catalog. <u>Admission to the major requires 2.0 cumulative GPA at the college level.</u> Students must complete a minimum of 90 undergraduate credits, including 30 credits of 300-400 level coursework, and be accepted into the Veterinary Medicine program to complete this degree.

Honors students complete honors requirements in place of UCORE requirements. The math and science components of those requirements are fulfilled as part of the School requirements described below. Other University requirements include: 120 total credits, of which 40 must be 300-400-level credits; the writing portfolio; and two writing in the major courses (identified by [M] in the course listings). The College of Arts and Sciences requires two years of high school foreign language or at least two semesters of college-level foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 19 18 semester credits of core BIOLOGY (BioCore) courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 305 or 395 or 403 or 405). An additional 21 semester credits of biological sciences coursework selected in consultation with your biology advisor is required. The 21 semester credits must include 15 upper division credits, six of which must be BIOLOGY courses taken in residence at WSU, one additional

BIOLOGY writing in the major course (identified by [M] in the course listings) or ENGLISH 402 [M], and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). VET MED credits fulfill other Program Option electives requirements. An overall cumulative GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework that are graded S, F may be used toward fulfilling School requirements or program options, and no other courses taken S or P can be applied toward fulfilling School requirements or program options. Students must complete an exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, General Studies Biological Sciences, or Human Biology.

First Term	Credits
BIOLOGY 106 [BSCI] or 107 [BSCI] ⁺	4
CHEM 105 [PSCI]	4
Diversity [DIVR]	3
ENGLISH 101 [WRTG]	3
Second Term	Credits
BIOLOGY 106 or 107 ⁴	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4
Second Year	
First Term	Credits
BioCore ¹	3 or 4
BIOLOGY 301 ¹	4
CHEM 345	4
PHYSICS 101 or 201	3
PHYSICS 111 or 211	1
Social Sciences [SSCI]	3
Second Term	Credits
BioCore ¹	3 or 4
BIOLOGY 395, 403, or 405 [‡]	3
Humanities [HUM]	3
PHYSICS 102 or 202	3
PHYSICS 112 or 212	1
STAT 212, 412, or PSYCH 311	3 or 4
Complete Writing Portfolio	

Third Year				
First Term	Credits			
BioCore ¹	<u>4 or 3</u>			
BIOLOGY 370 [M] or 372 [M] ¹				
Communication [COMM] or Written Communication [WRTG] 3				
Program Option Course: Anatomy/Development Emphasis ²	4			
Program Option Electives ^{3,4}	3			
Second Term	Credits			
Arts [ARTS]	3			
MBIOS 303 (recommended) or CHEM 370	4 or 3			
Program Option Course: Anatomy/Development Emphasis ²	4			
Program Option Elective ³ .4	3			
Electives	2			
Fourth Year				
First Term	Credits			
Equity and Justice [EQJS]	3			
Program Option Course: Physiology/Cell Biology Emphasis ²	4			
Program Option Courses ² or Electives ³ .4	3			
Foreign Language ⁵ or Electives ⁵				
Electives	3			
Second Term	Credits			
BIOLOGY 473 [CAPS] [M], 483 [CAPS] [M], or 489 [CAPS] [M]	6 3			
BIOLOGY Capstone [CAPS] [M]	<u>3</u>			
Program Option <u>Course</u> ² or Electives ^{3,4}	3			
Foreign Language ⁵ or Electives ⁵	4			
Electives				
Complete School of Biological Sciences Exit Survey				
Footnotes				
All zoology majors must complete 19 credits of Biology Core courses (BIOLOGY 106; 107; 301; 370 [M] or 372 [M]; one from 395, 403, or 405); and 21 credits of option requirements or electives. These must include 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. 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 and sufficient 300-400 level coursework to meet the University requirement of 40 upper division credits. BioCore (10 credits required): BIOLOGY 301, one of 370 [M] or 372 [M], and one of 305, 395, 403, or 405.				
² Pre-Vet/Animal Care Zoology Option Requirements include two courses from the Anatomy/Development Biology emphasis (BIOLOGY 315, 321, or 324); one course from Physiology/Cell Biology emphasis (BIOLOGY 350 or 353).				
³ Pre-Vet /Animal Zoology Option Electives include a minimum of 12 credits of Biologica selected in consultation with a biology advisor. These should include coursework to fulfill				

University requirement of 40 upper division credits. Approved program electives include BIOLOGY 352, 360, 393 [M], 412, 423, 428, 432, 438 [M], 495, CHEM 370 or MBIOS 303, MBIOS 304, 305, SOE 431.

⁴ 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, SOE 431, or as approved by advisor. Beyond the core requirements (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], one from 395, 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 fulfilling departmental requirements or program options and must be approved by advisor.

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.

⁶ Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.

Criminal Justice and Criminology

Revise requirements for BA in Criminal Justice and Criminology

Criminal Justice and Criminology (120 Credits)

A student may be admitted to the Criminal Justice and Criminology major upon completing CRM J 101 and earning a minimum WSU cumulative GPA of 2.0 or better.

Students who major in criminal justice and criminology must complete the 18 credits criminal justice core (CRM J 101, 201, 311, 320, 321, and 480) and 12 credits in criminal justice electives of which 21 courses must be an [M]. The Bachelor of Arts in Criminal Justice and Criminology requires a minimum of 30 credits in CRM J.

First Year

First Term	Credits
CRM J 101 [SSCI]	3
ENGLISH 101 [WRTG]	3
Quantitative Reasoning [QUAN]	3
Electives	6
Second Term	Credits
Arts [ARTS]	3
Communication [COMM] or Written Communication [WRTG]	3
CRM J 201	3
Diversity [DIVR] or CRM J 205 [DIVR]	3
Equity and Justice [EQJS] or CRM J 205 [EQJS]	<u>3</u>
HISTORY 105 [ROOT]	3
Second Year	
First Term	Credits
Biological Sciences [BSCI] with lab ¹	4
CRM J 311	3
Humanities [HUM]	3

	Electives	6	
	Second Term	Credits	
	CRM J 321	3	
	Diversity [DIVR]	<u>3</u>	
	Equity and Justice [EQJS]	3	
	Electives	9	
	Complete Writing Portfolio		
	Third Year		
	First Term	Credits	
	CRM J 320	3	
	CRM J Electives ²	3	
	Electives ³	9	
	Second Term	Credits	
	CRM J Electives ²	3	
	Physical Sciences [PSCI] with lab ¹	4	
	Electives ³	9	
	Fourth Year		
		Credits	
	CRM J Electives ²	6	
	Foreign Language, if needed, or Electives ³	9	
	Second Term	Credits	
		3	
	Foreign Language, if needed, or Electives ³	10	
	Footnotes		
	¹ To meet University and College of Arts and Sciences requirements, students must take a [F course with lab and [PSCI] course with lab.	BSCI]	
	² CRM J Electives (12 credits): Any CRM J course not used to fulfill the CRM J core require Must include one [M] course.	ements.	
	³ Electives: 300-400-level coursework as needed to meet University requirements of 120 cre 40 upper-division credits.	dits and	
{S} Human	Child and Youth Development Option (120 Credits)		8-25
Development Under BA in Human			
Development, drop			
Child and Youth			
Development Option			
{S} Human Development	Gerontology Option (120 Credits)		8-25
Development			

Under BA in Human Development, drop Gerontology Option		
{S} Human Development Under BA in Human Development, drop Human Services Option	Human Services Option (120 Credits)	8-25
{S} Human Development Under BA in Human Development, drop Prevention Science Option	Prevention Science Option (120 Credits)	8-25
Languages, Cultures, and Race Revise requirements for Additional Major - French for the Professions	Students who are admitted in a major may seek an additional major in French for the Professions. This additional major does not lead to a degree. The additional major requires 38 32 credits, as follows: 1) Language Foundation (14 credits) FRENCH 101, 102, 203, and 204 or 261. Note that most students entering WSU will have already fulfilled the equivalent of the 101 and 102 courses, if they choose to pursue the same foreign language for this major; 2) Intermediate Language (6 credits) Two courses from FRENCH 306, 307, or 308; 3) Language for Specific Purposes (6 credits) FRENCH 320 [HUM] and 361 [COMM]; and 4) Upper-level Experience (42 6 credits) FRENCH 420 [CAPS]; two Writing in the Major courses (see school); and FOR LANG 495, Internship / Service Learning / Undergraduate Research / Study Abroad (for 8 weeks minimum). In addition, students must complete two Writing in the Major [M] courses (FRENCH 308 and 320). No course in which a C- or lower grade is earned will be counted toward the additional major. No course taken pass/fail may be included for credit toward the major. No course may be repeated for credit toward the major unless thus designated in the catalog. No course may count for both the major and the minor. The STAMP 4S (Standards-based Measurement of Proficiency) web-based assessment of foreign language proficiency in reading, writing, speaking, and listening and will be taken during the semester in which the student is completing the final course for the major taught in the target language.	8-25
Languages, Cultures, and Race Revise requirements for minor in Chinese, French, German, Japanese, or Spanish	Chinese, French, German, Japanese, or Spanish To fulfill requirements for a minor in Chinese, French, German, Japanese, or Spanish, a student must complete a minimum of 17 19 credits of course work in one language area. A foundation of the target language, 102, 203 and 204 (8 10 credits), is required. The remaining 9 credits must be 300-400-level course work in the target language, of which 3 credits must be taken in residence at WSU, while the remaining 6 credits must be taken either in residence at WSU or through WSU-approved education abroad, educational exchange courses, or equivalent transfer coursework.	8-25

To fulfill requirements for a minor in Chinese or Japanese, a student must complete a minimum of 17 credits of course work in one language area. A foundation of the target language, 203 and 204 (8 credits), is required. The remaining 9 credits must be 300-400-level course work in the target language, of which 3 credits must be taken in residence at WSU, while the remaining 6 credits must be taken either in residence at WSU or through WSU-approved education abroad. All courses must be passed with a grade of C or better. Only courses thus designated in the Catalog may be repeated for credit toward the minor. Courses counting towards a minor in the language may not be counted towards a major in International Area Studies (i.e., Asian Studies, Latin America Area Studies, German Area Studies, or French and Francophone Area Studies). 105, 205, 305, 405 may not count towards the minor. For courses taken in Study Abroad Programs or as other transfer credits, please check with your advisor. All Chinese, French, German, Japanese, and Spanish language minors must also complete an exit proficiency examination interview during the semester in which they complete the last language course of their minor. There is a fee charged for the exam. 8-25 Languages, French Area and Culture Studies Cultures, and Race Revise requirements A minimum of 16 19 credits is required (options in French or Francophone for minor in Area Studies). A foundation of the target language, French FRENCH 102 and 203 and Culture Studies (4.7 credits), is required; in addition, 4 courses (12 credits) of further (French) knowledge must be taken other than 203 as: EITHER one lower level and two upper-level courses in FLC plus one approved course in another department; OR one lower-level and one upper-level course in FLC plus two approved courses in another department. See the school for a list of acceptable courses. For special requirements concerning French and Francophone options in the French Area Studies Minor, please see your advisor. A minimum of 9 credits with a letter grade must be taken in residency at WSU at the 300-400 level. All courses must be passed with a grade of C or better. Only courses thus designated in the Catalog may be repeated for credit toward the minor. Courses counting towards a minor in the language may not be counted towards a major in International Area Studies (i.e., Latin America Area Studies, German Area Studies, French and Francophone Area Studies, or Russian Area Studies). 105, 205, and 305 may not count towards the minor. For courses taken in Study Abroad Programs or as other transfer credits, please check with your advisor. Languages, 8-25 German Area and Culture Studies Cultures, and Race Revise requirements A minimum of 16 19 credits is required. A foundation of the target language, for minor in Area GERMAN 102 and 203 (47 credits), is required; in addition, 4 courses (12) and Culture Studies credits) of further knowledge must be taken other than 203 as: EITHER one (German) lower level and two upper-level courses in FLC plus one approved course in another department; OR one lower-level and one upper-level course in FLC plus two approved courses in another department. See the school for a list of acceptable courses. A minimum of 9 credits with a letter grade must be taken

in residency at WSU at the 300-400 level. All courses must be passed with a

	grade of C or better. Only courses thus designated in the Catalog may be repeated for credit toward the minor. Courses counting towards a minor in the language may not be counted towards a major in International Area Studies (i.e., Latin America Area Studies, German Area Studies, French and Francophone Area Studies, or Russian Area Studies). 105, 205, and 305 may not count towards the minor. For courses taken in Study Abroad Programs or as other transfer credits, please check with your advisor.	
Languages, Cultures, and Race Revise requirements for minor in Area and Culture Studies (Latin American and Spanish) Latin American and Spanish Area Studies A minimum of 46 19 credits is required. A foundation of the target language, SPANISH 102 and 203 (4 7 credits), is required; in addition, 4 courses (12 credits) of further knowledge must be taken other than 203 as: EITHER one lower level and two upper-level courses in FLC plus one approved course in another department; OR one lower-level and one upper-level course in FLC plus two approved courses in another department. See the school for a list of acceptable courses. A minimum of 9 credits with a letter grade must be taken in residency at WSU at the 300-400 level. All courses must be passed with a grade of C or better. Only courses thus designated in the Catalog may be repeated for credit toward the minor. Courses counting towards a minor in the language may not be counted towards a major in International Area Studies (i.e., Latin America Area Studies, German Area Studies). 105, 205, and 305 may not count towards the minor. For courses taken in Study Abroad Programs or as other transfer credits, please check with your advisor.		8-25
{S} Molecular Biosciences Revise requirements for BS in Microbiology - Molecular Biology Option	Microbiology – Molecular Biology Option (120 Credits) A student may be admitted to a School of Molecular Biosciences Microbiology major upon making their intention known to the department. To remain in good standing, a student must meet the following two requirements: Complete BIOLOGY 106, BIOLOGY 107, CHEM 105 and CHEM 106, MBIOS 301, MBIOS 303, MBIOS 305, or transfer equivalents, with a minimum grade of C. After 30 credits, maintain a minimum cumulative GPA of at least 2.5. A Microbiology major who falls below the minimum requirements will be released from the program according to Academic Regulation 53. 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. Completed core requirements may not be used to satisfy lecture or lab electives. First Year	8-25
	First Term Credits	
	BIOLOGY 106 [BSCI] or 107 [BSCI] 4 CHEM 105 [PSCI] 4	

ENGLISH 101 [WRTG]	3	
MATH 106 (accelerated) or Elective ¹	3	
MATH 108 (accelerated) or Elective ¹	2	
Second Term	Credits	
BIOLOGY 106 or 107	4	
CHEM 106	4	
HISTORY 105 [ROOT]	3	
MATH 140 [QUAN] or 171 [QUAN]	4	
MBIOS 138	1	
Second Year		
First Term	Credits	
Arts [ARTS]	3	
CHEM 345 ²	4	
Humanities [HUM]	3	
MBIOS 301	4 <u>3</u>	
Second Term	Credits	
MBIOS 201 [COMM]	3	
MBIOS 303	4	
MBIOS 305	3	
Social Sciences [SSCI]	3	
Complete Writing Portfolio		
Third Year		
First Term	Credits	
Diversity [DIVR]	3	
Equity and Justice [EQJS]	3	
MBIOS 304 or 360 [M]	3 or 2	
PHYSICS 101 or 201	3	
PHYSICS 111 or 211	1	
STAT 212 or 412	3 or 4	
Second Term	Credits	
MBIOS 360 [M] or 304	2 or 3	
MBIOS 410	3	
MBIOS 450	3	
PHYSICS 102 or 202	3	
PHYSICS 112 or 212	1	
Electives	<u>34</u>	

Fourth Year First Term **Credits** Lecture Elective³ 3 3 **MBIOS 404** 3 **MBIOS 440** MBIOS 460 or 411 3 Electives 3 Second Term **Credits** MBIOS 442 MBIOS 494 [M] [CAPS] 3 Electives 9 Exit Survey Footnotes ¹ If required - consult advisor.

 $^{^{2}}$ CHEM 345 and 348 recommended for professional or graduate degrees.

³ Lecture elective: select one from MBIOS 342, 401, 413, 426, 446; BIOLOGY 418, ENTOM 343, FS 416.