UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 10
Spring 2020

--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. The text under the heading titled *Proposed* will show strikethroughs for deletions, and underlines for additions, as needed.

Dept	Proposed	Effective Date
Agricultural and Food Systems Revise graduation requirements, correct a prefix, and revise language for Rule 53 for Bachelor of Science in Agricultural and Food Systems - Agricultural Education.	**Agricultural Education (~~129~~ 125 Credits)** Combining the best of both agriculture and teaching, the Agricultural Education major prepares students to educate the next generation of agricultural leaders and consumers. Highly sought after by employers, they teach high school and middle school agricultural science classes, as well as serve as FFA advisors, adult education instructors, community outreach coordinators, university extension agents, etc. This major requires students to complete the Agricultural and Food Systems (AFS) core courses and agricultural education required courses, as well as a series of teaching and learning courses to meet initial teacher certification requirements. Students also spend a semester student teaching in an agricultural education program in a Washington high school. A student may be admitted to an AFS major upon making their intention known to the department. **First Year** ***First Term*** ***Credits*** AG ED 110 2 ~~ANIM SCI 101~~ ~~3~~ BIOLOGY 120 [BSCI] 4 ~~CHEM 101 [PSCI] or 105 [PSCI]~~ ~~4~~ ~~ECONS 101 [SSCI]~~ ~~3~~ ENGLISH 101 [WRTG] 3 HISTORY 105 [ROOT] 3 HORT / CROP SCI 102 3 ***Second Term*** ***Credits*** AGTM 201 3 ANIM SCI 101 3 BIOLOGY 106 or 107[1] 4	**8-20**

~~CHEM 102 or 106~~	~~4~~
ENGLISH 201 [WRTG]~~, 301 [WRTG] or 302 [M]~~[1]	3
~~HISTORY 105 [ROOT]~~	~~3~~
Humanities [HUM]	3
~~STAT 212 [QUAN], MATH 140 [QUAN], 171 [QUAN], or 202 [QUAN]~~	~~3 or 4~~
~~Complete West B Exam~~	

Second Year

First Term	***Credits***
~~300-400-level Ag Elective~~[2]	~~3~~
~~AFS 101~~	~~3~~
AFS 201	3
Arts [ARTS]	3
~~BIOLOGY 120 [BSCI]~~	~~4~~
CHEM 101 [PSCI]	4
ECONS 101 [SSCI]	3
TCH LRN 301	3
~~Certify in College of Education~~	

Second Term	***Credits***
~~AFS 201~~	~~3~~
~~BIOLOGY 106 or 107~~	~~4~~
CHEM 102	4
Diversity [DIVR]	3
~~Humanities [HUM]~~	~~3~~
SOIL SCI 201	3
STAT 212 [QUAN], MATH 140 [QUAN], 171 [QUAN], or 202 [QUAN]	3 or 4
300-400-level Agricultural Elective[2]	3
Apply to College of Education	
Complete Writing Portfolio	

Third Term	***Credits***
TCH LRN 317 ~~(Available summer only)~~	2

Third Year

First Term	***Credits***
AFS Core Systems Elective[3]	3
AG ED 471	2
CROP SCI 360	3
ECONS 350[34]	3
~~TCH LRN 464~~	~~3~~

~~TCH LRN 465~~	~~3~~
~~TCH LRN 466~~	~~2~~
300-400-level Agricultural Elective[2]	3

Second Term	***Credits***
~~AFS 401 [CAPS]~~	~~3~~
AGTM 402	3
~~ED PSYCH 468~~	~~3~~
TCH LRN 464	3
TCH LRN 465	3
TCH LRN 466	2
~~TCH LRN 467 [M]~~	~~3~~
~~TCH LRN 469~~	~~2~~
~~TCH LRN 470~~	~~3~~
300-400-level Agricultural Elective[2]	3

Fourth Year

First Term	***Credits***
~~300-400-level Ag Elective[2]~~	~~3~~
~~AFS Core Systems Elective[4]~~	~~3~~
AG ED 440 [M]	2
AG ED 450	3
~~AG ED 471~~	~~2~~
ED PSYCH 468	3
TCH LRN 467 [M]	3
TCH LRN 469	2
TCH LRN 470	3

Second Term	***Credits***
AG ED 407 [CAPS]	8
TCH LRN 415	8

Footnotes

[1] ~~One from ENGLISH 201, 301, 302 [M] or 402 is required for admission to the Teacher Education Program. Students who take ENGLISH 302 will need to take an additional [WRTG] or [COMM] course.~~ BIOLOGY 106 is recommended.

[2] ~~The~~ Agricultural ~~upper-division~~ 300-400-level Electives (minimum 9 credits) - required for teacher certification in Agricultural Education. Any 300-400-level course with one of the following ~~CAHNRS~~ subjects: AGTM, AFS, ANIM SCI, CROP SCI, ECONS, ENTOM, ~~ENIVR SCI,~~ FS, HORT, IPM, LND ARCH, ~~NATRS,~~ PL P, SOE, SOIL SCI, or VIT ENOL not used to satisfy major requirements can be accepted to fulfill this requirement, per advisor approval. AG ED 430 and/or 431 are suggested for CASE Certification.

[~~4~~3] AFS Core Systems Electives: AGTM 305, 310, ANIM SCI 464 [M], 472 [M], 474 [M], BIOLOGY 372 [M], CROP SCI 302, ECONS 351, HORT 320, ~~NATRS~~ SOE 300, SOIL SCI 368, or other systems courses approved by your advisor.

[~~3~~4] ECONS 351 and 352, which ~~is~~ are only offered in the spring, may be used as an alternative for ECONS 350.

Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science in Biology - Basic Medical Sciences Plan A.	**Biology - Basic Medical Sciences Plan A (120 Credits)** ~~At least 40 of the 120 hours for the degree must be at the 300-400-level.~~ 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 completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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, or General Studies Biological Sciences. **First Year** ***First Term*** ***Credits*** Arts [ARTS] 3 BIOLOGY 106 [BSCI] 4 CHEM 105 [PSCI][1] 4 ENGLISH 101 [WRTG] 3 ***Second Term*** ***Credits*** BIOLOGY 107 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN][21] 4 **Second Year**	**8-20**

First Term	*Credits*
BIOLOGY 301	4
CHEM 345	4
Communication [COMM] or Written Communication [WRTG]	3
~~MBIOS 301~~	~~4~~
Foreign Language, if ~~necessary~~ needed, or Electives[3 2]	~~3~~ 4

Second Term	*Credits*
CHEM 348	3
Social Sciences [SSCI]	3
Foreign Language, if ~~necessary~~ needed, and/or Electives[3 2]	9
Complete Writing Portfolio	

Third Year

First Term	*Credits*
Diversity [DIVR]	3
MBIOS 303 or CHEM 370	4 or 3
PHYSICS 101[~~4~~3]	4
Electives[3 2]	3 or 4

Second Term	*Credits*
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
PHIL 365 [HUM]	3
PHYSICS 102[3]	4
Electives[3 2]	6

Fourth Year

First Term	*Credits*
Degree Program Elective[5 4]	2-4
Degree Program Elective [M][5 4]	3
300-400-level Electives	6
Electives[3 2]	4 ~~5~~

Second Term	*Credits*
BIOLOGY Capstone [CAPS]	3
Degree Program Elective [M][5 4]	3
~~Integrative Capstone [CAPS]~~	~~3~~
300-400-level Electives	6
Electives[3 2]	4

Footnotes

[1] ~~CHEM 101 may be taken prior to CHEM 105.~~

	[2~~1~~] MATH 106 may be taken the first semester as a prerequisite to other MATH courses and as a co-requisite to CHEM 105. MATH 108 may also be needed. In addition to either MATH 140 or 171, a statistics course is highly recommended, and for some programs, required. [3~~2~~] Students are encouraged to pursue a minor in other areas of more in-depth science minor. [4~~3~~] An elective may be substituted for PHYSICS 101 and 102 if it is not required for entrance to a graduate or professional program. [5~~4~~] Degree Program Electives (8 credits required): Approved courses are BIOLOGY 315, 321 [M], 324, 350, 352, 353, 393 [M], one from 395 or 403 or 405, 418 [M]; MBIOS 304, 305, 401, 413, 414, 423, 440, 442, 446; NEUROSCI 301, 403 [M], 404, and 430 [M].	
Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science in Biology - Basic Medical Sciences Plan B.	**Biology - Basic Medical Sciences Plan B (120 Hours)** ~~At least 40 of the 120 credits for the degree must be at the 300-400-level.~~ 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 completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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, or General Studies Biological Sciences. **First Year** ***First Term*** ***Credits*** Arts [ARTS] 3 BIOLOGY 106 [BSCI] 4 CHEM 105 [PSCI][1] 4 HISTORY 105 [ROOT] 3	**8-20**

Second Term	***Credits***
BIOLOGY 107	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
MATH 140 [QUAN] or 171 [QUAN][21]	4

Second Year

First Term	***Credits***
BIOLOGY 301	4
Communication [COMM] or Written Communication [WRTG]	3
CHEM 345	4
~~MBIOS 301~~	~~4~~
PHYSICS 101[32]	4

Second Term	***Credits***
CHEM 348	3
MBIOS 305	3
MBIOS 306	2
PHYSICS 102[32]	4
Social Sciences [SSCI]	3
Complete Writing Portfolio	

Third Year

First Term	***Credits***
Degree Program Elective[43]	3 or 4
Diversity [DIVR]	3
MBIOS 303 or CHEM 370	4 or 3
Foreign Language, if ~~necessary~~ needed, and/or Electives[54]	6 or 7

Second Term	***Credits***
PHIL 365 [HUM], or Humanities [HUM]	3
Degree Program Elective[43]	6 - 8
Foreign Language, if ~~necessary~~ needed, and/or Electives[54]	6

Fourth Year

First Term	***Credits***
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
Degree Program Elective[43]	3 or 4
Degree Program Elective [M][43]	2 - 4
Electives[54]	7

Second Term	***Credits***
BIOLOGY Capstone [CAPS]	3

	Degree Program Elective[43]	3 or 4	
	Degree Program Elective [M][43]	3 or 4	
	~~Integrative Capstone [CAPS]~~	~~3~~	
	Electives[54]	6	
	Footnotes [1] ~~CHEM 101 may be taken prior to CHEM 105.~~ [21] MATH 106 may be taken the first semester as a prerequisite to other MATH courses and as a co-requisite to CHEM 105. MATH 108 may also be needed. In addition to either MATH 140 or 171, a statistics course is highly recommended, and for some programs, required. [32] An elective may be substituted for PHYSICS 101 and 102 if it is not required for entrance to a graduate or professional program. [43] Degree Program Electives: A combination of 39 science credits, with 21 credits in 300-400-level courses, is required. 20 credits must be selected from the following list and must include a minimum of one each BIOLOGY, MBIOS, and NEUROSCI: BIOLOGY 251, 315, 321 [M], 324, 333, 350, 352, 353, 393 [M], one from 395 or 403, or 405, 418 [M]; MBIOS 304, 360 [M], 401, 402 [M], 413, 414, 423, 440, 442, 446; NEUROSCI 301, 403 [M], 404, and 430 [M]. Coursework must include sufficient 300-400-level coursework to meet the University requirement of 40 upper division credits. [54] Students are encouraged to pursue a minor.		
Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science in Biology - Ecology and Evolutionary Biology Option.	**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 completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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, or General Studies Biological Sciences.	**8-20**

First Year

First Term	***Credits***
Arts [ARTS]	3
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI][1]	4
HISTORY 105 [ROOT]	3

Second Term	***Credits***
BIOLOGY 107	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
MATH 140 [QUAN] or 171 [QUAN][1]	4

Second Year

First Term	***Credits***
CHEM 345	4
Communication [COMM] or Written Communication [WRTG]	3
Humanities [HUM]	3
PHYSICS 101 or 201	4

Second Term	***Credits***
BIOLOGY 370 [M] or 372 [M]	4
PHYSICS 102 or 202	4
Program Option Courses or Electives[2,3]	4
Social Sciences [SSCI]	3
Complete Writing Portfolio	

Third Year

First Term	***Credits***
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
BIOLOGY 301	4
Program Option Courses or Electives[2,3]	7
Foreign Language, if needed, or Electives[4]	3 or 4

Second Term	***Credits***
Diversity [DIVR]	3
Program Option Courses or Electives[2,3]	6 or 7
STAT 212, 412, or PSYCH 311	3 or 4
Foreign Language, if needed, or Electives[4]	3 or 4

Fourth Year

First Term	***Credits***
BIOLOGY Capstone [CAPS]	3

	~~Integrative Capstone [CAPS]~~ ~~3~~ Program Option Courses or Electives[3] 11 ***Second Term*** ***Credits*** BIOLOGY 395, 403, or 405 3 Program Option Courses or Electives[2,3] 13 or 14 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] 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 [M], 483 [M] [CAPS]) and the Evolution/Organismal Emphasis (BIOLOGY 322 [M], 324, 332 [M], 335 [M], 408 [CAPS], 409, 412, 418, 423, 428, 432 [M], 438 [M]). At least one course must be from the Ecology Emphasis and one course from the Evolution/Organismal Emphasis. [3] 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 [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.	
Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science 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 completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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	**8-20**

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, or General Studies Biological Sciences.

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 Year

First Term	***Credits***
Arts [ARTS]	3
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI][1]	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***
BIOLOGY 301	4
CHEM 345	4
Diversity [DIVR]	3
TCH LRN 301	3
Foreign Language, if needed[2]	0 - 4
Second Term	***Credits***
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, if needed, or Electives[2]	3 or 4
Complete Writing Portfolio	

Third Year

First Term	***Credits***
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3

	BIOLOGY 370 [M] or 372 [M] 4 PHYSICS 101 or 201 4 Program Electives[3] 4 ***Second Term*** ***Credits*** PHYSICS 102 or 202 4 TCH LRN 465 3 Program Option Requirements[4] 3 or 4 Program Electives [3] 4 **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 [CAPS] or HONORS 450[5] 3 BIOLOGY 395, 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 **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] ~~The College of Arts and Sciences requires two years of high school foreign language or two semesters of college-level foreign language.~~ 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. [3] 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. [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. [5] Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.	
Biological Sciences Revise graduation requirements and Rule 53 language	**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	**8-20**

for Bachelor of Science in Biology - Entomology Option

WSU general catalog. Admission to the major requires completion of 24 semester credits and 2.0 GPA.

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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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, or General Studies Biological Sciences.

First Year

First Term	***Credits***
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI][1]	4
Communication [COMM] or Written Communication [WRTG]	3
HISTORY 105 [ROOT]	3
Second Term	***Credits***
BIOLOGY 107	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
MATH 140 [QUAN] or 171 [QUAN][1]	4

Second Year

First Term	***Credits***
Arts [ARTS]	3
CHEM 345	4
ENTOM 343 [M]	3
PHYSICS 101 or 201	4
Second Term	***Credits***
BIOLOGY 301	4

	Diversity [DIVR] 3 PHYSICS 102 or 202 4 Program Option Elective [2] 3 Complete Writing Portfolio **Third Year** ***First Term*** ***Credits*** BIOLOGY 322 [M], 350, or 418 4 BIOLOGY 370 [M] or 372 [M] 4 Humanities [HUM] 3 Electives[3] 5 ***Second Term*** ***Credits*** Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3 CHEM 370 or MBIOS 303 3 or 4 Social Sciences [SSCI] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Elective[2] 3 **Fourth Year** ***First Term*** ***Credits*** BIOLOGY 332 [M] or 420 3 or 4 Foreign Language, if needed, and/or Electives[3,4] 13 ***Second Term*** ***Credits*** BIOLOGY [CAPS] or HONORS 450[5] 3 BIOLOGY 395, 403, or 405 3 Foreign Language, if needed, and/or Electives[3,4] 10 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] Entomology Program option electives include 6 credits of 300-400-level ENTOM courses excluding ENTOM 343. [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, 370 [M] or 372 [M], one from 395, 403, or 405, BIOLOGY [CAPS] or HONORS 450), 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. [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] Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.	
Biological Sciences Revise graduation requirements and	**Biology - General 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	**8-20**

Rule 53 language for Bachelor of Science in Biology - General Option	WSU general catalog. Admission to the major requires completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). An overall 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, or General Studies Biological Sciences. **First Year** ***First Term*** ***Credits*** Arts [ARTS] 3 BIOLOGY 106 [BSCI] 4 CHEM 105 [PSCI][1] 4 HISTORY 105 [ROOT] 3 ***Second Term*** ***Credits*** BIOLOGY 107 4 CHEM 106 4 ENGLISH 101 [WRTG] 3 MATH 140 [QUAN] or 171 [QUAN][1] 4 **Second Year** ***First Term*** ***Credits*** BIOLOGY 301 4 CHEM 345 4 Communication [COMM] or Written Communication [WRTG] 3 Humanities [HUM] 3 ***Second Term*** ***Credits*** BIOLOGY 370 [M] or 372 [M] 4	

	CHEM 370 or MBIOS 303 3 or 4 PHYSICS 101 or 201 4 Social Sciences [SSCI] 3 Complete Writing Portfolio **Third Year** ***First Term*** ***Credits*** 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 ***Second Term*** ***Credits*** Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3 BIOLOGY 395, 403, or 405 3 Foreign Language, if needed, or Electives[2] 3 or 4 Program Option Courses or Electives[3] 6 **Fourth Year** ***First Term*** ***Credits*** BIOLOGY 352 or MBIOS 401 3 Program Option Courses or Electives[3] 13 ***Second Term*** ***Credits*** BIOLOGY [CAPS] or HONORS 450[4] 3 STAT 212, 412, or PSYCH 311 3 or 4 Program Option Courses or Electives[3] 10 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] 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. [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, 370 [M] or 372 [M], one from 395, 403, or 405, BIOLOGY [CAPS] or HONORS 450), 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. [4] Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.	
Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of	**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	**8-20**

Science in Biology - Plant Biology Option	WSU general catalog. Admission to the major requires completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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, or General Studies Biological Sciences. **First Year** ***First Term*** ***Credits*** Arts [ARTS] 3 BIOLOGY 106 [BSCI] 4 CHEM 105 [PSCI][1] 4 HISTORY 105 [ROOT] 3 ***Second Term*** ***Credits*** BIOLOGY 107 4 CHEM 106 4 ENGLISH 101 [WRTG] 3 MATH 140 [QUAN] or 171 [QUAN] 4 **Second Year** ***First Term*** ***Credits*** BIOLOGY 301 4 CHEM 345 4 Humanities [HUM] 3 PHYSICS 101 or 201 4 ***Second Term*** ***Credits*** Communication [COMM] or Written Communication [WRTG] 3	

	Foreign Language and/or Electives[2] 6 PHYSICS 102 or 202 4 Social Sciences [SSCI] 3 Complete Writing Portfolio **Third Year** ***First Term*** ***Credits*** Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3 BIOLOGY 370 [M] or 372 [M] 4 BIOLOGY 420 3 STAT 212, 412, or PSYCH 311 3 or 4 ***Second Term*** ***Credits*** BIOLOGY 332 [M] 4 BIOLOGY 462 3 Diversity [DIVR] 3 Foreign Language or Electives[2] 4 Program Option Courses or Electives[~~2~~3] 2 or 3 **Fourth Year** ***First Term*** ***Credits*** BIOLOGY 395, 403, or 405 3 BIOLOGY 409 4 Program Option Courses or Electives[~~2~~3] 6 Electives 3 ***Second Term*** ***Credits*** BIOLOGY [CAPS] or HONORS 450[~~3~~4] 3 Program Option Courses or Electives[~~2~~3] 12 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] 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. [~~2~~3] Plant Biology 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, 370 [M] or 372 [M], one from 395, 403, or 405, BIOLOGY [CAPS] or HONORS 450), 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. [~~3~~4] Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.	
Biological Sciences Revise graduation requirements and Rule 53 language	**Biology - Pre-Physical Therapy / Pre-Occupational Therapy / Pre-Physician Assistant 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	**8-20**

for Bachelor of Science in Biology - Pre-Physical Therapy/Pre-Occupational Therapy/Pre-Physician Assistant Option	WSU general catalog. Admission to the major requires completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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, or General Studies Biological Sciences. **First Year** ***First Term*** ***Credits*** BIOLOGY 106 [BSCI] 4 CHEM 105 [PSCI][1] 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 PSYCH 105 [SSCI] 3 ***Second Term*** ***Credits*** BIOLOGY 301 4	

PHIL 365 [HUM]	3
PHYSICS 101 or 201	4
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, if needed, or Program Emphasis Requirements[2,3,4,5]	3 or 4
PHYSICS 102 or 202	4
PSYCH 333	3
Second Term	***Credits***
Arts [ARTS]	3
BIOLOGY 370 [M] or 372 [M]	4
H D 101 or PSYCH 361[2,3,64]	3
Foreign Language, if needed, and/or Electives[5,6]	6

Fourth Year

First Term	***Credits***
ENGLISH 402 [WRTG]	3
Program Emphasis Requirements or Electives[2,3,4,6]	12
Second Term	***Credits***
BIOLOGY [CAPS] or HONORS 450[7]	3
BIOLOGY 395, 403, or 405	3
Program Emphasis Requirements or Electives[2,3,4,6]	10
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] 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] 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 Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science in Zoology - Accelerated Pre-Veterinary Option	**Zoology - Accelerated Pre-Veterinary Option (125 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 college-level foreign language. Bachelor of Science degree options in Biology and Zoology require a minimum of 19 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings). VET MED credits fulfill other Program Option electives requirements. An overall 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, or General Studies Biological Sciences. ~~This 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.~~ For more information about the Accelerated Pre-Vet Option program contact the School of Biological Sciences. ~~NOTE: 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.~~ **First Year** ***First Term*** ***Credits*** Arts [ARTS] 3	**8-20**

	BIOLOGY 106 [BSCI]	4
	CHEM 105 [PSCI][1]	4
	HISTORY 105 [ROOT]	3
	Second Term	***Credits***
	BIOLOGY 107	4
	CHEM 106	4
	ENGLISH 101 [WRTG]	3
	MATH 140 [QUAN] or 171 [QUAN][1]	4
	Second Year	
	First Term	***Credits***
	BIOLOGY 301	4
	CHEM 345	4
	Communication [COMM] or Written Communication [WRTG]	3
	Humanities [HUM]	3
	Second Term	***Credits***
	Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
	CHEM 370 or MBIOS 303	3 or 4
	PHYSICS 101 or 201	4
	STAT 212, 412, or PSYCH 311	3 or 4
	Complete Writing Portfolio	
	Third Year	
	First Term	***Credits***
	BIOLOGY [CAPS] or HONORS 450[2]	3
	BIOLOGY 321 [M] or BIOLOGY 322 [M]	4
	PHYSICS 102 or 202	4
	Foreign Language, if needed, and/or Elective[3,~~4~~]	6
	Second Term	***Credits***
	BIOLOGY 370 [M] or 372 [M]	4
	BIOLOGY 395, 403, or 405	3
	Diversity [DIVR]	3
	Social Sciences [SSCI]	3
	Foreign Language, if needed, or Elective[3,~~4~~]	4
	Fourth Year	
	First Term	***Credits***
	VET MED 510	4
	VET MED 511[5~~4~~]	5
	VET MED 513	4
	VET MED 568	2
	VET MED 586	1

	~~Note: VET MED credits fulfill Zoology Program option electives requirements~~ ***Second Term*** ***Credits*** VET MED 512 4 VET MED 520~~56~~ 5 VET MED 521 3 VET MED 534 3 VET MED 545 3 VET MED 580 1 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] Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course. [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 are required to complete a minimum of 90 undergraduate credits – including 30 credits of 300-400 level coursework prior to starting coursework as a DVM student.~~ ~~5~~4 Counts as Anatomy option requirement toward the Zoology degree ~~6~~5 Counts as Physiology option requirement toward the Zoology degree.	
Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science 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 completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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	**8-20**

exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, or General Studies Biological Sciences.

First Year

First Term	***Credits***
Arts [ARTS]	3
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI][1]	4
HISTORY 105 [ROOT]	3
Second Term	***Credits***
BIOLOGY 107	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
MATH 140 [QUAN] or 171 [QUAN]	4

Second Year

First Term	***Credits***
CHEM 345	4
Communication [COMM] or Written Communication [WRTG]	3
Humanities [HUM]	3
Program Option Courses, Foreign Language, and/or Electives[2,3]	7
Second Term	***Credits***
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
BIOLOGY 301	4
Diversity [DIVR]	3
Program Option Courses, Foreign Language, and/or Electives[2,3]	3 - 6
STAT 212, 412, or PSYCH 311	3 or 4
Complete Writing Portfolio	

Third Year

First Term	***Credits***
BIOLOGY 321 [M], 322 [M], or 324	4
PHYSICS 101 or 201	4
Program Option Course or Electives[2,3]	6 or 7
Social Sciences [SSCI]	3
Second Term	***Credits***
BIOLOGY 321 [M], 322 [M], or 324	4
BIOLOGY 370 [M] or 372 [M]	4
PHYSICS 102 or 202	4
Electives	3

Fourth Year

First Term	***Credits***

	BIOLOGY 350 or 353 4 BIOLOGY 395, 403, or 405 3 Program Option Courses or Electives[2,3] 6 ***Second Term*** ***Credits*** BIOLOGY Capstone [CAPS] 3 ~~Integrative Capstone [CAPS]~~ ~~3~~ Program Option Courses or Electives[2,3] 10 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] 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. [2,3] Zoology General Program Option electives should be selected in consultation with a biology advisor and must include 9 credits selected from ANIM SCI 314; BIOLOGY 352, 393 [M], 407, 410, 412, 418 [M], 423, 428, 432, 438 [M], 469, 486, 495; ENTOM 340, 343 [M], 344 [M], 448; MBIOS 303, or as approved by advisor. 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 except those used to fulfill core requirements (BIOLOGY 106. 107, 301, 370 [M] or 372 [M], one from 395, 403, ~~and~~ 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.	
Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science in Zoology - Pre-Medicine/Pre-Dentistry Option	**Zoology - Pre-Medicine/Pre-Dentistry 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 completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall 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	**8-20**

exit survey. Students may not double major or take a minor in any combination of Biology, Zoology, or General Studies Biological Sciences.

First Year

First Term	***Credits***
Arts [ARTS]	3
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI][1]	4
ENGLISH 101 [WRTG]	3
Second Term	***Credits***
BIOLOGY 107	4
CHEM 106	4
HISTORY 105 [ROOT]	3
MATH 140 [QUAN] or 171 [QUAN]	4

Second Year

First Term	***Credits***
BIOLOGY 301	4
CHEM 345	4
PHYSICS 101 or 201	4
Social Sciences [SSCI]	3
Second Term	***Credits***
CHEM 348	4
Communication [COMM] or Written Communication [WRTG]	3
Diversity [DIVR]	3
PHYSICS 102 or 202	4
Complete Writing Portfolio	

Third Year

First Term	***Credits***
BIOLOGY 315, 321 [M], or 324	4
BIOLOGY 322 [M], 418 [M], or MBIOS 305	4 or 3
BIOLOGY 395, 403, or 405	3
Humanities [HUM]	3
Program Option Courses, Foreign Language, or Electives[2,3]	3 or 4
Second Term	***Credits***
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
BIOLOGY 370 [M] or 372 [M]	4
CHEM 370 or MBIOS 303	3 or 4
Foreign Language or Electives[2]	2 - 4
~~MBIOS 303~~	~~4~~
Program Option Courses or Electives ~~2,~~[3]	4 or 3

	Fourth Year ***First Term*** ***Credits*** BIOLOGY 322 [M], 418 [M], or MBIOS 305 3 or 4 BIOLOGY 352 3 Program Option Courses or Electives~~2~~,3 9 ***Second Term*** ***Credits*** BIOLOGY 315, 321 [M], or 324 4 BIOLOGY 353 4 BIOLOGY Capstone [CAPS] 3 ~~Integrative Capstone [CAPS]~~ ~~3~~ STAT 212, 412, or PSYCH 311 3 or 4 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 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. ~~2~~,3 Zoology, Pre-Medicine/Pre-Dentistry Option, must include 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, ~~and~~ 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.	
Biological Sciences Revise graduation requirements and Rule 53 language for Bachelor of Science 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. Admission to the major requires completion of 24 semester credits and 2.0 GPA. 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 semester credits of core BIOLOGY courses (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], and 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), and one BIOLOGY Capstone course (identified by the [CAPS] in the course listings. An overall GPA of at least 2.0 must be maintained in all College and School requirements. A maximum of 4 credits of coursework	**8-20**

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, or General Studies Biological Sciences.

First Year

First Term	***Credits***
Arts [ARTS]	3
BIOLOGY 106 [BSCI]	4
CHEM 105 [PSCI][1]	4
HISTORY 105 [ROOT]	3
Second Term	***Credits***
BIOLOGY 107	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
MATH 140 [QUAN] or 171 [QUAN][1]	4

Second Year

First Term	***Credits***
BIOLOGY 301	4
CHEM 345	4
Communication [COMM] or Written Communication [WRTG]	3
Humanities [HUM]	3
Social Sciences [SSCI]	3
Second Term	***Credits***
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3
CHEM 370 or MBIOS 303 or Elective[2]	3 or 4
PHYSICS 101 or 201	4
Program Option Courses, Foreign Language, or Electives[3,4]	3
STAT 212, 412, or PSYCH 311	3 or 4
Complete Writing Portfolio	

Third Year

First Term	***Credits***
BIOLOGY 321 [M], 322 [M], or 324	4
PHYSICS 102 or 202	4
Program Option Courses, Foreign Language, or Electives[3,4]	6
Second Term	***Credits***
BIOLOGY 321 [M], 322 [M], or 324	4
BIOLOGY 370 [M] or 372 [M]	4
Diversity [DIVR]	3
Electives	4

	Fourth Year ***First Term*** ***Credits*** BIOLOGY 350 or 353 4 BIOLOGY 395, ~~403~~, or 405 3 Program Option Courses or Electives~~3~~4 3 Electives 3 ***Second Term*** ***Credits*** BIOLOGY [CAPS] or HONORS 450~~4~~5 3 Program Option Courses or Electives~~3~~4 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 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. ~~3~~,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, ~~NATRS~~ SOE 431, or as approved by advisor. Beyond the core requirements (BIOLOGY 106, 107, 301, 370 [M] or 372 [M], one from 395, ~~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 fulfilling departmental requirements or program options and must be approved by advisor. ~~4~~,5 Students in Honors College complete HONORS 450 in lieu of a BIOLOGY [CAPS] course.	
Chemical Engineering and Bioengineering Revise graduation requirements and revise language for Rule 53 for Bachelor of Science in Chemical Engineering	**Chemical Engineering – General (124 Credits)** At least 63 of the total credits required for this degree must be in 300-400-level courses. ~~**Criteria for Certification – Chemical Engineering Program**~~ ~~1. In September of each year, the faculty of the School of Chemical Engineering and Bioengineering will establish the total number of students (January, June, and August) to be certified into the chemical engineering program.~~ ~~2. Each student will be considered for certification during the semester after all of the following courses are completed: MATH 171, MATH 172, MATH 273; CHEM 105, CHEM 106, CHEM 345, PHYSICS 201, CHE 201.~~ ~~3. To be certified, each student must meet the following minimum requirements:~~ ~~a. 2.0 cumulative GPA.~~ ~~b. A "C" grade or better in each of the courses listed in 2) above.~~	**8-20**

c. ~~Be in good academic standing (semester GPA 2.00 or higher) at the time they are being considered for certification.~~

4. ~~Certification decisions will be made at the end of Fall, Spring, and Summer terms. Those being certified at the end of Fall term will be notified by January 15, those being certified at the end of Spring term will be notified by June 1, and those being certified at the end of Summer term will be notified by August 15.~~
5. ~~If the number of students seeking certification exceeds the program capacity, as determined in 1) above, additional criteria will be used to select those who are certified. Those criteria include:~~
   a. ~~grade received in CHE 201;~~
   b. ~~average GPA in the courses listed in 2) above;~~
   c. ~~the GPA earned during the previous semester;~~
   d. ~~cumulative GPA.~~
6. ~~Students who have completed all the courses listed in 2) above, but who are not certified will be notified of the decision according to the time table described in 4) above. Such students who are not certified may appeal the decision. The appeal should describe any special circumstances which should be considered. A faculty committee will consider the appeal, the special circumstances described, and trends in the grades (e.g. trends in grades and/or withdrawals, typical course load attempted and typical course load completed) and make a final decision regarding certification. The appeal must be submitted within 2 weeks of the notification described in 4) above. The appeal will be considered and a decision made by February 15, July 1, and September 15.~~
7. ~~Students who are deficient under the University's Academic Regulations are subject to decertification. Recertification will be granted only under rare, extenuating conditions.~~
8. ~~Certification Guarantee: Students who have completed the courses noted in 2) above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the courses that have been taken that are required in the major, and who have not repeated any required course, are guaranteed certification~~.

Admission to the Major Criteria – Chemical Engineering Program

Incoming first-year students, transfer students, and students changing from a different major may be admitted to the Chemical Engineering degree program upon completion of MATH 171 with a C or better or concurrent enrollment, and CHEM 105 with a C or better or concurrent enrollment. To remain in the major the student must earn a grade of C or better in all CHE courses, earn a grade of C or better in all required electives, and maintain good academic standing (i.e. a 2.0 or higher GPA each term and an overall cumulative GPA of 2.0 at WSU).

Students who are deficient under the University's Academic Regulations 38 and 39 or whose GPA in CHE courses falls below 2.0 are subject to loss of eligibility of the major. The Chemical Engineering undergraduate studies committee will

determine the eligibility for readmission and probation conditions for students who are deficient and apply for re-entry into the major.

Graduation Requirements
No Washington State University courses listed in this schedule of study may be taken on a pass/fail basis. With the exception of CHE 488, 495, 498, 499 and ENGR 489, all listed CHE courses, required electives, and the prerequisites to these courses must be completed with a grade of C or better.

First Year

First Term	***Credits***
CHE 101	1
CHEM 105 [PSCI]	4
Diversity [DIVR]	3
HISTORY 105 [ROOT] or 305 [ROOT]	3
MATH 171 [QUAN]	4

Second Term	***Credits***
BIOLOGY 106 [BSCI], 107 [BSCI], or 110 [BSCI]	3 or 4
CHE 110[1]	2
CHEM 106 or 116	4
ENGLISH 101 [WRTG]	3
MATH 172 or 182	4

Second Year

First Term	***Credits***
CHE 201	3
CHEM 345	4
Humanities [HUM]	3
MATH 273 or 283	2
PHYSICS 201 or 205	4 or 5

Second Term	***Credits***
CHE 211	3
CHEM 348 or MBIOS 303	4
MATH 220 or 230	2 or 3
MATH 315	3
PHYSICS 202 or 206	4 or 5
Complete Writing Portfolio	

Third Year

First Term	***Credits***
Arts [ARTS]	3
CHE 301	3

	CHE 310 3 CHEM 331 3 CHEM 333 or 334 [M] 1 or 2 ~~CHE or~~ Technical Elective[1,2] 3 ***Second Term*** ***Credits*** CHE 321 3 CHE 332 3 CHE 334 3 CHE 498 1 ENGLISH 402 [WRTG] [M] or 403 [WRTG] [M] 3 STAT 423 3 **Fourth Year** ***First Term*** ***Credits*** CHE 352 3 CHE 432 [M] 3 CHE 441 3 CHE 450 3 ECONS 101 [SSCI], 102 [SSCI] or 198 3 ***Second Term*** ***Credits*** CHE 433 [M] 2 CHE 451 [M] [CAPS] 3 CHE Elective[2,3] 6 ~~CHE or~~ Technical Elective[1,2] 3 Exit Interview **Footnotes** [1] Three credit 300-400-level CHE course may be substituted for CHE 110 by approval of advisor. The CHE course can be included as three credits of the CHE or Technical Electives. ~~1~~[2] Technical Elective (6 credits): MSE 201 or any 300-400-level BIO ENG, CHEM, CHE, CE, E E, ENGR, MATH, ME, MSE, ~~or~~ PHYSICS, or STAT course as approved by advisor. ~~2~~[3] CHE Electives (6 credits): Any 400-level CHE course not used to fulfill major requirements. A maximum of 3 credits is allowed in CHE 488, 495, and 499 combined.	
Chemical Engineering and Bioengineering Revise graduation requirements and revise language for Rule 53 for Bachelor of Science in	**Bioengineering - General Option (120 Credits)** Students who plan to pursue pre-med studies should consult their advisor for further information about appropriate courses. ~~**Criteria for Certification - Bioengineering Program**~~ ~~1. In March of each year, the faculty of the School of Chemical Engineering and Bioengineering will establish the total number of students (January, June, and August) to be certified into the Bioengineering program.~~	**8-20**

Bioengineering - General option	~~2. Each student will be considered for certification during the semester after she/he has completed all of the following courses: MATH 171, MATH 172, CHEM 105, CHEM 106, BIOLOGY 107, PHYSICS 201, CHE 201.~~ ~~3. To be certified, each student must meet the following minimum requirements:~~ ~~a. 2.0 cumulative GPA.~~ ~~b. A "C" grade or better in each of the courses listed in 2) above.~~ ~~c. Be in good academic standing (semester GPA 2.00 or higher) at the time they are being considered for certification.~~ ~~4. Certification decisions will be made at the end of Fall, Spring, and Summer terms. Those being certified at the end of Fall term will be notified by January 15, those being certified at the end of Spring term will be notified by June 1, and those being certified at the end of the Summer term will be notified by August 15.~~ ~~5. If the number of students seeking certification exceeds the program capacity, as determined in 1) above, additional criteria will be used to select those who are certified. Those criteria include:~~ ~~a. average GPA received in the courses listed in 2) above;~~ ~~b. average GPA earned in all the engineering/math/science courses which have already been completed; and~~ ~~c. the GPA earned during the previous semester.~~ ~~6. Students who have completed all the courses listed in 2) above, but who are not certified will be notified of the decision according to the time table described in 4) above. Such students who are not certified may appeal the decision. The appeal should describe any special circumstances which should be considered. A faculty committee will consider the appeal, the special circumstances described, and trends in the grades (e.g. trends in grades and/or withdrawals, typical course load attempted and typical course load completed) and make a final decision regarding certification. The appeal must be submitted within 2 weeks of the notification described in 4) above. The appeal will be considered and a decision made by February 15, July 1, and September 15, depending on the term.~~ ~~7. Students who are deficient under the University's Educational Policies and Procedures are subject to decertification. When a student is in good academic standing, they will be reconsidered for certification as stated in 2) above.~~ ~~8. Certification Guarantee: Students who have completed the certification courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the completed courses required in th e major, and who have not repeated any required courses, are guaranteed certification~~ **<u>Admission to the Major Criteria – Bioengineering Program</u>** <u>Incoming first-year students, transfer students, and students changing from a different major may be admitted to the Bioengineering degree program upon completion of MATH 171 with a C or better or concurrent enrollment, and</u>	

CHEM 105 with a C or better or concurrent enrollment. To remain in the major the student must earn a grade of C or better in all courses and maintain good academic standing (i.e. a 2.0 or higher GPA each term and an overall cumulative GPA of 2.0 at WSU).

Students who are deficient under the University's Academic Regulations 38 and 39 or whose GPA in Bioengineering courses falls below 2.0 are subject to loss of eligibility of the major. The Bioengineering undergraduate studies committee will determine the eligibility for readmission and probation conditions for students who are deficient and apply for re-entry into the major.

First Year

First Term	***Credits***
Arts [ARTS]	3
CHEM 105 [PSCI]	4
ENGLISH 101 [WRTG]	3
ENGR 120[1]	2
MATH 171 [QUAN]	4

Second Term	***Credits***
BIO ENG 140	1
BIOLOGY 107 [BSCI]	4
CHEM 106 or 116	4
HISTORY 105 [ROOT] or 305 [ROOT]	3
MATH 172 or 182	4

Second Year

First Term	***Credits***
BIO ENG 205	1
CHE 201	3
Humanities [HUM]	3
MATH 220 or 230	2 or 3
MATH 273 or 283	2
PHYSICS 201 or 205	4 or 5

Second Term	***Credits***
BIO ENG 210	2
CE 211	3
MATH 315	3
PHYSICS 202 or 206	4 or 5
STAT 370 or 423	3
Complete Writing Portfolio	

Third Year

	First Term ***Credits*** BIO ENG 310 3 BIO ENG 321 3 BIO ENG 322 [M] 1 BIO ENG 350 3 E E 261 3 ***Second Term*** ***Credits*** BIO ENG 330 3 BIO ENG 340 4 Bioengineering Elective[2] 3 Diversity [DIVR] 3 ECONS 101 [SSCI], 102 [SSCI] or 198 3 **Fourth Year** ***First Term*** ***Credits*** BIO ENG 410 [M] 3 BIO ENG 440 4 Communication [COMM] or Written Communication [WRTG] 3 Technical Electives[3] 6 ***Second Term*** ***Credits*** BIO ENG 411 [CAPS] 3 Bioengineering Electives[2] 3 Technical Electives[3] 6 Elective 1 Complete BIO ENG Exit Interview **Footnotes** [1] 3 credit 300-400-level engineering course may be substituted for ENGR 120 by approval of advisor. [2] Bioengineering Electives (6 credits): Must have a BIO ENG subject, selected from the following: BIO ENG 425, 435, 455, 476, or 481. [3] Technical Electives (12 credits): ~~May be either BIO ENG courses (not used to fulfill Bioengineering elective requirements) from Footnote 2, or other relevant engineering or science courses from the following: BIO ENG 488, 495, 499; BIOLOGY 106, 251, 301, 315, 340, 352, 353, 494; CE 315, 463; CHE 301, 334, 475; CHEM 345, 348, 370; CPT S 121; E E 262; MBIOS 301, 303, 304, 305, 306, 401, 405/505, 413, 414, 426, 465, 478; ME 116, 212, 216, 301, 303, 310, 311, 401, 472, 473; MSE 201, 302, 401, 402, 403, 406, 413; NEUROSCI 301, 302, 305, 403 [M], 404, 425, 426, 430 [M]; PHIL 365; PHYSICS 466.~~ Approved courses include BIOLOGY 106, 251, CPT S 121, E E 214, 262, ME 116, 212, 216, MSE 201, PHIL 365, or any 300-400 level BIO ENG, BIOLOGY, CE, CHE, CHEM, CPT S, E E, MATH, ME, MSE, NEUROSCIENCE, PHYSICS, or STAT course as approved by advisor. Must include sufficient 300-400-level courses to meet University requirement of 40 credits upper-division coursework.	
Chemical Engineering and Bioengineering	**Bioengineering - Pre-Med Option (127 Credits)**	**8-20**

Revise graduation requirements and revise language for Rule 53 for Bachelor of Science in Bioengineering - Pre-Med option	Students who plan to pursue pre-med studies should consult their advisor for further information about appropriate courses. ~~**Criteria for Certification – Bioengineering Program**~~ ~~1. In March of each year, the faculty of the School of Chemical Engineering and Bioengineering will establish the total number of students (January, June, and August) to be certified into the Bioengineering program.~~ ~~2. Each student will be considered for certification during the semester after she/he has completed all of the following courses: MATH 171, MATH 172, CHEM 105, CHEM 106, BIOLOGY 107, PHYSICS 201, CHE 201.~~ ~~3. To be certified, each student must meet the following minimum requirements:~~ ~~a. 2.0 cumulative GPA.~~ ~~b. A "C" grade or better in each of the courses listed in 2) above.~~ ~~c. Be in good academic standing (semester GPA 2.00 or higher) at the time they are being considered for certification.~~ ~~4. Certification decisions will be made at the end of Fall, Spring, and Summer terms. Those being certified at the end of Fall term will be notified by January 15, those being certified at the end of Spring term will be notified by June 1, and those being certified at the end of the Summer term will be notified by August 15.~~ ~~5. If the number of students seeking certification exceeds the program capacity, as determined in 1) above, additional criteria will be used to select those who are certified. Those criteria include:~~ ~~a. average GPA received in the courses listed in 2) above;~~ ~~b. average GPA earned in all the engineering/math/science courses which have already been completed; and~~ ~~c. the GPA earned during the previous semester.~~ ~~6. Students who have completed all the courses listed in 2) above, but who are not certified will be notified of the decision according to the time table described in 4) above. Such students who are not certified may appeal the decision. The appeal should describe any special circumstances which should be considered. A faculty committee will consider the appeal, the special circumstances described, and trends in the grades (e.g. trends in grades and/or withdrawals, typical course load attempted and typical course load completed) and make a final decision regarding certification. The appeal must be submitted within 2 weeks of the notification described in 4) above. The appeal will be considered and a decision made by February 15, July 1, and September 15, depending on the term.~~ ~~7. Students who are deficient under the University's Educational Policies and Procedures are subject to decertification. When a student is in good academic standing, they will be reconsidered for certification as stated in 2) above.~~ ~~8. Certification Guarantee: Students who have completed the certification courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the completed courses required in the~~	

~~major, and who have not repeated any required courses, are guaranteed certification.~~

Admission to the Major Criteria – Bioengineering Program

Incoming first-year students, transfer students, and students changing from a different major may be admitted to the Bioengineering degree program upon completion of MATH 171 with a C or better or concurrent enrollment, and CHEM 105 with a C or better or concurrent enrollment. To remain in the major the student must earn a grade of C or better in all courses and maintain good academic standing (i.e. a 2.0 or higher GPA each term and an overall cumulative GPA of 2.0 at WSU).

Students who are deficient under the University's Academic Regulations 38 and 39 or whose GPA in Bioengineering courses falls below 2.0 are subject to loss of eligibility of the major. The Bioengineering undergraduate studies committee will determine the eligibility for readmission and probation conditions for students who are deficient and apply for re-entry into the major.

First Year

First Term	***Credits***
Arts [ARTS]	3
CHEM 105 [PSCI]	4
ENGLISH 101 [WRTG]	3
ENGR 120[1]	2
MATH 171 [QUAN]	4
Second Term	***Credits***
BIO ENG 140	1
BIOLOGY 107 [BSCI]	4
CHEM 106 or 116	4
HISTORY 105 [ROOT] or 305 [ROOT]	3
MATH 172 or 182	4

Second Year

First Term	***Credits***
BIO ENG 205	1
BIOLOGY 106	4
CHE 201	3
MATH 220 or 230	2 or 3
MATH 273 or 283	2
PHYSICS 201 or 205	4 or 5
Second Term	***Credits***
BIO ENG 210	2

	CE 211 3 MATH 315 3 PHYSICS 202 or 206 4 or 5 STAT 370 or 423 3 Complete Writing Portfolio **Third Year** ***First Term*** ***Credits*** BIO ENG 310 3 BIO ENG 321 3 BIO ENG 322 [M] 1 CHEM 345 4 E E 261 3 MBIOS 301 4 ***Second Term*** ***Credits*** BIO ENG 330 3 BIO ENG 340 4 CHEM 348 4 MBIOS 303 or CHEM 370 4 **Fourth Year** ***First Term*** ***Credits*** BIO ENG 350 3 BIO ENG 410 [M] 3 BIO ENG 440 4 Communication [COMM] or Written Communication [WRTG] 3 Diversity [DIVR] 3 ***Second Term*** ***Credits*** BIO ENG 411 [CAPS] 3 Bioengineering Electives[2] 6 ECONS 101 [SSCI] or 102 [SSCI] or 198 3 Humanities [HUM] 3 Complete BIO ENG Exit Interview **Footnotes** [1] 3 credit 300-400 level engineering course may be substituted for ENGR 120 by approval of advisor. [2] Bioengineering Electives (6 credits): Must have a BIO ENG subject, selected from the following: BIO ENG 425, 435, 455, 476, or 481.	
Design and Construction Revise graduation requirements and	**Landscape Architecture (120 Credits)** ~~Students may apply for certification at the end of spring semester of the first year. Certification requirements include completion of a minimum of 24~~	**8-20**

revise language for Rule 53 for Bachelor of Landscape Architecture	~~semester credits and earning a C or better grade in the following courses: SDC 100, 120, and 140. Additional required courses are HISTORY 105, COM 102, ENGLISH 101, and one fine arts course (FINE ART 101, 201, or 202). Transfer equivalents may be approved by the program. A minimum 2.5 WSU cumulative GPA is required to apply for certification. Students' overall WSU GPA and major specific GPA from the courses listed above are considered in the application process.~~ ~~**Certification Guarantee:** Students who have completed the certification courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the completed courses required in the major, and who have not repeated any required courses, are guaranteed certification.~~ Landscape Architecture (LA) is a four-year program structured into one year of pre-professional coursework and three years of major (professional) coursework. Professional program courses begin in second year fall. Due to the sequential nature of courses there are no spring admits. To be considered for admission into the LA program, a student must have completed the following pre-professional coursework (or their approved equivalents): COM 102 [COMM], ENGLISH 101 [WRTG], FINE ARTS 101, 201, or 202 [ARTS], HIST 105 [ROOT], PSYCH 105 or SOC 101 [SSCI], and SDC 100, 120, 140, each with a grade of C or better and a cumulative GPA of 3.3 or higher. Students not meeting the admission to major criteria above will be considered until enrollment limits are reached. Average enrollment limits into the second year of the landscape architecture major are 25-30 students. Greater emphasis is given to performance in SDC 100, 120, and 140. Completion of all pre-professional coursework does not guarantee acceptance into the professional program. Students are encouraged to work with SDC advisors to identify an alternate major should they not be admitted to their primary choice of major. Transfer Students A limited number of transfer students are considered each year. Requirements include completion of the pre-professional courses (or approved equivalents). Emphasis is given to cumulative GPA. A design portfolio may be requested for additional evaluation. Schedule of Studies The plan below is a suggested path to completion of the landscape architecture degree. Students will meet with an advisor each semester to confirm academic schedule and monitor progress towards graduation. Students are required to earn a grade of C or better in all major courses required for the degree (HORT 330, 331; LND ARCH ~~210~~, 222, 262, 263, 297, 327, 362, 363, 365, 366, 367, 380, 450, 470, 485; SOIL SCI 201~~, 368~~; SDC 100, 120, 140, 250, 300, 350, 473). **First Year**	

First Term		***Credits***
BIOLOGY 120 [BSCI][1]		4
HISTORY 105 [ROOT]		3
~~Math prereq, if needed~~		~~0 – 3~~
PSYCH 105 [SSCI] or SOC 101 [SSCI]		3
SDC 100 [ARTS]		3
SDC 120		3
Second Term		***Credits***
COM 102 [COMM]		3
ENGLISH 101 [WRTG]		3
FINE ART 101, 201, or 202		3
~~Quantitative Reasoning [QUAN]~~		~~3~~
SDC 140		3
SOE 101 [PSCI]		4
Second Year		
First Term		***Credits***
~~BIOLOGY 120 [BSCI]~~[1]		~~4~~
~~LND ARCH 210~~		~~3~~
Digital Tools Requirement I[2]		3
LND ARCH 222		1
LND ARCH 262		4
Quantitative Reasoning [QUAN][3]		3
SDC 250		3
SDC 300[4]		1
Second Term		***Credits***
LND ARCH 263		4
LND ARCH 297		3
LND ARCH 365		4
SDC 350 [M]		3
~~SOE 101 [PSCI]~~		~~4~~
SOIL SCI 201		3
Complete Writing Portfolio		
Third Year		
First Term		***Credits***
Digital Tools Requirement II[5]		3
HORT 330		3
~~Humanities [HUM]~~		~~3~~
LND ARCH 327		3

	LND ARCH 362 4 LND ARCH 366 4 ~~LND ARCH 499~~ ~~1~~ ***Second Term*** **Credits** ~~Diversity [DIVR]~~ ~~3~~ HORT 331 3 LND ARCH 363 4 LND ARCH 367 3 LND ARCH 380[26] 3 **Fourth Year** ***First Term*** ***Credits*** Diversity [DIVR] 3 Humanities [HUM] 3 LND ARCH 470 4 ~~SOIL SCI 368~~ ~~3~~ Supportive Electives[37] 3~~6~~ ***Second Term*** ***Credits*** LND ARCH 450 [M] 3 LND ARCH 485 [CAPS] [M] 4 SDC 473 [M] 3 Supportive Electives[37] 3 Complete Digital Portfolio **Footnotes** [1] Students are encouraged to complete BIOLOGY 120 [BSCI] and SOE 101 [PSCI] during the first year; however, these are not a requirement for admission to the professional program. If BIOLOGY 120 is not taken in Fall, BIOLOGY 106 can be substituted in the Spring. [2] Digital Tools Requirement I (3 credits): Select from I D 197, LND ARCH 210, or approved alternative. [3] All first year students must take the ALEKS math placement exam. Prerequisites may be required depending on placement score. [4] Students must complete SDC 300 by the end of the second year. [5] Digital Tools Requirement II (3 credits): Select from I D 397, LND ARCH 467, SOIL SCI 368, or approved alternative. [26] If LND ARCH 380 is not available, may use BIOLOGY 372, 462, ~~NATRS~~SOE 300, 454, or 464. [37] Supportive electives: At least ~~9~~6 credits of 300-400-level courses from ARCH, CST M, DESIGN, I D, LND ARCH, ~~or~~ SDC, or other courses approved in consultation with LA Program Head not used to fulfill major requirements.	
Design and Construction Revise graduation requirements and revise language	**Bachelor of Science in Architectural Studies (120 Credits)** ~~Students may apply for certification at the end of spring semester of the first year. Certification requirements include completion of a minimum of 24 semester credits and earning a C or better grade in the following courses: SDC~~	**8-20**

for Rule 53 for Bachelor of Science in Architectural Studies	~~100, 120, and 140. Additional required courses are COM 102, ENGLISH 101, HISTORY 105, PSYCH 105 or SOC 101, and one fine arts class (FINE ART 101, 201, or 202). Transfer equivalents may be approved by the program. A minimum 2.5 WSU cumulative GPA is required to apply for certification. Students' overall WSU GPA and major specific GPA from the courses listed above are considered in the application process.~~ ~~**Certification Guarantee:** Students who have completed the certification courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the completed courses required in the major, and who have not repeated any required courses, are guaranteed certification.~~ Architectural Studies (ARCH) is a four-year program structured into one year of pre-professional coursework and three years of major (professional) coursework. Professional program courses begin in second year fall. Due to the sequential nature of courses there are no spring admits. To be considered for admission into the ARCH program, a student must have completed the following pre-professional coursework (or their approved equivalents): COM 102 [COMM], ENGLISH 101 [WRTG], FINE ART 101, 201, or 202 [ARTS], HIST 105 [ROOT], PSYCH 105 or SOC 101 [SSCI], and SDC 100, 120, 140, each with a grade of C or better and an overall GPA of 3.3 or higher. Students not meeting the admission to major criteria above will be considered until enrollment limits are reached. Average enrollment limit into the second year of the architecture major are 45 students. Greater emphasis is given to performance in SDC 100, 120, and 140. Completion of all pre-professional coursework does not guarantee acceptance into the professional program. Students are encouraged to work with SDC advisors to identify an alternate major should they not be admitted to their primary choice of major. Transfer Students A limited number of transfer students are considered each year. Requirements include completion of the pre-professional courses (or approved equivalents). Emphasis is given to cumulative GPA. A design portfolio may be requested for additional evaluation. Schedule of Studies The plan below is a suggested path to completion of the architectural studies degree. Students will meet with an advisor each semester to confirm academic schedule and monitor progress towards graduation. Students are required to earn a grade of C or better in all major courses required for the degree (ARCH 201, 203, 209, 210, 215, 301, 303, 309, 351, 352, 401, 403, 451; CST M 201, 202, 332, 333; SDC 100, 120, 140, 250, 300, 350). **First Year** ***First Term*** ***Credits***	

COM 102 [COMM]		3
ENGLISH 101 [WRTG]		3
~~Humanities [HUM]~~		~~3~~
Quantitative Reasoning [QUAN][1,2]		3
SDC 100 [ARTS]		3
SDC 120		3
Second Term		***Credits***
FINE ART 101, 201, or 202 ~~[ARTS]~~		3
HISTORY 105 [ROOT]		3
~~MATH pre-req (if needed) or MATH [QUAN]~~[1]		~~3 or 4~~
PHYSICS 101 [PSCI][2]		4
PSYCH 105 [SSCI] or SOC 101[SSCI]		3
SDC 140		3
Second Year		
First Term		***Credits***
ARCH 201		5
ARCH 210		3
CST M 201		3
~~MATH [QUAN] or Elective~~[1]		~~3 or 4~~
SDC 250		3
SDC 300		1
Second Term		***Credits***
ARCH 203		5
ARCH 209		3
ARCH 215		3
CST M 202		3
SDC 350 [M]		3
Complete Writing Portfolio		
Third Year		
First Term		***Credits***
ARCH 301		5
ARCH 309 [M]		3
ARCH 351		3
ARCH 451		3
CST M 332		3
~~Diversity [DIVR]~~		~~3~~
Second Term		***Credits***
ARCH 303		5
ARCH 352		3

	Biological Science [BSCI] 4 CST M 333 3 ~~PHYSICS 101 [PSCI]~~ ~~4~~ **Fourth Year** ***First Term*** ***Credits*** ARCH 401 6 Diversity [DIVR] 3 ~~ARCH 463[2]~~ ~~3~~ Supportive Electives[3] ~~3~~4 ***Second Term*** ***Credits*** ARCH 403 [CAPS] 6 ~~ARCH 531[2]~~ ~~0 or 3~~ ~~ARCH 540[2]~~ ~~0 or 3~~ ~~Biological Sciences [BSCI]~~ ~~3 or 4~~ Humanities [HUM] 3 Supportive Electives[3] 3 **Footnotes** [1] All freshmen must take the math placement exam. Completion of MATH 108 with a grade of C or better, a minimum ALEKS math placement score of 75%, or passing MATH 140, 171 or 202 is required for PHYSICS 101 [PSCI]. MATH 108 does not fulfill the University [QUAN] requirement for graduation. ~~Students who do not take MATH prerequisites may need additional credits to meet the University minimum of 120 credits.~~ [2] Math and Physics are not required for admission to the major (professional program, beginning in second year); however, Math and Physics are course prerequisites for ARCH 351/352 and CSTM 332/333 in the third year. ~~[2] ARCH 463 is required for students intending to enter the M. Arch program. Students not intending to enter the M. Arch program may take ARCH 463 or an additional supportive elective in its place. ARCH 531 and 540 may be taken and reserved for graduate credit towards the accelerated M. Arch program if a grade of B or better is earned. Courses must be in addition to the requirements for undergraduate degree, and students must have a 3.0 GPA over the last 60 hours of undergraduate work to be eligible.~~ [3] Supportive Electives: At least ~~6~~7 credits of any 300-400-level courses from ARCH, CST M, DESIGN, I D, LND ARCH, ~~or~~ SDC, or other courses approved in consultation with ARCH Program Head not used to fulfill major requirements.	
Human Development Revise graduation requirements and revise language for Rule 53 for Bachelor of Arts in Human Development - General Option	**Human Development - General Option (120 Credits)** Students can ~~certify~~ be admitted as a Human Development major after completing 24 credits and earning a GPA of at least 2.0 ~~2.35~~. A cumulative GPA of 2.6 or better in all H D courses that apply to the option, including substitutions is required to (a) maintain ~~certification~~ admission in the major; and (b) complete the Bachelor of Arts degree in Human Development. Of the 42-44 H D credits required for the major, a minimum of 21 must be taken at WSU. **First Year** ***First Term*** ***Credits*** Arts [ARTS] 3	**8-20**

H D 101 [SSCI]	3	
Natural Sciences [BSCI]~~,~~ or [PSCI]~~, or [SCI]~~[1]	3	
Quantitative Reasoning [QUAN]	3	
Written Communication [WRTG]	3	
Second Term	***Credits***	
Communication [COMM] or Written Communication [WRTG]	3	
H D 200	2	
HISTORY 105 [ROOT]	3	
Natural Sciences [BSCI]~~,~~ or [PSCI]~~, or [SCI]~~ (with lab)[1]	4	
Minor, Certificate, and/or General Electives[2]	3	
Second Year		
First Term	***Credits***	
H D 204	3	
H D 220	3	
Humanities [HUM]	3	
Minor, Certificate, and/or General Electives[2]	6	
Second Term	***Credits***	
H D 306, 307, or 308	3	
H D 320, 334, 341, 342, 430, 480, or 482	3-4	
H D 350 [DIVR]	3	
Minor, Certificate, and/or General Electives[2]	6	
Complete Writing Portfolio		
Third Year		
First Term	***Credits***	
H D 300, 301, 302, or 360	3	
H D 306, 307, or 308	3	
H D 310 [M]	3	
Minor, Certificate, or General Electives[2]	6	
Second Term	***Credits***	
H D 403, 405, 406, or 479	3	
Minor, Certificate, or General Electives[2]	12	
Fourth Year		
First Term	***Credits***	
H D 385, 445, or 497[3,4]	3	
H D 496 or Elective[3]	1	
Integrative Capstone [CAPS]	3	
Minor, Certificate, or General Electives[2]	8	
Second Term	***Credits***	
H D 410 [M]	3	
H D 446 or 498[5,6]	3-6	

	Minor, Certificate, or General Electives 9 **Footnotes** [1] For a total of 7 credits—one Biological Science [BSCI] and one Physical Science [PSCI] course, including one lab course~~., or 8 credits of [SCI] designated courses. (SCIENCE 101 [SCI] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCI], which is offered Spring semester.)~~ [2] Students strongly encouraged to pursue a minor or certificate. Elective credits should include sufficient 300-400-level courses to meet University requirement of 40 upper-division credits. [3] H D 385 and 496 are required for Vancouver students only and must be completed before H D 498 ~~or 446~~. [4] H D 497 is required for Pullman and Global students ~~only~~ and must be completed prior to H D ~~446 or~~ 498. [5] All H D majors complete a practicum/internship experience. H D 446 is reserved for students completing the certificate in Early Childhood Education and requires a half-day each day, 5 days a week for a semester~~ and can be put into the schedule any time after taking H D 342~~. For Pullman and Global students HD 445 must be taken before HD 446 but no more than two semesters before taking the practicum. For Vancouver students H D 385 or 445 must be taken before completion of H D 446. ~~All other H D majors complete H D 498~~. [6] The internship course (H D 498) can be taken during the summer semester of the junior or senior year. For Pullman and Global students, H D 497 must be taken before H D 498 but no more than two semesters before taking the internship. For Vancouver students, H D 385 and H D 496 must be taken before completion of H D 498 f~~or Vancouver students~~. Vancouver students are required to take 3 credits of H D 498. Pullman and Global students must complete 4 credits of H D 498.	
Human Development Revise requirements and revise language for Rule 53 for HD undergraduate certificate in Adolescence.	**Adolescence** The department of Human Development offers a Certificate in Adolescence. The certificate reflects a high standard of training and experience in this specific area of human development. Non-human development majors are required to complete any prerequisites for the internship requirement. The requirements include 6 ~~hours~~ credits in H D core courses that support the area of certification, 15 ~~hours~~ credits in required and optional courses and 4 ~~hours~~ credits of internship that reflect the area of certification. Students must maintain an overall GPA of ~~2.5~~ 2.6 in those courses that count toward the certificate. Certificate requirements: Required courses: H D ~~202,~~ 220, 302, 307, 408, ~~420,~~ 498, one other 300-400 level H D course, H D 479 or 480, and one from PSYCH 230, 265, SOC 360, or 362.	**8-20**
Human Development Revise requirements and revise language for Rule 53 for HD undergraduate certificate in Gerontology.	**Gerontology** The department of Human Development offers a Certificate in Gerontology. The certificate reflects a high standard of training and experience in the specific area of human development. Non-human development majors are required to complete any prerequisites for the internship requirement. The requirements include 6 ~~hours~~ credits in H D core courses that support the area of certification, 15 ~~hours~~ credits in required and optional courses, and 4 ~~hours~~ credits of internship that reflect the area of certification. Students must maintain an overall GPA of ~~2.5~~2.6 in those courses that count toward the certificate. Certificate requirements:	**8-20**

	Required courses: BIOLOGY 140; H D ~~203 or 305~~308 or 405; PSYCH 363 or 490; SOC 351 or 356. Elective Courses, 6 credits minimum from the following: BIOLOGY 233; HBM 375, 497; H D ~~203,~~ ~~305~~ 308 (if not used in required), 360; KINES 264, 361; MGMT 101, 301; PHIL 103, 365; PSYCH 320, 363, 490 (if not used in required); SOC 250, 351, 356 (if not used in required); H D 497, H D 498.	
Human Development Revise requirements for minor in General Human Development	**General Human Development** The General Human Development minor requires 18 ~~hours~~ credits and a cumulative GPA of 2.6 or better in coursework used to fulfill this minor. Required coursework includes H D 101, 204, 220, and 9 additional H D elective ~~hours~~ credits selected from H D 300, 301, 302, 306, 307, 308, 320, 334, 341, 350, 360, 385, 403, 405, 406, 408, 430, 479, 480, or 482~~,~~. ~~and a~~ A maximum of 3 credits of H D 485 may apply to the upper-division requirement of the minor. Coursework must include a minimum of 9 ~~hours~~ credits of 300-400-level courses taken in residence at WSU or through WSU-approved education abroad or educational exchange courses.	**8-20**
Integrated Plant Sciences Revise graduation requirements and language for Rule 53 for Bachelor of Science in Integrated Plant Sciences - Field Crop Management	**Field Crop Management (120 Credits)** The Field Crop Management major is ideal for students interested in agronomy, crop production, and plant, soil, and pest management. Crop scientists (or agronomists) are involved in improving food, feed, and fiber production. Graduates qualify for careers in agribusiness, corporate and technical farm management, professional consulting, research, and sales positions. A student may be admitted to the Field Crop Management major upon making their intention known to the department. **First Year** ***First Term*** ***Credits*** CHEM 101 [PSCI] or 105 [PSCI] 4 Communication [COMM] (COM 102 [COMM] or H D 205 [COMM] recommended) 3 or 4 ~~ECONS 101 [SSCI]~~ ~~3~~ ENGLISH 101 [WRTG] 3 ~~HISTORY 105 [ROOT]~~ ~~3~~ HORT / CROP SCI 102 3 ~~MATH 140 [QUAN]~~ ~~4~~ ***Second Term*** ***Credits*** ~~Arts [ARTS]~~ ~~3~~ CHEM 102 or 106 4 ECONS 101 [SSCI] 3 ~~ENGLISH 101 [WRTG]~~ ~~3~~	**8-20**

HISTORY 105 [ROOT]	3	
HORT / CROP SCI 202	4	
Second Year		
First Term	***Credits***	
~~[COMM] Course (COM 102 [COMM] or H D 205 [COMM] recommended)~~	~~3 or 4~~	
BIOLOGY 106 [BSCI], 107 [BSCI], or 120 [BSCI]	4	
~~Humanities [HUM]~~	~~3~~	
SOIL SCI 201	3	
SOIL SCI 202	1	
STAT 212 [QUAN]	4	
Electives	~~2~~4	
Second Term	***Credits***	
Arts [ARTS]	3	
BIOLOGY 106, 107, or 120	4	
Diversity [DIVR]	3	
~~ENTOM 351~~	~~3~~	
MATH 140[1]	4	
~~STAT 212~~	~~4~~	
Electives	3	
Complete Writing Portfolio		
Third Year		
First Term	***Credits***	
CROP SCI 305	3	
ECONS 350[~~1~~2]	3	
ENTOM 343 [M]	3	
Major Electives[~~2~~3]	3	
Electives	3	
Second Term	***Credits***	
CROP SCI 302	3	
CROP SCI 495, 498, or 499	~~3~~1	
~~Diversity [DIVR]~~	~~3~~	
ENTOM 351	3	
Humanities [HUM]	3	
Electives	~~6~~ 4	
Fourth Year		
First Term	***Credits***	
CROP SCI 403	3	

	CROP SCI 411 [M][34] 3 ~~Integrative Capstone [CAPS]~~ ~~3~~ PL P 429 3 Electives 3 Major Electives[23] 3 ***Second Term*** ***Credits*** CROP SCI 412 1 Integrative Capstone [CAPS] 3 ~~IPM 452~~ ~~2~~ SOIL SCI 441 3 Electives 6 Major Electives[23] 3 **Footnotes** [1] MATH 106 and 108 can be taken as an alternative to MATH 140. ~~[1]~~[2] ECONS 352 can be taken in the spring as an alternative to ECONS 350. ~~[2]~~[3] Major Elective (9 Credits): AFS 302 [M]; CROP SCI 360, ~~401 [M],~~ 445 [M], 480, ~~4~~95, 498, 499; ENTOM 361, 460; HORT 357; SOIL SCI 442; and/or consult with your advisor. No more than 3 credits of 495, 498, or 499 may be used toward Major Elective credits. ~~[3]~~[4] HORT 416 can be taken in the spring as an alternative to CROP SCI 411 [M]. However, two [M] courses are required therefore one elective should have [M] designation.	
Integrated Plant Sciences Revise graduation requirements and revise language for Rule 53 for Bachelor of Science in ~~Integrated Plant Sciences –~~ Viticulture and Enology on WSU Tri-Cities campus.	**BS in Viticulture and Enology (120 Credits)** The Viticulture and Enology ~~major~~ degree was created for students interested in wine-grape growing and winemaking, as well as contributing to critical research and development opportunities in the wine industry. This program offers the technical, scientific, and practical experience needed to gain the essential skills for producing high quality grapes and premium table wines. It prepares students for successful careers in the wine industry in Washington and beyond. A student may be admitted to the Viticulture and Enology degree program upon making their intention known to the department. **First Year** ***First Term*** ***Credits*** CHEM 101 [PSCI] or 105 [PSCI] 4 ~~[COMM] Course (COM 102 [COMM] or H D 205 [COMM] recommended)~~ ~~3 or 4~~ HISTORY 105 [ROOT] 3 HORT / CROP SCI 102 3 VIT ENOL 113 3 ***Second Term*** ***Credits*** CHEM 102 or 106 4	**8-20**

ENGLISH 101 [WRTG]	3	
HORT / CROP SCI 202	4	
STAT 212 [QUAN]	4	
Second Year		
First Term	***Credits***	
BIOLOGY 106 [BSCI] or 120 [BSCI]	4	
CHEM 345	4	
Communication [COMM] (COM 102 [COMM] or H D 205 [COMM] recommended)	3 or 4	
ECONS 101 [SSCI] or 102 [SSCI]	3	
~~VIT ENOL 113~~	~~3~~	
~~Electives~~	~~3~~	
Second Term	***Credits***	
Arts [ARTS]	3	
BIOLOGY 107	4	
Diversity [DIVR]	3	
Humanities [HUM]	3	
SOIL SCI 201	3	
Complete Writing Portfolio		
Third Year		
First Term	***Credits***	
BIOLOGY 420	3	
ENTOM 343 [M]	3	
HORT/VIT ENOL 313	3	
MBIOS 101[1]	4	
~~MBIOS 303~~	~~4~~	
PL P 300~~1~~2	2	
Second Term	***Credits***	
ENTOM 351	3	
HORT/VIT ENOL 413	3	
~~IPM 452~~	~~2~~	
MBIOS 303	4	
~~MBIOS 305~~	~~3~~	
Specialization Electives[2]	3	
Electives	3	
Third Term	***Credits***	
(Summer Session) HORT/VIT ENOL 399 or FS/VIT ENOL 496	2	
Fourth Year		

	First Term ***Credits*** FS/VIT ENOL 465 3 HORT 418 [M] 3 ~~HORT/VIT ENOL 326~~ ~~3~~ HORT/VIT ENOL 409 1 HORT/VIT ENOL 435 3 Specialization Electives[2] 3 Elective 1 ***Second Term*** ***Credits*** FS/VIT ENOL 422 3 ~~FS/VIT ENOL 435~~ ~~3~~ HORT 416[3] 3 ~~HORT 425 [CAPS] [M]~~ ~~3~~ VIT ENOL 433 [CAPS] [M] 3 VIT ENOL/HORT 440 3 Specialization Electives[2] 3 **Footnotes** [1] MBIOS 305 can be taken as an alternative to MBIOS 101. ~~[1]~~[2] PL P 429 can be taken as an alternative, but PL P 300 is recommended. ~~[2]~~[3] ~~Approved~~ Specialization Electives courses ~~include~~ (9 credits): ~~AGTM 315; BIOLOGY 421; CHEM 220/222; CROP SCI 305, 403; ECONS 351; ENVR SCI 486; FS 303, 416, 423, 460, 462, 470; FS/VIT ENOL 466; GEOLOGY 322, 323; HBM 350, 358, 480; HORT 251 421 [M], 495, 499; MATH 140; MBIOS 301,306; MKTG 360; PHYSICS 101; SOIL SCI 302 [M], 374, 414, 415, 441, 442, 468; or as approved by advisor.~~ Approved courses include HBM 350, 358; HORT 310, 320, 421, 495, 499; MATH 106, 140; MBIOS 301, 306; MKTG 360; PHYSICS 101; SOE 322; SOIL SCI 302 [M], 374, 441, 468, or as approved by advisor. ~~[3]~~[4] CROP SCI 411 [M] can be taken in the fall as an alternative to HORT 416.	
Kinesiology and Educational Psychology Bachelor of Science in Kinesiology Change name of major from Sport Science to Kinesiology; change language in schedule of studies to accommodate Rule 53.	**Bachelor of Science in Kinesiology - ~~Sport Science~~ Kinesiology (120 Credits)** The ~~Sport Science~~ Kinesiology major leads to the Bachelor of Science in Kinesiology. The major provides an interdisciplinary understanding of human movement through the study of anatomy, physiology, movement analysis, biomechanics, motor learning, exercise physiology, and sport psychology and ethics. ~~Sport Science~~ Kinesiology provides a foundation for personal training certification, health and fitness club employment, teaching, coaching, physical therapy, and sports medicine. Because of the high demand for this program, students must meet minimum ~~certification~~ admission requirements, as listed below, in order to apply to the ~~Sport Science~~ Kinesiology program. Applicants who meet the minimum requirements are eligible for consideration, but not assured admission. Enrollment is limited and admission competitive. Admission application dates are September 1st to 30th, and February 1st to 28th, with ~~certification~~ admission effective the following term. Candidates must complete formal admission	**8-20**

	procedures and be ~~certified in~~ admitted to the ~~Sport Science~~ Kinesiology major prior to taking any 300- or 400-level courses. The following minimum criteria must be met for consideration for admission: Minimum ~~Certification~~ Admission Criteria 1. Completion of at least 24 semester ~~hours~~ credits of coursework. 2. A cumulative GPA of 2.75. 3. A grade of C or better in each of the following courses: KINES 199 and KINES 262. 4. A written statement (maximum of two pages) describing relevant work experience/involvement in extracurricular activities related to ~~Sport Science~~ Kinesiology. A grade of C or better must be obtained in all departmental core courses, ~~elective core~~ cognate courses, and in UCORE courses used as prerequisites for departmental courses listed on this schedule of studies. All letter-graded courses specifically required for this major must be taken for a letter grade (i.e., not pass, fail).	
Teaching and Learning Revise graduation requirements for Bachelor of Arts in Education - Elementary Education Certificate Program	**Elementary Education Teacher Certificate (128 Credits)** Candidates for the undergraduate elementary education teacher certificate program will satisfy degree requirements of the Department of Teaching and Learning. The degree will be the Bachelor of Arts. The student should include the following course work within UCORE selections to satisfy prerequisite, degree, and admission to teacher preparation requirements. This course schedule does not include an add-on endorsement. ~~During the freshman year, students must qualify to enroll in MATH 251, and begin the University Writing Portfolio.~~ **First Year** ***First Term*** ***Credits*** ENGLISH 101 [WRTG] 3 H D 101 [SSCI] 3 MATH 251 3 MUS 153 [ARTS] or Arts [ARTS] 3 Science Requirement[1] 4 ***Second Term*** ***Credits*** Endorsement Course[2] 3 HISTORY 105 [ROOT] 3 HISTORY 110 [HUM] or 111 [HUM] 3 MATH 252 [QUAN] 3 Science Requirement[1] 4 **Second Year**	**8-20**

First Term	*Credits*
Endorsement Course[2]	3
ENGLISH 201 [WRTG], 301 [WRTG], or 402 [WRTG]	3
POL S 101, ECONS 101, or ECONS 102	3
Science Requirement[1]	4
TCH LRN 301	3
~~Complete WEST-B (if minimum required scores on SAT or ACT are not met)~~	
Second Term	***Credits***
Endorsement Courses[2]	6
HISTORY 120 [DIVR]	3
Science Requirement[1]	4
TCH LRN 307	3
Apply for admission to the major	
~~Certify in Major~~	
Complete Writing Portfolio	

Third Year

First Term	*Credits*
ED PSYCH 401	3
TCH LRN 320 or 321	3
TCH LRN 352	3
TCH LRN 402	1
TCH LRN 445	2
TCH LRN 483[3]	3
Second Term	***Credits***
Endorsement Course[2]	3
SPEC ED 420	3
TCH LRN 306 [M] or 322 [M]	3
TCH LRN 310 [M]	2
TCH LRN 371	3
~~TCH LRN 390~~	~~3~~
TCH LRN 405	1

Fourth Year

First Term	*Credits*
Endorsement Course [2]	3
~~SPEC ED 420~~	~~3~~
TCH LRN 330	3
TCH LRN 385	3
TCH LRN 390	3

	TCH LRN 413	3	
	TCH LRN 490 [CAPS]	3	
	Second Term	***Credits***	
	TCH LRN 415	16	

Footnotes

[1] Science Requirement – choose one of two options: Option 1) SCIENCE 101 [SCI] and 102 [SCI], plus two from: ASTRONOM 135 [PSCI], BIOLOGY 102 [BSCI] or 106 [BSCI], CHEM 101 [PSCI], PHYSICS 101 [PSCI], SOE 101 [PSCI], or SOE 110 [BSCI]; Option 2) SOE 101 [PSCI], and BIOLOGY 102 [BSCI] or 106 [BSCI], plus two from: ASTRONOM 135 [PSCI], CHEM 101 [PSCI], PHYSICS 101 [PSCI], SCIENCE 101 [SCI], SCIENCE 102 [SCI], or SOE 110 [BSCI].

[2] Endorsement Courses: Students seeking a BA in Elementary Education must complete at least 20 semester credits ~~hours~~ in an endorsable area. Some required coursework may be applied to the endorsement area. See Specific Subject area requirements.

[3] TCH LRN 483 must be completed prior to the Fourth Year.