UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 3
Fall 2014

---REQUIREMENTS---

Faculty Senate Approved November 20, 2014

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

Dept	Proposed	Effective Date
Foreign Languages and Cultures New major: Japanese Requirements	**Japanese (120 Hours)** A minimum of 34 hours beyond the 203 level (or the equivalent level in competence) in the major language is required for a Bachelor of Arts degree in Foreign Languages and Cultures. 101, 102, and 203 do not count toward the major. Students who place into 102 and receive a B or better qualify for an additional 4 departmental advanced placement credits; students placing into 203 or above and receiving a B or better qualify for 8 departmental advanced placement credits. A maximum of 8 departmental AP credits is possible. See department for details. Majors must complete either a minor in a second foreign language, a concentration of at least 16 credits in a related field, or a second major. No course in which a C- or lower grade is earned will be counted toward the major or minor. 300-400-level courses taken pass, fail may not be included for credit toward the major. No course may be repeated for credit toward the major unless thus designated in the catalog. No course may count for both the major and the minor. Majors and prospective majors are strongly encouraged to spend at least one semester abroad, living in the target culture and enhancing their fluency. Many accredited study abroad programs are available; students should work with their advisers in the selection of a program. Of the 34 hours required for the major, a minimum of 15 must be taken in residence with 6 of these hours at the 400-level. A maximum of 12 credits per semester or 18 credits per year earned in a study abroad program may be applied toward the major. Credits for 105, 205, 305, 405 may not be applied toward the major or minor. Honors students complete the Honors College requirements which replace the UCORE requirements. All majors must complete an exit proficiency examination during the semester in which they complete the last language course of their major.	**8-15**

There is a fee charged for the exam.

First Year

First Term	***Hours***
Biological Sciences [BSCI] with lab or SCIENCE 101 [SCI]	4
ENGLISH 101 [WRTG]	3
FOR LANG 101, 110, 120, 130, or 220	3
JAPANESE 101 (if necessary) or higher (102, 203, or 204)	4
JAPANESE 105 or Elective	1
Second Term	***Hours***
HISTORY 105 [ROOT]	3
JAPANESE 102 (if necessary) or higher (203 or 204)	4
JAPANESE 111, 120, 123, or 131	3
Quantitative Reasoning [QUAN]	3
Electives[1]	3

Second Year

First Term	***Hours***
JAPANESE 203 (if necessary), or higher (204 or 300-level)	4
JAPANESE 205 or Elective	1
Physical Sciences [PSCI] with lab or SCIENCE 102 [SCI]	4
Social Sciences [SSCI]	3
Electives[1]	3
Second Term	***Hours***
Communication [COMM] or Written Communication [WRTG]	3
Creative & Professional Arts [ARTS]	3
Humanities [HUM]	3
JAPANESE 204 or higher (300-level)	4
JAPANESE 205 or Elective	1
Complete Writing Portfolio	

Third Year

First Term	***Hours***
Area Studies courses[2]	3
ASIA 330 [M]	3
JAPANESE 306, 307, 308, or 361	3
JAPANESE 322 [DIVR]	3
Electives[1]	3
Second Term	***Hours***
Creative & Professional Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI]	3

	FOR LANG 440 if teaching major or Electives 4 JAPANESE 305 or Elective 1 JAPANESE 306, 307, 308, or 361 3 JAPANESE 320 [M] 3 **Fourth Year** ***First Term*** ***Hours*** JAPANESE 306, 307, 308, or 361 3 JAPANESE 305 or Elective 1 CHINESE 311 or Elective 3 FOR LANG 441 if teaching major or 300-400-level Electives[3] 3 300-400-level Electives[3] 6 ***Second Term*** ***Hours*** Area Studies courses[2] 3 FOR LANG 410 [CAPS] 3 JAPANESE 306, 307, 308, or 361 3 300-400-level Electives[3] 6 Language Proficiency Exam **Footnotes** [1] Electives must be represented by an approved university minor in a second foreign language; 16 credits in a concentrated related field; or a second major in another field. [2] Area Studies courses: Students must take 6 credits in Japanese-related courses from CES 311, 313, 314, 315, 411, and 413; ASIA 275, 374, 387, 477, and 479; FINE ART 302; PHIL 314 and 315; or as approved by advisor. [3] 6 credits of 400-level major coursework required. Approved courses are Japanese prefix courses and Area Studies courses, or as approved by advisor.	
Foreign Languages and Cultures New Major to be offered only as a Second Major: Japanese for the Professions	**Second Major – Japanese for the Professions** Students who are certified in a major may seek an additional major in Japanese for the Professions. This additional major does not lead to a degree. The additional major requires 37 credits, as follows: 1) Language Foundation (16 credits) -- JAPANESE 101, 102, 203, and 204. Note that most students entering WSU will have already fulfilled the equivalent of the 101 and 102 courses, if they choose to pursue the same foreign language for this major; 2) Intermediate Language (9 credits) -- JAPANESE 306, 307, and 308; 3) Language for Specific Purposes (3 credits) -- JAPANESE 361; 4) Lower-level Culture/Literature course taught in English (3 credits) -- one from JAPANESE 111, 120, 123, and 131; 5) Upper-level Culture/Literature courses taught in English (6 credits) -- two from CHINESE 311, JAPANESE 320, JAPANESE 322, and ASIA 330; and 6) Upper-level Experience (12 credits), including two Writing in the Major courses (see department). The STAMP 4S (Standards-based Measurement of Proficiency) web-based assessment of foreign language proficiency in reading, writing, speaking, and listening and will be taken during the semester in which the student is completing the final course for the major taught in the target language.	**8-15**

Integrative Physiology and Neuroscience [IPN] Revise graduation requirements for Bachelor of Science in Neuroscience – General Option	**Neuroscience - General Option (120 Hours)** Students may certify in general neuroscience (including ~~premed and prevet~~Pre-Medical/Pre-Dental and Pre-Veterinary options) after completing ~~NEUROSCI 301 and~~ a minimum of 24 semester hours with a 3.0 minimum ~~gpa~~GPA overall, and a 3.0 minimum GPA in BIOLOGY 106, BIOLOGY 107, CHEM 105, CHEM 106 or 116, MATH 140 or 171, PHYSICS 101 or 201 or 205, and PHYSICS 102 or 202 or 206 or CHEM 345. **First Year** ***First Term*** ***Hours*** ~~BIOLOGY~~ MATH 140 [QUAN] or 171 [QUAN] ~~106 [BSCI]~~ 4 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 ~~HISTORY~~ PSYCH 105 [~~ROOT~~SSCI] 3 NEUROSCI 138 1 ***Second Term*** ***Hours*** BIOLOGY 107 [BSCI] 4 CHEM 106 4 Creative & Professional Arts [ARTS] 3 ~~PSYCH~~ HISTORY 105 [~~SSCI~~ROOT] 3 **Second Year** ***First Term*** ***Hours*** Communication [COMM] or Written Communication [WRTG] 3 ~~Diversity [DIVR]~~BIOLOGY 106 ~~3~~4 ~~Humanities [HUM]~~ ~~3~~ ~~NEUROSCI 301~~CHEM 345 ~~3~~4 PHYSICS 101 or 201 4 ***Second Term*** ***Hours*** ~~CHEM 345~~[1] NEUROSCI 301 ~~4~~3 ~~MATH 140 [QUAN] or 171 [QUAN]~~[2] Diversity [DIVR] ~~4~~3 PHYSICS 102 or 202 4 Neuroscience Electives[1] ~~3~~5 Complete Writing Portfolio **Third Year** ***First Term*** ***Hours*** ~~BIOLOGY 315~~ Statistics[2] 4 ~~BIOLOGY 438, PSYCH 384, or 390~~Behavior Course[3] 3 MBIOS 303 4	**8-15**

	Neuroscience Electives[1] ~~(consult adviser)~~ ~~8~~4 ***Second Term*** ***Hours*** ~~MBIOS 303~~ ~~4~~ NEUROSCI ~~403~~ 404 ~~[M]~~ ~~3~~4 Humanities [HUM] 3 Electives[4] ~~(consult advisor)~~ ~~8~~9 **Fourth Year** ***First Term*** ***Hours*** ~~Integrative Capstone [CAPS]~~NEUROSCI 430 [M] ~~3~~4 ~~NEUROSCI 495 or 499~~ ~~2~~ ~~NEUROSCI Electives~~ ~~3~~ ~~PSYCH 311~~[3] ~~4~~ Electives[4] ~~(consult advisor)~~ ~~3~~11 ***Second Term*** ***Hours*** NEUROSCI ~~430~~403 [M] ~~4~~3 NEUROSCI 490 [CAPS] ~~1~~3 ~~NEUROSCI Electives~~ ~~6~~ ~~300-400 level~~ Electives[4] ~~(consult advisor)~~ ~~5~~9 **Footnotes** [1] Approved Neuroscience electives include: BIOLOGY 301, 315, 321, 340, 352, 353, 354, 438, 456; MATH 340; MBIOS 301, 304, 305, 401, 404, 413; NEUROSCI 305, 409/509, 425, 426; PSYCH 265, 312, 333, 350, 361, 372, 384, 464,470, 490, 491; PHYSICS 466/566; VET PH 308. Other courses may be allowed by department consent. Please see your advisor.~~Part of the 345-346 year-long sequence. Recommended for medical, dental, or optometry school.~~ [2] Choose one course from: MATH/STAT 212, MATH 360, MATH 370, STAT 412, or PSYCH 311.~~MATH 202 or 206 can substitute.~~ [3] Choose one course from: BIOLOGY 438, BIOLOGY 456, PSYCH 470, PSYCH 491, NEUROSCI 305, or NEUROSCI 409. ~~Or statistics course approved by advisor.~~ [4] Additional elective choices should include a minimum of 9 credits at the 300-400 level.	
Integrative Physiology and Neuroscience [IPN] Revise graduation requirements for Bachelor of Science in Neuroscience – Pre-Medical and Pre-Dental Option.	**Neuroscience - Pre-Medical and Pre-Dental Option (120 Hours)** Students may certify in general neuroscience (including Pre-Medical/Pre-Dental and Pre-Veterinary options~~premed and prevet~~) after completing ~~NEUROSCI 301 and~~ a minimum of 24 semester hours with a 3.0 minimum ~~gpa~~ GPA overall, and a 3.0 minimum GPA in BIOLOGY 106, BIOLOGY 107, CHEM 105, CHEM 106 or 116, MATH 140 or 171, PHYSICS 101 or 201 or 205, and PHYSICS 102 or 202 or 206 or CHEM 345. **First Year** ***First Term*** ***Hours*** ~~BIOLOGY~~ MATH 140 [QUAN] or 171 [QUAN] ~~106 [BSCI]~~ 4	**8-15**

CHEM 105 [PSCI]	4
ENGLISH 101 [WRTG]	3
~~HISTORY~~ PSYCH 105 [~~ROOT~~SSCI]	3
NEUROSCI 138	1
Second Term	***Hours***
BIOLOGY 107 [BSCI]	4
CHEM 106	4
Creative & Professional Arts [ARTS]	3
~~PSYCH~~ HISTORY 105 [~~SSCI~~ROOT]	3
Second Year	
First Term	***Hours***
Communication [COMM] or Written Communication [WRTG]	3
~~Diversity [DIVR]~~BIOLOGY 106	~~3~~4
~~Humanities [HUM]~~	~~3~~
~~NEUROSCI 301~~CHEM 345	~~3~~4
PHYSICS 101 or 201	4
Second Term	***Hours***
~~CHEM 345~~[1] NEUROSCI 301	~~4~~3
~~MATH 171 [QUAN] or 140 [QUAN]~~Diversity [DIVR]	~~4~~3
PHYSICS 102 or 202	4
~~Electives~~CHEM 348	~~3~~4
Complete Writing Portfolio	
Third Year	
First Term	***Hours***
~~BIOLOGY 315~~ Statistics[1]	4
~~BIOLOGY 438, PSYCH 384, or 390~~Behavior Course[2]	3
~~MBIOS 301~~Neuroscience Electives[3]	~~4~~5
MBIOS 303	4
Second Term	***Hours***
~~CHEM 346~~[1] BIOLOGY/MBIOS 301	~~3~~4
NEUROSCI 404	~~3~~4
Humanities [HUM]	3
~~NEUROSCI or other~~ Electives[4]	~~9~~5
MCAT in ~~April~~Spring	
Fourth Year	
First Term	***Hours***

	~~Integrative Capstone [CAPS]~~NEUROSCI 430 [M] ~~3~~4 ~~NEUROSCI 403 [M]~~ ~~3~~ ~~NEUROSCI 495 or 499~~ ~~2~~ ~~NEUROSCI or other~~ Electives[4] ~~4~~11 ~~PSYCH 311~~ ~~4~~ ***Second Term*** ***Hours*** ~~MBIOS 305~~ ~~3~~ NEUROSCI ~~430~~ 403 [M] ~~4~~3 NEUROSCI 490 [CAPS] ~~1~~3 ~~PSYCH 312~~ ~~4~~ Electives[4] ~~3~~9 **Footnotes** [1] Choose one course from: MATH/STAT 212, MATH 360, MATH 370, STAT 412, or PSYCH 311.~~Part of the 345-346 year-long sequence. Recommended for medical, dental, or optometry school.~~ [2] Choose one course from: BIOLOGY 438, BIOLOGY 456, PSYCH 470, PSYCH 491, NEUROSCI 305, or NEUROSCI 409. [3] Approved Neuroscience electives include: BIOLOGY 301, 315, 321, 340, 352, 353, 354, 438, 456; MATH 340; MBIOS 301, 304, 305, 401, 404, 413; NEUROSCI 305, 409/509, 425, 426; PSYCH 265, 312, 333, 350, 361, 372, 384, 464,470, 490, 491; PHYSICS 466/566; VET_PH 308. Other courses may be allowed by department consent. [4] Additional elective choices should include a minimum of 9 credits at the 300-400 level. Consult your advisor regarding elective courses that may be required or recommended for admission into your future health-professions program.	
Integrative Physiology and Neuroscience [IPN] Revise graduation requirements for Bachelor of Science in Neuroscience – Pre-Veterinary Option.	**Neuroscience - Pre-Veterinary Option (120 Hours)** Students may certify in general neuroscience (including Pre-Medical/Pre-Dental and Pre-Veterinary options~~premed and prevet~~) after completing ~~NEUROSCI 301 and~~ a minimum of 24 semester hours with a 3.0 minimum ~~gpa~~ GPA overall, and a minimum 3.0 GPA in BIOLOGY 106, BIOLOGY 107, CHEM 105, CHEM 106 or 116, MATH 140 or 171, PHYSICS 101 or 201 or 205, and PHYSICS 102 or 202 or 206 or CHEM 345. **First Year** ***First Term*** ***Hours*** ~~BIOLOGY~~ MATH 140 [QUAN] or 171 [QUAN] ~~106~~ ~~[BSCI]~~ 4 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 ~~HISTORY~~ PSYCH 105 [~~ROOT~~SSCI] 3 NEUROSCI 138 1 ***Second Term*** ***Hours*** BIOLOGY 107 [BSCI] 4 CHEM 106 4	**8-15**

Creative & Professional Arts [ARTS]	3
~~PSYCH~~ HISTORY 105 [~~SSCI~~ROOT]	3

Second Year

First Term	***Hours***
Communication [COMM] or Written Communication [WRTG]	3
~~Diversity [DIVR]~~BIOLOGY 106	~~3~~4
~~Humanities [HUM]~~	~~3~~
~~NEUROSCI 301~~CHEM 345	~~3~~4
PHYSICS 101 or 201	4

Second Term	***Hours***
~~CHEM 345~~NEUROSCI 301	4
~~MATH 140 [QUAN]~~Diversity [DIVR]	~~4~~3
PHYSICS 102 or 202	4
~~Electives~~BIOLOGY/MBIOS 301	~~3~~4
Complete Writing Portfolio	

Third Year

First Term	***Hours***
~~MBIOS 301~~ Statistics[1]	4
MBIOS 303	4
~~NEUROSCI or other~~ Neuroscience Electives[2]	~~2~~5
~~PSYCH 311~~Behavior Course[3]	~~4~~3

Second Term	***Hours***
~~BIOLOGY 438 [M] (recommended elective)~~	~~3~~
NEUROSCI 404	~~3~~4
~~NEUROSCI 495/499 or other Electives~~Humanities [HUM]	~~6~~3
~~VET PH 308~~ ~~(recommended elective)~~ Electives[4]	~~4~~8
Take GRE over the summer	

Fourth Year

First Term	***Hours***
~~Integrative Capstone [CAPS]~~	~~3~~
NEUROSCI ~~403~~ 430 [M]	~~3~~4
~~NEUROSCI 495 or 499~~	~~2~~
~~NEUROSCI or other~~ Electives[4]	~~7~~11
Apply to Veterinary School	

Second Term	***Hours***
NEUROSCI ~~430~~ 403 [M]	~~4~~3

	NEUROSCI 490 [CAPS] ~~1~~3 ~~NEUROSCI or other~~ Electives[4] ~~6~~9 ~~300-400-level NEUROSCI or other Electives~~ ~~5~~ **Footnotes** [1] Choose one course from: MATH/STAT 212, MATH 360, MATH 370, STAT 412, or PSYCH 311. [2] Approved Neuroscience electives include: BIOLOGY 301, 315, 321, 340, 352, 353, 354, 438, 456; MATH 340; MBIOS 301, 304, 305, 401, 404, 413; NEUROSCI 305, 409/509, 425, 426; PSYCH 265, 312, 333, 350, 361, 372, 384, 464,470, 490, 491; PHYSICS 466/566; VET PH 308. Other courses may be allowed by department consent. Please see your advisor. [3] Choose one course from: BIOLOGY 438, BIOLOGY 456, PSYCH 470, PSYCH 491, NEUROSCI 305, or NEUROSCI 409. [4] Additional elective choices should include a minimum of 9 credits at the 300-400 level. Consult your advisor regarding elective courses that may be required or recommended for admission to a DVM program.	
Integrative Physiology and Neuroscience [IPN] Revise graduation requirements for Bachelor of Science in Neuroscience – Computational (Breadth of Field emphasis).	**Neuroscience - Computational (Breadth of Field emphasis) (128 Hours)** Students may certify in computational neuroscience after completing ~~NEUROSCI 301, and~~ a minimum of 24 semester hours with a 3.0 minimum ~~gpa~~ GPA overall, and a minimum 3.0 GPA in BIOLOGY 106, BIOLOGY 107, CHEM 105, CHEM 106 or 116, MATH 171, MATH 172, and PHYSICS 201 or 205. **First Year** ***First Term*** ***Hours*** CHEM 105 [PSCI][1] 4 Creative & Professional Arts [ARTS] 3 ENGLISH 101 [WRTG] 3 HISTORY 105 [ROOT] 3 MATH 171 [QUAN][1] 4 ~~PSYCH 105 [SSCI]~~ 3 ***Second Term*** ***Hours*** BIOLOGY ~~106~~ 107 [BSCI][1] 4 CHEM 106[1] 4 CPT S 121 4 MATH 172 4 **Second Year** ***First Term*** ***Hours*** ~~CHEM 345~~[1]BIOLOGY 106 4 ~~Creative & Professional Arts [ARTS]~~ PSYCH 105 [SSCI] 3 ~~MATH 220~~ PHYSICS 201 ~~2~~4 MATH 273 2 ~~NEUROSCI 301~~ ~~3~~ PHIL 201[1] 3	8-15

Second Term	*Hours*
Humanities [HUM]	3
NEUROSCI 301	3
~~BIOLOGY 107~~[1]CHEM 345	4
CPT S 122	4
~~MBIOS 303~~[1]PHYSICS 202	4
Complete Writing Portfolio	

Third Year

First Term	*Hours*
E E 214	~~3~~4
MATH 216	3
MATH ~~315~~220	~~3~~2
~~NEUROSCI 403 [M]~~[2]Diversity [DIVR]	3
~~PHYSICS 201~~ [1] BIOLOGY/MBIOS 301	4

Second Term	*Hours*
~~Diversity [DIVR]~~MATH 315	3
~~MBIOS 301~~[1]Communication [COMM] or Written Communication [WRTG][1]	~~4~~3
NEUROSCI 404	~~3~~4
~~PHYSICS 202~~ [1]MBIOS 303	4

Fourth Year

First Term	*Hours*
E E 261/~~262~~	3~~ or 1~~
~~ENGLISH 402 [WRTG]~~E E 262	~~3~~1
~~Integrative Capstone [CAPS]~~NEUROSCI 425	3
NEUROSCI ~~495~~426	~~2~~1
NEUROSCI 430 [M]	4
~~Program~~ Computational Neuroscience Electives[2] ~~(consult advisor)~~	6

Second Term	*Hours*
~~BIO ENG 340~~B E 340	4
~~BIOLOGY 353~~	~~4~~
NEUROSCI ~~430~~403 [M]	~~4~~3
NEUROSCI 490 [CAPS]	~~1~~3
~~Program~~ Computational Neuroscience Electives[2] ~~(consult advisor)~~	~~3~~3

Footnotes

[1] ~~Required for entrance into medical or veterinary school.~~Professional or Technical Writing is recommended (e.g. ENGLISH 201 or 402)

	[2] ~~Prereq CHEM 345, NEUROSCI 301 and MBIOS 303~~The Breadth of Field emphasis option requires a minimum of 9 elective credits, of which at least 3 must be E E or CPT S courses at 300/400 level. Approved Computational Neuroscience electives include: BIOLOGY 315, 321, 340, 438, 456; BIO_ENG 481; CPT_S 322, 421, 422, 423, 434, 440, 443, 450; E E 311, 321,324,341,441, 442, 451, 464; MBIOS 305, 401, 404, 413, 478; NEUROSCI 305, 409/509; PSYCH 470, 490, 491; PHYSICS 466/566. Other courses may be allowed by department consent. Please see your advisor.	
Integrative Physiology and Neuroscience [IPN] Revise graduation requirements for Bachelor of Science in Neuroscience – Computational (Hardware Emphasis).	**Neuroscience - Computational (Hardware Emphasis) (~~125~~ 128 Hours)** Students may certify in computational neuroscience after completing ~~NEUROSCI 301, and~~ a minimum of 24 semester hours with a 3.0 minimum ~~gpa~~ GPA overall, and a minimum 3.0 GPA in BIOLOGY 106, BIOLOGY 107, CHEM 105, CHEM 106 or 116, MATH 171, MATH 172, and PHYSICS 201 or 205. **First Year** ***First Term*** ***Hours*** CHEM 105 [PSCI][1] 4 Creative & Professional Arts [ARTS] 3 ENGLISH 101 [WRTG] 3 HISTORY 105 [ROOT] 3 MATH 171 [QUAN][1] 4 ~~PSYCH 105 [SSCI]~~ ~~3~~ ***Second Term*** ***Hours*** BIOLOGY ~~106~~ 107 [BSCI][1] 4 CHEM 106[1] 4 CPT S 121 4 MATH 172 4 **Second Year** ***First Term*** ***Hours*** ~~CHEM 345~~[1]BIOLOGY 106 4 ~~Creative & Professional Arts [ARTS]~~ PSYCH 105 [SSCI] 3 ~~MATH 220~~PHYSICS 201 ~~2~~4 MATH 273 2 ~~NEUROSCI 301~~ ~~3~~ PHIL 201[1] 3 ***Second Term*** ***Hours*** ~~BIOLOGY 107~~[1]CHEM 345 4 CPT S 122 4 ~~Humanities [HUM]~~NEUROSCI 301 3 ~~MBIOS 303~~[1]PHYSICS 202 4 Complete Writing Portfolio	**8-15**

	Third Year ***First Term*** ***Hours*** E E 214 ~~3~~4 MATH 216 3 MATH ~~315~~[1]220 ~~3~~2 ~~NEUROSCI 403 [M]~~[2] Communication [COMM] or Written Communication [WRTG][1] 3 ~~PHYSICS 201~~[1]BIOLOGY/MBIOS 301 4 ***Second Term*** ***Hours*** Diversity [DIVR] 3 ~~MBIOS 301~~[1]MATH 315 ~~4~~3 NEUROSCI 404 ~~3~~4 ~~PHYSICS 202~~ [1]MBIOS 303 4 **Fourth Year** ***First Term*** ***Hours*** E E 234 ~~3~~4 E E 261 3 E E 262 1 ~~ENGLISH 402 [WRTG]~~NEUROSCI 425 3 NEUROSCI ~~495 or 499~~426 ~~2~~1 ~~Program Electives (consult advisor)~~NEUROSCI 430 ~~2~~4 ***Second Term*** ***Hours*** ~~BIOLOGY 353~~ ~~4~~ E E 324 [M] 4 ~~Integrative Capstone~~NEUROSCI 490 [CAPS] 3 NEUROSCI ~~430~~ 403 [M] ~~4~~3 ~~NEUROSCI 490~~Computational Neuroscience Electives[2] ~~1~~5 **Footnotes** [1] Professional or Technical Writing is recommended (e.g. ENGLISH 201 or 402)~~Required for entrance into medical or veterinary school~~. [2] The Hardware emphasis option requires a minimum of 5 elective credits, of which at least 3 must be E E or CPT S courses at 300/400 level. Approved Computational Neuroscience electives include: BIOLOGY 315, 321, 340, 438, 456; BIO ENG 481; CPT S 322, 421, 422, 423, 434, 440, 443, 450; E E 311, 321,324,341,441, 442, 451, 464; MBIOS 305, 401, 404, 413, 478; NEUROSCI 305, 409/509; PSYCH 470, 490, 491; PHYSICS 466/566. Other courses may be allowed by department consent. Please see your advisor.~~Prereq CHEM 345, NEUROSCI 301 and MBIOS 303.~~	
Integrative Physiology and Neuroscience [IPN] Revise graduation	**Neuroscience - Computational (Software Emphasis) (123 Hours)** Students may certify in computational neuroscience after completing ~~NEUROSCI 301, and~~ a minimum of 24 semester hours with a 3.0 minimum	**8-15**

requirements for Bachelor of Science in Neuroscience – Computational (Software Emphasis)	~~gpa~~ GPA overall, and a 3.0 minimum GPA in BIOLOGY 106, BIOLOGY 107, CHEM 105, CHEM 106 or 116, MATH 171, MATH 172, and PHYSICS 201 or 205. **First Year** ***First Term*** ***Hours*** CHEM 105 [PSCI][1] 4 Creative & Professional Arts [ARTS] 3 ENGLISH 101 [WRTG] 3 HISTORY 105 [ROOT] 3 MATH 171 [QUAN][1] 4 ~~PSYCH 105 [SSCI]~~ ~~3~~ ***Second Term*** ***Hours*** BIOLOGY ~~106~~ 107 [BSCI][1] 4 CHEM 106[1] 4 CPT S 121 4 MATH 172 4 **Second Year** ***First Term*** ***Hours*** BIOLOGY ~~107~~[1]106 4 ~~CHEM 345~~[1,2]PHYSICS 201 or 205 4 ~~Creative & Professional Arts [ARTS]~~ PSYCH 105 [SSCI] 3 ~~NEUROSCI 301~~ ~~3~~ PHIL 201[1] 3 ***Second Term*** ***Hours*** CPT S 122 4 ~~MATH 216~~NEUROSCI 301 3 ~~MBIOS 303~~[1]CHEM 345 4 PHYSICS ~~201~~[1]202 or 206 4 Complete Writing Portfolio **Third Year** ***First Term*** ***Hours*** ~~CPT S 440~~Communication [COMM] or Written Communication [WRTG][1] 3 E E 214 ~~3~~4 Humanities [HUM] 3 MATH 216 3 MBIOS 301[1] 4	

	~~NEUROSCI 403 [M]~~ [3] ~~3~~ ***Second Term*** ***Hours*** CPT S 223 3 Diversity [DIVR] 3 NEUROSCI 404 ~~3~~4 ~~PHYSICS 202~~ [1]MBIOS 303 4 PSYCH 490 3 **Fourth Year** ***First Term*** ***Hours*** CPT S 224 2 ~~ENGLISH 402 [WRTG]~~ CPT S 440 3 NEUROSCI ~~495 or 499~~430 [M] ~~2~~4 NEUROSCI 425 3 NEUROSCI 426 1 ~~Program Electives (consult advisor)~~ ~~5~~ ***Second Term*** ***Hours*** ~~BIOLOGY 353~~ ~~4~~ CPT S 322 3 ~~Integrative Capstone~~NEUROSCI 490 [CAPS] 3 NEUROSCI ~~430~~403 [M] 3 ~~NEUROSCI 490~~Computational Neuroscience Electives[2] ~~1~~5 **Footnotes** [1] Professional or Technical Writing is recommended (e.g. ENGLISH 201 or 402)~~Required for entrance into medical or veterinary school~~. [2] The Software emphasis option requires a minimum of 5 elective credits, of which at least 3 must be E E or CPT S courses at 300/400 level. Approved Computational Neuroscience electives include: BIOLOGY 315, 321, 340, 438, 456; BIO ENG 481; CPT S 322, 421, 422, 423, 434, 440, 443, 450; E E 311, 321, 324, 341, 441, 442, 451, 464; MBIOS 305, 401, 404, 413, 478; NEUROSCI 305, 409/509; PSYCH 470, 490, 491; PHYSICS 466/566. Other courses may be allowed by department consent. Please see your advisor.~~Part of the 345-346 year-long sequence. Recommended for medical, dental, or optometry school~~. [3] ~~Prereq CHEM 345, NEUROSCI 301 and MBIOS 303.~~	
Integrative Physiology and Neuroscience [IPN] Revise minor in Neuroscience.	**Neuroscience** Students may apply for a minor in neuroscience once they have completed 60 semester credit hours and have a ~~2.0~~ 2.75 ~~gpa~~ GPA. However, they may take minor coursework at any time as long as they meet the prerequisites. A minor in neuroscience requires 16 credits in Neuroscience, with at least 13 at or above the 300-level. Courses needed to satisfy the minor must include NEUROSCI 301; three credits selected from NEUROSCI 305, 409, ~~PSYCH 384,~~ PSYCH 470, 491, ~~or~~ BIOLOGY 438, or BIOLOGY 456; ~~at least three credits of NEUROSCI 495 or 499; and~~ at least six credits selected from the following: NEUROSCI 403, 404, and 430~~.~~; and up to four credits of	**8-15**

	neuroscience related elective coursework (see elective choices for Neuroscience Major). Up to five credits of NEUROSCI 495 or 499 may be included. Upon the approval of the student's advisor, a student with a minor in neuroscience may include 500-level courses in the minor program, provided the student meets the graduate study requirements and, prior to registration, obtains the consent of the faculty member(s) teaching the course. Students must maintain a minimum ~~2.0~~ 2.75 ~~gpa~~ GPA to remain certified as a neuroscience minor. Credit hours for the minor must include 9 hours of upper-division work taken in residence at WSU or through WSU-approved education abroad or educational exchange courses.	
Molecular Biosciences Revise graduation requirements for Bachelor of Science in Biochemistry – Biophysics Option.	**Biochemistry - Biophysics Option(120 Hours)** A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. **First Year** ***First Term*** ***Hours*** BIOLOGY 106 [BSCI] or 107 [BSCI] 4 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 MATH 106 (accelerated)[1] or Elective 3 MATH 108 (accelerated)[1] or Elective 2 ***Second Term*** ***Hours*** BIOLOGY 106 or 107 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 171 [QUAN] 4 **Second Year** ***First Term*** ***Hours*** CHEM 345 4 Communication [COMM] or Written Communication [WRTG] 3 MATH 172 4 MBIOS 301 4 ***Second Term*** ***Hours*** CHEM 348 4 MBIOS 303 4 PHYSICS 201 4 Social Sciences [SSCI] 3 Complete Writing Portfolio **Third Year** ***First Term*** ***Hours*** Creative & Professional Arts [ARTS] 3 Humanities [HUM] 3	

	PHYSICS 202 4 MBIOS 305 3 ***Second Term*** ***Hours*** CHEM 347 3 Diversity [DIVR] 3 MBIOS 304 3 MBIOS 401 3 MBIOS 465 3 **Fourth Year** ***First Term*** ***Hours*** CHEM 220 2 CHEM 222 2 MBIOS 413 or 513 3 MBIOS 466 or PHYSICS 466 3 Electives 3 ***Second Term*** ***Hours*** Lab Elective~~1~~2 3 MBIOS 414 3 MBIOS 454 [M] 3 MBIOS 494 [M] [CAPS] 3 Electives 6 **Footnotes** 1 If required - consult advisor. ~~1~~2 Lab Elective: minimum of 3 credits selected from MBIOS 402, 411, 430, 498, 499; BIOLOGY 251, 315, 353.	
Molecular Biosciences Revise graduation requirements for Bachelor of Science in Biochemistry – Molecular Biology Option.	**Biochemistry - Molecular Biology Option (120 Hours)** A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. **First Year** ***First Term*** ***Hours*** BIOLOGY 106 [BSCI] or 107 [BSCI] 4 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 MATH 106 (accelerated)[1] or Elective 3 MATH 108 (accelerated)[1] or Elective 2 ***Second Term*** ***Hours*** BIOLOGY 106 or 107 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4	**8-15**

Second Year

First Term	***Hours***
CHEM 345	4
Communication [COMM] or Written Communication [WRTG]	3
MBIOS 301	4
PHYSICS 101 or 201	4
Second Term	***Hours***
CHEM 348	4
MBIOS 303	4
PHYSICS 102 or 202	4
Social Sciences [SSCI]	3
Complete Writing Portfolio	

Third Year

First Term	***Hours***
Creative & Professional Arts [ARTS]	3
Humanities [HUM]	3
MBIOS 305	3
STAT 212 or 412	3 or 4
Electives	3
Second Term	***Hours***
Diversity [DIVR]	3
MBIOS 304 ~~[M]~~	3
MBIOS 401	3
MBIOS 465	3
Electives	3

Fourth Year

First Term	***Hours***
Lab Elective~~1~~[2]	3 or 4
MBIOS 404	3
MBIOS 413 or 513	3
Electives	5
Second Term	***Hours***
MBIOS 414	3
MBIOS 454 [M]	3
MBIOS 494 [M] [CAPS]	3
Lecture ~~Elective~~[2~~3~~]	3
Electives	3

Footnotes

[1] If required - consult advisor.

~~1~~[2] Lab Elective: minimum of 3 credits from MBIOS 402, 411, 430, 498, 499; BIOLOGY 251, 315,

	353. [23] Lecture elective: select one from MBIOS 410, 423, 426, 440, 442, 450, 466, 478; PHYSICS 466.	
Molecular Biosciences Revise graduation requirements for Bachelor of Science in Genetics and Cell Biology – Molecular Biology Option.	**Genetics and Cell Biology – Molecular Biology Option (120 Hours)** A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. **First Year** ***First Term*** ***Hours*** BIOLOGY 106 [BSCI] or 107 [BSCI] 4 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 MATH 106 (accelerated)[1] or Elective 3 MATH 108 (accelerated)[1] or Elective 2 ***Second Term*** ***Hours*** BIOLOGY 106 or 107 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 **Second Year** ***First Term*** ***Hours*** CHEM 345[12] 4 Humanities [HUM] 3 MBIOS 301 4 PHYSICS 101 or 201 4 ***Second Term*** ***Hours*** Creative & Professional Arts [ARTS] 3 MBIOS 303 4 PHYSICS 102 or 202 4 Social Sciences [SSCI] 3 Complete Writing Portfolio **Third Year** ***First Term*** ***Hours*** Communication [COMM] or Written Communication [WRTG] 3 MBIOS 304 3 ~~MBioS~~ MBIOS 305 3 STAT 212 or 412 3 or 4 Electives 3 ***Second Term*** ***Hours*** Diversity [DIVR] 3 Lecture Elective[23] 3	**8-15**

	MBIOS 401 3 Electives 4 **Fourth Year** ***First Term*** ***Hours*** Lab Elective~~3~~4 3 or 4 MBIOS 404 3 MBIOS 423 3 MBIOS 478 3 Electives 3 ***Second Term*** ***Hours*** MBIOS 402 [M] 3 MBIOS 442 or BIOLOGY 476 3 MBIOS 494 [M] [CAPS] 3 Electives 8 **Footnotes** 1 If required - consult advisor. ~~1~~2 CHEM 345 and 348 recommended for professional or graduate degrees. ~~2~~3 Lecture elective: select one from BIOLOGY 476, 519; MBIOS 410, 413, 426, 440, 442, 450, or 503. ~~3~~4 Lab Elective: minimum of 3 credits selected from MBIOS 411, 430, 454, 498, 499; BIOLOGY 251, 315, 321, 353, 372, 420.	
Molecular Biosciences Revise graduation requirements for Bachelor of Science in Microbiology – Medical Technology Option.	**Microbiology – Medical Technology Option (120 Hours)** A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. **First Year** ***First Term*** ***Hours*** BIOLOGY 106 [BSCI] or 107 [BSCI] 4 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 MATH 106 (accelerated)[1] or Elective 3 MATH 108 (accelerated)[1] or Elective 2 ***Second Term*** ***Hours*** BIOLOGY 106 or 107 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 **Second Year** ***First Term*** ***Hours*** CHEM 345~~1~~2 4 Creative & Professional Arts [ARTS] 3	**8-15**

	Humanities [HUM] 3 MBIOS 301 4 ***Second Term*** ***Hours*** MBIOS 303 4 MBIOS 305 3 Social Sciences [SSCI] 3 Electives 3 Complete Writing Portfolio **Third Year** ***First Term*** ***Hours*** Communication [COMM] or Written Communication [WRTG] 3 MBIOS 304 3 PHYSICS 101 or 201 4 STAT 212 or 412 3 or 4 Electives 3 ***Second Term*** ***Hours*** Diversity [DIVR] 3 MBIOS 410 3 MBIOS 450 3 PHYSICS 102 or 202 4 Electives 3 **Fourth Year** ***First Term*** ***Hours*** BIOLOGY 418 4 MBIOS 404 3 MBIOS 430 [M] 3 MBIOS 440 3 Electives 3 ***Second Term*** ***Hours*** MBIOS 411 [M] 3 MBIOS 442 3 MBIOS 494 [M] [CAPS] 3 Electives 5 **Footnotes** [1] If required - consult advisor. [1][2] CHEM 345 and 348 recommended for professional or graduate degrees.	
Molecular Biosciences Bachelor of Science in Microbiology –	**Microbiology – Molecular Biology Option (120 Hours)** A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail.	**8-15**

Molecular Biology Option	**First Year** ***First Term*** ***Hours*** BIOLOGY 106 [BSCI] or 107 [BSCI] 4 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 MATH 106 (accelerated)[1] or Elective 3 MATH 108 (accelerated)[1] or Elective 2 ***Second Term*** ***Hours*** BIOLOGY 106 or 107 4 CHEM 106 4 HISTORY 105 [ROOT] 3 MATH 140 [QUAN] or 171 [QUAN] 4 **Second Year** ***First Term*** ***Hours*** CHEM 345[12] 4 Creative & Professional Arts [ARTS] 3 Humanities [HUM] 3 MBIOS 301 4 ***Second Term*** ***Hours*** MBIOS 303 4 MBIOS 305 3 Social Sciences [SSCI] 3 Electives 4 Complete Writing Portfolio **Third Year** ***First Term*** ***Hours*** Communication [COMM] or Written Communication [WRTG] 3 MBIOS 304 3 PHYSICS 101 or 201 4 STAT 212 or 412 3 or 4 Electives 2 ***Second Term*** ***Hours*** Diversity [DIVR] 3 MBIOS 410 3 MBIOS 450 3 PHYSICS 102 or 202 4 Electives 3 **Fourth Year** ***First Term*** ***Hours*** Lecture Elective[23] 3	

	MBIOS 404 3 MBIOS 430[M] or 411 [M] 3 MBIOS 440 3 Electives 3 ***Second Term*** ***Hours*** Lab Elective~~3~~4 3 or 4 MBIOS 442 3 MBIOS 494 [M] [CAPS] 3 Electives 6 **Footnotes** 1 If required - consult advisor. ~~1~~2 CHEM 345 and 348 recommended for professional or graduate degrees. ~~2~~3 Lecture elective: select one from MBIOS 342, 401, 413, 426, 446; BIOLOGY 418, ENTOM 343, FS 416. ~~3~~4 Lab Elective: minimum of 3 credits selected from MBIOS 402, 411 or 430, 454, 498, 499; BIOLOGY 251, 315, 353; ENTOM 344; FS 417.	
College of Pharmacy Revise graduation requirements for Doctor of Pharmacy Professional Curriculum	**Professional Curriculum(~~132~~130 Hours)** **First Year** ***First Term*** ***Hours*** PHARDSCI 502 3 ~~PHARDSCI 503 4~~ PHARDSCI 504 1 PHARDSCI 508 3 PHARDSCI 528 3 ~~PHARMACY 505 2~~ PHARMACY 507 1 PHARMACY 509 1 PHARMACY 516 2 ***Second Term*** ***Hours*** PHARDSCI 512 4 ~~PHARDSCI 515 2~~ PHARDSCI 518 2 PHARDSCI 519 1 PHARMACY 501 1 PHARMACY 513 1 PHARMACY 514 4 ~~PHARMACY 516 2~~ PHARMACY 545 3 Electives[1] ~~1~~2 **Second Year**	**8-15**

	First Term	***Hours***
	~~PHARDSCI 528~~	~~3~~
	PHARDSCI 532	4
	~~PHARMACY 527~~	~~3~~
	PHARMACY 531	1
	PHARMACY 533	3
	PHARMACY 534	4
	PHARMACY 565	2
	Electives[1]	~~1~~2
	Second Term	***Hours***
	PHARDSCI 542	4
	PHARMACY 541	1
	PHARMACY 543	1
	PHARMACY 544	4
	PHARMACY 546	2
	PHARMACY 559	2
	Electives[1]	~~1~~2
	Third Year	
	First Term	***Hours***
	~~PHARMACY 545~~	~~3~~
	PHARMACY 551	~~1~~2
	PHARMACY 553	3
	PHARMACY 554	~~3~~4
	PHARMACY 555	~~3~~4
	PHARMACY 558	2
	PHARMACY 567	3
	Electives[1]	~~1~~
	Second Term	***Hours***
	PHARMACY 557	~~3~~4
	PHARMACY 561	~~1~~2
	PHARMACY 563	2
	PHARMACY 564	3
	~~PHARMACY 565~~	~~2~~
	PHARMACY 566	3
	~~PHARMACY 568~~	~~1~~
	Electives[1]	~~1~~4
	Fourth Year	
	First Term	***Hours***
	Advanced Pharmacy Practice Experiences (APPE)[2]	15
	Second Term	***Hours***

	Advanced Pharmacy Practice Experiences (APPE)[2] 15	
	Footnotes [1] Elective Courses: ~~4~~ 10 credits of electives involving a minimum of 4 courses are ~~mandatory~~ required throughout the first three years of the curriculum. ~~Students are required to take 2 elective credits during the first two years of the program and 2 elective credits during the third year of the program.~~ Select from: PHARMACY 499, 576, 577, 578, 579, 580, 588, ~~589,~~ 590, ~~591, 592, 593,~~ 594, 595, 596, ~~597,~~ 598, ~~and~~ 599, or any other College approved electives. [2] Advanced Pharmacy Practice Experiences (APPE) courses are: PHARMACY 581, 582, 583, 584, 585, 586, 587.	