

B.S. Biology Checklist

General Biology Track

2015-2016 Catalog

Name: _____

ID Number: _____

GENERAL EDUCATION PROGRAM (24-27 hrs)

English Composition

COURSE	TITLE	HRS.
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Depending on placement, either 8 or 6 semester hours.

ENGL 1101	<i>Discourse & Comp.</i>	5	
or			
ENGL 1102	<i>Discourse & Comp.</i>	3	_____
ENGL 1105	<i>Comp. & Argument.</i>	3	_____

Fine & Performing Arts (Select 1)

COURSE	TITLE	HRS.
ARTH 1101	<i>Introduction to Art</i>	3
ENGL 2275	<i>Amer. Film History</i>	3
MUSI 1201	<i>Music Appreciation</i>	3
MUSI 2211	<i>Music History I</i>	3
PHIL 3300	<i>Philosophy and Film</i>	3
THAR 1000	<i>Introduction to Theater</i>	3

Quantitative Reasoning

The Quantitative Reasoning component of the GEP will be met within the biology degree.

Social Science (Select 1)

COURSE	TITLE	HRS.	
ANTH 3350	<i>Biological Anthr.</i>	4	_____
GOVT 2250	<i>Intro. to Political Sci.</i>	3	_____
HIST 2430	<i>World History II</i>	3	_____
HIST 2440	<i>World History II</i>	3	_____
HIST 2530	<i>World Prehist. & Arch</i>	3	_____
HIST 4110	<i>Intellectual History</i>	3	_____
PHIL 3360	<i>Social & Politic. Hist.</i>	3	_____
PSYC 1101	<i>Intro. to Psychology</i>	3	_____
SOCI 1101	<i>Intro. to Sociology</i>	3	_____
SOSC 1110	<i>Foun. of Social Sci.</i>	3	_____

Ethics (Select 1)

COURSE	TITLE	HRS.
PHIL 3320	<i>Ethics Public/Priv. Life</i>	3
ROCI 4485	<i>Reflec. Comm. Invol.</i>	3

Natural Sciences

The Natural Sciences component of the GEP will be met within the biology degree.

Western Perspectives (Select 1)

COURSE	TITLE	HRS.	
ENGL 2211	<i>Survey of English Lit.1</i>	3	_____
ENGL 2212	<i>Survey of English Lit.2</i>	3	_____
HIST 3115	<i>Women in Medieval Eur.</i>	3	_____
HIST 3300	<i>Christianity in Ea. Am.</i>	3	_____
HIST 3520	<i>History of Crusades</i>	3	_____
IDST 2225	<i>Civilization & Lit. 1</i>	3	_____
IDST 2226	<i>Civilization & Lit. 2</i>	3	_____
PHIL 2200	<i>Intro. to Philosophy</i>	3	_____
RELI 2230	<i>Hist. of Chr. Thought</i>	3	_____

Non-Western Perspectives (Select 1)

COURSE	TITLE	HRS.	
ANTH 2250	<i>Cultural Anthropology</i>	3	_____
ARTH 3366	<i>Non-Western Survey</i>	3	_____
GEOG 2201	<i>Cultural Geography</i>	3	_____
GEOG 3351	<i>Reg. Geog.: Middle E.</i>	3	_____
GOVT 3320	<i>Third World Politics</i>	3	_____
HIST 3410	<i>East Asian History</i>	3	_____
HIST 3430	<i>Anc. Indian Cu. of Soc</i>	3	_____
HIST 3432	<i>Gandhi & Mod. India</i>	3	_____
HIST 3500	<i>History of So. Africa</i>	3	_____
HIST 3550	<i>Islam: Rel., Pol., Soc.</i>	3	_____
HIST 4420	<i>Middle East (modern)</i>	3	_____
IDST 2227	<i>Civilization & Lit. 3</i>	3	_____
PHIL 2284	<i>Asian Philosophy</i>	3	_____

Capstone

IDST 4490	<i>Senior Seminar</i>	3	_____
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BIOLOGY CURRICULUM (55 hrs)

Biology Requirements (16 hrs)

COURSE	TITLE	HRS.	
BIOL 1151	<i>General Biology 1</i>	4	_____
BIOL 1152	<i>General Biology 2</i>	4	_____
BIOL 3770	<i>Genetics & Molecu.</i>	4	_____
BIOL 4770	<i>Cell Biology</i>	4	_____

General Biology Track Requirements (39 hrs)

COURSE	TITLE	HRS.
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Core Requirements (7 hrs)

BIOL 3850	<i>Ecology</i>	4	_____
BIOL 3870	<i>Evolution</i>	3	_____

(Checklist continued on reverse side)

B.S. Biology Checklist

General Biology Track

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Botany Electives		(8 hrs)
COURSE	TITLE	HRS.
<i>(Choose from the following list.)</i>		
BIOL 2250	Plant Taxonomy	4 _____
BIOL 2252	Dendrology	4 _____
BIOL 3251	Summer Flora	4 _____
BIOL 3270	Plant Anat. & Morph.	4 _____
BIOL 3271	Non-Vascular Plants	4 _____
BIOL 4270	Plant Physiology	4 _____

Zoology Electives		(8 hrs)
COURSE	TITLE	HRS.
<i>(Choose from the following list.)</i>		
BIOL 3350	Entomology	4 _____
BIOL 3355	Ornithology	4 _____
BIOL 3360	Animal Physiology	4 _____
BIOL 3852	Marine Biology	4 _____
BIOL 4360	Herpetology	4 _____
BIOL 4370	Mammalogy	4 _____
BIOL 4491	Limnology	4 _____
BIOL 4680	Parasitology	4 _____

General Biology Electives		(16 hrs)
COURSE	TITLE	HRS.
<i>(Any Biology course numbered 2000 or above. Four of these hrs. must be at 4000 or above. Only 4 hrs. of BIOL 4495 may be counted.)</i>		
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Mathematics and Support Sciences (22-23 hrs)		
COURSE	TITLE	HRS.
MATH 1250	Trigonometry	3 _____
<i>or</i>		
MATH 2110	Calculus I	4 _____
MATH 1500	Principles of Statistics	3 _____
<i>or</i>		
MATH 2500	Statistics I	3 _____
CHEM 1141	General Chemistry I	4 _____
CHEM 1142	General Chemistry 2	4 _____
CHEM 3305	Organic Chemistry I	4 _____
<i>or</i>		
CHEM 2200	Intro. to Org. Chem.	4 _____
PHYS 2201	Physics 1	4 _____

General Electives			
<i>Once all other requirements have been met (GEP, Biology Curriculum, and Math and Support Science) you must take enough General Electives to meet the 120 hour requirement.</i>			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ADDITIONAL MINIMUM REQUIREMENTS

120 semester credit hours	_____
2.00 overall, cumulative GPA	_____
60 semester credit hours at 2000 level or above	_____
C- or better required in <u>ALL</u> biology, chemistry, and physics courses	_____

SPECIAL MINIMUM REQUIREMENTS FOR TRANSFER STUDENTS

30 semester credit hours completed at SSU, of which 21 credit hours must be upper division courses (3000-4000 level)	_____
12 semester credit hours in biology completed at SSU at the 3000 or 4000 level	_____

120 Semester Hours Required

7/23/2015

BS BIOL (General)—Suggested Four-Year Course Schedule

Year 1			
Fall Semester		Spring Semester	
BIOL1151: General Biology 1	4	BIOL1152: General Biology 2	4
CHEM1141: General Chemistry 1	4	CHEM1142: General Chemistry 2	4
ENGL1102: Discourse and Composition	3	ENGL1105: Comp. and Argumentation	3
MATH1250: Trigonometry	3	MATH1500: Principles of Statistics	3
General Electives	1	General Electives	1
Total Hours:	15	Total Hours:	15
Year 2			
Fall Semester		Spring Semester	
Zoology Elective	4	Botany Elective	4
◆ General Biology Elective	4	CHEM2200: Intro to Organic Chemistry	4
General Electives	4	Social Science GEP	3
Fine Arts GEP	3	◆ General Biology Elective	4
Total Hours	15	Total Hours	15
Year 3			
Fall Semester		Spring Semester	
**BIOL3850: Ecology	4	**BIOL3870: Evolution	3
BIOL3770: Genetics	4	Zoology Elective	4
PHYS2201: Physics 1	4	◆ General Biology Elective	4
Botany Elective	4	Non-Western Perspectives GEP	3
Total Hours	16	Total Hours	14
Year 4			
Fall Semester		Spring Semester	
◆ General Biology Elective	4	BIOL4770: Cell Biology	4
Ethics GEP	3	IDST4490: Senior Seminar	3
Western Perspectives GEP	3	General Electives	8
General Electives	5		
Total Hours	15	Total Hours	15
Total Hours: 120			

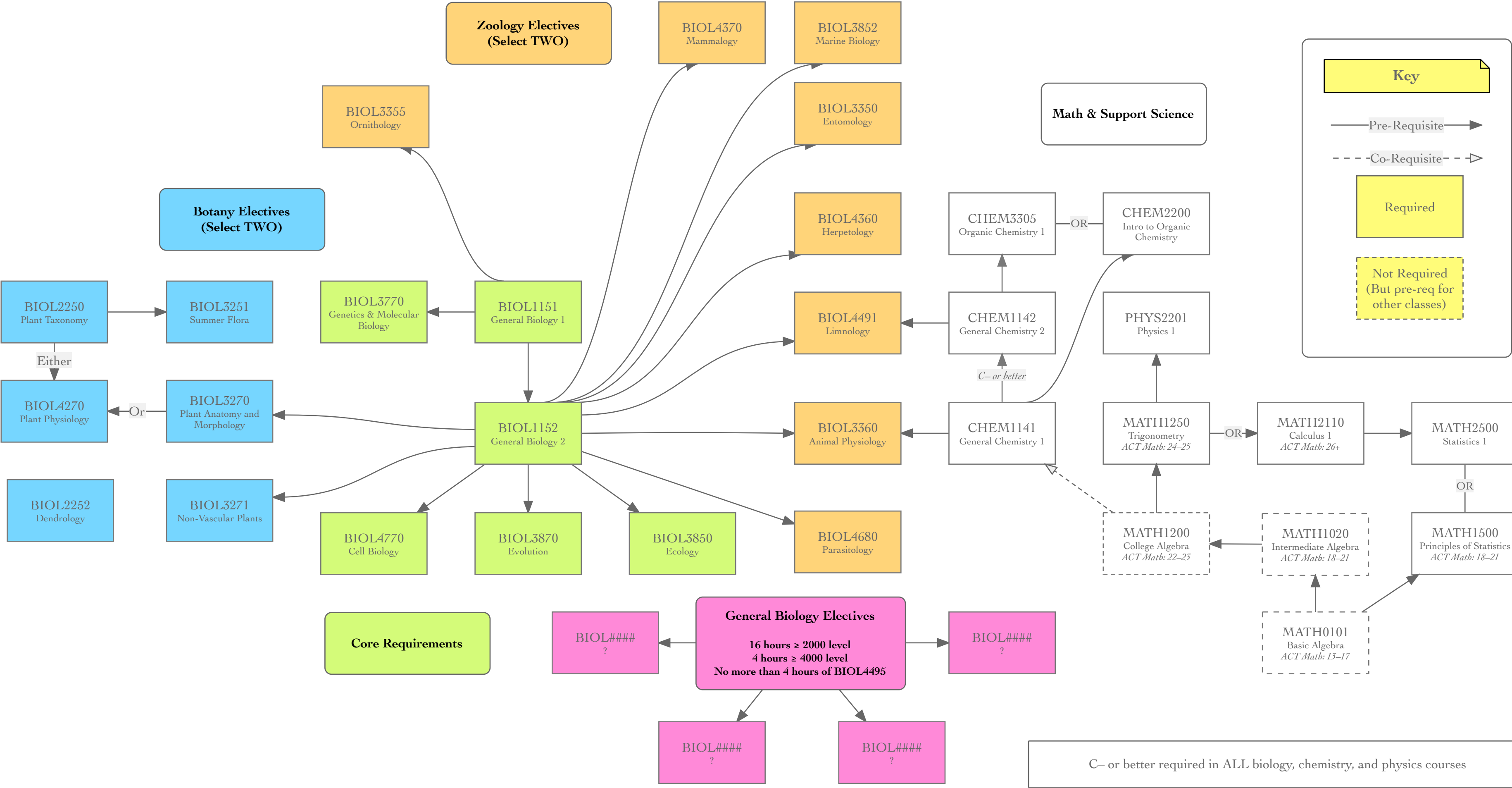
**** BIOL3850 (Ecology)/ BIOL3870 (Evolution)** — These courses are offered on an every-other-year basis. Take these courses either during your junior or senior year.

◆ General Biology Elective: Any Biology courses numbered 2000 or above. Four of these hours must be at 4000 or above. Only 4 hour of BIOL4495 may be counted.

Note about General Electives: General electives may be rearranged to have more or less in any particular semester. For example, a student may want to combine several of the general electives in order to take a 3 or 4 credit course. They have been placed as they are on this schedule so that no semester has over 16 hours.

BS Biology (General Track), AY15-16

Last Updated: July 23, 2015



Guide for the Natural Sciences Student

Freshman Year	<p>Meet with your academic advisor to form a plan for your degree. Talk with your advisor about future career goals.</p> <p>Pick up the every-other-year course list, degree checklist, and four-year plan.</p>	<p>Join a club! Pre-Med / Chemistry / World Before Us / Geology.</p> <p>Like the Department Facebook page to learn about goings on. http://bit.ly/SSU_Science</p> <p>Follow us on Twitter too: @SSU_Science</p>	<p>Start drafting your résumé</p> <p>Visit Student Career Development Office : ADM036</p> <p>Spring semester: Create a profile and upload resume to College Central: www.collegecentral.com/shawnee</p>
Sophomore Year	<p>Meet with your academic advisor and make sure that you are on track with your degree.</p> <p>Learn about our minors, and consider signing up for one.</p>	<p>Talk to faculty members about becoming a lab assistant.</p> <p>Consider applying for a summer internship through the Student Career Development office.</p> <p>Consider joining a professional organization in your major, such as the ACS (Chemistry), GSA (Geology), etc.</p>	<p>Learn about our study abroad opportunities: www.shawnee.edu/offices/international-students/study-abroad.aspx</p> <p>Volunteer on/off campus to gain experience</p> <p>Meet with Peer Career to update your résumé</p>
Junior Year	<p>Meet with your academic advisor.</p> <p>Make sure you examine the every-other-year science course list and talk with your advisor about your graduation plan.</p> <p>Consider getting involved with an undergraduate research project. Talk to several professors about research possibilities.</p>	<p>Consider running for office in a student club</p> <p>Late fall semester, apply for a summer research experience for undergraduates (REU), such as NSF-REU: www.nsf.gov/crssprgm/reu/ or a summer internship.</p>	<p>Have the Career Development Office assist with updating your résumé and practice interviewing through Mock Interviews.</p>
Senior Year	<p>Meet with your academic advisor and be sure that you will soon meet all your degree requirements.</p> <p>Print off your degree audit, and cross reference with your degree checklist.</p>	<p>Get involved with tutoring through the student success center.</p> <p>Continue your involvement with a student club.</p>	<p>Start job search in fall semester. Update résumé, join LinkedIn, and consider taking advantage of your professional science organization's job database and other tools.</p> <p>If applying for graduate school, take the GRE and start applying in fall.</p>

Every-Other-Year Course Schedule

Natural Sciences

Note: This course schedule is subject to change. Be sure to talk to your advisor before you schedule your classes!

Course	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Irregular/As Needed
Biology													
BIOL2250 Plant Taxonomy	✓				✓				✓				
BIOL2252 Dendrology			✓				✓				✓		
BIOL2253 Practical Horticulture				✓				✓				✓	
BIOL3350 Entomology	✓				✓				✓				
BIOL3251 Summer Flora													✓ (Summers)
BIOL3254 Economic Botany													✓
BIOL3270 Plant Anatomy & Morphology		✓				✓				✓			
BIOL3271 Non-vascular Plants													✓
BIOL3359 Comparative Vertebrate Anatomy			✓				✓				✓		
BIOL3360 Animal Physiology		✓				✓				✓			
BIOL3640 Histology				✓				✓				✓	
BIOL3850 Ecology	✓				✓				✓				
BIOL3852 Marine Biology			✓				✓				✓		
BIOL3860 Field Methods													✓
BIOL3870 Evolution		✓				✓				✓			
BIOL4270 Plant Physiology													✓
BIOL4355 Animal Behavior		✓				✓				✓			

Course	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Irregular/As Needed
BIOL4360 Herpetology				✓				✓				✓	
BIOL4370 Mammalogy				✓				✓				✓	
BIOL4491 Limnology	✓				✓				✓				
BIOL4670 Neuropharmacology	✓				✓				✓				
BIOL4680 Parasitology			✓				✓				✓		
BIOL4760 Diagnostic Microbiology	✓				✓				✓				
BIOL4765 Virology				✓				✓				✓	
BIOL4780 Immunology			✓				✓				✓		
BIOL4850 Forest Ecology & Management													✓
BIOL4851 Wildlife Ecology & Management													✓
Chemistry													
CHEM3325 Analytical Chemistry 2		✓				✓				✓			
CHEM4431 Physical Chemistry 1			✓				✓				✓		
CHEM4432 Physical Chemistry 2				✓				✓				✓	
CHEM4441 Adv. Inorganic Chemistry		✓				✓				✓			
Natural Science													
NTSC3860 Environmental Science			✓				✓				✓		

Note: This course schedule is subject to change. Be sure to talk to your advisor before you schedule your classes!

Last Updated: September 25, 2014

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