

BIOLOGY/MATHEMATICS BS (2009-2010 Catalog)

Name _____ Student Number W _____

Supporting courses: 29 credits required.			
Course	Qtr/Yr	Credits	Substitute Course #, Name, College/University
Chem 121 – General Chemistry I (5 cr)			
Chem 122 – General Chemistry II (5 cr)			
Chem 123 – General Chemistry III (4 cr)			
Or Honors Chemistry 125, 126, 225 (15 cr) [see #2 on back]			
Chem 251 – Elementary Organic Chemistry (cr 5)			
Phys 121 – Physics w/Calculus w/lab (5 cr)			
Phys 122 – Physics w/Calculus w/lab (5 cr)			
Supporting Courses Subtotal			

75 Basic, Breadth, Depth, Elective credits to complete this major

Basic Biology Requirements: 14 credits required.			
Course	Qtr/Yr	Credits	Substitute Course #, Name, College/University
Biol 204 – Evolution, Ecology & Biodiversity (4 cr)			
Biol 205 – Cell & Molecular (5 cr)			
Biol 206 – Organismal Biology (5 cr)			
Basic Biology Courses Subtotal			
Basic Mathematics requirements: 15 credits required			
Math 124 – Calculus & Analytic Geometry [or Math 134] (5 cr)			
Math 125 – Calculus & Analytic Geometry [or Math 135] (5 cr)			
Math 224 – Multivariable Calculus & Geometry (5 cr)			
Basic Mathematics Courses Subtotal			
Breadth Biology Requirements: 15 credits required			
Course	Qtr/Yr	Credits	Substitute Course #, Name, College/University
Biol 321 – Genetics (4 cr)			
Biol 323 – Cellular & Molecular Biology (4 cr)			
Biol 325- Ecology (3 cr)			
Biol 432 – Evolutionary Biology (4 cr)			
Breadth Biology Courses Subtotal			
Breadth Mathematics Requirements: 23-24 credits required			
Course	Qtr/Yr	Credits	Substitute Course #, Name, College/University
Math 203 – Linear Algebra & Differ. Equations I (4 cr) [203/303series] Or Math 204 – Elem. Linear Algebra (4 cr) [204/331 series]			
Math 303 – Linear Algebra & Differ. Equations II (4 cr) Or Math 331 – Ordinary Differ. Equations (4 cr)			
Math 341 – Probability & Statistics (4 cr)			
Math 342 – Statistical Methods (4 cr)			
Math 432 – Syst. Of Differ. Equations (4 cr)			
One of the following: CSCI 139 or 140 – Programming Fundamentals (4 cr) CSCI 141 – Programming I (4 cr) Math 207 – Mathematical Computing (3 cr)			
Breadth Mathematics Courses Subtotal			
Elective Requirements: about 7-8 credits under advisement from biology, math or math/computer science			
Course	Qtr/Yr	Credits	Substitute Course #, Name, College/University
Elective Courses Subtotal			
Basic, Breadth, Elective, Subtotal			

Major Evaluation for Graduation: 104-105 credits required to complete this major			
Supporting Course Subtotal (29 required credits)		Qtr/Yr you PLAN TO GRADUATE:	
Basic, Breadth, Elective, Completion Subtotal (75 minimum credits)			
TOTAL CREDITS			

Biology Adviser Signature _____ Date _____ Math Adviser Signature _____ Date _____ Biology Chair _____ Date _____

INSTRUCTIONS FOR BIOLOGY/MATHEMATICS – BACHELOR OF SCIENCE

1. Planning your coursework.

<ul style="list-style-type: none"> ▪ Keep a working copy of your major checklist with your transcript(s) from other colleges and any waivers granted.
<ul style="list-style-type: none"> ▪ Keep your checklist up-to-date with the coursework you have completed and that is in progress. Note tentative plans that you and your adviser have discussed.
<ul style="list-style-type: none"> ▪ Bring your checklist every time you talk with your adviser.
<ul style="list-style-type: none"> ▪ See your adviser at least 2-3 times a year: <ul style="list-style-type: none"> - once in Fall Quarter to plan Winter, Spring Quarter classes; - maybe in Winter Quarter to plan internships; - once in Spring Quarter to plan Summer and Fall Quarters.

2. Instructions on how to complete this major evaluation for graduation.

<ul style="list-style-type: none"> ▪ As a working copy, use pencil to complete this form. When you use this form to apply for graduation, this form must be completed in INK.
<ul style="list-style-type: none"> ▪ The Biology/Mathematics BS is a 104-105 credit major. A minimum of 29 credits of supporting coursework is required, but you may wish to take more chemistry or physics courses.
<ul style="list-style-type: none"> ▪ You may take the Honors Chemistry series instead of Chem 121, 122, 123. List the Honors Chemistry courses as substitute courses for the General Chemistry Series.

3. Western’s graduation policies.

<ul style="list-style-type: none"> ▪ You are responsible for knowing all of Western’s graduation requirements. You can review the requirements at: http://www.wwu.edu/depts/registrar/degree_requirements.shtml.
<ul style="list-style-type: none"> ▪ You must earn a C- or higher in every course applied towards your major.
<ul style="list-style-type: none"> ▪ You need a total of 3 Writing Proficiency (WP) units in any discipline to graduate from WWU.
<ul style="list-style-type: none"> ▪ 50% or 45 credits in your major must be taken at WWU.
<ul style="list-style-type: none"> ▪ To graduate with a bachelor’s degree from WWU, you will need 60 credits of upper-division coursework (300- & 400-level classes). Use the worksheet below to list all of the upper-division courses you’ve taken, including GUR courses. If you took courses at a community college that transferred as upper-division courses at WWU (e.g. organic chemistry), you do not receive upper-division credits.

4. Calculate the number of upper-division credits you’ve taken or plan to take.

Courses (300- or 400-level)	Credits	Courses (300- or 400-level)	Credits
		TOTAL NUMBER OF CREDITS	

5. Applying for Graduation [Allow 2-3 weeks for this process]

<ul style="list-style-type: none"> ▪ Two Quarters before you plan to graduate, totally complete this major evaluation (in INK). Be sure that you note the quarter/year the course is or will be completed and any substitutes granted. Submit your major evaluation to your advisor for his/her approval. Bring the signed evaluation to the Biology Department Office and give to Kim Kolb Ayre. After the Department Chair has signed your major evaluation you will be notified via email to pick up your checklist.
<ul style="list-style-type: none"> ▪ Make a copy of your checklist with signatures of your adviser and department chair for your records and to remind you of the final courses approved for completion of your major.
<ul style="list-style-type: none"> ▪ Take your major checklist to the Registrar’s office along with the Degree Application (available online at: http://www.wwu.edu/depts/registrar/pdfs/degree_application.pdf).