

**STUDENT EVALUATION STATEMENT****and Student Advising Sheet****Bachelor of Science in Biology, West Virginia State University**

name \_\_\_\_\_ A# \_\_\_\_\_ option \_\_\_\_\_

date \_\_\_\_\_ catalog year \_\_\_\_\_ GPA (cumulative / major) \_\_\_\_\_

**Biology Core courses 22 credits**

<u>grade</u> <u>QP</u>	<u>required Biology Core courses</u>		<u>credits</u>	<u>prerequisites and comments</u>
_____	NSM 101	First-Year Experience	1	P: must take in the first 30 hours at WVSU
_____	Biol 120	Fundamentals of Biology + lab	4	P: must be eligible for Engl 101
_____	Biol 121	Biological Diversity + lab	4	P: Biol 120
_____	Biol 250	General Ecology + lab	4	P: Biol 120 and 121; eligible for Math 101 or 121
_____	Biol 270	Genetics + lab	4	P: Biol 120 and 121; Chem 106 and 108
_____	Biol 385	Cell Biology + lab	4	P: Biol 270; Chem 201 or 206 and 208
_____	Biol 411	Senior Seminar	1	P: Biol 385



Option A: Environmental and Organismal Biology (EOB) 18 - 20 credits

**required EOB courses** none

<u>grade</u> <u>QP</u>	<u>restricted EOB elective</u>	<u>credits</u>	<u>grade</u> <u>QP</u>	<u>restricted EOB elective</u>	<u>credits</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

<u>restricted EOB electives</u>	<u>credits</u>	<u>prerequisites and comments</u>
Biol 306 General Zoology + lab	4	P: Biol 121
Biol 310 Conservation Ecology	3	P: Biol 250 or permission of Instructor
Biol 320 Entomology + lab	4	P: Biol 250
Biol 321 Animal Parasitism + lab	4	P: Biol 121
Biol 325 Invertebrate Zoology + lab	4	P: Biol 121
Biol 326 Vertebrate Zoology + lab	4	P: Biol 121
Biol 350 Evolution	3	P: Biol 250 or 270
Biol 365 Biology of Fishes + lab	4	P: Biol 121
Biol 375 Principles of Aquiculture + lab	4	P: Biol 121
Biol 395 Practicum in Biology	1	junior standing and permission of Instructor and Chair a maximum of 4 credits may be counted toward a Biology major
Biol 399 <i>Special Topics: various TBA</i>		not all Biol 399 courses count toward this option
Biol 430 Embryology + Animal Develop. + lab	4	P: Biol 385 or permission of Instructor
Biol 435 Comparative Vertebrate Morph. + lab	4	P: permission of Instructor
Biol 440 Field Botany + lab	4	P: Biol 250 or permission of Instructor
Biol 441 Plant Development + lab	4	P: Biol 250 and 270 or permission of Instructor
Biol 442 Plant Geography	3	P: Biol 250 or permission of Instructor
Biol 443 Plant Tissue Culture + lab	4	P: Biol 250 or permission of Instructor
Biol 444 Plant Physiology + lab	4	P: Biol 120; Chem 106 and 108; Chem 205 and 207
Biol 460 Environmental Microbiology + lab	4	P: Biol 341; Chem 106 and 108 or permission of Instructor
Biol 490 Directed Student Research	1 - 4	P: 24 credits of Biology + permission of Instructor and Chair a maximum of 4 credits may be counted toward a Biology major
Biol 491 Undergraduate Independent Study	1 - 4	P: 4 credits of Biol 490 and permission of Instructor and Chair
Biol 492 Undergraduate Library Research	1 - 2	P: permission of Instructor and Chair a maximum of two credits may be counted toward a Biology major
Biol 499 <i>Special Topics: various TBA</i>		not all Biol 499 courses count toward this option

**Option B: Biotechnology and Genetics (BG) 18 - 20 credits**

<u>grade</u> <u>QP</u>	<u>required BG courses</u>	<u>credits</u>	<u>prerequisites and comments</u>
_____	Biol 341      Microbiology + lab	4	P: Biol 121, Chem 105 and 107
_____	Chem 331      Biochemistry	3	P: Chem 201 or 206
_____	Chem 333      Biochemistry Lab	2	P: completed or enrolled in Chem 331

<u>grade</u> <u>QP</u>	<u>restricted EOB elective</u>	<u>credits</u>	<u>grade</u> <u>QP</u>	<u>restricted EOB elective</u>	<u>credits</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

<u>restricted BG electives</u>	<u>credits</u>	<u>prerequisites and comments</u>
Biol 345 General Virology	3	P: Biol 270
Biol 347 Immunology + lab	4	P: permission of Instructor
Biol 350 Evolution	3	P: Biol 250 or 270
Biol 361 Microbial Genetics + lab	4	P: Biol 260 and 341; Chem 106
Biol 375 Principles of Aquaculture + lab	4	P: Biol 250
Biol 395 Practicum in Biology	1	P: junior standing and permission of Instructor and Chair a maximum of 4 credits may be counted toward a Biology major not all Biol 399 courses count toward this option
Biol 399 <i>Special Topics: various TBA</i>		
Biol 443 Plant Tissue Culture + lab	4	P: Biol 250 or permission of Instructor
Biol 444 Plant Physiology + lab	4	P: Biol 120; Chem 106 and 108; Chem 205 and 207
Biol 460 Environmental Microbiology + lab	4	P: Biol 341; Chem 106 and 108 or permission of Instructor
Biol 466 Cancer Biology	3	P: Biol 385 or permission of Instructor
Biol 490 Directed Student Research	1 - 4	P: 24 credits of Biology and permission of Instructor and Chair a maximum of 4 credits may be counted toward a Biology major
Biol 491 Undergraduate Independent Study	1 - 4	P: 4 credits of Biol 490 and permission of Instructor and Chair
Biol 492 Undergraduate Library Research	1 - 2	P: permission of Instructor and Chair a maximum of 2 credits may be counted toward a Biology major not all Biol 499 courses count toward this option
Biol 499 <i>Special Topics: various TBA</i>		

**Option C: Pre-Medical and Biomedical Sciences (MBS) 18 - 20 credits**

<u>grade</u>	<u>QP</u>	<u>required MBS courses</u>	<u>credits</u>	<u>prerequisites and comments</u>
_____		Biol 331 Human Anatomy + Phys. I + lab	4	P: Biol 101 or 120
_____		Biol 332 Human Anatomy + Phys. II + lab	4	P: Biol 331
_____		Biol 341 Microbiology + lab	4	P: Biol 121; Chem 105 and 107
_____		Chem 331 Biochemistry	3	P: Chem 201 or 206

<u>grade</u>	<u>QP</u>	<u>restricted EOB elective</u>	<u>credits</u>	<u>grade</u>	<u>QP</u>	<u>restricted EOB elective</u>	<u>credits</u>
_____		_____	_____	_____		_____	_____
_____		_____	_____	_____		_____	_____
_____		_____	_____	_____		_____	_____

<u>restricted MBS electives</u>	<u>credits</u>	<u>prerequisites and comments</u>
Biol 306 General Zoology + lab	4	P: Biol 121
Biol 321 Animal Parasitism + lab	4	P: Biol 121
Biol 326 Vertebrate Zoology + lab	4	P: Biol 121
Biol 330 Vertebrate Histology + lab	4	P: Biol 121
Biol 345 General Virology	3	P: Biol 270
Biol 347 Immunology + lab	4	P: permission of Instructor
Biol 361 Microbial Genetics + lab	4	P: Biol 270 and 341; Chem 106
Biol 370 Pharmacology	4	P: Biol 101 or 120; Chem 101 or 201; Chem 105 and 106; or permission of Instructor
Biol 395 Practicum in Biology	1	P: junior standing and permission of Instructor and Chair a maximum of 4 credits may be counted toward a Biology major not all Biol 399 courses count toward this option
Biol 399 <i>Special Topics: various TBA</i>		
Biol 430 Embryology and Animal Develop + lab	4	P: Biol 385 or permission of Instructor
Biol 435 Comparative Vertebrate Morph + lab	4	P: permission of Instructor
Biol 466 Cancer Biology	3	P: Biol 385 or permission of Instructor
Biol 490 Directed Student Research	1 - 4	P: 24 credits of Biology and permission of Instructor and Chair a maximum of 4 credits may be counted toward a Biology major
Biol 491 Undergraduate Independent Study	1 - 4	P: 4 credits of Biol 490 and permission of Instructor and Chair
Biol 492 Undergraduate Library Research	1 - 2	P: permission of Instructor and Chair a maximum of 2 credits may be counted toward a Biology major not all Biol 499 courses count toward this option
Biol 499 <i>Special Topics: various TBA</i>		
Chem 333 Biochemistry Lab	2	P: completed or enrolled in Chem 331

## General Education courses

**Biology majors need 44 credits of Gen Ed**

<u>grade</u>	<u>QP</u>	<u>restricted GenEd electives</u>	<u>credits</u>	<u>prerequisites and comments</u>
_____		Ged 100      Origins	3	P: Engl 101 placement; waived for transfer students with 30 credits
_____		Ged 200      Race and Gender	3	P: Ged 100
_____	_____	International Perspectives elective 1	3	<b>caution:</b> only approved GenEd electives count toward this category
_____	_____	International Perspectives elective 2	3	<b>caution:</b> only approved Gen Ed electives count toward this category
_____	_____	History of Civilization elective	3	<b>caution:</b> only approved Gen Ed electives count toward this category
_____		Engl 101      English Composition I	3	P: "C" in Engl 098 or ACT placement. Must take in first 60 hours.
_____		Engl 102      English Composition II	3	P: Engl 101. Must take in first 60 hours.
_____		Engl 150      Introduction to Literature	3	P: Engl 101 placement or "C" in Engl 098.
_____	_____	Mathematics elective	3	All students must take a Math course above Math 012. Biology Majors take Math 101 and 102 as a pre-requisite to Phys 201.
_____		Comm 100      Speech Communication	3	
_____	_____	Lifetime Health and Fitness elective	2	<b>caution:</b> only approved Gen Ed electives count toward this category
_____	_____	Fine Arts elective 1	3	<b>caution:</b> only approved Gen Ed electives count toward this category
_____	_____	Fine Arts elective 2	3	<b>caution:</b> only approved Gen Ed electives count toward this category
_____	_____	American Traditions elective	3	<b>caution:</b> only approved Gen Ed electives count toward this category
_____	_____	Social Structure and Behavior elective	3	<b>caution:</b> only approved Gen Ed electives count toward this category
		<i>Natural Sciences electives</i>	6 - 8	<i>Biology Major automatically fulfills this requirement.</i>
		<i>Information Skills requirement</i>	4 units	<i>Biology Majors automatically complete all required Info Skills units</i>





## courses that count as General Education electives

<u>course title (course number)</u>	<u>credits</u>	<u>prerequisites and comments</u>
<b>Interdisciplinary Matrix</b>		
<b>Overview 6 credits</b>		
Origins (Ged 100)	3	Waived for students entering with over 30 credits.
Race and Gender (Ged 200)	3	P: Ged 100
<b>International Perspectives 6 credits</b>		
Beginning Chinese (Chin 101)	3	Students may not use two different language courses.
Elementary Chinese (Chin 102)	3	
International Cinema (Comm 446)	3	P: Chin 101
World Literature: Classical (Engl 350)	3	
World Literature: Modern (Engl 351)	3	
Interpreting the Holocaust (Engl 440)	3	
Beginning French (Fren 101)	3	
Elementary French (Fren 102)	3	
A View of Changing Culture (Fren 205)	3	
West African Culture (Fren 443)	3	P: 75 credits
Beginning Japanese (Japn 101)	3	
Elementary Japanese (Japn 102)	3	
Beginning Russian (Russ 101)	3	
Elementary Russian (Russ 102)	3	P: Russ 101
Beginning Spanish (Span 101)	3	
Elementary Spanish (Span 102)	3	P: Span 101 or equivalent
Spain and Its Culture (Span 205)	3	
Birth, Death, Migration ... (Soc 305)	3	P: Soc 101
Social Cultural Changes ... (Soc 411)	3	
International Relations (Posc 210)	3	
Arab Middle East (Posc 415)	3	P: Posc 210
World Religions (Phil 308)	3	P: Engl 102
<b>History of Civilization 3 credits</b>		
World History to 1660 (Hist 201)	3	P: Engl 102
World History 1660 to now (Hist 202)	3	P: Engl 102
<b>Modes of Inquiry</b>		
<b>American Traditions 3 credits</b>		
History of US to 1865 (Hist 207)	3	P: Engl 102
History of US since 1865 (Hist 208)	3	P: Hist 102
American National Gov't. (Posc 101)	3	

<u>course title (course number)</u>	<u>credits</u>	<u>prerequisites and comments</u>
<b>Literature 3 credits</b>		
Introduction to Literature (Engl 150)	3	P: Engl 101 placement or "C" in Engl 098
<b>Fine Arts 6 credits</b>		The two Fine Arts electives must be from different disciplines.
Introduction to Art (Art 101)	3	
Art Appreciation (Art 200)	3	
Film Appreciation (Comm 140)	3	
Art of the Theater (Comm 170)	3	P: eligible for Engl 101
American Music ... (Mus 104)	3	
Appreciation of Music (Mus 107)	3	
<b>Natural Science 6 - 8 credits</b>		The Biology major automatically fulfills Natural Science electives.
Principles of Biology (Biol 101)	4	
Environmental Biology (Biol 108)	3	
Economic Biology (Biol 110)	4	
Fundamentals of Biology (Biol 120)	4	intended for Science majors
Consumer Chemistry (Chem 100)	3	
Geology (Phys 106)	4	
Physics Through Photo ... (Phys 170)	3	
Elements Physical Sci ... (Phys 103)	3	
Astronomy (Phys 120)	3	
<b>Social Structure and Behavior 3 credits</b>		
Introduction Gov't. Politics (Posc 100)	3	
General Psychology (Psync 151)	3	P: eligible for Engl 101
Introduction to Sociology (Soc 101)	3	
<b>Intellectual and Personal Development</b>		
<b>English 6 credits</b>		
English Composition I (Engl 101)	3	P: "C" or above in Engl 099 or ACT placement. Must take it in first 60 hours.
English Composition II (Engl 102)	3	P: Engl 101 Must take it in first 60 hours. Fulfills one unit of Library Skills.
<b>Mathematics 3 credits</b>	3	Students must take a Math course above Math 012. Biology Majors take Math 101 as P: to Phys 201.
<b>Speech 3 credits</b>		
Speech Communications (Comm 100)	3	
<b>Lifetime Health and Fitness 2 credits</b>		
Fitness for Living (Hhp 122)	2	
Healthy Living (Hhp 157)	2	

## Information Skills

Students must take four Information Skills courses (i.e. four units). At least one must be a Library Skills unit and at least one must be a Computer Skills unit.

### Computer Skills

Graphic Design (Art 213)  
Computer Graphics (Art 217)  
Fundamentals of Biology (Biol 120) ..... *Biology Majors must take this course*  
Fundamentals of Business Computer Technologies (Bst 240) CTC  
Business Statistics (Ba 203)  
Mathematical Analysis for Business Design (Ba 209)  
Computer Chemistry (Chem 202)  
Senior Seminar (Chem 450)  
Methodology (Cj 315)  
Copy Editing and Makeup (Comm 227)  
Digital Video Production (Comm 282)  
Web Design and Digital Media (Comm 285)  
Filmmaking (Comm 241)  
Advanced Filmmaking (Comm 341)  
Animation Production (Comm 343)  
Survey of Computers and Programming (Cs 106) CTC  
Educational Technology (Educ 300)  
English Composition I (Engl 101) ..... *Biology Majors must take this course.*  
Principles of Health and Health Promotion (Hhp 150)  
Methodology and Research (Soc 311, Posc 311)  
Social Policy and Legislation (Sw 400)

### Library Skills

Junior Seminar (Chem 350)  
English Composition II (Engl 102) ..... *Biology Majors must take this course.*  
Introduction to English Literature (Engl 250)  
Research Methods (Psyc 390)  
Spain and Its Culture (Span 205)  
Methods of Social Work Research (Sw 400)  
Senior Seminar (Biol 411) ..... *Biology Majors must take this course.*

**In order to graduate from WVSU, you must have at least 128 credits**

<b>Biology majors take:</b>	Core Biology .....	22	credit hours
	Biology Cognates .....	28 - 29	credit hours
	Biology Elective .....	18 - 20	credit hours
	Option A, B, or C		
	Gen Ed .....	44	credit hours
	free electives .....	13 - 16	credit hours

You must have an over-all GPA  
(counting all courses) of 2.0  
or above to graduate from WVSU.

**GPA over-all** is total quality points  
divided by total credit hours = \_\_\_\_\_

You must have a Biology GPA  
(counting Biology Core + Biology  
Electives) of 2.0 or above to get a  
BS in Biology.

**GPA in Biology** is Biology quality points  
divided by Biology credit hours = \_\_\_\_\_