

SOUTH DAKOTA BOARD OF REGENTS ACADEMIC AFFAIRS FORMS

Revisions to General Education Requirements

Use this form to request any change to the General Education Requirements specified in Policies 2:7 – Baccalaureate General Education Curriculum and 2:26 – Associate Degree General Education Requirements. This includes any changes to the System General Education Requirements, Institutional Graduation Requirements, Globalization/Global Issues Requirement, and Writing Intensive Requirement.

NOTE: This process does not include approval for the development of a new course. If the proposal does include the development of a new course, the new course process must be completed before the course will be considered for inclusion in any set of the General Education Requirements

DSU	College of Arts and Science	Tuhan Han	Nov, 2016			
Institutio	Division/Department	Institutional Approval Signature	Date			
X	System General Education Re	eral Education Curriculum that the p quirements g proposed (more than one may be cl				
	Revision to an approved course	e				
X	X Addition of a course to the set of approved courses					
	Deletion of an approved course from the set of approved courses					

Section 1. Provide a Concise Description of the Proposed Change

During the last curriculum cycle, DSU received approval from the other universities to offer this common course. DSU completed and requested authority to offer an existing common course, BIOL 153 General Biology II and BIOL 153L General Biology II Lab. This document is to seek approval to include this course in meeting the SGE #6 Natural Sciences at DSU.

Section 2. Provide the Effective Date for the Proposed Change

Fall 2017

Section 3. Provide a Detailed Reason for the Proposed Change

The proposed course will allow DSU students another option in fulfilling the SGE #6 requirement. The DSU Assessment Committee has concurred with the recommendation that these courses meet the goals for this requirement.

Section 4. Provide Clear Evidence that the Proposed Modification will Address the Specified Goals and Student Learning Outcomes

Attached is the course syllabus.

Section 5. Provide a Copy of all Course Syllabi and Other Supporting Documentation

COURSE SYLLABUS

PREFIX, NUMBER AND TITLE: BIOL 153: GENERAL BIOLOGY II

CREDIT HOURS: 4 Semester Hours

UNIVERSITY NAME: Dakota State University

ACADEMIC TERM: Spring, 2017

COURSE MEETING TIME AND LOCATION:

Lecture: MWF 11:00 to 11:50 a.m. in Science Center, room 109 Laboratory: TH 9:30 to 12:20 p.m. in Science Center, room 109

TH 1:30 to 4:20 p.m. in Science Center, room 109

INSTRUCTOR CONTACT INFORMATION:

Dr. Dale Droge

Office: 146D Science Center Telephone: 256-5194 (office) Email: dale.droge@dsu.edu.

Office Hours: MWF 9:00-10:00 am

T 10:00 - 12:00 pm

W 3:00 - 5:00 pm (or by appointment)

APPROVED COURSE DESCRIPTION:

A continuation of BIOL 151, the introductory course for those majoring in biology and microbiology. Presents the concepts of animal and plant structure and function, energetics, and reproduction.

PREREQUISITES: None

COURSE REQUIREMENTS:

ATTENDANCE

Although there is no policy of required attendance of lectures in this course, it is unlikely that you will be able to earn a good grade without regularly attending the class. On many occasions material that is not explicitly covered in the textbook and other course materials will be discussed at length in lecture. Please note that attendance may also be taken from time to time, and that this information can be used in determining the final grade for students whose final averages fall slightly below the cutoff for the next higher grade. Also, if you are on academic probation or an at-risk student, you are required to attend every class meeting. You are expected to arrive at lecture on time and to remain for the entire period. If for some reason you do arrive

late or must leave early, please do so quietly. Talking or other behavior that disrupts lecture will not be tolerated. If for any reason I am late for the start of class and you have not received official notification that the class has been canceled, you are expected to remain for 15 minutes before "assuming" that the lecture has been canceled for that day.

FINAL EXAM

It is the policy of DSU that ALL students enrolled in Biology 153 must take the final examination. The final exam for this course will be on Wednesday, May 3rd, 10:30 a.m. - 12:30 p.m. No exams will be given early, and only emergencies of a catastrophic nature will be accepted as an excused absence. So do not plan to travel until after the exam.

READINGS

Students are responsible for a number of written exercises dealing with articles exploring the great diversity of organisms on earth and the interactions that are inevitable with people such as disease, drugs, parasites, or venomous animals. Most of these assignments will be approximately 1-2 pages in length. Some exercises may require a presentation instead of a paper. Access to the short readings will be available on the course D2Learn site.

LABORATORY

Attendance in the laboratory is mandatory. The first unexcused absence will serve as your dropped quiz score (see below). The second unexcused absence will result in a zero for the lab quiz. More than two unexcused absences will result in a failing grade for the course. The lab portion of the grade (25%) will be determined by quiz scores and lab practicals. There will be a quiz each week over the material from the previous lab. The lowest score will be dropped. Lab activities are described in documents located on the Desire2Learn site for this course.

TEXTBOOK AND OTHER REFERENCES

Required:

Coyne, Jerry A. Why Evolution is True. Penguin Books.

Urry, L.A., M.L. Cain, S.A. Wasserman, P.V. Minorsky, R.B. Jackson, J.B. Reece, *Biology in Focus* 2nd edition. Pearson Publishing.

This is an electronic text that includes Mastering Biology course software. The access code can be purchased at the DSU bookstore. You must have your own copy of this package to complete the Mastering Biology assignments.

Recommended:

Additional readings for reports and discussion will be on Desire2Learn.

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ADDITIONAL COURSE INFORMATION:

LECTURE SLIDES AND STUDY GUIDES

The Powerpoint slides used in class, handouts and study guides are available on the Desire2Learn course site. I provide this resource to reduce the amount of writing, printing and copying you need to do. PLEASE DO NOT CONSIDER REVIEWING SLIDES AS A SUBSTITUTE FOR ATTENDING CLASS.

MAKE-UPS

Students must make every effort to take the regular lecture exams; make-ups may be arranged for excused absences only. Make-up exams will consist mainly of essay-style questions. In order to qualify for a make-up exam, students must notify the instructor as soon as possible to explain the circumstances that require a make-up exam. Excused absences are granted at the discretion of the instructor and a time for a make-up exam scheduled.

USING INTERNET AND SOCIAL MEDIA

Students will search for interesting animal stories that are relevant to the class. Everyone will be required to post links to articles, images and videos on a course Facebook page. Discussions over this and other course material may also take place on the Facebook page.

Netiquette Guidelines for Discussions (with thanks to Dr. Viki Johnson) –

You are expected to use Standard English on the discussion boards. While you can be much more informal and conversational with your writing style on the discussion boards, please do not use text or instant message abbreviations. An occasional LOL is okay, but your message should not be peppered with abbreviations. In addition, spelling, punctuation, and grammar do matter in the discussions. It is expected that you will be respectful of the instructor and other students in this class. Therefore, you should refrain from using profanity and other inappropriate language on the discussion boards. You should also not attack individuals personally, but rather focus on their comments and ideas. Certainly you may disagree and challenge the ideas and opinions of others, as well as the ideas presented in your text and other assigned readings and materials, and I would encourage you to do so, but you must do it in a respectful manner, as tolerance for other viewpoints will be expected. Inappropriate behavior and/or comments on the discussion boards will not be tolerated, and I will address any concerns or issues with you individually.

WITHDRAWAL:

Students who wish to withdraw from Biology 165 should be aware of the following dates:

18 Jan. - last day to drop and receive a complete refund.

3 Apr. - last day to drop and receive an automatic "W".

COURSE GOALS

Regental General Education Goal (#6):

Students will understand the fundamental principles of natural sciences and apply scientific methods of inquiry to investigate the natural world.

Student Learning Outcome 1:

Demonstrate the scientific method in a laboratory experience.

Assessment:

Students will: Design and carry out a scientific experiment and give a class presentation describing the project.

Student Learning Outcome 2:

Gather and critically evaluate data using the scientific method.

Assessment:

Students will:

Use the scientific method to complete lab exercises and demonstrate their learning through quizzes and assignments.

Demonstrate their knowledge of the scientific method on tests and quizzes.

Use the scientific method to formulate hypotheses and design tests of hypotheses in written assignments.

Student Learning Outcome 3:

Identify and explain the basic concepts, terminology, and theories of biology.

Assessment:

Students will:

Demonstrate knowledge of diversity and classification on quizzes and exams.

Gain an understanding of structure and function of prokaryotes, protists, fungi, plants and animals and use that knowledge on quizzes, exams and projects.

Use an understanding of the process of evolution to answer questions on quizzes and exams.

Student Learning Outcome 4:

Apply selected concepts and theories of biology to contemporary issues.

Assessment:

Students will:

Use scientific method and concepts and theories of biology to answer questions about behavior and evolution on exams.

Use concepts and principles of biology to evaluate issues of social and ethical significance through projects and writing assignments.

INSTRUCTIONAL METHODOLOGIES

The method of instruction in this course will consist of a variety of different activities including small group assignments, lecture, class discussion and "hands on" experiments in the laboratory. I expect you to enthusiastically participate in all these activities.

During lecture sessions, I encourage you to participate by thinking about what is being discussed and asking questions that will help you understand the material. You will gain very little from this class if you passively write down everything that I say. There is a certain amount of memorization in biology. There is a large vocabulary that you must be familiar with to be conversant with the principles of biology. But a working knowledge of terminology is only the beginning step. The real challenge is to relate these terms to concepts and recognize the importance of the concepts in understanding how and why life occurs the way it does.

EVALUATION PROCEDURE

Final grades will be determined as a percentage of the total points you earn out of the 800 points possible in this course. The following fixed-percentage scale is used for determining final grades:

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90 - 100\% = A

80 - 89\% = B

70 - 79\% = C

60 - 69\% = D

0 - 59\% = F
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Lecture exams (3 x 100 pts) = 300 points

Final Exam = 150 points

Lecture Quizzes = 40 points

Written Assignments = 150 points

News Postings/Discussion = 20 points

Lab Exercises = 80 points

Lab Quizzes (10 x 10 pts) = 120 points

Total = 860 points

Four examinations will be administered during the semester. Three of the exams will be given during regular lecture periods, and the fourth exam will be given on the final exam day. Each exam will consist mostly of multiple-choice, fill in the blank or matching questions, and the remaining questions will be short answer.

Quizzes

A number of unannounced quizzes will be given during the lecture period. The quizzes will test retention of material from the previous lecture or cover a reading assignment. These quizzes are intended to encourage you to attend class and study the material on a regular basis. The two lowest quiz scores will be dropped. There will be no make-up quizzes given

COURSE OUTLINE

Dat	e	Topic	Readings from <i>Biology</i> in Focus
M	9 Jan	Introduction	
W	11 Jan	Evolution and Natural Selection	Chapter 19
F	13 Jan	Evidence for Evolution	
M	16 Jan	Martin Luther King Day – No Class	
W	18 Jan	Phylogeny and Classification	Chapter 20
F	20 Jan	Species and Speciation	Chapter 22
M	23 Jan	Hybrids, Punctuated Equilibria, Macroevolution	
W	25 Jan	The History of Life	Chapter 23
F	27 Jan	Origins of Life, Prokaryotic Characteristics	Chapter 24
M	30 Jan	Prokaryotic Diversity	
W	1 Feb	Groundhog Day	
F	3 Feb	EXAM #1	
•••			
M	6 Feb	Origin of Eukaryotes	Chapter 25
W	8 Feb	Diversity of Protists	
F	10 Feb	Multicellularity and Colonization of Land	Chapter 26
M	13 Feb	President's Day - No Class (Washington & Lincoln were animals, too)	
W	15 Feb	Fungi	
F	17 Feb	Diversification of Plants	
M	20 Feb	Seeds, Flowers, and Fruits	Chapter 30
W	22 Feb	Plant Structure and Growth	Chapter 28
F	24 Feb	Plant Nutrition and Transport	Chapter 29
M	27 Feb	Plant Response	Chapter 31
W	1 Mar	EXAM # 2	
F	3 Mar	Thoughts of Spring: Migration	
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Date		Topic	Readings from <i>Biology</i> in Focus			
	MARCH 4 - 12 SPRING BREAK ***********************************					
M	13 Mar	First Animals: Sponges and Cnidaria	Chapter 27			
W	15 Mar	Evolution of Animal Body Plan, Flatworms				
F	17 Mar	Body Cavities and Transport Systems, Molluscs	Chapter 34			
M	20 Mar	Segmented Body: Annelids				
W	22 Mar	Adaptations for Arthropod Success				
F	24 Mar	Arthropods and Human Affairs				
M	27 Mar	Strange Creatures: Echinoderms				
W	29 Mar	Rise of Chordates				
F	31 Mar	First Vertebrates: Fish				
M	3 Apr	Invasion of Land: Tetrapods				
W	5 Apr	Transitional forms and Evolution				
F	7 Apr	EXAM #3				
	***	***************	*****			
M	10 Apr	Amniotes: Masters of the Land				
W	12 Apr	Endothermy and Activity				
F	14 Apr	Easter Vacation- No Class				
M	17 Apr	Birds and Mammals				
W	19 Apr	Population Ecology	Chapter 40			
F	21 Apr	Limits to Distribution				
M	24 Apr	Species Interactions	Chapter 41			
W	26 Apr	Biological Communities and Diversity				
F	28 Apr	Conservation and Diversity				
W	3 May	FINAL EXAM (10:30 am - 12:30 pm)				

SOUTH DAKOTA BOARD OF REGENTS

Authority to Offer an Existing Common Course

<u>DSU</u>	A&S		<u>3/21/16</u>
Institutio	n Divisio	n/Department Institutional App	proval Signature Date
1. Provide			e system common course database
	prerequisites		•
		Course Title	Credits
		General Biology II	3-4
	-	a: A continuation of BIOL 151, the	•
			oncepts of animal and plant structure
		getics, and reproduction. Co-requisi Course Title	te: BIOL 153L Credits
-	L 153L		0-1
			companies BIOL 153. Co-requisite:
	nse Descriptio L 153	ii. Laboratory experience that acc	ompanes BIOL 133. Co-requisite.
210			
2. Univers	sities currently	offering this course:	
X	BHSU	DSU <u>X</u> NSU <u>X</u>	SDSMT X SDSU X USD
3. FTE In	aplication		
	No Don	accompant of	which is being deleted
	No. Rep		,which is being deleted
	(Attach de	(prefix, number, nam letion form). Effective Date of De	
	(Attach uc	etion form). Effective Date of De	
X	No. Sche	dule Management, explain:	
			-
	Yes. Spe	cify:	
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4. Existi	ng program i	which course will be offered: $\underline{\underline{}}$	Biology for Information Systems
5. CIP c	ode for the co	mmon course 260101	
(D	1T / /*		T
6. Propo	osed Instruction	onal Method by this university: _	Lecture/lab
7 Duone	and delivery	nethod by this university: 001	
7. Propo	sed denvery i	neurod by this university: 001	
8 Unive	ersity Dept. Co	ode DSCI	
5. Omve	zor, zepu et		
9. Autho	ority to offer e	ffective beginning in what term?	Spring 2017
	· y	· ·	
10. Section	on Restriction	none	

General Education Revision Form (last revised 02/2007)