### Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title: BIOL 151 General Biology II, Number of Credits: 4 semester credits

Course Description: The second semester of a two-semester sequenced study of the fundamental topics of biology, with an emphasis on organismal biology.

Prerequisites: none

Course Objectives: Demonstrate an understanding and proficiency with the following concepts:

- 1. Describe the unity and diversity of life, including structure and function and how this relates to environment.
- 2. Describe how live (or life forms) has (have) changed over time.
- 3. Understand basic evolution and evolutionary processes.
- 4. Develop and understanding of ecology.
- Instructor: Lura
- Office: NSC 114

Office Hours: MWF 9:00-10:00 & 2:00-3:00

- Phone: (701) 228-5472
- Email: <u>charles.lura@dakotacollege.edu</u>
- Lecture/Lab Schedule: Spring Semester
- Textbook(s): Campbell, N.A. and J.B. Reece. 2008. Biology. 8<sup>th</sup> Edition. Pearson/Benjamin Cummings, Publ. Co.

Course Requirements:	4 Hour Exams @ 100 pts. ea.	400 pts.
	Lec assign/quizzes	100 pts.
	2 Lab Exams @ 50 pts. ea.	100 pts.
	10 Lab Quizzes	<u>100 pts.</u>
	TOTAL POINTS	700

# **Tentative Course Outline:**

## BIOLOGY 151 TENTATIVE SYLLABUS SPRING 2015

DATE	ΤΟΡΙΟ	READING ASSIGN.
Jan 14-16	Macroevolution Lab: no labs this week	Chapter 25
Jan 19-23	January 19, Martin Luther King Day Descent with Modification Lab: Phylogeny Simulation	22
Jan 26-30	Populations and evolution Lab: Hardy-Weinberg Law	23
Feb 2-6	Speciation First Hour Exam, Friday February 6 Lab: Island Biogeography and Evolution	24
Feb 9-13	Classification System, Bacteria, Archaea Lab: Classification and Binomial System of Nomenclature	26,27
Feb 16-20	February 16, President's Day Bacteria & Archaea cont'd, Protists Lab: Bacteria & Protista Diversity	27,28
Feb 23-27	Fungi, Plant Structure & Function (LVP's) Lab: Fungi & Plant Diversity	31,29
Mar 2-6	Plant Structure & Function (HVP's) <b>Second Hour Exam, Friday March 6</b> Lab: Lab Midterm	30,35
Mar 9-13	Animal Diversity & Invertebrates Lab: Invertebrate Animal Diversity	32,33
	Spring Break March 16-20	
Mar 23-27	Vertebrates Lab: Vertebrate Animal Diversity	34
Mar 30-Apr 3	Organs and Organ Systems Lab: Fetal Pig Dissection Friday April 3-Easter Break	42,43,45
Apr 6-10	Monday April 6-Easter Break Organs and Organ Systems Third Hour Exam Friday April 10 Lab: Fetal Pig Dissection	46,48,49

Apr 13-17	Population ecology Lab: Population Sampling	53
Apr 20-24	Community Ecology Lab: Community Sampling	54
Apr 27-May 1	Ecosystems Lab: Pheasant Habitat Model	55
May 4-8	Conservation/Restoration Ecology Climate Change & Future Considerations Lab: Lab Final	56
	Final Exam: Wednesday May 13, 3:00-5:00	

Classroom Policies:Regular attendance and participation in lab and lecture is expected.All make-up exams will include a significant essay/short answer component and must be<br/>made up within one week of the students return to class unless prior arrangements<br/>have been made.

#### Academic Integrity: Cheating on a test, quiz, or other assessment results in zero points for the assessment.

**Disabilities and Special Needs:** Any accommodations due to a learning disability must come through the Dakota College Learning Center. If you have a diagnosed learning disability, you need to contact the Learning Center in Thatcher 1104 or phone (701) 228-5477.

General Education Goals/Objectives:

- Goal 1: Explains the interrelationships between humans and their environment and the role of science in their lives
- Goal 2: Demonstrates knowledge and application of technology

#### Relationship to Campus Theme:

Class announcement/discussion on news items about technological developments in biology, and how that influences the discipline as well as societal aspects.

Knowledge on cell structure and function related to microscope development.

Interject technological developments and how they influence scientific development and societal issues.