BIOL 1108K, Principles of Biology II Fall Semester, 2017 Sections A, B, C

Lecture (BC 1023): Laboratory (BC 1073): TR 2:00 p.m. - 3:15 p.m. Section A (CRN 82067): Wed.: 10:00 a.m. – 12:50 p.m. Section B (CRN 82068): Wed.: 2:00 p.m. – 4:50 p.m. Section C (CRN 82069): Thurs.: 9:30 a.m. - 12:20 p.m.

Instructor: Dr. Russ Goddard, BC 2090. (Phone 249-2642; or Dept. office 333-5759) (Office hours: TWR 1:00 – 1:50 p.m.; TR 3:30 – 4:00 p.m.) Email: <u>rgoddard@valdosta.edu</u> <u>Note</u>: This is the official electronic contact method and address for Dr. Goddard!

Dr. Goddard does not respond to email sent through BlazeView!

<u>Course</u> <u>Catalog Description</u>: BIOL 1108 Principles of Biology II; 3-3-4; An introduction to physiological processes in plants and animals. Structure, nutrition, transport, coordination, reproduction, and development are addressed.

Required Materials:

Text: Sadava, D., D.M. Hillis, H.C. Heller, and S.D. Hacker. 2016. Life: The Science of Biology. 11th https://www.grtep.com/index.cfm/core/General/index

Direct Course link: http://vsu.grtep.com/index.cfm/bioprelab/page/topicslabprep

Student Recommended Laboratory Study guide: Van De Graaff's Photographic Atlas for the Biology Laboratory, 7e.

https://www.morton-pub.com/catalog/biology/van-de-graaffs-photographic-atlas-biology-laboratory-7e

General Objectives: This course continues the introduction to basic principles of biology started in BIOL 1107. Where BIOL 1107 focused on cellular structure and function addressing how life is similar through unifying cellular mechanisms, BIOL 1108, in concept, was designed as a comparative organismal physiology course to address organismal function and the diversity seen in life as defined by variations in multicellular organism structure and function. One way of interpreting how we study function (organisms) is that we really ask two basic questions; 1) final grade.

- Lecture grade: (100 pts). During this course the instructor will require students to read all text book chapter material before it is presented in class. Further, students will be assigned "Learning Curve" quizzes to complete within the LaunchPad web site before the material is scheduled in class. All learning curve quizzes must be completed by the due date regardless of whether the instructor's lectures are keeping up with the schedule. Once the chapter material is completed in lecture, a new assignment called the "summative chapter quiz" will be assigned on LaunchPad for each chapter presented. Adequate time will be given to complete the summative quiz before your opportunity to take it expires. The lecture exam will consist of a single chapter score that is the average between the LaunchPad score (effectively 100%) and your summative quiz score. All chapter scores will be added and computed as a percent score for the final lecture score to count 100 pts towards your final grade.
- Final Exam (100 pts): The final comprehensive exam is scheduled for Wednesday, December 6th from 2:45 4:45 p.m. in our classroom. Students will have the option of taking this exam or skipping it and counting it as their "drop" grade.

Dropped grade: The lowest score you receive among either the four

Biology 1108 course syllabus (Goddard); Page 4

Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V) and 229-375-5871 (VP). For more information, please visit http://www.valdosta.edu/access or email: access@valdosta.edu.

| Tenative Dectare and Lab schedule (subject to revision). | | | | | | | | | |
|--|--------------|--|---------------------------------------|-----------------|--|--|--|--|--|
| | | Lecture: | Laboratory: | | | | | | |
| <u>Lecture</u> | <u>Date:</u> | <u>Topic :</u> | <u>Chapter</u> Reading(s) pages | <u>Day(s)</u> | Exercise | | | | |
| 1 | 15 Aug. | How is physiology important in our understanding of biology? | PowerPoint lecture 1 | 16,17 Aug. | Independent Lab Assignment: Introduction to Basic Statistics | | | | |
| 2 | 17 Aug. | History of Life on Earth | Pg. 507 – 527 | | Introduction to Dasic Statistics | | | | |
| 3 | 22 Aug. | Phylogeny | Pg. 448 – 466 | 23, 24 Aug. | Nonvascular, Seedless Plants: Mosses, Liverworts, and Hornworts | | | | |
| 4 | 24 Aug. | Bacteria and Archaea | Pg. 528 – 551 | | | | | | |
| 5 | 29 Aug. | Origin and Diversification of Eukaryotes | Pg. 552 – 571 | 30, 31 Aug. | Vascular Plants: Ferns, Gymnosperms and Angiosperms | | | | |
| 6 | 31 Aug. | Evolution of Plants 1: Nonvascular to vascular plants | Pg. 572 – 591 | | | | | | |
| 7 | 5 Sept. | Evolution of Plants 2: evolution ar diversification of seed plants | Pg. 592 – 612 | 6, 7 Sept. | Angiosperm Reproduction | | | | |
| 8 | 7 Sept. | Reproduction in Flowering Plants | 786 - 804 | | | | | | |
| 9 | 12 Sept. | The Plant Body | Pg. 715 – 734 | 13, 14 Sept. | Angiosperm Development | | | | |
| 10 | 14 Sept. | Exam #1 | | | | | | | |
| 11 | 10 | Can Englande & Turner and in | | | | | | | |

Tentative Lecture and Lab schedule (subject to revision):

11

19 Gas Exchange & Transport in

Sept. Plants

Biology 1108 course syllabus (Goddard); Page 6

| 24 | 7 Nov. | Salt and Water Balance and Nitrogen Excretion | Pg. 1093 - 1114 | 8, 9 Nov. | Sensory Systems |
|----|------------|--|--------------------|-------------|---|
| 25 | 9 Nov. | Animal Circulatory Systems | Pg. 1043 – 1067 | | |
| 26 | 14 Nov. | Neurons and Nervous Systems | Pg. 938 – 959 | 14, 15 Nov. | Cardiovascular System |
| 27 | 16 Nov. | Musculoskeletal Systems: | Pg. 1001 - 1021 | | |
| 28 | 21 Nov. | Sensory Systems | Pg. 960 - 980 | 22 Nov. | Thanksgiving Holiday, No Labs this week |
| 29 | 23 Nov. | Animal Reproduction | Pg. 899 – 921 | | |
| 30 | 28 Nov. | Exam 3 | | 29, 30 Nov. | Final Lab Practical |
| | 6 | Final Exam Period: 2:45 – 4:45 p.m. in in | | | |
| | Dec. | BC 1023 | | | |