

BIOL 1108K, Principles of Biology II
Summer Semester, 2018 **Section A, (CRN 50698)**
Jun 20, 2018 - Jul 25, 2018

Lecture (BC 2022): **MTWRF** **9:35 a.m. – 11:05 a.m.**
Laboratory (BC 1073): **MTR** **11:30 a.m. – 2:20 p.m.**

Instructor: Dr. Russ Goddard, BC 2090. (Phone 249-2642; or Dept. office 333-5759)
(**Office hours:** Generally available before and after class times)
Official Contact email: rgoddard@valdosta.edu (Don't expect replies through BlazeView mail)

Course Catalog Description: 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 M.R. Berenbaum. 2016. Life: The Science of Biology. 11th edition. Sinauer Associates Inc., Sunderland, MA.

Note: There is a **GRADED** component to this course using the interactive quizzing software available through the publisher's LaunchPad web page (Go to <http://www.macmillanhighered.com/launchpad/life11e/7929699>):

Course specific link: Students can now join your course at this URL:
<http://www.macmillanhighered.com/launchpad/life11e/8189383>

There are three versions of the text book that students may choose to purchase (purchase just one!). Just be sure to choose a version with "LaunchPad" access (<https://www.macmillanlearning.com/Catalog/product/lifethescienceofbiology-eleventhedition-sadava/valueoptions#tab>):

LaunchPad for Life (Twenty-four Month Access) ISBN-10: 1-319-02531-5; ISBN-13: 978-1-319-02531-1

LaunchPad + Loose Leaf Sheets: ISBN-10: 1-319-12619-7; ISBN-13: 978-1-319-12619-3

LaunchPad + Cloth Text: ISBN-10: 1-319-12571-9; ISBN-13: 978-1-319-12571-4

Online Laboratory Manual: Grove, T.J. Biology Lab Manual. Great River Learning.

First time use: <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, 8e. Morton Publishing; ISBN-13: 9781617317651

<https://www.morton-pub.com/catalog/biology/van-de-graaffs-photographic-atlas-biology-laboratory-8e>

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) how do organisms form (structure/development), and 2) how do organisms function (physiology). This course is designed to present the basics of development and physiology along two evolutionary lines in particular; those giving rise to multicellular plants and to animals. Additionally, comparisons will be made on how organisms obtain energy, how they get their nutrition, how gas exchange is handled, how wastes are managed, how circulation connects many systems, as well as how these systems are regulated, particularly through hormones.

Attendance: Attendance in this course absolutely is required. Students should be seated at the beginning of class. If you are late, your attendance may not be acknowledged. Additionally, anyone arriving late could miss points from quiz questions (no make-ups!). The student is responsible for all material missed regardless of the reason for absences.

ABSOLUTELY NO LECTURES OR LABORATORIES CAN BE "MADE UP." In the event that a student will miss a class, s/he should notify the instructor in writing by email preferably BEFORE the missed class, but as soon as possible. The student will miss any points assessed during the missed class, but penalty points assessed for absences may be waived at the discretion of the instructor.

Graded Course Components: Your final grade will be based on your performance in the following course components: Additional unannounced in-class assignments may count toward the final grade during the semester.

Lecture: (400 pts): There will be **3 lecture exams** and an optional **comprehensive final exam** given on the dates listed below. Students are required to know the lecture material and the readings from the text for exams and quizzes. Information presented in the laboratory may also be included in these exams. Each exam counts 100 points toward your final grade.

Learning Curve: (100 pts). During this course the instructor will require students to read all text book chapter material before it is presented in class. For this, students will be assigned “Learning Curve” quizzes to complete within the textbook publisher’s 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. The deadline for each summative quiz assigned will expire at 8:00 a.m. on the following Monday from when it was assigned.

The course “learning curve” grade will consist of an average for each chapter of the percent score for the learning curve quiz and its correlated summative quiz. All of these “chapter scores,” consisting of one grade for both learning curve and summative quiz for the chapter, will be added together and computed as a percent score for the score to count 100 pts towards your final grade. Note that Dr. Goddard cannot assist with technical help with access to Learning Curve assignments. Contact information for help services from the publisher are contained on the web site and at the end of this syllabus.

Final Exam (100 pts): **The final comprehensive exam is scheduled for Thursday, July 26, 2018 from 11:30 a.m. to 2:30 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 three regular lecture exams, the final exam, or the learning curve grade will be excluded (dropped) and will not be used for computing your final grade. Therefore, although there are 500 possible points from lecture exams, only 400 points will be used to compute your final grade. It is not possible to “drop” any Laboratory grades from your final grade.

Laboratory: (150 pts) The major points towards your grade assessed in the laboratory will be through two laboratory practicals. Each practical will be worth 100 points; All Lab quizzes, and selected homework assignments will count for another 100 points total. Of the 300 points earned in lab, your lab score will be computed as a percent score out of 150 points total. As the laboratory is considered an extremely important part to learning “hands-on” biology, any student will automatically *lose* points from their final lab grade for any absence from laboratory.

Final grades will be based on a percentage of your cumulative points relative to the total points possible:

Lecture Exams:	300 pts	} (low dropped)
Learning Curve	100 pts	
Final Exam	100 pts	
Laboratory:	<u>150 pts</u>	
Total:	550 pts	

Guaranteed grade distribution is as follows:

A = 90-100%
B = 80-89.9%
C = 70-79.9%
D = 60-69.9%
F = \leq 59.9%

Notes on grading philosophy: Students should note that a grade of "A" in this course represents an exemplary command of the material covered. To obtain this grade of excellence, it is recommended that students study daily and clarify with the professor any problems regarding course information, as they arise.

MAKE-UP EXAMS: The exam schedule is posted below. It is assumed that because students are registered for this course at the scheduled time and exams are given during this time, all students will be able to attend. Additionally, since one exam grade is dropped, absolutely **NO make-up exams are given.** If you cannot make it to a test at the assigned time for ANY reason, your exam grade will be zero and this will be the grade that is dropped in the computation of your final grade. In no circumstance should a student registered for this course miss two exams. If you know you will miss more than one exam time, you should **DROP THIS COURSE NOW.**

EXAM SCHEDULE:

NOTE: “Bubble” sheets will be used during exams. Please bring and use an “HB” or “#2” pencil with you to the exams to insure that your answers are recorded and scored accurately

You will have the class time only to complete each lecture exam and 2 hours for the final.

Exams will consist of multiple choice questions. The exam schedule is as follows:

Exam 1: Monday, July 2, 2018
Exam 2: Friday, July 13, 2018
Exam 3: Wednesday, July 25, 2018

Mid-term Lab Practical: Monday, July 9, 2018
Final Lab Practical: Tuesday, July 24, 2018

Final Examination: **Thursday, July 26 from 11:30 a.m. – 1:30 p.m. in in BC 2022.**

Procedure for exams:

- No books, electronic devices (including cell phones), or notebooks will be allowed during exams. Students using such items, including cell phones that ring during the exam, will be asked to leave and will receive a zero for the exam.
- No talking will be allowed during the exam, but students are welcome to come to the instructor's desk to ask questions about the exam. If a cell phone rings during an exam, disrupting the exam, the student will be asked to leave. ***Turn off your cell phones during exams!***
- Every student should bring their University ID.

Assignments passed in electronically. When a course assignment is required to be passed in electronically (e.g. in a document format like MS Excel) Dr. Goddard **does not accept OneDrive shared files**. The purpose of passing these assignments in electronically is so the document can be graded and sent back to the student. Too often, OneDrive files do not allow write privileges to the instructor so all files must be in the program format and attached to an email to rgoddard@valdosta.edu (Word document in *.doc or *.docx format; Excel document in *.xls or *.xlsx format). **Any file that a student has applied restricted access for editing will not be graded!**

Student identification. Students should have in their possession at all times their VSU student identification card. In order to verify the identification of students officially enrolled in the course, it is the instructor's prerogative to request official student photo identification cards at any time during lecture. During examinations, students may be asked to display their VSU student identification cards visibly on the desk top and to make them available for inspection by their instructor and/or assistants.

Academic Integrity: Any behavior suggestive of academic dishonesty will lead to a reprimand, failure of an assignment, or failure of the course at the discretion of the instructor, but based on the severity of the infraction(s). Cooperative learning and group interactions are common and necessary to scientists and this activity is encouraged in the form of laboratory work and discussions about data and information. However, on assignments designed to assess individual learning of material in the class or writing and analytical skills, work must be completed totally independently. Behavior contrary to this principle constitutes cheating. Students should fully understand that plagiarism is not tolerated in this department or by the instructor and full appreciation for the intellectual property of others should be respected completely.

Plagiarism is the representation of someone else's work as your own. You may not blatantly copy phrases, paragraphs, or ideas from another's work. You cannot paraphrase someone else's ideas and use them as your own. You must analyze all data and work by others and then integrate this information with new data and conclusions that you independently synthesize, properly citing past work that supports your conclusions.

Students should read and be familiar with the Biology Department policy on plagiarism:

<https://www.valdosta.edu/colleges/arts-sciences/biology/documents/resources/PlagiarismPolicy.pdf> and read and understand the University policy on Academic Integrity:

<https://www.valdosta.edu/academics/academic-affairs/academic-honesty-policies-and-procedures.php>

Disruptive behavior: No disruptive behavior of any kind will be tolerated in this course. Talking during lectures is disruptive due to the nature of the acoustic design of the room. Students should restrict talking and discussion to pertinent questions related to course material and these questions should be directed toward the instructor. Entering a classroom late is discouraged, particularly from the front of the room, because it is disruptive, as is leaving early. Any student disrupting lectures will be required to leave the classroom. Use of cellular telephones or any similar remote communication device is prohibited during scheduled lectures, laboratories, or examinations. If students bring cellular telephones or similar devices to lecture, it is their responsibility to switch them off prior to the beginning of the lecture period. Ringing, buzzing, or any other sounds emitted from such devices will be treated as disruptive behavior on the part of the owner/possessor, and the owner/possessor will be asked to leave lecture immediately (including during exams!).

Privacy Act (FERPA): The Family Educational Rights and Privacy Act (FERPA) prohibits the public posting of grades by social security number or in any manner personally identifiable to the individual student. No grades can be given over the telephone, as positive identification cannot be made by this manner.

Students with Disabilities: 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.

Tentative Lecture and Lab schedule (subject to revision):

Lecture:				Laboratory:	
<u>Lecture</u>	<u>Date:</u>	<u>Topic :</u>	<u>Chapter Reading(s) - pages</u>	<u>Date:</u>	<u>Exercise</u>
1	20 June	How is physiology important in our understanding of biology? History of Life on Earth	Pg. 507 – 527		
2	21 June	Phylogeny	Pg. 448 – 466	21 June	Independent Lab Assignment: “How to Use Excel” Introduction to Basic Statistics
3	22 June	Bacteria and Archaea	Pg. 528 – 551		
4	25 June	Origin and Diversification of Eukaryotes	Pg. 552 – 571	25 June	Lab 4. Plant Cells, Vegetative Organ Structures, and Patterns of Growth
5	26 June	Evolution of Plants 1: Nonvascular to vascular plants	Pg. 572 – 591	26 June	Lab 2. Nonvascular, Seedless Plants: Mosses, Liverworts, and Hornworts
6	27 June	Evolution of Plants 2: evolution and diversification of seed plants	Pg. 592 – 612		
7	28 June	Reproduction in Flowering Plants (Section 37.1 only) The Plant Body	786 – 793 Pg. 715 – 734	28 June	Lab 3. Vascular Plants: Ferns, Gymnosperms and Angiosperms
8	29 June	Gas Exchange & Transport in Plants	Pg. 735 - 749		
9	2 July	Exam #1		2 July	Lab 3 (con't) Angiosperm Reproduction Lab 5 (part) seed structure and planting
10	3 July	Plant Nutrition	Pg. 750 – 764	3 July	Lab 5. Angiosperm Development
11	5 July	Regulation of Plant Growth	Pg. 765 – 785	5 July	Lab 6. Growth and Transpiration
12	6 July	Plant Responses to the Environment	Pg. 805 – 822		
13	9 July	Animal Origins and Evolution of Body Plans	Pg. 635 – 657	9 July	Midterm Lab Practical
14	10 July	Animal Development Protostome animals	Pg. 916 - 937 Pg. 658 – 683	10 July	Lab 7. Diversity of Porifera, Cnidaria, Platyhelminthes, and Annelida
15	11 July	Deuterostome animals Physiology, Homeostasis, Temperature Regulation	Pg. 684 – 714 Pg. 823 – 843		
16	12 July	Animal Nutrition, digestion, absorption	Pg. 1068 - 1090	12 July	Lab 8. Diversity of Mollusca, Nematoda, Arthropoda, Echinodermata, and Chordata
17	13 July	Gas Exchange in Animals	Pg. 1022 - 1042		
18	16 July	Salt and Water Balance and Nitrogen Excretion	Pg. 1093 - 1114	16 July	Lab 9. Introduction to Animal Tissues
19	17 July	Exam 2		17 July	Lab 10. External and Internal Anatomy of the Fetal Pig
20	18 July	Animal Circulatory Systems	Pg. 1043 – 1067		
21	19 July	Neurons and Nervous Systems	Pg. 938 – 959		

	July			19 July	Lab 11. Sensory Systems
22	20 July	Musculoskeletal Systems:	Pg. 1001 - 1021		
23	23 July	Sensory Systems	Pg. 960 - 980	23 July	Lab 12. Cardiovascular System
24	24 July	Animal Reproduction	Pg. 899 – 921	24 July	Final Lab Practical
25	25 July	Exam 3			
	26 July	Final Exam Period:			

Pre- and Post-Lab Quiz times

Lab:	Pre-Lab open	Pre-lab close	Post-lab open	Post-lab close
Lab 1: Excel	June 20, 2018 9:30 a.m.	N.A.	N.A.	N.A.
Lab 4: Plant Cells	June 20, 2018 9:30 a.m.	Monday, June 25, 2018 11:30 a.m.	Monday, June 25, 2018 2:30 p.m.	Monday, July 2, 2018 8:00 a.m.
Lab 2: Nonvascular Plants	June 20, 2018 9:30 a.m.	Tuesday, June 26, 2018 11:30 a.m.	Tuesday, June 26, 2018 2:30 p.m.	Monday, July 2, 2018 8:00 a.m.
Lab 3: Vascular Plants	June 20, 2018 9:30 a.m.	Thursday, June 28, 2018 11:30 a.m.	Thursday, June 28, 2018 2:30 p.m.	Monday, July 2, 2018 8:00 a.m.
Lab 5: Angiosperm Dev't	June 20, 2018 9:30 a.m.	Tuesday, July 3, 2018 11:30 a.m.	Tuesday, July 3, 2018 2:30 p.m.	Monday, July 9, 2018 8:00 a.m.
Lab 6: Plant Growth and Dev't	June 20, 2018 9:30 a.m.	Thursday, July 5, 2018 11:30 a.m.	Thursday, July 5, 2018 2:30 p.m.	Monday, July 9, 2018 8:00 a.m.
Lab 7: Porifera...	June 20, 2018 9:30 a.m.	Tuesday, July 10, 2018 11:30 a.m.	Tuesday, July 10, 2018 2:30 p.m.	Monday, July 16, 2018 8:00 a.m.
Lab 8: Mollusca...	June 20, 2018 9:30 a.m.	Thursday, July 12, 2018 11:30 a.m.	Thursday, July 12, 2018 2:30 p.m.	Monday, July 16, 2018 8:00 a.m.
Lab 9: Animal Tissues	June 20, 2018 9:30 a.m.	Monday, July 16, 2018 11:30 a.m.	Monday, July 16, 2018 2:30 p.m.	Monday, July 23, 2018 8:00 a.m.
Lab 10: Fetal Pig	June 20, 2018 9:30 a.m.	Tuesday, July 17, 2018 11:30 a.m.	Tuesday, July 17, 2018 2:30 p.m.	Monday, July 23, 2018 8:00 a.m.
Lab 11: Sensory Systems	June 20, 2018 9:30 a.m.	Thursday, July 19, 2018 11:30 a.m.	Thursday, July 19, 2018 2:30 p.m.	Monday, July 23, 2018 8:00 a.m.
Lab 12: Cardiovascular System	June 20, 2018 9:30 a.m.	Monday, July 23, 2018 11:30 a.m.	In class post quiz	In class post quiz

Macmillan Learning Curve Information:

Course Activated

Your course URL: <http://www.macmillanhighered.com/launchpad/life11e/8189383>

School: Valdosta State University

Course Title: Sadava et al., Life: The Science of Biology, 11e: Principles of Biology II

Course Number: BIOL 1108K

Course Section: A

Students can now join your course at this URL:

<http://www.macmillanhighered.com/launchpad/life11e/8189383>

Get your students started.

Dear Students,

My online course is open for student registration. Follow these steps to get started. If you need additional guidance, consult the [support site](#), especially the system requirements which list recommended browsers.

1. Go to <http://www.macmillanhighered.com/launchpad/life11e/8189383>
2. **Bookmark** the page to make it easy to return to (although note that the URL will look different due to security measures).
3. **Enroll** in our course using one of the following options:
 1. If you have an access code, select "I have a student access code", enter the code exactly as it appears on the card, and click Submit.
 2. If you don't have an access code, either purchase a text package that includes one OR click "I want to purchase access" and follow the instructions.
 3. If you need to start working but can't purchase right away, select "I want temporary access" and follow the instructions. Please note: Your grades are linked to your Launchpad account username (email address). If you use temporary access, make sure you purchase or register your code using the same email address for your paid access.

If you have problems registering, purchasing, or logging in, please [contact Customer Support](#). You can reach a representative 7 days a week:

1. through the online form
2. by chat
3. by phone at (800) 936-6899

Looking forward to seeing you in class!

Russ Goddard

rgoddard@valdosta.edu