

2015

# Biology 101 General Biology Spring 2015

Scott Siechen

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**BIOLOGY 101  
GENERAL BIOLOGY  
SPRING SEMESTER, 2015**

**Instructor:** \_\_\_\_\_  
**Email:** \_\_\_\_\_  
**Office:** \_\_\_\_\_ **Hrs:** \_\_\_\_\_



**Tentative Schedule:** this schedule may be subject to change during the semester.  
All Module Quizzes are to be taken in the Nat. Sci. Testing Center, L-161‡.

Lecture Topics and Dates				
Module Covered	Dates	Chapters in <i>What is Life?</i> , Phelan, 2 <sup>nd</sup> Ed.	Module Covered	Module Quiz DEADLINES‡
1	Jan 12-16	<b>1 - Scientific Thinking</b> Your Best Pathway to Understanding the World	<b>Pre-Course Evaluation</b>	
2	Jan 20-23 (Jan 19 MLK Day)	<b>2 - Chemistry</b> Raw Materials and Fuel for Our Bodies	1	Jan 21
3	Jan 26-30	<b>3 - Cells</b> The Smallest Part of You	2	Jan 28
4a	Feb 2-6	<b>4.1-4.10 - Energy I - Photosynthesis</b> From the Sun to Food	3	Feb 4
4b	Feb 9-13	<b>4.12-4.17 - Energy II – Cellular Respiration</b> From Food to You	4a	Feb 11
5a	Feb 16-20	<b>5.2-5.10 – DNA &amp; Gene Expression</b> What is the Genetic Code and How is it Harnessed?	4b	Feb 18
5b	Feb 23-27 (Feb 26 Prof. Dev.)	<b>5.11-5.17 – Biotechnology</b> Improving Our Daily Lives	5a	Feb 25
6	Mar 2-6	<b>6 – Chromosomes and Cell Division</b> Continuity and variety	5b	Mar 4
7	Mar 9-13	<b>7 – Genes and Inheritance</b> Family Resemblance: How Traits are Inherited	6	Mar 11
8	Mar 16-20	<b>8 – Evolution and Natural Selection</b> Darwin's Dangerous Idea	7	Mar 18
10	Mar 30-Apr 3*	<b>10 - The Origin and Diversification of Life On Earth</b> - Understanding Biodiversity	8	Apr 1
11	Apr 6-10	<b>11 – Animal Diversification</b> Visibility in Motion	10	Apr 8
14	Apr 13-17	<b>14 – Population Ecology</b> Planet at Capacity: Patterns of Population Growth	11	Apr 15
15	Apr 20-24	<b>15 – Ecosystems and Communities</b> Organisms and Their Environments	14	Apr 22
16	Apr 27-May 1	<b>16 – Conservation &amp; Biodiversity</b> Human Influences on the Environment	15	Apr 29
Review	May 4-7	<b>Review for COMPREHENSIVE Final</b>	16	May 6

\*There are no classes on Jan. 19<sup>th</sup> (Martin Luther King Jr. Day), Feb. 26<sup>th</sup> (Professional Development Day) or the week Mar. 23-27 (Spring Break)!

‡See Page 7 of this syllabus for the Natural Sciences Testing Center Hours and Rules

**Lab Schedule:**

Depending on which section of Biology 101 you are enrolled in, you will have your weekly lab on **Wednesday**, **Thursday**, or **Friday**. Check your class schedule. All Bio 101 labs are held in **L-114**. For each lab exercise, you will be required to turn in the corresponding **lab exercise sheets** from the lab. Each lab report is worth 15 points. Your instructor will let you know when your labs are due. Due dates may vary among instructors.

LAB #	LAB DATES	LAB EXERCISE / OTHER ACTIVITY
1	Jan 14-16	The Scientific Method
2	Jan 21-23	Microscope Use and Scale
3	Jan 28-30	Diffusion and Osmosis
4	Feb 4-6	Photosynthesis
5	Feb 11-13	Cellular Respiration
6	Feb 18-20	DNA Structure
7	Feb 25 & 27*	Working with DNA
8	Mar 4-6	Mitosis and Meiosis
9	Mar 11-13	Probability and Mendelian Genetics
10 or 10E	Mar 18-20	Populations and Natural Selection
<b>No Lab!</b>	Mar 25-27	<b>Spring Break</b>
<b>Movie</b>	Apr 1-3	Movie and Discussion: Evidence for Evolution
11	Apr 8-10	Human Evolution
12	Apr 15-17	Size & Structure of the Human Population
<b>J.A.F.</b>	Apr 22-24	<b>Journal Article File – See page 6 for Instructions</b>
13 or 13A	Apr 29-May 1	Diversity and Classification of Animals
No Lab	May 6-7	Final Essay Due, Final Exam Review
<b>Finals Week: May 8-14</b>		

**FINAL EXAM SCHEDULE**

Section	Date and Time
001	8-10 a.m., Wednesday, May 13
002	8-10 a.m., Thursday, May 14
003	11a-1:00 p.m., Monday May 11
004	2-4:00 p.m., Wednesday May 13
005	Monday Dec 11 Regular Class Time

**Grading System:**

Your final grade in the course will be based on **total points** accumulated during the semester. Total points may vary slightly from section to section at the end of the semester.

<b>15 Module Quizzes</b>	20 Points	300	38%
<b>13 Lab Reports</b>	15 Points	195	24%
<b>12 Pre-lab Quizzes</b>	4 Points	48	6%
<b>Newspaper/Magazine Article Files</b> (see p. 5)	15 Points	15	2%
<b>Instructor Points (TBA)</b>	30 Points	30	4%
<b>15 Prep-U Mastery Quizzes</b>	5 Points	75	9%
<b>Class Discussions (TBA)</b>	40 Points	40	5%
<b>Attendance Points</b>	15 Points	15	2%
<b>Final Essay Assignment</b>	30 Points	30	4%
<b>Final Exam</b>	50 Points	50	6%

**Total Possible Points** **798 Points** 100%

**Attendance Points will be earned as follows:**

Number of days per week section meets	Attendance Points			
	15 pts	10 pts	5 pts	0 pts
4	0-4 absences	5-8 absences	9-12 absences	>12 absences
3	0-3 absences	4-6 absences	7-9 absences	>9 absences
2	0-2 absences	3-4 absences	5-6 absences	>6 absences

**Semester Points Grading Scale:**

<b>A</b>	718-798	(90%-100%)
<b>B</b>	638 – 717	(80%-89%)
<b>C</b>	559 – 637	(70%-79%)
<b>D</b>	479 – 558	(60%-69%)
<b>F</b>	<479	(less than 60%)

**Extra Credit/Bonus Points:**

Your instructor will give you a number of opportunities throughout the semester to earn extra credit or bonus points. These exercises will vary with each instructor. Extra credit and bonus point exercises handed out by instructors other than your own will not be accepted without arrangement from your own instructor. You may earn a **maximum of 30** total extra credit and bonus points during the semester.

**Textbooks and ancillary materials (required for ALL sections):**

1. What Is Life?, 2<sup>nd</sup> Ed. (2012) Jay Phelan
2. Biology 101 Module Objectives and Labs
3. Access to PrepU (Publisher's On-line resource)
4. Other Materials as required by your instructor

**Students with Disabilities:**

If you believe you have a disability for which you may need an academic accommodation (e.g. an alternate testing environment, use of assistive technology or other classroom assistance) please contact: **Cathy Robinson (Director) / James Albrecht (Specialist)**

U-260

Ph. #: 353-2082

Email: crobinson@parkland.edu

**Withdrawing From the Course:** The last day to withdraw with W grade from full-semester courses is **Friday May 1<sup>st</sup>, 2015**. Withdrawal from a course is solely the responsibility of the student. Information on withdrawal policy and procedures is published in the most recent Parkland College Catalog and Parkland Class Schedule.

### **Cobra Learning:**

Although all Biology 101 sections use the same syllabus and textbook, do the same labs and take the same quizzes, individual instructors are free to use Cobra, or not, as they see fit. Your instructor will tell you if and how s/he plans to use Cobra.

### **Course Policies, Procedures, and Information:**

1. **Quiz deadlines** are on the course syllabus and are also posted in the Testing Center.
2. **Lab absences:** Labs cannot be made up. If you know ahead of time that you will not be able to attend your regular lab, speak with your instructor prior to the lab. It may be possible for you to make up the exercise with another section of the course.
3. **Lecture Attendance:** There are 15 points assigned for attendance in this course. Regular and prompt attendance is expected at all class sessions except in cases of illness or emergency, which should be brought to the instructor's attention as soon as possible. Regular attendance and consistent study habits are considered necessary for academic success in college. If you cannot reach your instructor, you may leave a voicemail message or email message with your instructor, or call 351-2285 to leave a message with the Department Office. Quiz deadlines will not be extended as a result of absence unless the instructor is contacted prior to the scheduled quiz time. Any student not attending class will be dropped at 10 days or at midterm; after that a student is responsible for his/her own course withdrawal.
4. **Late Assignment Policy:** Assignments worth up to 20 points will have **1 point per day deducted** from the grade for each day late; assignments worth 20 points or more will have **2 points per day deducted** per each late day.
5. **Rules about written assignments:** **PLAGIARISM, OR PRESENTING SOMEONE ELSE'S WORK AS YOUR OWN, IS NOT ACCEPTABLE AND IS A SERIOUS ACADEMIC BREACH OF CONDUCT AT PARKLAND COLLEGE.** Your instructor must be able to determine from your written work whether you understand concepts and terminology. This cannot be done if you copy from other sources. If you work in groups in a lab, **each student is expected to write his/her own answers to the questions.** You **must not copy definitions** from lab exercises, the textbook, or any other source. When summarizing articles, you must **use your own words**—copying selected sentences from the article and presenting them as a summary is plagiarism. When writing your essay, you must present your information in your own words—**PLAGIARIZED ASSIGNMENTS WILL NOT BE GRADED, NOR WILL YOU BE ALLOWED TO REWRITE SUCH ASSIGNMENTS. BE SURE TO CONTACT YOUR INSTRUCTOR IF YOU ARE NOT SURE WHETHER THE WORK YOU PLAN TO SUBMIT CONSTITUTES PLAGIARISM.**
6. **Parkland College email (Your Parkland Connection) accounts for all students:** You should visit <http://stu.parkland.edu> as soon as possible to set up your email account. Then you should check your email at least twice weekly to obtain course information and college announcements.
7. Your section instructor will let you know if she/he plans to use **Angel**.
8. We understand that there may be circumstances through the semester that occasionally make it difficult or impossible for you attend class. As a community college, Parkland and its instructors try to work with students to help them academically through these rough spots. Please realize, however, that it is the student's responsibility to bring to the instructor's attention any situations that may be interfering with his/her studies and pursuit of success in school. **STAY IN CONTACT WITH YOUR INSTRUCTOR!**

### **Center for Academic Success**

The Center for Academic Success provides a wide range of academic support services to enable you learn well, grow as a student, succeed in your classes, and excel at what you do. These services include the following:

1. **Writing Lab:** A free service for all Parkland students, the writing lab is designed to help you improve your academic writing. You may either take a draft of your assignment to have them look over with you, or use their computers for writing your assignments. There are mentors available to assist you with grammar issues, formatting concerns or to help you improve your writing style. No matter your level of proficiency with Standard American English, the writing lab is there to help you take your academic writing to the next level. Use of this facility is strongly encouraged for writing assignments.
2. **Tutoring and Learning Assistance:** Make use of walk-in tutoring services provided by faculty, staff and trained peer tutors, Monday through Friday. Many students come to get help in reading, writing, math (all levels), study skills, and nursing.
3. **For-credit Modules and Tutorials:** Enroll in one-credit hour Tutorials to supplement classroom instruction in reading, writing, ESL, math, and chemistry. Modules are available to eligible students to complete certain developmental coursework requirements.
4. **Advising and Advocacy:** Work with our team of advocates and academic advisor to plan a semester schedule, understand transfer requirements, or manage issues that stand in the way of school.

For more information, please contact

**Sue Schreiber**  
**Room: D120**  
**Phone: 351-2441**

**Becky Osborne**  
**Room: D120**  
**Phone: 351-2431**

You may also email the CAS at [CenterForAcademicSuccess@parkland.edu](mailto:CenterForAcademicSuccess@parkland.edu).

**HAVE A GREAT SEMESTER!**

## RULES FOR ARTICLE FILES

One of the requirements for Bio 101 is for you to assemble a file of newspaper, magazine and/or internet articles that pertain to biology. The purpose of this is to help make you more aware and up-to-date on the biological issues facing us in our everyday lives. The following are instructions for preparing these files. **15 points** are possible on this assignment.

**Your instructor will announce at least one week in advance when the article file is due. Due dates can also be found on page 2 of this syllabus. Files will be presented during scheduled lab times.**

- Articles must directly pertain to **biology**. If you are unsure whether an article you're interested in submitting is acceptable, **ask your instructor**. Select articles that you find interesting, can understand, and will enjoy sharing with the class.

Examples of <i>acceptable</i> topics	Examples of <i>unacceptable</i> topics
medicine and health, including genetics	astronomy
biotechnology (cloning, genetic engineering)	meteorology, chemistry, physics, math
air, water pollution	editorial and opinion articles
population issues	articles less than one page long
endangered species	incomplete articles, advertisements
natural resources	question and answer columns, abstracts
evolution, archaeology, paleontology	scientific and professional journals

- Your article must be referenced with **source** and **date**. **Circle or highlight the source and date on the article itself**. For internet articles, the web site is **not** the source. The source is where the publication appeared in print. If the source is only on the internet, then **circle/highlight its source** (CNN, ENN, Science-a-Go-Go, etc.). Dates on internet articles typically appear at the beginning or end of the article. The **Parkland Library** (<http://www.parkland.edu/library>) also has many databases that you can search, such as **Ebscohost**, **FirstSearch**, and **Info Trac Web**.
- Articles must be recent: all articles (including those from the internet) must be dated after **January 1 of last year**.
- Articles must be **at least one page of text, not counting pictures, graphs and tables**. Look for feature-type articles. You may use primary scientific journal articles, but this is not required. You may use magazines that are available to the general public (***Newsweek, Time, National Geographic, Natural History, Discover, Science News, Audubon, Sierra, etc.***). **All articles must be photocopied—originals are not acceptable**. This requirement is to protect the library's journal and newspaper collection.
- Include a **one page typed, double-spaced** summary of one article in your folder. The summary will be worth **10 points** of the 15 points each article file is worth. Your review must include the article title, date, author and source and must be organized as follows into **two (2) paragraphs**:
  - First paragraph** - summarize the content of the article **in your own words**. **Copying from the article is not acceptable: this is plagiarism**.
  - Second paragraph** - analyze the article with your own comments. Here you may want to consider the following: 1) what you learned from reading the article; 2) whether you agree or disagree with the article and why; 3) how well the article was researched; 4) possible future implications, and; 5) any connections with BIO 101. **You must discuss at least three of these 5 items for full credit on your review**.
- You will also give a short oral presentation on one of the articles you selected. You may choose either of your articles unless someone else has already given a presentation on that article. Although it's not mandatory, you should feel free to use drawings, posters, overheads, or other visual aids. Your presentation is worth **5 points**. **Absence from class during presentation of articles will result in the loss of the 5 presentation points**.

**Testing Center Rules for Fall/Spring Semester  
Room L-161**

For more information visit our page on my.parkland:  
<https://my.parkland.edu/stuservices/testing/default.aspx>

Hours:

<b>All Students</b>	Mon. - Thurs.	9:00-4:00 (no test started after 3:45)
	Friday	9:00-3:00
<b>Night Students (No Day Students)</b>	Mon. - Thurs.	5:30-7:15 (no test started after 7:00)

**All times are by Testing Center clock.**

**Tests not completed by closing time must be submitted.  
Allow more time for tests longer than 20 questions.**



- **Cell Phones**, books, packs, and purses are not permitted inside the Testing Center. Please use the lockers in the hallway to secure your belongings. **We are not responsible for lost or stolen items.**
- A Parkland ID is required to take a computer quiz. We cannot accept any other type of ID.
- No studying in the Testing Center. No pre-quiz evaluations. No PowerPoint review.
- No emailing. Testing Center computers are for quizzes only. Any other computer business should be completed outside the Testing Center.
- No talking to anyone at any time except the Testing Center Staff. Please refrain from talking outside the TC, talking when entering the room, or other disruptive behavior.
- Earphones may not be worn in the Testing Center.
- Dictionaries may not be used during testing.
- Students may use only the scratch paper provided by the Testing Center. It must be turned in to TC staff before leaving the TC.
- Students should keep their eyes on their own work and make a reasonable attempt to prevent others from seeing their computer screen and scratch paper.
- No answers (correct or incorrect) may be taken out of the Testing Center.
- Out of consideration for students taking tests, children are not allowed in the Testing Center.

**Procedure For Misconduct:**

At the discretion of the TC staff, infractions of the above will be dealt with in the following manner:

1. The student's instructor will be notified.
2. If a second episode occurs, the student will forfeit Testing Center privileges.
3. If a problem persists, the Department Chair of Natural Sciences will be notified.

**Students should be familiar with the Student Conduct Code in the Student Policies and Procedures Manual**



