

COURSE SYLLABUS – FALL 2017
BIOLOGY 161.01 - GENERAL BIOLOGY I – SURVEY OF LIFE

LECTURE: JM 219; MONDAY & WEDNESDAY 9:00 AM – 10:23 AM

LAB: JM 133; MONDAY 10:30 – 1:24 PM

Course Description:

Biology 161 is the first semester of a one year general biology experience intended for science major or pre-professional students. This course covers nature of science, a survey of the major groups of living organisms (bacteria, fungi, plants, & animals), the process and evidence for evolution, and the fundamentals of ecology. It provides the foundation for upper level biology courses. The course includes a laboratory component that includes dissections.

Prerequisite: ENG 090 or higher and MAT 031 or higher

*Note: CEM 131 or higher is required for Bio 162

Instructor: Jon F. Powell, Ph. D

e-mail: powelljonf@iccmi.edu

Office: 136c McDivitt Hall

Phone: (517) 796-8599

Office Hours:

Tuesday 9:00 AM – 12:30 PM

Wednesday 10:30 AM – 1:30 PM

Thursday 9:00 AM – 12:30 PM

Or by appointment

Required Text:

- **Biology, 11th Edition**, Raven, Johnson, Mason, Losos, & Singer
ISBN: 9781259188138

*This text is available for rent or purchase in digital format through the JC bookstore or sites like amazon.com or barnesandnoble.com

- **Student Lab Notebook**: Hayden McNeil ISBN 1930882351

*These two text will be required in BIO 161 and BIO 162, if you take BIO 162 you will not need to buy additional books

Introduction:

As a college student you are responsible for your own learning. This course is intended to prepare you for higher level biology courses and we will be covering a large amount of material in a relatively short amount of time. To be successful you will need to allocate sufficient time and discipline to your studies. There are no quick and easy ways to be successful.

Course Requirements:

Final grades will be comprised of 75% from lecture and 25% from lab.

Lecture:

- Each day a portion of the book will be assigned. A ten point quiz over the assigned material will be given at the beginning of the next class period. To aid in your success on the quiz, you will be able to use any handwritten notes you have taken (only handwritten notes can be used). The two lowest daily quizzes will be dropped for the semester.

- Exam formats may include, multiple choice, matching, fill-in, short answer, essay, application, and problem solving. Up to 15% of the exam may include material from previous chapters. Dates for the exams will be discussed in class. Exams will be 100 points each. A final cumulative exam will be given on the last day of class.

If you miss an exam (for **any** reason) you will receive a zero (0%) for the exam. Your lowest exam score can be dropped (the final exam cannot be dropped). The intention of the policy to drop your lowest exam of the semester is to account for missed exams or poor test performances due to circumstances that are beyond your control. Make-up exams will **not** be given because of this policy. A note of caution, some students start to count on using the dropped test policy to cover for poor performance on an exam. Beware of this as you may have to miss a test later in the semester due to unforeseen circumstances.

Electronic devices must be turned off and out of reach during exams (including smart watches), violation of this will be considered cheating and will result in a 0 for the exam. Low scores due to academic dishonesty **cannot** be dropped.

Lab

- Points will be awarded for each lab whether they are collected for grading or not. The instructor will inform you if the lab is to be collected prior to the end of lab. Labs not collected for grading will be submitted to the instructor prior to the end of lab and will receive up to 5 points. Labs that are collected will be graded out of 10 points and scored on content.
- A formal lab report will be written based on the results of a lab exercise. The format of the report will be provided. The lab report will be worth 25 points.
- Lab knowledge will be assessed through lab quizzes. The lab quizzes will cover the material related to the lab activities and concepts. The final lab practical will consist to two 25 point quizzes. Missed lab quizzes cannot be made up, but your lowest lab quiz can be dropped.
- If you are going to miss your lab section you may attend another lab section with the instructor's permission. If you cannot make up the lab, one lab grade over the course of the semester may be made up by writing a typed review (2 pages, double spaced, 1 inch margins, 12 point font) of a biology related article (must be longer than two pages long) from Scientific American magazine (paper, not online version, available in the library). In the review you should provide a reflective statement of your perspective on the article. Include a photocopy of the article with the assignment.

Grading Scale:

The grading scale will be as followed pending further. Grades may be curved at the instructor's discretion.

Percent	Grade	Percent	Grade	Percent	Grade
90 - 100%	4.0	75 – 79 %	2.5	60 – 64 %	1.0
85 – 89 %	3.5	70 – 74 %	2.0	55 – 59 %	0.0
80 – 84 %	3.0	65 – 69 %	1.5		

Grades will be posted on JetNet after each test as an Excel spreadsheet, the JetNet grading system will not be used. If at any point you wish to know your grade please email the instructor.

Extra credit will NOT be given under any circumstance. Instead, take the time that you would have spent on doing the extra credit to learn assigned material.

Absences and Arriving to Class Late:

The doors on classrooms are now required to be locked at all times for security purposes. If you arrive late, please knock and wait patiently until you are allowed in the class.

Although you will not be graded on attendance, it is an important factor to your learning and success in this course. In the case of an absence it is **your** responsibility to contact the instructor about missed materials or assignments. You are strongly encouraged to get the notes from a classmate. Missed in-class assignments may not be made up and assignments will not be accepted after the scheduled. Late take home work will be accepted at a 20% deduction in points possible and will only be accepted prior to when the assignment is returned to class. Labs will only be accepted if you participated in the lab activity.

Being Dropped from Class:

JC faculty are required to drop students from classes if they are not participating. If you miss more than 4 lectures, or 2 labs, or are not participating in assignment, you may be dropped from the class. Be aware that this is a lab course and attendance/participation in lab is required to receive credit for the course. After the drop date, a student missing sufficient days will receive a 0.0 for the course.

Students own the responsibility of the effect of being dropped. Being dropped from the class may affect financial aid or housing status. If you are dropped, the drop status will **NOT** be changed due to the impact on financial aid, housing status, etc.

Incompletes:

Incompletes will only be issued if the student and is unable to complete the course due to extenuating circumstances. In order to receive an incomplete the student must have completed a vast majority (over 90%) of the course and have been earning a minimum of a 2.0 at the time of the request. If a grade of incomplete is issued all grades/scores earned to that date will be used in calculated the course grade.

Assistance:

If you are in need of assistance in this course I encourage schedule a time to meet with me during office hours to discuss your study strategies. You may also benefit from discussion strategies with your classmates or setting up group study sessions. If you feel that you would benefit from a tutor, be aware that tutors are available free of charge. Additional information on special services may be found by contacting the front office or through the JCC's Center for Student Success (796-8415).

Accommodations:

If you have special needs or accommodations, it is your responsibility to make the instructor aware of those needs as soon as possible so suitable arrangements may be made. In order to receive special accommodations I will also need the necessary paperwork from Student Services. Accommodations cannot be applied retroactively.

Academic Dishonesty:

Consistent with JCC policy, cheating and plagiarism (copying another's work and presenting it as your own) will **not** be tolerated. To minimize the risk of this, phones will not be permitted out or within reach in any way during tests and quizzes. Having a phone within reach will be sufficient evidence of cheating and will result in implementation of the cheating policy.

A first offense of cheating, plagiarism, and unethical behavior will result in a zero for the assignment and a deduction of the points value of the assignment from points earned. This score may not be dropped. A second offense will result in a zero for the course. All cases of academic dishonesty will be documented and forwarded to the Academic Dean.

Phones in the Classroom:

Research has repeatedly shown that having a cell phone out in class has a negative effect on learning and success. One study reported that students accessing their phones even once in class have an average earned grade 0.5 points less than those that do not have a phone out. Students with grades less than a 3.0 have even greater negative effect on their grade.

JC has made a point of emphasizing student success. As such, **phones are not permitted to be out in class (this includes texting)**. If you have a phone with you, leave it in your backpack or pocket. If you have matters that require such vital importance that it requires you to focus on text messages or calls, you probably should not be in class. If you access your phone in class you will be asked to leave for 10 minutes while you take whatever the pressing matter may be. A refusal to leave or more than three time of being asked to leave class will result in application of the disruptive behavior policy.

Audio and Digital Recording:

Audio and photographic recordings during class may only be permitted with instructor permission. This is due to federal laws protecting student privacy in class. Any recordings permitted in class may not be posted on the internet or shared otherwise without instructor permission.

Disruptive Behavior:

Disruptive behaviors will not be tolerated in this class. Disruptive behaviors include (but are not limited to) having side discussions, being distracting to class when arriving late, cell phone constantly ringing, constantly arriving to class late, and being disrespectful of others. These behaviors will result in point deductions of up to 15 points and being asked to leave the class. If there are situations that I may not be aware of, please let me know so the situation may be addressed.

I am not opposed to the use of computers in the classroom if they are being used for classroom purposes. However, you should note that research has repeatedly demonstrated that taking notes by hand promotes better learning than using a keyboard. The use of computers for non-class activities (facebook, YouTube, etc...) has been distracting to others learning. If you use the computer for non-class activities you will not be allowed to use a computer during class. If you use a computer please sit in the back of class as screens may be distracting to others.

Grievances:

If you have a concern about any aspect of the course it is your responsibility to bring it to the instructor's attention. This is the first step of handling any academic concern. Academic complaints need to be handled by having a scheduled meeting with the instructor.

Important Dates:

Sept. 5	First day of classes ☺
Nov. 22-26	No classes – Thanksgiving Break
Dec. 21	End of semester

Tentative Lecture Schedule

<u>Class</u>	<u>Topic</u>	<u>Chapter</u>	<u>Class</u>	<u>Topic</u>	<u>Chapter</u>
9-6	Intro		11-1	Fungi	32
9-11	Nature of Science	1	11-6	Exam 3	
9-13	Scientific Inquiry	1	11-8	Animal Overview	33
9-18	Natural Selection	20	11-13	Flatworms & Mollusks	34
9-20	Evidence for Evolution	20/21	11-15	Annelids & Arthropods	34
9-25	Evidence for Evolution	21	11-20	Fish & Amphibians	35
9-27	Origin of Species	22	11-22	No Classes	
10-2	Exam 1		11-27	Reptiles and Birds	35
10-4	Introduction to Systematics	23	11-29	Mammals and Primates	35
10-9	Prokaryotic Cells	28	12-4	Animal Catchup day	
10-11	Prokaryotic Cells	28	12-6	Exam 4	
10-16	Protists	29	12-11	Population Biology	55
10-18	Protists	29	12-13	Population Ecology	55-56
10-23	Exam 2		12-18	Ecosystems	57
10-25	Seedless Plants	30	12-20	Final Exam	
10-30	Seed Plants	31			

Tentative Lab Schedule

<u>Week</u>	<u>Topic</u>		
	No Lab	10-20	Plants
9-11	Introduction	11-6	Fungi
9-18	Basic Techniques	11-13	Protostome I
9-25	Field Trip	11-20	Protostome II
10-2	Evolution	11-27	Deuterostome I
10-9	Systematics	12-4	Deuterostome II
10-16	Prokaryotes	12-11	Lab Practical
10-23	Protists	12-18	No Lab

Note: The policies included in this document are subject to the instructor's discretion.

General Education Outcomes:

General Education Outcomes. The Board of Trustees has determined that all JCC graduates should develop or enhance certain essential skills while enrolled in the college. Several of these outcomes are addressed in this class, including critical thinking, scientific reasoning, and a knowledge of science.

GEO 4: Scientific Reasoning

Students will be able to design and carry out valid experiments to assess a given hypothesis, and draw appropriate conclusions based on the results.

Biology 161 Learning Contract:

As a student taking Biology 161, I understand my responsibilities as follows:

- I understand and accept the policies outlined in this syllabus
- I understand that this is a transferable college level course that transfers to most colleges and universities
- I understand that this is General Biology and not Introductory Biology and am aware that this course is intended for science majors and pre-professional students.
- I understand that this is not an “easy” or “blow-off” course.
- I understand that I am responsible for my success in this course
- I understand that if I do not come to class prepared, having studied previous material, completed homework, and read from the book that I will not be successful in this course
- I understand that this course builds upon previous information and falling behind will make the course more challenging.
- I understand that attendance and being to class on-time are critical to my success.
- I understand that if I cheat in this course, it may affect my ability to obtain certain jobs in health care or with the government for the rest of my life.
- If I need help or have special problems, I will see the instructor, or request a tutor before I fall too far behind.
- If I have a complaint about the course, I will first discuss it with the instructor as per JCC policy.