

Course	BIOLOGY 3 – General Biology (0435) – 4 units
Semester	Fall, 2015
Meeting time & Place	T/Th (0435) 2:20 - 3:45 (CFS 91120)
Instructor	Dr. Michael Nicholson [lecture only; lab instructor may be different]
Contact information	e-mail = dr@michael-nicholson.com web page = http://www.michael-nicholson.com Office phone = (805) 498-8451 - do not use any other contact phone Mail box in mail room in College Svcs Building 2100)
Office hours	T/Th 2-2:20 (immediately before class)

Description: This course presents an overview of the principles of biology. Topics covered include the cellular basis of life, basic chemistry, metabolic processes of respiration and photosynthesis, genetics, and evolution. Lecture and Laboratory are combined in this course for grading purposes. BIO 3 lecture time will be divided into lectures, presentations, and discussion. Presentations will most likely be video. Lab Information, as supplied separately, apply to lab policies and subjects covered.

Objectives: At the end of the course, students will understand the cellular basis of life and the essential differences between the two most general categories of living organisms (Prokaryotes and Eukaryotes). Additionally, students will understand the process of protein production and the sub-cellular components involved. Finally, students will understand the importance of DNA, how changes in the genetic code can have dramatic effects on an organism, and how such changes drive evolutionary processes. Student Learning Outcomes are:

1. Given a microscope and prepared slide, students are able to properly use the microscope to focus on and view the specimen under high power.
2. Students are able to identify possible outcomes of an experiment.
3. Students are able to correctly identify steps in biological processes and their significance to the organism.

Texts: The required texts for this class are: 1) Simon *et al.* Campbell Essential Biology with Physiology. Fourth Edition, by Pearson [for lecture; 3rd edition is okay]; and 2) Farris, Koller, Beavers, Biological Patterns. 12th edition (custom for Pierce College) [required for lab; photocopied material, except for lab #1, will not be accepted – this will be strictly enforced].

Expectations & grades: There will be 4 lecture exams, each worth 110 points, and the lowest grade will be dropped and replaced by the average grade of the remaining three exam grades. There will be one lab quiz per

week, usually on Monday (unless there is an exam) at the beginning of lecture (in the first 10 minutes). DO NOT MISS QUIZZES because there are no make-up quizzes (or labs, for that matter). Expect 13 lab quizzes, each worth 10 points, and the lowest 2 will be dropped. The Lab Manual must be turned in at the end of the semester, and it is worth 50 points (8.3% of the total grade). Lab Manuals WILL NOT BE RETURNED. The grade on the Lab Manual will be based on the proportion of the answers that are correctly finished and the proportion of instructor initials received, determined from a random sampling of the manual (all students will have the same pages reviewed).

See the Lab Information sheet for additional information that pertains to the Laboratory component.

The grading scale is based on 10% brackets (i.e. 90+% is an A, 80-89% is a B, 70-79% is a C, 60-69 is a D). The final percentage is rounded up or down to the nearest whole number. Every point matters, since 6 points is equivalent to 1% in the class.

Exams	(4 x 110 pts each)	440	points
Quizzes ...	(11 x 10 pts each)	110	points
Lab Manual	(1 x 50 pts each)	50	points
Total			600	points

Exam & Quiz Requirements: For each exam, be prepared with a Scantron and a #2 pencil. The Scantron required for EXAMS is the narrow-format (883-E) with 50 questions on the front and short answers on the back. The Scantron required for QUIZZES is the small, 15-question form (815-E). Students should prepare for separate Scantrons for 3 exams and 13 quizzes. Of course, students should have a #2 PENCIL for the exams and quizzes. Exams and quizzes will be offered only ONE TIME, at the beginning of the class period, and make-ups for exams (and quizzes) are not available. Arriving late for exams or quizzes is highly likely to result in loss of eligibility to take the exam or quiz.

Attendance: Failure to attend may reduce the final grade. Students who miss role for two consecutive class days may be dropped from the course; students missing four consecutive class days will be dropped or may receive a FAILING grade. Students who miss role for a total of 10 days (1/3 of the course) may be dropped from the course or receive a FAILING grade (again, depending on when the absences occur). Exams/quizzes are only offered one time, so missing an exam/quiz will result in an automatic failing grade for the specific exam/quiz, since such are not available for make-up.

IMPORTANT: Students failing to complete the Orientation Lab and/or First

Lab will be DROPPED from the course. A very brief Orientation must be completed by the end of the first week of class, while the first lab must be completed by the end of the second week of class. Lab attendance reports are reviewed to understand how much time is spent by students on each weekly lab. Labs are scheduled for 3 hours per week and students should plan to spend the entire time in the lab, though more time is available if required. Students not attending a particular lab will receive no credit for work in the lab and will not receive credit for the corresponding lab quiz during lecture (taking the quiz will not yield any points). See the Lab Information sheet for additional information.

Academic Honesty: Cheating is not tolerated and a student found cheating in any way will receive a grade of zero on the material at hand, be it exam, quiz, or lab; such zero grades will not be dropped as lowest grades. Forging signatures or initials in the Lab Manual and/or copying answers from a colleague's lab manual are both considered methods of cheating and will result in a grade of zero for the entire lab manual, as well as a grade of zero for associated quizzes. Unless otherwise expressly allowed, all labs are to be completed individually, with data collected on an individual basis. Exceptions must apply to all students (as is the case for a couple of labs) or must be provided in writing by a biology professor. Unless specifically allowed by the instructor, all lab material must be completed during the current semester of enrollment, with a new copy of the lab material, and signatures from instructors must reflect recent and up-to-date work; anything otherwise will be considered academic dishonesty. Academic Dishonesty Reports will be filed as appropriate for a student who performs any acts of cheating.

Schedule: The lecture schedule will, in general, follow the chapters of the book. Not everything in the book will be covered in lecture. Likewise, not everything in lecture will be covered by the book. Some of the material in the book will be skipped completely. Students are expected to read the text, reading appropriate sections prior to lecture is strongly suggested. See the Lecture and Exam Schedule on the following page. See the Lab Information sheet for additional information. Also see <http://www.piercecollege.edu/schedules/> for general Pierce schedules.

Cell Phones: Please do not use cell phones during lecture and please mute or otherwise silence your phone during lecture. Recognizing that emergencies can occur and that some students may have a specific responsibility, if an incoming call **MUST** be answered, please exit the classroom to do so. During exams and quizzes, please mute or turn cell phones off; students with responsibilities to others must prepare for a temporary break in possible communications at these times.

Special Services: Students with disabilities, whether physical, learning, or psychological, who believe that they may need accommodations in this class, are encouraged to contact Special Services as soon as possible to ensure that accommodations are implemented in a timely fashion. Authorization, based on verification of disability, is required before any accommodation can be made. The phone number for Special Services is (818) 719-6430 and they are located in the Student Services Building (Building 4800), Room 48-175 (through main entrance, down the hall on the right).

Note Regarding Retaking Courses: Specific rules govern retaking courses. A course may be attempted a maximum of 3 times, including drops and graded attempts.

LECTURE AND EXAM SCHEDULE

<u>Week</u>	<u>Date, Day</u>	<u>Lecture Content</u>	<u>Chapter</u>
1	Tue, 9/1	Roster & Invitation to Biology	1
1	Thu, 9/3	Invitation to Biology	1
2	Tue, 9/8	Invitation to Biology	1
2	Thu, 9/10	Chemistry	2
2	Fri, 9/11	<i>Last day to add with add slip</i>	
3	Sun, 9/13	<i>Last day to drop (no fee, no 'W')</i>	
3	Tue, 9/15	Chemistry	2
3	Thu, 9/17	Molecules of Life	3
4	Tue, 9/22	Molecules of Life	3
4	Thu, 9/24	Exam 1	
5	Tue, 9/29	Cells	4
5	Thu, 10/1	Cells	4
6	Tue, 10/6	Working Cell	5
6	Thu, 10/8	Working Cell	5
7	Tue, 10/13	Working Cell	5
7	Thu, 10/15	Cell Respiration	6
8	Tue, 10/20	Cell Respiration	6
8	Thu, 10/22	Cell Respiration	6
9	Tue, 10/27	Exam 2	
9	Thu, 10/30	Photosynthesis	7
10	Tue, 11/3	Photosynthesis	7
10	Thu, 11/5	Cell Division	8
11	Tue, 11/10	Cell Division	8
11	Thu, 11/12	Inheritance	9
12	Tue, 11/17	Inheritance	9
12	Thu, 11/19	Exam 3	
13	Sun, 11/22	<i>Last day to drop (w/W)</i>	
13	Tue, 11/24	DNA	10
13	Thu, 11/26	<i>Thanksgiving; No Class</i>	
14	Tue, 12/1	Gene Regulation	11
14	Thu, 12/3	Gene Regulation	11
15	Tue, 12/8	Evolution	12
15	Thu, 12/10	Evolution	12
16	Tue, 12/15	FINAL EXAM (2:15-4:15PM)	