**General Biology I (Bio 101)**

**Lecture: MW, 9:30 – 10:45, AA293**

**Lab: depends on your lab schedule**

**4 credits**

**Spring 2015**

Instructor: Dr. David Fernandez

Office: AA352, Row 5

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Office hours:

Mon 11:00 – 2:30, Wed 11:00 – 12:30, Thu 8:00 – 11:00 & 12:30 – 2:30

\*Please email me to set up an appointment\*

*The purpose of this syllabus is to address relevant administrative concerns and policies. If you have questions of this nature throughout the semester, please consult this syllabus first, before directing these questions to your Professor.*

**Census Date: 1/29/15**

Last day to withdraw with refund

**Withdraw Date: 3/23/15**

Last day to withdraw without a grade penalty (receive a “W”)

**Course Texts**

This is an Open Educational Resource lecture. There is NO textbook to purchase. It will be provided free of charge and entirely online to registered students through the following link:

https://courses.candelalearning.com/novabiology/

General Biology Study Guide and Lab Manual, 10th Ed., King et. al. ISBN: 9780536477231

Lab manuals must not have a previous student’s writing in them.

**Course Description (From College-Wide Course Content Summary)**

Bio 101 focuses on foundations in cellular structure, metabolism, and genetics in an evolutionary context. Explores the core concepts of evolution; structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology. Emphasizes process of science, interdisciplinary approach, and relevance of biology to society.

This course provides students with an opportunity to acquire fundamental knowledge of the principles and living systems and their applications to everyday life. The course is designed for both science and non-science majors. It may serve as a prerequisite for advanced biology courses, a laboratory science graduation requirement, or as transfer credit for a four-year institution.

**Fetal Pig Dissection**

There is no fetal pig dissection in Bio 101 lab, however, there will be a mandatory fetal pig dissection in Bio 102 lab, so please be aware if you are planning on taking that class.

**How to Get the Most Out of This Course:**

Consider the following as a checklist for success. If you wish to improve your grade, first consult this checklist and perform an honest self-evaluation:

* Have a strong foundation in biology (especially), chemistry, and physics. Some remedial studying of these topics may be needed for some students.
* Be present physically and mentally, from start to finish, at every class. Do NOT pack up your belongings before the class officially ends.
* Study without distractions, at least 10 hours per week, outside of scheduled lecture or lab times.
* Check your NOVA email at least once per day.
* Turn off your phone/tablet/laptop unless using these items for note taking or reading PPTX slides.
* Ask and/or answer as many questions as you can.
* Come to office hours / email questions frequently.
* Take detailed notes during class.

**Exams**

Exams will be administered as designated in the schedule. If you arrive late to class, you will miss all or part of the time allotted for taking the exam, so come on time if you want the maximum amount of time to take your exam. During the course of the semester, three non-cumulative exams will be given, covering only the material since the proceeding exam. None of the exams will be dropped. Make-up exams will only be offered under special or extreme circumstances, such as emergencies (requiring documented evidence). In these cases, you must notify me directly (via email), before the start of class. All cell phones and other such devises must be completely off for the duration of an exam. Ringing cell phones during an exam will result in a 2% point reduction on that exam. If you have a special circumstance which requires your phone to be left on during an exam (such as expecting a call from a doctor, a family emergency, etc…), you must notify me before the exam begins.

\*\*\*The Honor Code applies at all times. Cheating during an exam in any form will not be tolerated. Remember: cheating involves receiving or giving of information and/or answers! Wandering eyes, whispering, or intentionally allowing other students to clearly see your exam will result in a 20% point reduction on that exam grade, for a first offense. A second offense will result in a 0 being given on that exam.\*\*\*

**Final Exam**

The final exam will be cumulative. Therefore, it is critical to keep up with the material from the beginning of the semester onwards.

**Study Guides**

Study guides will be posted on Bb prior to each exam. They are aimed at focusing your efforts when preparing for each exam, but are not necessarily a cumulative list of topics. If something appears in your PPTX slides, textbook, and/or is emphasized during class, it is fair game to appear on your exam, so please study accordingly.

**Extra Credit**

Extra credit is at the sole discretion of the Professor. It often comes in the form of especially challenging questions at the end of each exam, including the final exam. If answered correctly, these questions replace regular exam questions which were missed, on a one-to-one basis: e.g., -3+2 = -1 on an exam. Exams will be curved at the discretion of the Professor. Students requesting additional extra credit at any point during the semester (especially at the end), will be referred back to the syllabus.

**Grading Policy**

Grades are earned, not given. Grades reflect not only the student’s effort, but also comprehension and mastery of the material. Simply “working hard”, while necessary, does not warrant a specific grade. As such, “I think I deserve a grade of \_\_\_\_ because I worked so hard and always came to class” is not an acceptable argument, and will not hold any value. This is especially true at the end of the semester. The time to think about your grade is starting from the very first day, not waiting until the last one. If you need a grade of \_\_\_\_ to get into a specific program or further your career, I am here to help you achieve that. But you are the one responsible for earning that grade.

Bio 101 consists of lecture and laboratory. There are no separate attendance or participation grades, as these are things students should be doing anyway. Your overall grade (out of **1000 pts**) will be calculated as follows:

**Lecture (700 pts):**

3 exams (175 pts each or 25% of lecture grade each) **= 525 pts**

Cumulative Final Exam (175 pts or 25% of lecture grade) **= 175 pts**

**Lab (300 pts):**

See lab syllabus. The shared lab website can be accessed with the following link:

http://www.nvcc.edu/alexandria/science/s\_biolab.htm

**Overall course grades will be assessed as follows:**

**A: > 90 %**

**B: 80-89%**

**C: 70-79%**

**D: 60-69%**

**F: < 59%**

**Note: grades will be rounded using basic math, e.g. 79.5 rounds to an 80 (B), but 79.4 rounds to a 79 (C).**

**Tutoring**

Students are strongly encouraged to bring questions or points of confusion directly to the instructor. However, for additional assistance, you may contact the Academic Center for Excellence, located in AA 229 (703-845-6363). They offer free tutoring for enrolled students.

**Special Needs/Accommodations**

If you need special assistance, you may contact disability services (nvcc.edu/depts./disability). You may then bring me documentation from disability services at the beginning of the semester, at which time we will discuss any special accommodations to best suit your needs.

**Time expectations for grading**

Exams and/or other assignments will be graded as soon as possible. The actual timeframe may vary. Inquiring into when you can expect to see your grade will NOT expedite the grading process. Rather, your focus should be on preparing for the next grading opportunity.

**Lecture Schedule**

The lecture schedule appears on the next page. It is subject to change as necessary and at the discretion of the Professor.

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| **Tentative Date** | **Topic** |
| 1/12, 1/14 | Syllabus, The Process of Science |
| **1/19**, 1/21 | **MLK Day**, The Chemical  Foundation of Life |
| 1/26, 1/28 | The Chemical Foundation of Life |
| 2/2, 2/4 | Biological Macromolecules |
| 2/9, 2/11 | Cell Structure and Function |
| 2/16, **2/18** | Cell Structure and Function, **Exam 1** |
| 2/23, 2/25 | Structure and Function  of the Plasma Membrane |
| 3/2, 3/4 | Cellular Respiration |
| **3/9, 3/11** | **Spring Break** |
| 3/16, 3/18 | Photosynthesis |

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| **Tentative Date** | **Topic** |
| **3/23**, 3/25 | **Exam 2**, Genes, Proteins,  and Chromosomes |
| 3/30, 4/1 | Genes, Proteins, and Chromosomes |
| 4/6, 4/8 | Cell Division and Cell Cycle |
| 4/13, 4/15 | Genetics and Inheritance |
| 4/20, 4/21 | Evolution |
| 4/27, **4/29** | Review and/or Catch-Up,  **Exam 3** |
| **5/4 (9:30 – 11:10)** | **Final Exam (Cumulative)** |