**Valencia College – General Biology I - BSC 1010C**

**CRN 21120**

**Spring 2020 Course Syllabus**

Credit hours: 4: Contact hours: 6 (3 lecture, 3 Laboratory)

**Instructor**: Professor Ahmed

**Phone**: 407-582-1407

**Email**: mahmed20@valenciacollege.edu

**Office hours**: ATLAS Email

**Meeting times and places**: Lecture: Wednesday 10:00am-12:45pm, Bldg. 1 rm 230

Lab: Wednesday 1:00 pm -3:45pm, AHS rm. 321

**Lecture Textbook**: Campbell Biology 11th Edition; Volume 1, Custom for Valencia College. REQUIRED Complete package; Text &Access Card for Mastering Biology New Design. PURCHASE from Bookstore.

**Lab Manual**: General Biology I Laboratory Manual 5th Edition by Graeme Lindbeck and Susan

Mathews. REQUIRED

**Lab materials**: REQUIRED lab coat, permanent ink felt tip pen (i.e. Sharpie)

**Course Description**: Introduction to fundamental biological principles emphasizing common attributes of all living organisms. Unifying concepts include chemical structure of living matter, structure and function of the cell, specialized cells, major metabolic functions, control systems, reproduction, genetics, evolution and ecology. It is **prerequisite for advanced biology courses**.

**Specific Course Goals**: To understand and apply the basic principles and concepts of modern day biology. Develop critical thinking skills necessary to communicate biological concepts with accuracy and detail.

**Special accommodations**: Students with disabilities who qualify for academic accommodations must provide a letter from the Office of Students with Disabilities (OSD) and discuss specific needs with the professor during the first week of classes. The Office of Students with Disabilities determines accommodations based on appropriate documentation of disabilities (West Campus SSB 102, ext. 1523).

**Tutoring:** Tutoring may be available in the Tutoring Center in 7-240, call 407-582-1633 for details on how to obtain tutoring.

**Testing**: If necessary, and authorized, you may take tests in the Testing Center in Building 11, Room 142 (phone: 407-582-1323), you must bring a valid Valencia Community College Student ID to the Testing Center.

**Academic Honesty**: All work submitted by students is expected to be the result of individual effort. Any student caught cheating on an exam, copying homework or plagiarizing – *using someone else’s words or thoughts without giving credit* – will be treated according to Valencia’s policy on academic honesty. Engaging in acts of academic dishonesty will result in penalties ranging from a zero grade on the assignment, quiz, lecture test, to failure of the course and expulsion from the college.

**Classroom Conduct**: Activities that disrupt the learning environment of the classroom violate the Valencia Student Code of Classroom Conduct. These activities include discussions that disrupt the learning environment for other students, the use of indecent or abusive language, and the ringing of cell phones, etc. If you disrupt the learning environment, I may ask you to leave the class. If you are asked to leave the class you will also be assigned one absence.

**Attendance**: At Valencia College attending every lecture and laboratory class is essential to achieve student success. If you miss six classes and or labs, you will be withdrawn from the class, at the professor’s discretion. During every lecture/lab, an attendance roster will be passed around at the beginning of class. You must sign the attendance sheet at every lecture and lab meeting. It is YOUR responsibility to sign in. If you forget to sign in you will be marked absent. Missing signatures are viewed as absences; leaving early from lecture/ lab will be counted as an absence. More than one absence has proven, in the past, to be a sign that your grade will be substantially less than what you may have hoped for in the course. Documented absences for unavoidable emergencies will be dealt with on a case-by-case basis.

**Withdrawal:** Per Valencia Policy 4-07 a student who withdraws from class before the *withdrawal deadline of March 20, 2020* will receive a grade of “W.” It is the responsibility of students to withdraw themselves before the withdrawal deadline. A student is not permitted to withdraw from this class after the withdrawal deadline; if you remain in the class after the withdrawal deadline, you can only receive a grade of A, B, C, D, F. The professor MAY withdraw a student up to the beginning of the final exam period according to the attendance policy. Any student who withdraws from a class during a third or subsequent attempt in the same course will be assigned a grade of “F.”

**Withdrawal/Drop**: January 13, 2020 is the Drop/100% Refund deadline

March 20, 2020 is the withdrawal deadline for a W “grade”

**Other Information**: College policy prohibits children from attending lectures or labs; please do not

violate this policy.

**Valencia Student Core Competencies:**

1. **Think**: clearly, critically and creatively, analyze, synthesize, integrate and evaluate (lectures and examinations).
2. **Value**: make reasoned value judgments and responsible commitments (laboratory classes).
3. **Communicate**: with different audiences and using varied means (group work, written assignments and lab reports).
4. **Act**: purposefully, reflectively and responsibly (laboratory classes).

**Course Evaluation**: 5 lecture exams (lowest score dropped, 100 pts. each - 31%) --------------------- 400 pts.

Lecture final exam (comprehensive, 11%) ------------------------------------------- 150 pts.

6 Lecture Quizzes (lowest score dropped, 20 pts. each – 8%) --------------------- 100 pts.

2 laboratory practical exams (100 pts. each – 15%) ---------------------------------200 pts.

10 Laboratory reports (10 pts. each - 8%) -------------------------------------------- 100pts.

Scientific paper assignment (2.0%) -----------------------------------------------------30 pts.

Syllabus quiz (2.0%.) --------------------------------------------------------------------- 20 pts.

Mastering Biology New Design Reading/Homework Assignments (23%)-------300 pts.

**TOTAL POINTS POSSIBLE** …………………………..….………..………..1300 pts

**Laboratory performance points will be deducted from your total possible points as follows:**

No lab jacket (or suitable substitute) ………………………………………………...2 points/lab

Wearing toe-less, heel-less shoes or high heels ………………………..…………....2 points/lab

Eating or drinking in the lab …………………………………………………….…...2 points/infraction

Improper disinfection……………………... ………………………………………...2 points/infraction

\*\* Scantron sheets (green/white half sheets) and a pencil (not a pen) are required for the lecture and final exams and may be purchased in the bookstore. If a Scantron is not used or if the appropriate Scantron is not used, your test score will be reduced 5 points.

\*\* ALL exams are the property of Professor Ahmed. If an exam (i.e. test questions, Scantrons, and answer sheets) leave the room, you WILL receive a ZERO for that exam.

You do have the right to look over your exams (and I encourage you to do so) after lab/class is over.

**Grade Calculation Formula**: Add the total number of points from all your tests, quizzes, etc. and then divide by 1300 cumulative points in the course. Refer to grading scale below.

**Grading Scale**: A = 90% – 100% D = 60% – 69.9%

B = 80% – 89.9% F = 0% – 59.9%

C = 70% - 79.9%

**MAKE-UP POLICY\*:**

* No makeups for Lecture Tests and Lecture Quizzes
* No makeups for Lab Exams, and Final Lecture Exam:

Full-score makeups are given ONLY if written documentation is provided to the professor.

In such a case you MUST contact the professor by email or phone (you can leave a voicemail) no later than the day of the test/quiz to notify the professor of your absence and your desire to makeup the test/quiz; otherwise you forfeit your right to a makeup; and if for ANY reason you miss the scheduled makeup, you will not be given another makeup chance.

* **Documentation** = official written documentation of hospitalization, court summons, or police report.
* \*Exception: If you notify the professor **via email** during the FIRST week of classes that you will be missing class on a specific date due to an unavoidable emergency, I will allow you a “maximum point” makeup without documentation, for a lecture test/quiz should you be absent when a lecture test/quiz is given (**this does NOT apply for the Final lecture Exam**). **NOTE:** **Failure to take the Final Exam at the end of the semester will result in an “F” grade in the course.**
* *The Reading Assignments and Homework Assignments from Mastering Biology New Design* must be completed on time online on the designated due dates (check CANVAS). The Scientific Paper Assignment must be submitted by due date designated in Canvas. Five points will be deducted for each day late. You can bring assignments to the Science office in AHS 231: they will date stamp it and put in my mailbox.

**Lecture Schedule (Chapters)**

Chapter 1: Study of Life

Chapter 2: The Chemical Context of Life

**Quiz #1 (ch. 1,2) Jan 15**

Chapter 3: Water and the Fitness of the Environment

Chapter 4: Carbon and the Molecular Diversity of Life

**Quiz #2 (ch. 3,4) Jan 22**

**Test #1 (ch.1, 2, 3, 4) Jan 29**

Chapter 5: The Structure and Function of Macromolecules

Chapter 6: A Tour of the Cell

**Quiz #3 (ch. 5,6) Feb 12**

Chapter 7: Membrane Structure and Function

**Test #2 (ch. 5, 6, 7) Feb 26**

Chapter 8: An Introduction to Metabolism

Chapter 9: Cellular Respiration: Harvesting Chemical Energy

**Quiz #4 (ch. 8,9) Mar 4**

Chapter 10: Photosynthesis

**Test #3 (ch. 8, 9, 10) Mar 18**

Chapter 12: The Cell Cycle

**Quiz #5 (ch. 12) Mar 25**

Chapter 13: Meiosis and Sexual Life Cycles

**Test #4 (ch. 12, 13) Apr 1**

Chapter 16: The Molecular Basis of Inheritance

Chapter 17: From Gene to Protein

**Quiz #6 (ch. 16) Apr 8**

**Test #5 (ch. 16, 17) Apr 15**

Chapter 14: Mendel and the Gene Idea

Chapter 15: The Chromosomal Basis of Inheritance

**Final Exam (comprehensive):** Wednesday April 22, 2020 in the lab room AHS 321

Time: 10:00 am- 12:30 pm

To Access the Lecture Notes (and other Course Material)

1. From the Valencia home page, click “Faculty and Staff”

2. Under Faculty Resources, click “Faculty Websites”

3. Click “Faculty Front Door Only”

4. Click “Ahmed”

5. Click “Course Materials”

6. Under Course Materials click on Content, then follow the appropriate links

Wednesday Lab Schedule

|  |  |
| --- | --- |
| **Week of:** | **Experiments** |
| Jan 6th | Reaction Times |
| Jan 13th | Atoms and Molecules |
| Jan 20th | Use of the Microscope |
| Jan 27th | The Cell |
| Feb 3rd | Diffusion I |
| Feb 10th | Diffusion II |
| Feb 17th | Practical |
| Feb 24th | Enzymes |
| March 2nd | Respiration |
| March 9th | *Spring break!!* |
| March 16th | Photosynthesis |
| March 23rd | Mitosis and Meiosis |
| March 30th | Mendelian Genetics |
| April 6th | Human Phenotypes |
| April 13th | Practical |

**Tips To Help You Do Well In This Course**

- Be absolutely serious and dedicated.

- Come to EVERY laboratory meeting; and come prepared.

- See the instructor whenever you have questions/concerns.

- Study the material presented online/laboratory.

- Don’t cram for tests. Ideally, you should study the material at least 2 or 3 times before taking the test.

- Study hard first by yourself, then when you feel that you could take the test and do reasonably well, study with one or two other classmates who have also studied hard.

-Record all of your grades in the table on this syllabus

**\*Disclaimer:** Changes in the course syllabus and grading policy may be made at any time during the term at the discretion of the professor.

**BSC 1010C – Biology Spring 2020**

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| --- | --- | --- |
|  | YOUR  POINTS | TOTAL POINTS POSSIBLE |
| LECTURE TEST #1 |  | 100 |
| LECTURE TEST #2 |  | 100 |
| LECTURE TEST #3 |  | 100 |
| LECTURE TEST #4 |  | 100 |
| LECTURE TEST #5 |  | 100 |
| LECTURE FINAL EXAM |  | 150 |
| LECTURE QUIZ #1 |  | 20 |
| LECTURE QUIZ #2 |  | 20 |
| LECTURE QUIZ #3 |  | 20 |
| LECTURE QUIZ #4 |  | 20 |
| LECTURE QUIZ #5 |  | 20 |
| LECTURE QUIZ #6 |  | 20 |
| Midterm LAB EXAM |  | 100 |
| Final LAB EXAM |  | 100 |
| LAB REPORT #’s:  1 2 3 4 5 6 7 8 9 10 |  | 100 |
| Scientific Paper Assignment |  | 30 |
| Mastering Biology New Design  Reading Assignments  Homework Assignments |  | 150  150 |
| Syllabus Quiz |  | 20 |
|  |  |  |
| TOTAL POINTS |  | 1300 points |