Syllabus: General Education Biology (section 1501)

Prof: Felix E. Rivera-Mariani, PhD

BSC1005(section 1501), Web-Enhanced (with Blackboard Learn)

"Nobody is born intelligent: intelligence feeds from strong effort and desire to learn" - Anonymous

I. General Course Information

• Term: 2016-3

• Class location: Room 3218

• Class meeting time: Tuesdays and Thursdays, from 11:40AM - 1:20PM

• Professor: Dr. Felix E. Rivera-Mariani

• Office room: Room 3218

• Office hours: before class time or by appointment

• email: friveram@mdc.edu

II. Textbook

(print or eBook): Reece J., Taylor M., Simon E, and Dickey J. Campbell Biology: Concepts & Connections. 7th or 8th edition. Benjamin Cummings.

III. Rationale of the Course

To present students the main biological concepts that abound in our continuous inquiry to understand life. With the concepts covered, students will have an introductory understanding of molecular biology, genetics, biochemistry, cellular biology, evolution and other topics that help us understand how biosciences explain the interactions between living organisms and the environment. In addition, real-life and scientific scenarios will be presented to learn the way biology is scientifically practiced, and how biology affects our daily lives.

IV. Topics

Find in the next page the sequence of topics to be covered in the course. If viewing this document online, click here to access an interactive flowchart that includes the learning objectives matched to each topic. The learning objectives can also be accessed in Blackboard Learn (after May 8th).

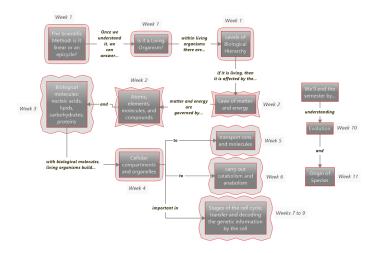


Figure 1: Flow of Topics during the course, and how topics are linked to each other.

V. Course Materials

A. All materials, links, videos, among others will be available in http://mdc.blackboard.com.

B. **Textbook**: Reece J., Taylor M., Simon E, and Dickey J. Campbell Biology: Concepts & Connections. 7^{th} or 8^{th} edition. Benjamin Cummings.

Note: The textbook is needed, but feel free to **rent** (search online for renting options for the textbook) or **borrow it from someone**: just make sure you have access to the textbool. Also, older version may work as well.

C. **Reef-Polling**TM account through one of the following:

- For Apple-based equipment, use the following link: (https://itunes.apple.com/us/app/reef-polling-by-i-clicker/id899690067?mt=8)
- For Android-based equipments, use the following link: (https://play.google.com/store/apps/details?id=com.mnv.reef&hl=en)
- An additional option would be to use the app through the web browser: (https://app.reef-education. com/#/login).

Note: The application is needed. After 14 days trials, you must obtain a paid subscription to access the application when used in-class. This applications will also be used to record attendance.

VI. Methods of Instructions

A. Reading assignments

- 1) Will always expose you to a new topic (e.g. terminology, concepts, theories, etc). prior to discussing the topic in class. Therefore, we must complete an online Reading Assignment before we cover a new topic.
- 2) Reading assignments count for grade (refer to Graded Items).
- 3) Reading Assignments will be available on Blackboard Learn (http://mdc.blackboard.com) Thursdays at 1:20PM
- 4) Reading Assignments must be completed by Tuesdays at 10:00AM.

B. Group work

- 1) Facilitate the discussion and peer-teaching of biological terms, concepts, processes, methods, scientific data, among others.
- 2) In some instances, will provide in-class bonus points opportunities.

C. Weekly quizzes

- 1) Weekly Quizzes will keep you studying and help you (and the professor) identify the areas that you may be struggling with.
- 2) Quizzes are semi-cumulative (integrate 1 or 2 prior topics) to help you connect new knowledge to previous knowledge.
- 3) Quizzes count for grade (see to Graded Items), and will only contain 6 to 7 questions in different formats.
- 4) Quizzes will be administered the first 20 minutes of each Thursday (except on days where is an exam). Once completed, they will be briefly discussed in class.

D. Exams

- 1) Three 100 points exams will be administrated.
- 2) Their corresponding dates are listed on the tentative schedule (syllabus's last page).
- 3) No scantrons are needed beaus the professor will provide written feedback on the exams.
- 4) Exams are semi-cumulative (exam 2 will contain material from exam 1, and exam 3 will contain material from exam 2).

VII. Academic Integrity

Each student is expected to maintain a high level of integrity and abide by the procedure 4074 of the Miami-Dade College Student Rights and Responsibility Handbook. Any work submitted by a student in the course for academic credit will be the student's own work. For the purpose of this course, collaboration is allowed in the following instances: a) in-class group work, b) case studies discussions, c) or when stated by the professor. Nevertheless, each student must submit their individual work unless indicated otherwise by the professor. D. Avoid at all costs copying and pasting the information from your classmates' response or from any other sources. The penalty for violation of this Code can include 0 on an assignment, failure of the course and/or notifying the corresponding University authorities for disciplinary action. Any form of plagiarism will constitute Academic Dishonesty, and points won't be earned during any form of this fault. Make sure you understand what constitute plagiarism and how to avoid it. Any other form of Academic Dishonesty listed in the Miami-Dade College Student Rights and Responsibility Handbook will not be accepted during in the course.

VIII. Attendance

Attendance at each class sessions parallels with your learning in the course. The course requires the input of time and effort in order to learn and be proficient in the learning objectives stated earlier in the syllabus. In addition, 20 easy attendance points will be awarded to everyone at the beginning. Note that, as stated in the Graded Items section (found in Grading Scales), 10% of the total grade will be your attendance. For each unexcused absence, unfortunately, I'll have to deduct 0.5 point. In the event of an absence, the student will be allowed to make up work if the absence results from one of the following:

A. Official campus activities (as designated by MDC) B. Family or personal emergencies (as designated by MDC) C. Medical reasons (discussed with the instructor) D. Work-related reasons (discuss with the instructor) E. Important notes

- 1) Make-up exams are allowed only if your excuse meets any of the four requirements above.
- 2) Make-up for guizzes are not permitted.
- 3) With three unexcused absences, I won't be able to keep you on the class roster.

4) With three unexcused absences, I won't be able to keep your name in the course's roster.

IX. Late Policy

Unless arrangement have been made prior to the due date or have a valid absence excuse (as stated in the Attendance section of this syllabus), I won't be able to award full grade on Late Assignments (the final grade for any late assignment will be 30% less).

X. Accommodations for Students with disabilties

In compliance with the Miami-Dade College and the Student Rights and Responsibility Handbook policy and equal access laws, I more than available to discuss any necessary academic accommodations that may be required for the student with disabilities. Requests for academic accommodations are to be made during the first week of the term, except for unusual circumstances, so arrangements can be made. Students are encouraged to contact the Student Services to verify their eligibility for appropriate accommodations.

XI. Inclusive Statement

Members (student, faculty, administrators) of the Miami-Dade College community represent a diversity of backgrounds and perspectives. In this course, and as a member of this community, I am a strong supporter of diversity and its benefits. Therefore, to maintain an adequate learning and diverse environment students in this course are strongly encouraged to:

- A. share their unique beliefs, experiences, and values
- B. be open to the opinions and views of others
- C. honor your colleagues' uniqueness
- D. appreciate the unique opportunity we have to learn from each other
- E. value each others opinions and communicate in a respectful manner
- F. keep confidential discussions of personal and professional nature
- G. take advantage of this opportunity to share ways in an inclusive environment

Every student must maintain, at all times, respectful manners and actitudes.

XII. Grading Scales

A. Graded Items

Assessment	Percentage of Total Grade		
Quizzes (on Thursdays)	10%		
Attendance	10%		
Reading Assignments	5%		
Reel Polling questions	5%		
1st Exam	25%		
Midterm Exam	25%		
Final Exam	20%		

B. Grading Scale

Letter Grade	Percentage
A	100 - $90%$
В	89.9 - $80%$
$^{\mathrm{C}}$	79.9 - $70.0%$
D	69.9 - $60.0%$
\mathbf{F}	Below 60.0%

XIII. Incomplete Grades and Withdrawls

Incomplete (I) grades will be posted only in consultation with the student and professor, and only when extenuating circumstances will prevent the student to complete the requirements of the course. At least one-half of the course must have been completed with a C or better grades. It is important that the incomplete (I) be completed within the time-frame agreed between the student and the professor. Unfortunately, if not completed within the agreed time frame, the incomplete must be submitted as an F.

Withdrawals: The professor is not entitled to withdraw a student from the course: it is the students' duty to evaluate and monitor how he/she is doing in the course. Knowing your status in the course will be important in the case you determine it is necessary to withdraw from the course. The deadline to withdraw (W) from the course June 27th, 2017. Keep in mind that a "W" grade will be permanent in your grade transcripts, and constitute an attempt for the course.

XIV. Tentative Course Schedule

Note: The tentative course schedule may change at the discretion of the professor

Date	Day	Week	Topic	Chapter	Assessment.Due
2017-05-09	Tue	W1	Intro, Install Apps, Intro to Bio	Chp1	NA
2017-05-11	Thurs	W1	Intro to Biology	Chp1	Quiz1
2017-05-16	Tue	W2	Biological Chemistry	Chp2	RA1
2017-05-18	Thurs	W2	Biological Chemistry	Chp2	Quiz2
2017-05-23	Tue	W3	Biological Molecules	Chp3	RA2
2017 - 05 - 25	Thurs	W3	Biological Molecules	Chp3	Quiz3
2017-05-30	Tue	W4	Components of the Cell	Chp4	RA3
2017-06-01	Thurs	W4	Components of the Cell/Exam1	Chp4	Exam1
2017-06-06	Tue	W5	Energy, Enzymes, Cell Transport	Chp5	RA4
2017-06-08	Thurs	W5	Energy, Enzymes, Cell Transport	Chp5	NA
2017-06-13	Tue	W6	Cellular	Chp6,7	RA5
			Respiration/Photosynthesis		
2017 - 06 - 15	Thurs	W6	Cellular	Chp6,7	Quiz4
			Respiration/Photosynthesis		
2017-06-20	Tue	W7	Cellular	Chp6,7	NA
			Respiration/Photosynthesis		
2017 - 06 - 22	Thurs	W7	Cellular	Chp6,7	Quiz5
			Respiration/Photosynthesis		
2017-06-27	Tue	W8	Genetics/Inheritance	Chp8,9	RA6
2017-06-29	Thurs	W8	Exam2	Chp8	Exam2
2017-07-04	Tue	W9	$No\ Class$	NA	NA
2017-07-06	Thurs	W9	Genetics/Inheritance	Chp8,9	NA
2017-07-11	Tue	W10	Molecular Genetics	Chp10	RA7
2017 - 07 - 13	Thurs	W10	Molecular Genetics	Chp10	Quiz6

Date	Day	Week	Topic	Chapter	Assessment.Due
2017-07-18	Tue	W11	Gene Control	Chp11	RA8
2017-07-20	Thurs	W11	Evolution/Origin of Species	Chp14,15	Quiz7
2017 - 07 - 25	Tue	W12	Evolution/Origin of Species	Chp14,15	*NA
2017-07-27	Thurs	W12	$Final\ Exam$	*NA	$Final\ Exam$