2015

119 Life: Current Topics

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Life: Current Topics
Syllabus

Instructor Information

Instructor: Charles J. Grossman, PhD & Prof
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Office: Albers 107
Office Hours: Mon, Wed, Thurs 7:00 - 8:00 PM
Phone: 513-257-5040 (cell)

Course Information

Course Description

New advances and controversial areas of research in the life sciences, as a way of introducing some of the major concepts in biology. Topics may include evolution and creationism, global warming, animals in research, artificial intelligence, and genetic engineering.

Course Learning Outcomes
1. Utilize the Scientific Method in Hypothesis Building and Problem Solving
2. Define characteristics of a living system, identify positive and negative impact of humans on Earth and the Biosphere
3. Describe cell theory, outline the importance of homeostatic mechanisms operating in a single cell and a fully functional organism.
4. Define energy and describe how it is generated in living systems.
5. Define evolutionary theory, describe its importance in steps that led to development of life on earth
6. Define the scope of Ecology, the relationship between Biotic and Abiotic Biomes, and their impact on animal and human populations
7. List ancient and modern infectious diseases, describe underlying mechanisms to explain the appearance of newly emerging virulent and antibiotic resistant pathogens. Relate to world globalization, urbanization, increased population mobility, food production.
8. Describe and explain human genetics, mechanism of protein synthesis, genetics of cellular division. Relate to genetic engineering in animals, humans, stem cell controversy.
9. Discuss modern methods employed in humans to prevent pregnancy, methods used by infertile couples to increase probability of becoming pregnant. Define legal and social issues and concerns associated with these activities.

Course Materials

Additional reading materials will be provided.

Time Commitment Expectations
It is expected that students will spend 5 hours/week on various aspects of this course including reviewing the video modules, studying, group activities, submitting homework, and taking on-line exams and quizzes.

For this online class there are no planned synchronous or face-to-face sessions.

Technical Requirements
- Internet connection (DSL, LAN, or cable connection desirable)
- Access to Canvas through a supported Web browser (Internet Explorer, Firefox, Safari).
  To ensure that you are using a supported browser and have required plug-ins please run the CheckBrowserTool from the Technology Services Web site.
- Check your computer against Xavier’s suggested minimum computer requirements: http://www.xavier.edu/ts/students/Computer-Recommendations.cfm

Technical Assistance
If you need technical assistance at any time during the course or to report a problem with Blackboard, contact the HELP Desk at (513) 745-HELP/4357 or visit the HELPDeskWebsite.

Course Structure

Course Schedule
You will find assignments, quizzes, and exam due dates at the top of each module. You are expected to complete and/or submit each item by the due date. It will be very important to keep up with all of the tasks each week to ensure that you do not fall behind.

Most modules will have a discussion question, a group project, and a quiz. Module 1 will have 2 assignments from the book. There will be 3 module exams and 1 comprehensive exam.

Modules

<table>
<thead>
<tr>
<th>Scientific Process</th>
<th>Jan 12 – Feb 4</th>
<th>2 book assignments, 1 group assignment, 2 quizzes, 1 discussion, 1 exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life on Earth</td>
<td>Feb 5 – Feb 7</td>
<td>1 quiz, 1 discussion</td>
</tr>
<tr>
<td>Cellular Process</td>
<td>Feb 8 – Feb 11</td>
<td>1 quiz, 1 discussion</td>
</tr>
<tr>
<td>Course</td>
<td>Start-End</td>
<td>Activities</td>
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<td>-----------------------------</td>
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<tr>
<td>Energy Process</td>
<td>Feb 12 – Feb 18</td>
<td>1 quiz, 1 discussion, 1 exam (modules 2, 3, 4)</td>
</tr>
<tr>
<td>Evolution</td>
<td>Feb 19 – Feb 28</td>
<td>1 quiz, 1 discussion, 1 group assignment</td>
</tr>
<tr>
<td>Ecology</td>
<td>March 8 – March 18</td>
<td>1 quiz, 1 discussion, 1 group assignment</td>
</tr>
<tr>
<td>Coral Bleaching and Pollution</td>
<td>March 19 – March 28</td>
<td>1 quiz, 1 discussion, 1 group assignment, 1 exam (modules 5, 6, 7)</td>
</tr>
<tr>
<td>Pathogens</td>
<td>March 29 – April 15</td>
<td>1 quiz, 1 discussion, 1 group assignment</td>
</tr>
<tr>
<td>Genetics</td>
<td>April 16 – April 25</td>
<td>1 quiz, 1 discussion, 1 group assignment</td>
</tr>
<tr>
<td>Reproduction</td>
<td>April 26 – May 9</td>
<td>1 quiz, 1 discussion, 1 group assignment</td>
</tr>
<tr>
<td>Final Exam</td>
<td>April 26 – May 9</td>
<td>1 exam (modules 8, 9, and 10)</td>
</tr>
</tbody>
</table>

Note: The schedule is subject to change in the event of extenuating circumstances. You are expected to check announcements regularly and adhere to the established course deadlines.

**Grading Policy**

**Graded Course Activities**

**Course Exams:**

There are 4 exam in this course, and each exam has a part A and part B: Multiple Choice Exam 1 is worth 60 pts and covers Module 1; Multiple Choice Exam 2 is worth 70 pts and covers Modules 2, 3 and 4; Multiple Choice Exam 3 is worth 70 pts and covers Modules 5, 6 and 7; Multiple Choice Exam 4 is worth 70 pts, and covers Modules 8, 9 and 10 (Therefore there are 270 total points for all exams during the semester.)

**Group Assignments:**

Group assignments will receive group grades. There are 6 group projects throughout the course of the semester and each group project is worth 20 pts. (6 x 20 = 120 pts for group projects)

**Online Quizzes:**
There are 11 online quizzes throughout the semester and each is worth 3 points.

\[(11 \times 3 = 33 \text{ total pts for online quizzes.})\]

**Discussion Boards:**

There are 10 discussion boards throughout the semester and each is worth 20 points.

\[(10 \times 20 = 200 \text{ total pts for discussion boards})\]

**Assignments:**

There are 2 assignments throughout the semester and each is worth 10 points.

\[(2 \times 10 = 20 \text{ total pts for assignments})\]

**Grand total possible points for the semester:**

\[270 + 120 + 33 + 200 + 20 = \text{ points 643}\]

Grades will be determined by adding all the points that a student has amassed and dividing that number by 643 and converting this to a final % grade. Final letter grades are broken down as follows: A 94 - 100, A- 91 - 93, B+ 88 - 90, B 84 - 87, B- 80 -83, C+ 77 - 79, C 73 - 76, C- 70 -72, 67 - 69, D 63 - 66.

**Academic Misconduct Policy and Plagiarism:** A zero grade will be given to any student violating the University Academic honesty Policy. The student may appeal according to normal University procedures as stated in the University Catalogue.

**Plagiarism is a special and highly serious case of academic misconduct.** If you copy information from any source and do not give credit by citing the source this is plagiarism. If you reference the source this allows you to use the material freely. If you copy the material word for word then you must also use quotations around the material that you copied as well as giving the reference for the source.

**Remember to avoid plagiarism you must do the following.**

Give credit to your research by citing your sources.

- A citation gives credit to the source of your information.
- A citation helps others find the source of your information.

**Citations are found in:**
In my classes plagiarism is absolutely unacceptable.

I will check your work using the internet and Turnitin.com. If I find that you are plagiarizing the material you have submitted to me you will receive a grade of 0 on the submission for THE FIRST OFFENSE AND A WARNING FROM ME! IF YOU DO THIS AGAIN YOU WILL RECEIVE A -50 PTS DEDUCTION AND A SECOND WARNING! IF YOU DO THIS A THIRD TIME I WILL REPORT YOU TO THE DEAN OF STUDENTS AND THEY WILL TAKE IT FROM THERE.

Viewing Grades in Canvas
Points you receive for scored activities will be posted to the Canvas Grade Book.

Grade Posting Policy
In general, you should expect to receive feedback on assignments within 48 hours of submission. Exceptions to this will noted in the course announcements in Canvas.

Assignment Submission
All assignments for this course will be submitted electronically through Canvas.

Late Work/Make-Up Work
You are expected to turn in all assignments by the due date. Any assignments that are late by up to 24 hours will have 10% of the points deducted. Any assignments that are late by between 25 and 48 hours will have 20% of the points deducted. Any points turned in 48 hours passed the due date will be given no points. You will not be able to take quizzes and exams after the due date. will Please contact the instructor if there are extenuating circumstances. You will be expected to provide documented proof of those circumstances.

Incomplete Policy

Course assignments are due at the time specified. Extension beyond the termination of the course is rarely granted and only for a serious reason. If an extension of time is granted, the grade of "I" (Undergraduate Incomplete) will be assigned and calculated as an "F" in the grade point average. Unless the work is completed and submitted by the fifteenth calendar day of the
academic semester following the course, the student will fail the course and the "I" will be permanently changed to an "F" (summer term is excluded). Exceptions to this policy must be approved in writing by the appropriate dean prior to that date. The faculty member initiates the grade change process once the student has made up the incomplete work.

If the student is deferred for graduation due to a grade of "I" (Incomplete), he or she may be eligible for the original date of graduation. Work must be completed, graded and recorded within thirty days of that term's graduation date.

Course Policies/Guidelines

Netiquette

The discussion boards are created to provide an opportunity for students to actively engage in meaningful conversation on a particular topic or issue. You are encouraged to provide your honest viewpoint, but be respectful of the views of your classmates.

Do’s
1. Do use correct grammar and spelling.
2. Do read the prompt, reflect on what you would like to say, and review what you’ve written before posting!
3. Do respect the privacy, beliefs, and opinions of your classmates.
4. Do challenge each other’s ideas but not each other personally.
5. Do remember to treat others as you would want to be treated.
6. Do stick to the discussion prompt at hand when posting to a forum.
7. Do use humor and sarcasm carefully. Students cannot see your facial expressions or hear any voice inflections.

Don’ts
1. Don’t type in ALL CAPS. This is regarded as shouting.
2. Don’t rant or flame. This is not the place to vent your anger or start a fight.
3. Don’t make inappropriate comments. Objectionable, sexist, or racist language will not be tolerated.

In the discussion forums you will post assignments and discuss your work with others in the class or in your groups. These are public forums, so whatever is posted can be seen by everyone in the course, including the instructors. If you want to send a private message, use individual email. The Class Lounge discussion forum is a public space for conversation with your classmates on any topic or question.
Academic Support

Learning Assistance Center

The Learning Assistance Center (LAC) provides support services to facilitate learning. The LAC has two main purposes: tutoring and disability services. The tutoring services include subject specific tutoring, drop-in sessions, study skills assistance, and Supplemental Instruction (SI). For students with documented disabilities, services include accommodations such as extended time on exams, reduced distraction testing environment, note-taking assistance, and assistive technology. Services are provided in a positive and encouraging environment, which promotes appreciation for diversity and cura personalis. Students in an online course can contact the LAC at (513) 745-3280 to set up an appointment. The LAC is located in the Conaton Learning Commons room 514. [http://www.xavier.edu/lac/](http://www.xavier.edu/lac/)

Writing Center

The Writing Center offers free one-on-one tutoring on writing assignments for all Xavier students. Students in an online course can contact the Center at (513) 745-2875 to set up an appointment. Sessions can be conducted in multiple ways, including discussions by phone and by email at writingcenter@xavier.edu. The Writing Center is located in the Conaton Learning Commons room 400. [http://www.xavier.edu/writingcenter/](http://www.xavier.edu/writingcenter/)

Mathematics Tutoring Lab

The Mathematics Tutoring Lab offers mathematics tutoring for all Xavier students. Students in an online course can contact the Lab at (513) 745-3069 to set up an appointment. The Mathematics Tutoring Lab is located in the Conaton Learning Commons room 419. [http://www.xavier.edu/mathematics/Math-Lab.cfm](http://www.xavier.edu/mathematics/Math-Lab.cfm)

University Policies

Academic Honesty Policy

The pursuit of truth demands high standards of personal honesty. Academic and professional life requires a trust based upon integrity of the written and spoken word. Accordingly, violations of certain standards of ethical behavior will not be tolerated at Xavier University. These include theft, cheating, plagiarism, unauthorized assistance in assignments and tests, unauthorized copying of computer software, the falsification of results and material submitted in reports or
admission and registration documents, and the falsification of any academic record including letters of recommendation. All work submitted for academic evaluation must be the student's own. Certainly, the activities of other scholars will influence all students. However, the direct and unattributed use of another's efforts is prohibited, as is the use of any work untruthfully submitted as one's own.

Copyright Policy

Copyright laws and fair use policies protect the rights of those who have produced the material. To help you familiarize yourself with copyright and fair use policies, the University encourages you to visit the librarycopyrightWebpage and download the following for reference purposes: http://www.xavier.edu/library/copyright/copyright_policy_2009.pdf

Xavier University, Canvas course sites contain copyrights held by the instructor, other individuals or institutions. Such material is used for educational purposes in accord with copyright law and/or with permission given by the owners of the original material. You may download one copy of the materials on any single computer for non-commercial, personal, or educational purposes only, provided that you (1) do not modify it, (2) use it only for the duration of this course, and (3) include both this notice and any copyright notice originally included with the material. Beyond this use, no material from the course web site may be copied, reproduced, re-published, uploaded, posted, transmitted, or distributed in any way without the permission of the original copyright holder. The instructor assumes no responsibility for individuals who improperly use copyrighted material placed on the web site.

Students with Disabilities

Any student who feels he/she may need an accommodation based on the impact of a documented disability should notify the course instructor and contact Cassandra Jones in the Learning Assistance Center at 513-745-3280 or e-mail jonesc20@xavier.edu to coordinate reasonable accommodations.