Chapman University
Controversial Topics in Biology

Instructor: Dr. Zeynep Akyol Ataman
Lecture: Tue and Thr 1-2.15 PM
Classroom: 
Email: zataman@chapman.edu
Office: HSC 10
Office hours: By appointment.

Blackboard: Blackboard will be used to post announcements, additional resources, assignments, etc. Also you can follow your up-to-date grades here.

Restrictions: Students formally admitted into the University Honors Program or permission of course instructor and Director of Honors

Course Description: An introduction to advanced-level critical inquiry, focusing on the biological topics that create controversy and how they are depicted in news and media

Credits: 3 units

GE 7NI Learning Outcome (Natural Science Inquiry):
Students will be able to use scientific principles and reasoning as a way of knowing the natural world, distinguishing science from non-science.

Course Learning Objectives:
* Apply the scientific method to analyze the natural world.
* Explain the difference between a scientific theory and “theories” in everyday life.
* Evaluate the science supporting scientific concepts.
* Analyze and articulate the controversies surrounding certain scientific topics.

GE 7VI Learning Outcome (Values Inquiry):
Articulates how values and ethics inform human understanding, structures, and behavior

Course Learning Objectives:
* Explore and assess the values and ethical norms and how they influence scientific advances.
* Analyze why so many Americans don’t “believe” in certain concepts that are supported by scientific studies.
* Evaluate the options for finding comfort with both the science and one’s personal religious beliefs.

Honors Program Learning Outcomes:
Upon completing a course in the University Honors Program students will have:
1. Obtained a starting point for integrative exploration of the development of cultures and intellectual achievements through a variety of disciplinary and interdisciplinary perspectives;
2. Sharpened their ability to critically analyze and synthesize a broad range of
knowledge through the study of primary texts and through engagement in active learning with fellow students, faculty, and texts (broadly understood);  

3. Understood how to apply more integrative and interdisciplinary forms of understanding in the advancement of knowledge and in addressing complex challenges shaping the world; Developed effective communication skills, specifically in the areas of written and oral exposition and analysis

**Course Objectives:**

Students will learn to analyze and understand scientific articles, broadcasts or movies about recent biology related scientific news and advances.

Students will become familiar with the topics in biology that generate controversy.

Students will gain the ability to separate correct information from “junk information”.

Students will learn to use the library and the appropriate online resources effectively.

Students will learn to write reports and prepare presentations on specific topics.

Students will learn to carry out discussions on controversial topics by using facts and scientific references.

**Classroom conduct:**

Cell phones are to be off during **ALL** class lectures.

Laptops are **ONLY** allowed during presentations.

If you are late to class or leave early, please minimize noise.

Civility is expected of all class participants at all times both in and out of the classroom. This includes use of appropriate behavior and language that is respectful to other individuals in the classroom.

**Instructional strategies:**

This is a class in which you must show up every day because you will be required to participate during the lectures. The class will involve in class exercises, discussions and presentations as well as guest speakers.

**Methods of Evaluation:**

There will be no exams in this class. The grading will be as follows:

Attendance, 20% of the overall grade,

Presentations, 25% of the overall grade,

Written reports and homeworks, 25% of the overall grade,

Final project, 30 % of the final grade

I will be adjusting the final grades according to your class participation.

**Chapman University Academic Integrity Policy:** Chapman University is a community of scholars, which emphasizes the mutual responsibility of all members to seek knowledge honestly and in good faith. Students are responsible for doing their own work, and academic dishonesty of any kind will not be tolerated anywhere in the university.

**Students with disabilities policy:** In compliance with ADA guidelines, students who have any condition, either permanent or temporary, that might affect their ability to
perform in this class are encouraged to inform the instructor at the beginning of the term. The University, through the Center for Academic Success, will work with the appropriate faculty member who is asked to provide the accommodations for a student in determining what accommodations are suitable based on the documentation and the individual student needs. The granting of any accommodation will not be retroactive and cannot jeopardize the academic standards or integrity of the course.

**Equity and Diversity**: Chapman University is committed to ensuring equality and valuing diversity. Students and professors are reminded to show respect at all times as outlined in Chapman’s harassment and Discrimination Policy: [http://tinyurl.com/CUHarassment-Discrimination](http://tinyurl.com/CUHarassment-Discrimination)

Any violations of this policy should be discussed with the professor, the Dean of Students, and/or otherwise in accordance with this policy.

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**Important Addresses and Telephone Numbers:**

<table>
<thead>
<tr>
<th>Services</th>
<th>Phone Number</th>
</tr>
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<tbody>
<tr>
<td>Disabilities Services:</td>
<td></td>
</tr>
<tr>
<td>410 N. Glassell</td>
<td></td>
</tr>
<tr>
<td>Phone: (714) 997-6778</td>
<td></td>
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<tr>
<td>Tutoring, Learning, and Testing Center:</td>
<td></td>
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<tr>
<td>Cecil B. DeMille Hall 130</td>
<td></td>
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<tr>
<td>Phone: (714) 997-6828</td>
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**Course Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th><strong>Tue</strong></th>
<th><strong>Thursday</strong></th>
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<tbody>
<tr>
<td>1/11</td>
<td>Course Introduction</td>
<td>Writing a paper and preparing a presentation</td>
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<tr>
<td>1/18</td>
<td><strong>Health and Medicine</strong></td>
<td>Presentation 1</td>
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<td></td>
<td>Antibacterial products</td>
<td>Presentation 1</td>
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<tr>
<td></td>
<td>and Antibiotic resistance</td>
<td>Presentation 1</td>
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<tr>
<td>2/1</td>
<td>Deadly Viruses</td>
<td>Presentation 2</td>
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<tr>
<td>2/8</td>
<td>Vaccines and prescription drugs</td>
<td>Presentation 2</td>
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<tr>
<td>2/15</td>
<td>Animal testing in medicine</td>
<td>Discussion Sessions</td>
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<tr>
<td>2/22</td>
<td>Alternative medicine and Medical Marijuana</td>
<td>Presentation 3</td>
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<tr>
<td>2/1</td>
<td>Biology of Addiction</td>
<td>Presentation 3</td>
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<td>3/7</td>
<td>Obesity and Diets</td>
<td>Presentation 4</td>
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<td>3/14</td>
<td><strong>Evolution</strong></td>
<td>Presentation 4</td>
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<td>3/21</td>
<td>Population Control</td>
<td>Discussion Sessions</td>
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<td>3/28</td>
<td>How Climate Change Threat Human Existence</td>
<td>Presentation 11</td>
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<td>4/4</td>
<td>How do Stem Cells and Cloning Shape Evolution</td>
<td>Presentation 12</td>
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<tr>
<td>4/11</td>
<td>Zoos, Cryozoos and De-extinction</td>
<td>Presentations 13</td>
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<tr>
<td>4/18</td>
<td>Genetically Modified Organisms</td>
<td>Final Projects</td>
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The orders of lectures are subject to change.

**Course Grades (out of 1000 points)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>200</td>
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<tr>
<td>Discussions and Presentations</td>
<td>250</td>
</tr>
<tr>
<td>Written reports and homeworks</td>
<td>250</td>
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<tr>
<td>Final Project</td>
<td>300</td>
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Accumulation of points:
925-1000 = A;
895-924 = A-;
870-894 = B+;
825-869 = B;
795-824 = B-;
770-794 = C+;
725-769 = C;
695-724 = C-;
670-694 = D+;
625-669 = D;
595-624 = D-;
594 and below = F