

## Syllabus BIOL 1330 – BIOLOGY IN POP CULTURE

Spring 2023

### Professor:

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Office Hours: 12:30-2:00 WF, or by appointment

**Catalog Description:** In this course, students will examine science from a biological perspective as it is portrayed in popular culture. Students will critically assess the validity of science as presented in popular culture through various media.

### Course Objectives/Student Learning Outcomes

- 1) Describe the science of biology and the scientific method; explain the scientific process and how it is portrayed in various pop culture media.
- 2) Describe the connection of these biological processes from a cellular, organismal, and ecosystem perspective; explain how evolution is a unifying theme in biology.
- 3) Understand the significance of biology to you and your life and apply the knowledge you have acquired to making educated decisions as a member of society.
- 4) Apply new learning and studying skills to your life. Specifically students will use emerging technologies in social media to communicate scientific information as part of a team.

### Required Texts:

Bozzone and Green. 2014. *Biology for the Informed Citizen*. Oxford University Press.  
H.G. Wells. 1895. *The Time Machine*.

Various other media will be explored – this will vary each time the course will be offered to make the material timely. Some of the media recommendations will be student driven.

**Evaluation:** Students will be evaluated based on the following work:

1. Participation 20%. This will include keeping up with readings, attendance, and actively participating in class discussions. Discussion will follow group presentations every Monday. Attendance will be taken at random.
2. Examinations 60%. Two midterms and a final exam will be given. Each will be worth 20% of the final grade. In the event you wish to dispute an exam question, an essay outlining your argument must be submitted within one week of the exam being returned.
3. Group presentation 20%. Small groups of students will prepare a group presentation on how a biological concept is portrayed in pop culture. These small groups will assign a content-relevant pop culture assignment each Wednesday, beginning the third week of class. The following Monday will be an in-class presentation by the group followed by a class discussion.

We will follow a 10-point scale for grading:

90-100% (450-500 pts) = A, 80-89% (400-449 pts) = B, 70-79 (350-399) = C, 60-69% (300-349) = D, 0-59% (<300) = F

**Academic Misconduct:** Submitting plagiarized work to meet academic requirements including the representation of another's work or ideas as one's own; the unacknowledged word for word use of another person's ideas; and/or the falsification, fabrication, or dishonesty in reporting research results shall be grounds for charges of academic misconduct. Any cheating or other type of academic misconduct will be reported to university administration and at minimum will result in automatic failure of the course.

## **TENTATIVE CLASS SCHEDULE**

### **Week**

1/9 – Biology and Evolution (Ch. 1); Media – “A Clockwork Origin”

1/16 – Media – “The Time Machine”

1/23 – Discussion “The Time Machine”; Human Reproduction & Development (Ch. 3, 6)

1/30 – Genetics (Ch. 4); Group 1 assignment (genetics); **Exam 1 (2/3)**

2/6 – Discussion Group 1; Cancer (Ch. 5); Group 2 assignment (cancer)

2/13 – Discussion Group 2; Genetic Engineering (Ch. 7); Group 3 assignment (gen. eng.)

2/20 – Discussion Group 3; Health Care (Ch. 8); Group 4 assignment (health care)

2/27 – Discussion Group 4; Media – “The Walking Dead”; **Exam 2 (3/10)**

3/6 - Evolution (Ch. 9); Group 5 assignment (evolution)

3/13 – Spring Break!

3/20 – Discussion Group 5; Disease (Ch. 10); Group 6 assignment (disease)

3/27 – Discussion Group 6; Ecology (Ch. 11); Group 7 assignment (ecology)

4/3 – Discussion Group 7; Biodiversity (Ch. 12); Group 8 assignment (biodiversity)

4/10 – Discussion Group 8; Humans (Ch. 13); Group 9 assignment (humans)

4/17 – Discussion Group 9; Media – TBA

Last Day to Drop with a W – March 23

Final Exam – TBD