

# Biology 1105 Human Biology in Cinema Autumn 2020 3 Credit Hours – Distance Learning

Instructor: Dr. Evan Waletzko

Center for Life Sciences Education

email: waletzko.1@osu.edu

**Student / Office Hours: TBD - Zoom** *By appointment:* Mon - Thurs (12 p.m. - 4 p.m.)

**Assistant Coordinator:** Erica Szeyller
Center for Life Sciences Education

email: szeyller.1@osu.edu

# Phone: 688-5495

# these times:

Center for Life Sciences Education

(emails to @buckeyemail are undeliverable)

<u>Class Meeting Schedule</u>
We will be meeting synchronously for this course

utilizing Zoom. You will find the link on Carmen.

You will be expected to actively participate during

email: andrews.171@osu.edu

**Course Coordinator:** Adam Andrews

Tuesdays, 6:00 - 7:50 p.m. Wednesdays, 6:00 - 9:15 p.m.

#### **Course Materials**

## Required

• Cell Phone or Internet-connected device (i.e. smart phone, laptop, tablet, etc.)

• *Internet Access:* Your access to CarmenCanvas, CarmenZoom, and TopHat is an integral and necessary part of this course.

# Suggested

• Biology Now with Physiology (2<sup>nd</sup> Edition) by Houtman et. al. ISBN for the ebook: 978-0-393-66401-0

#### **Course Description**

As a human organism, biology can be applied to and give insight upon many aspects of our lives, from straight forward subjects such as health to more abstract subjects such as gender. Additionally, art forms allow the observer to acquire deeper insight into their own experience as well as the experience of others. So, in pairing the of cinema, which encompasses visual, literary, and musical art forms, with biology it is my hope that the concepts taught in class will have a greater impression upon you the student, and therefore be retained for much longer than a traditional class. Such as many traditional classes, your understanding and ability to apply biological concepts will be mainly assessed via multiple choice exams. Though not graded directly, the post movie discussions will give you the opportunity to hear the viewpoints of other students and give you the opportunity to share your viewpoints regarding the concepts touched on in class and the movie. This format will hopefully increase the empathy between you and your peers, and I myself look forward to hearing new and unique perspectives from you as well, because learning never stops. In addition most writing assignments will assess your ability to consider biological concepts in the context of the human experience, from individual to the social implications.

My goal, by the end of this course, is threefold. First, for you to have a greater understanding of biology to make more informed decisions regarding yourself personally and society as a whole (i.e. an informed citizen). Second, appreciate the diverse organisms that we are in the hopes it fosters greater empathy for the individuals we share this world with. Lastly, to consider the role humans play as a globally influential organism.

#### **Class Format:**

We will meet for class on CarmenZoom twice a week. There is no lab or recitation for this course. Typically, we will spend Tuesday evenings exploring new concepts using active learning techniques for which you will prepare with assigned pre-work. We will watch and discuss films on Wednesday evenings, followed by an active discussion.

# **Learning Objectives:**

- 1. Students understand the basic facts, principles, theories and methods of modern science.
- 2. Students understand key events in the development of science and recognize that science is an evolving body of knowledge.
- 3. Students describe the inter-dependence of scientific and technological developments.
- 4. Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

Students who successfully complete Biology 1105 will meet the GE learning outcomes through a combination of lecture and movies that will illustrate basic biological principles. These include evolution by natural selection, the causes of infectious and noninfectious diseases and their medical investigations, DNA, genetics, nutrition, sex, gender, and sexual orientation, and the ramifications of population growth. Both lecture and movies will integrate modern and historical understandings of science and integrate science and technology. The movies focus on the nexus between science and society from the level of the individual (e.g., gender identity) to the level of the population (e.g., epidemics). Throughout the course, students will be assigned related current readings from *The New York Times* that will reflect current discoveries and problems of the contemporary world.

#### **Biology 1105 Learning Outcomes**

# Students completing the course will achieve the following course outcomes:

- 1. Students will describe the mechanism of evolution by natural selection.
- 2. Students will be able to solve basic Mendelian genetic problems specific to human reproduction.
- 3. Students will recall the sources of human infectious and noninfectious diseases and describe society's historical and current response to them.
- 4. Students will apply the requirements of human nutrition and energy to recognize healthy eating and activity.
- 5. Students will distinguish sex, gender, and sexual orientation and describe society's understanding of each.
- 6. Students will evaluate the effects of human population growth on the environment and on humans themselves.
- 7. Students will evaluate the interplay of science with current technology and the capability of each to both create and solve problems in the contemporary world.
- 8. Students will synthesize information from lecture, films, and articles from the popular press regarding current social issues.

# Credit hour and work expectation

This is a 3-credit-hour course. According to Ohio State policy, students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average. ASC Honors provides an excellent guide to scheduling and study expectations.

#### **Grading and Evaluation**

Graded assignments may come in three forms, and students should note the expectations for each in the descriptions of our class assignments below.

- Independent Work (†): Strictly non-collaborative, original-individual work. You may discuss this assignment only with your instructor/TA. Discussions with other individuals, either in person or electronically, are strictly prohibited.
- Collaboration Required (\*\*): An explicit expectation for collaboration among students in class (i.e. group work).
- Optional-Discussion (): These are <u>not</u> collaborative assignments however students are permitted, but not required, to discuss the assignment or ideas with each other. All submitted work must be one's original and individual creation.

Exams † : Exam questions are written to assess the student's achievement of the <u>lecture learning</u> <u>outcomes</u> found at the start of each lecture. Each of the three exams during the semester are worth 100 pts., and will assess your understanding and ability to apply the knowledge on the most recent material, usually the previous 3 - 4 weeks. Though there may be times when to fully understand the new material one must still understand the basics from previous exams. This will be made clear during the lectures. The exams will consist of approximately 20-25 multiple choice questions assessing your level of understanding, ability to apply, and ability to analyze material from lecture. Two attempts of the exam will be allowed if you are unsatisfied with your first attempt, and the final grade will be the average of the two attempts if you decided to take a second attempt. The exams will be 60 minutes long, is accessed through Carmen, occurs at the start of Wednesday's class, and will be accessible from 5:50 to 7:05 thereby giving some accessibility leeway. The professor will be available through Zoom to answer any questions one may have while taking the exam.

Collaborative Questions the: During the last 20 minutes of the Tuesday lecture prior to Wednesday's exam you'll have the opportunity to boost your exam score via collaborative work (groups of 4-5 individuals) answering challenging questions regarding concepts that will be found in the Wednesday exam. This portion will be 5 multiple choice questions accessed via Carmen, very similar to a typical exam. Students can collaborate to determine the best answer for each question, but since each individual student will have to submit answers to receive credit one may submit a different answer from the group consensus.

There is no way for the grade you earn from the collaborative portion to reduce your overall exam grade, it will only help.

If the percentage earned on the collaborative portion is less than what you earned on the individual portion, then the collaborative portion is dropped and only the individual portion will be used. If the collaborative portion is greater than the individual portion, then the collaborative portion will be weighted to be 20% of your final grade  $\{(Ind. \% * 0.80) + (Col. \% * 0.20) = Cumulative \%\}$ . For example, if you earned 70% on the individual portion but 90% on the collaborative then (0.70 \* 0.80) + (0.90 \* 0.20) = 0.74 (i.e. 74%), which increases the exam grade by 4 % points. Since the collaborative portion cannot lower your exam grade, one can forgo taking this portion of the exam without penalty.

Final Exam †: The final exam will consist of two parts. The first part is a typical exam assessing your ability to understand and apply the knowledge of the most recent material, in particular material from week 12 through week 14. The second part is will assess your cumulative knowledge of the major concepts covered from week 1 through week 11. These major concepts will be noted in the beginning of each lecture on the Lecture Outcomes slide. There is not a collaborative portion to the final exam.

Quizzes † : Material on the quizzes and will come from the previous week's lecture material and will be accessed via Carmen. Quizzes will be due at 5:59 p.m. on Tuesday before lecture after being open for approximately 4-5 days (Friday-Tuesday). Each quiz will consist of 5 multiple choice questions selected from a pool for a total of 10 pts., and are estimated to take between 5-15 minutes. Students can take the quiz twice and only the highest score will be accepted. Collaboration with other students is not permitted. The quizzes are meant to help you retain the concepts from the previous week. Due to the extended window of time you have to complete the quizzes (4-5 days), extensions and makeup opportunities will not be given except in the most extreme of situations. You are strongly encouraged not to wait until the last minute to complete the quiz as technological issues (i.e. internet or power failures, etc.) will not be grounds to extend the quiz window. If a

technological issue arises, please contact the *course coordinator*. It may be possible to reset a quiz attempt during the quiz window, but deadlines will not be extended if the attempt is not reset or technical problems are not solved before the deadline. With that said, the lowest quiz score will be dropped including zeroes.

In-Class Activities \*\*\* : Throughout the semester we will do a few in-class group activities associated with the current material in the course. Prompts, figures, and questions associated with these activities will be posted as PDF or Word documents on Carmen prior to class. You can either print these out, or view them on your laptop or other device in class. You will write your answers in a Word document and submit in Carmen in that particular assignment. Each activity will be worth 5 points; 3 pts for honestly attempting completion at the discretion of your TA, and 2 pts based on the correctness of 2 questions that are unknown to the student and TA during the activity. There are no make ups for missing an activity, but you may have **one** dropped with proper documentation for an excused absence. Due unique circumstances that you may face while remote learning the due dates for in-class activities will span from lecture time on Tuesday to Wednesday at 11:59 pm, allowing to watch the record lecture and do the exercise in a timely manner.

**TopHat Questions**: TopHat is an online tool that will be used to assess student progress during every lecture, to poll students for data to complete in-class activities, and to facilitate class wide discussions. Students will submit TopHat responses using Apple or Android smartphones and tablets, laptops, or through text message. You can visit https://support.tophat.com/s/categoryhome/Student for the Student Quick Start Guide. A registration invitation will be sent to your osu email account by the first lecture (if you don't receive the email, see alternative registration instructions on Carmen "start here" page).

There will be a total of 50 *class* points available from participation using Top Hat (TH). Throughout the semester, a record of how many questions you answer correctly and how many questions you participate in answering using TH points will be kept. You can access this record via the TopHat application. For most questions, you can earn up to 3 TH points, 2 for correct answers (correctness TH points) and 1 for participation (participation TH points). If you earn > 66.7% of the TH points for the semester, you will receive all 70 *class* points allocated for TopHat. If you earn less than 66.7% of the TH points, you will earn 100 pts \* (participation

%)) points. At any point during the semester you can access TopHat to view your earn *TH* points for correctness and participation.

For example, a student that earns < 66.7% of the *TH* points but has 90% participation would receive (50 \* 0.9) = 45 class points. If a student earns > 66.7% of the *TH* points even though they only had 70% participation they will still receive all 50 class points. So it pays to show up, but it also pays to answer correctly.

Top Hat Extra Credit: One may earn up to 3 class points of extra credit for exceptional proficiency answering TopHat questions. If one has 80% of possible TH correctness points they will have earned 0.5 points of extra credit, and with each 1% increase to their correctness points one can gain an additional 0.5 class points up to 3 points.

No makeup opportunities will be available for missed lectures or non-functioning technology since the criteria for earning all 50 class pts is so low, 66.7% of total *TH* points.

\*Please note that responding to questions as a proxy for another student will result in BOTH students being reported to the Committee on Academic Misconduct.

\*Proper registration is required by **Monday**, **August 31**<sup>st</sup>. After this deadline, a student will not be eligible to recoup points from previous lectures. You must check your grade on Carmen to verify you are earning points. Please see announcements on Carmen for further details.

**Plagiarism Assignment ↑:** Because we do a lot of writing in this class, it is imperative to learn about what constitutes plagiarism in a writing context. This assignment will be available as a Carmen quiz and must be completed by Sunday 1/12/2020 at 11:59pm.

**Syllabus Quiz** : Knowing key points of the syllabus will increase your chance of success in the course, and reduce stress for both yourself and the instructor © The quiz will be open the entire first week of classes up to Sunday at 11:59 p.m., and you'll have the ability to take the quiz as many times with the highest score being recorded.

Writing Assignments : There will be a total of ten writing assignments throughout the semester. The focus of each assignment will either be interpreting media articles regarding the current topic and synthesizing your own thoughts regarding the articles and topic, or to expand on and/or reflect on the discussions Wednesday evenings following the movie. Each assignment will worth 20 points, with the lowest one dropped, for a total of 180 pts. The assignment will be opened Wednesday mornings and due Sunday at 11:59 p.m., so you'll have five days to complete the assignment. These must be submitted as a .doc, .docx, .rtf, or .pdf to the associated Carmen assignment. Always double check to make sure assignments are submitted correctly, as thinking it submitted is not a valid excuse for late or missing work. Clarity of written ideas will be extremely important in the writing assignments. With that in mind, I encourage all students to seek help from the Writing Center.

**Faith in Science ↑:** This assignment is designed to touch on the philosophical topic of whether there is faith in science and associated with science. There will be two submissions, the first submission will occur after watching the movie *Lorenzo's Oil* which touches on this concept. Before the second submission, I will select several responses from the first submission that are creative, thought provoking, and/or well defended, and post them anonymously. The second assignment at the end of the semester will be your response to one of the anonymously posted submissions.

**SALG** †: The Student Assessment of Learning gains is a survey you will be asked to complete at the end of the term. The aggregated results help us to measure the effectiveness of the course and make improvements for future offerings.

# **Class Grade Structure:**

#### Lecture:

Exam (100 pts each) 300

Final 130

Mini Quizzes 90 (10 pts. each)

TopHat (in-class questions) 50

In-class activities 15

Total = 585

Complete Breakdown:	
Lecture	585
Out of class	236
<b>Total = 816</b>	
Bonus:	
TopHat	3
SEI	2

#### Out of class:

Plagiarism Assignment 10
Syllabus Quiz 5
Writing Assignments 200 (20 pts each)
Faith in Science
Assignment #1 10
Assignment #2 5
SALG 6

Total = 236

**Final Grades:** Your final grade will be based on the percentage of the 816 points that you earn during the course of the semester, as indicated below. Please note that we do not grade the course on a curve and *Carmen* does not round scores up to the next nearest percentage point, so 92.11% and 92.97% both earn the grade of A-.

#### Grade Scale

Grade Scale										
A	A-	B+	В	B-	C+	С	C-	D+	D	Е
100 -	92.9 –	89.9 –	86.9 -	82.9 –	79.9 –	76.9 –	72.9 –	69.9 –	66.9 -	59.9 –
93.0%	90.0%	87.0%	83.0%	80.0%	77.0%	73.0%	70.0%	67.0%	60.0%	0%

<u>Posting of Grades</u>: All grades will be posted on Carmen within one week of the due date, or submission date for late work. After grades are posted you have 10 working days to challenge any grade or inquire regarding an unposted or missing grade. After that time, grades are final as posted or zero if missing. To challenge or inquire about a grade contact your instructor. IMPORTANT: Make sure that all of your grades are properly posted on Carmen as you receive them. Challenges about grades, <u>particularly after the end of the semester</u>, cannot be entertained after the 10-day grace period.

**Late Assignments Policy**: There is no acceptance of late work unless otherwise stated. For the Faith in Science and Writing Assignments, 1 day late is a 25% reduction, 2 days 50% reduction, 3 days 75% reduction, and the fourth day is 100% reduction. All assignments will have significant windows in which the assignment can be submitted. Please do not save assignment completion for the 'eleventh hour'. Deadlines will not be extended.

# **Instructor Feedback and Response Expectations:**

- **Email Response:** The CLSE's expectation of instructors is that emails will be responded to within one business day. If your email is sent during the evening or over the weekend, you may not receive a response until the next business day.
- Class announcements: I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check your notification preferences (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- **Graded Assignments** will be graded and returned to you within one week after they were turned in. All scores are posted on Carmen no later than the day the graded assignment is returned.

#### **Absences:**

Because this is an active, discussion-based class, attendance is required to meet the class goals. In lieu of an attendance sign in sheet, TopHat points will be used. This will allow some attendance flexibility as students only need to accrue 66.7% of potential TopHat points to receive all 50 class points associated with TopHat. Please see page 4 of the syllabus for a detailed explanation of TopHat points.

If you are unable to take the exam at the regularly scheduled time, you must contact the course coordinator PRIOR to the exam window to schedule a makeup. If your absence is excused for a university-sanctioned event, if you are ill and have been seen by a medical practitioner on the day of the exam, or have other documentable reasons for missing, you may be offered a makeup exam without penalty. If you have no documentation to support your absence, or your absence from the exam is not for an excused reason, you will still be offered the opportunity for a makeup exam, with a 25% overall deduction on your exam score. Lack of transportation, loss of electricity or internet, travel plans, etc. will not be considered as valid excuses. If you are unsure of whether something is a valid excuse please ask either the lecturer or course coordinator, please do not assume one way or another.

Student illness or absence: In the event you must quarantine because of exposure to someone diagnosed with COVID-19 OR you are feeling ill with COVID-19 symptoms, you still will be able to make progress in this class. Please contact your instructor right away. If *you* are too ill to participate in this course due to COVID-19 or another illness, please contact the instructor as soon as you are able <u>prior</u> to the next class meeting. All materials will be made available on Carmen, including lecture recordings and slides.

The final exam is scheduled Monday, December 7<sup>th</sup> from 8:00pm-9:45pm. Make sure that this time does not conflict with your future plans as no early exams will be given.

Accommodation of Special Needs: Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the course coordinator as soon as possible of their needs. Please do this within the first week of the semester. Only the course coordinator is authorized to complete SLDS forms. This will help us ensure that your individual needs will be met appropriately and fairly. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 292-3307, slds@osu.edu.

Mental Health: As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you are or someone you know is suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614--292--5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766.

If you are thinking of harming yourself or need a safe, non-judgmental place to talk, or if you are worried about someone else and need advice about what to do, 24-hour emergency help is also available through the Suicide Prevention Hotline (Columbus: 614-221-5445)

The Writing Center offers free help with writing at any stage of the writing process for any member of the university community. During our sessions, consultants can work with you on anything from research papers to lab reports, from dissertations to résumés, from proposals to application materials. Appointments are available in-person at 4120 Smith Lab, as well as for online sessions. You may schedule an in-person or online appointment by visiting WCOnline or by calling 614-688-4291. Please note that the Writing Center also offers daily walk-in hours—no appointment necessary—in Thompson Library. You do not have to bring in a piece of writing in order to schedule a writing center appointment. Many students report that some of their most productive sessions entail simply talking through ideas. Please check out our Individual Writing Support and Group Writing Support pages for the types of consultations we provide. We also maintain a Writing Resources page with writing handouts and links to online resources.

Copyrighted Class Materials: ©The Instructor's lectures and course materials, including power point presentations, tests, outlines, and similar materials, are protected by copyright. You may take notes and make copies of course materials for your own use. The slides presented in class are provided as both power point and pdf formats prior to the lecture to facilitate note taking, though last minute changes may be made. Additionally, you may make audio or video recordings of the lecture if you do not disturb other students in doing so. This is to accommodate several different abilities and learning styles. You may not and may not allow others to reproduce or distribute lecture notes, recordings, and course materials publicly whether or not a fee is charged without the express written consent of the Course Instructor or Course Coordinator.

**Issue Resolution:** The CLSE believes that student concerns are usually most effectively addressed by the staff closest to the situation. Therefore, students are ordinarily expected to address issues or concerns with their TA first. If the issue cannot be resolved by your TA, or for some reason you feel that you absolutely cannot address your concern with your TA, please feel free to contact Adam Andrews or Dr. Amy Kulesza (kulesza.5@osu.edu).

**Lyft Ride Smart:** Lyft Ride Smart at Ohio State offers eligible students discounted rides, inside the university-designated service area, from 9 p.m. to 3 a.m. Each month, 10,000 discounted rides will be made available on a first-come, first-served basis with the average cost expected to be \$2 or less. Once the monthly allotment of 10,000 discounted rides is exhausted, Lyft's normal service rates will apply for the remainder of the month. Prices may be impacted by distance, traffic, time of day, special events and prime time surcharges. To qualify for program discounts, users must select "shared ride" when booking in the Lyft app. For more information, visit: <a href="https://ttm.osu.edu/ride-smart">https://ttm.osu.edu/ride-smart</a>

<u>Course Technology</u>: For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <a href="https://ocio.osu.edu/help/hours">https://ocio.osu.edu/help/hours</a>, and support for urgent issues is available 24x7.

#### Carmen:

- Carmen, Ohio State's Learning Management System, will be used to host materials and activities throughout this course. To access Carmen, visit <u>Carmen.osu.edu</u>. Log in to Carmen using your name.# and password. If you have not setup a name.# and password, visit <u>my.osu.edu</u>.
- Help guides on the use of Carmen can be found at https://resourcecenter.odee.osu.edu/carmen
- This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.
- Carmen accessibility

## **Secured Media Library**

- Some of the videos for this course will be posted in the University's Secured Media Library. The link will be posted on the class Carmen page and you will be automatically directed to the correct video.
- Secured Media Library help guide

#### Carmen Zoom

- Office hours will be held through Ohio State's conferencing platform, Carmen Zoom. A separate guide to accessing Carmen Zoom and our office hours is posted on the course Carmen page under Files.
- Students may use the audio and video functions if a webcam and microphone are available. If not, there is still a
  chat function within Carmen Zoom for the student to live chat with the professor or TA in the virtual office
  hours room.
- Carmen Zoom help guide

#### **Proctorio**

- Proctorio, an online proctoring tool, will be used during this course for the scheduled exams. Proctorio offers you flexibility to take your exams at the time and in the location of your choosing. Students are required to have a webcam (USB or internal) with a microphone and a strong and stable internet connection. During the course of an exam, Proctorio will record the testing environment, therefore students should select private spaces for the exam session where disruptions are unlikely and where recording devices can be enabled. Instructions for Proctorio use will be provided. The tool has limitations in its accessibility for students reliant upon screen readers and keyboard navigation. If you have concerns about using an online proctoring tool for the reasons listed above or in general, please work with your instructor to find an equivalent alternative. Additional information on academic integrity at Ohio State and recommended proctoring options are available.
- Proctorio offers free 24/7 student support through web chat or email.

#### Turnitin

Students at The Ohio State University are accountable for the integrity of the work they submit. Therefore, you should be familiar with the guidelines provided by the <u>Committee on Academic Misconduct</u> (<u>COAM</u>) and <u>Section A of OSU's Code of Student Conduct</u> in order to meet the academic expectations concerning appropriate documentation of sources. In addition, OSU has made Turnitin, a learning tool and plagiarism prevention system, available to instructors. For this class, you will submit your papers to

Turnitin from Carmen. When grading your work, I will interpret the originality report, following <u>Section A of OSU's Code of Student Conduct</u> as appropriate. For more information about Turnitin, please see <u>the vendor's guide for students</u>. Note that submitted final papers become part of the OSU database.

Please know that I view TurnItIn first and foremost as a teaching tool to make you a better writer. You will see in your individual originality reports exactly what the instructors see. We WANT you to look at this report as soon as you submit your assignments. If you see an issue, please correct it right away, before we start grading the assignment. You can resubmit without penalty as many times as you want prior to the established due date for any assignment. After the due date, the late policy is in effect.

# Top Hat

- Top Hat is a web-based response system that allows students to use their own devices provide responses in the classroom. This course uses Top Hat to promote active engagement, allow for synchronous feedback, and monitor attendance.
- <u>Top Hat</u> help guide

• Self-Service and Chat support: http://ocio.osu.edu/selfservice

• **Phone:** 614-688-HELP (4357)

Email: 8help@osu.edu
TDD: 614-688-8743

#### **Baseline Technical Skills Necessary for Online Courses**

• Basic computer and web-browsing skills

• Navigating Carmen

#### **Necessary equipment**

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Web cam and microphone

### **Necessary software**

- Word processor with the ability to save files under .doc, .docx, .rtf, or .pdf. Most popular word processing software programs including Microsoft Word and Mac Pages have these abilities.
  - OSU students have access to Microsoft Office products <u>free of charge</u>. To install, please visit <u>https://osuitsm.service-now.com/selfservice/kb\_view.do?sysparm\_article=kb04733</u>Other Course Policies

#### **Discussion and communication guidelines:**

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Tone and civility**: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online and is not always appreciated in-person. The instructional team work very hard to provide a positive learning experience. Please keep this in mind and remain civilized and respectful in your class communications.
- Citing your sources: When we have academic discussions, please cite your sources to back up what you say.

A significant component of our interactions in this class will occur through Zoom videoconferencing. Because this mode of discussion has benefits and challenges that differ from in-person class sessions, I want to share my expectations for how we will meet and communicate:

**Technical Issues**: If you encounter a technical issue with Zoom during a session, first make sure you are using the latest version of Zoom. Next, contact the IT Service Desk at go.osu.edu/it or 614-688-4357(HELP). If issues continue, contact me after the session to learn how to make up for the missed content either via a recording or other means. I will not be able to address technical issues during a live session.

**Preparation:** Come to the session having completed any readings or pre-work and be ready to have open, civil, and supportive discussions in video and chat spaces. I ask that you update your Zoom profile with your preferred name and add a picture with your face.

**Participation:** At the start of our sessions, Iall share specific expectations for how to use the chat, how to interact, and how to raise questions or concerns as we go. If you are unsure about expectations or are unsure about raising a question, please follow up with me afterward to make sure your questions are answered. Plan to be present during the entire class session as much as you are able. For some activities, I may ask you to share your faces on camera so that we can see each other and connect. Please feel encouraged to use a non-distracting virtual background. Many students and instructors prefer not to share their remote spaces for a variety of reasons. Mute your microphone when others are talking to minimize background noise in the meeting.

**Recordings:** I will be recording our meetings for the benefit of students who may need to be absent. These links will only be shared with students in our class, and only when a student contacts me to make this arrangement.

If you have any concerns about participating in class over Zoom in this way, please let me know. My goal is to create a safe environment where we can benefit from seeing each other and connecting, but I want to prioritize your safety and well-being.

Academic Misconduct: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed, illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <a href="http://studentlife.osu.edu/csc/">http://studentlife.osu.edu/csc/</a>. We will adhere to this policy.

- Unless otherwise specified for a particular assignment, all submitted work should be a student's own unique effort. Collaborative efforts are not permitted unless expressly sanctioned for a particular assignment.
- Reusing past work: In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with me.
- Using others' verbatim words without the use of quotation marks <u>and</u> citation is plagiarism. Paraphrased work requires citation to denote the use of others' ideas. Copying other's words without quotation while using citations is still considered plagiarism.
- Use of any technology during a quiz or exam (including but not limited to cell phones, smart watches, headphones, electronic dictionaries, etc.) is strictly prohibited.

**Title IX:** Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <a href="http://titleix.osu.edu/">http://titleix.osu.edu/</a> or by contacting the Interim Ohio State Title IX Coordinator, Molly Peirano, at <a href="mailto:titleix@osu.edu">titleix@osu.edu</a>.

**Diversity and Inclusion:** The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Week # Start-Date	Lecture topics	Suggested Textbook Readings Pre = Prior to lecture Post = After lecture	Movie Schedule (Wed)	Assignment Due (Quiz # does not correspond to week or chapter)	
Week 1	Introduction to science and biology: -Scientific methodology	Pre: N/A	Ex Machina	<u>Syllabus Quiz</u> (8/30 <i>Sunday</i> )	
8/24	-Properties of life -Basics of evolution	<b>Post</b> : pp. 6-13, 26-29, 192-195	(110 min)	Plagiarism Assignment (8/30 Sunday)	
Week 2 8/31	Mutations and Cancer -DNA and mutations -DNA to protein (transcription/translation) -Cell replication -Understanding cancer and methods of treatment	<b>Pre:</b> pp. 99-100 <b>Post</b> : pp. 103-104, 118-119, 164-165, 174-175	<i>Wit</i> (99 min)	Quiz 1 (wk 1) (9/1 Tuesday 6pm) Writing Assignment 1 (9/6 Sunday)	
Week 3	Diseases and the immune system: -Viruses v. Cells -How the immune system differentiates friend from foe -Basic epidemiology  ICA: Immune system	Pre: pp. 60-62, (p.66 Viruses), 73, 156-158 Post: pp. 459-460, 463-466	And the Band Played On (141 min)	Mini Quiz 2 (wk 2) (9/8 Tuesday 6pm) Writing Assignment 2 (9/13 Sunday)	
Week 4 9/14	Non-Infectious Diseases  -Heredity of traits -Homeostasis -Epigenetics, environmental influence  ICA: Punnett Squares	<b>Pre:</b> pp. 122-126	Lorenzo's Oil (136 min)	Exam 1 (weeks 1-3) (9/16 6:00 pm) Faith in Science 1 (9/20 Sunday)	
Week 5 9/21	Disease ecology and epidemiology -The host/pathogen relationship -Mitigating the spread of pathogens -Immunization	<b>Pre:</b> pp. 32-35 <b>Post</b> : pp. 192-195, 219-221, 225-226, 234-236	93 Days	Mini Quiz 3 (wk 4) (9/22 Tuesday 6pm) Writing Assignment 3 (9/27 Sunday)	
Week 6	Evolution -Natural Selection -Biological fitness -Role of mutations and chance	<b>Pre:</b> pp. 219 <b>Post</b> : pp. 200-207, 219-221	Contagion (105 min)	Mini Quiz 4 (wk 5) (2/29 Tuesday 6pm) Writing Assignment 4 (10/4 Sunday)	
Week 7	Biotechnology and Sexual Selection -Artificial selection -Sexual reproduction, meiosis	<b>Pre:</b> pp. 105, 108-110, 193-195	GATTACA	Mini Quiz 5 (wk 6) (10/6 Tuesday 6pm)	
10/5	-Sexual selection ICA: Crossing Over	Post: pp. 223 (sexual selection)	(121 min)	Writing Assignment 5 (10/11 Sunday)	
Week 8 10/12	Human Sexuality and Gender - insights from nature and the lab - mind v. body	<b>Pre:</b> pp. 138-139 <b>Post</b> : N/A	Moonlight (111 min)	Exam 2 (weeks 4-7) 10/14 <i>Wednesday</i> 6:00 pm	
Week 9 10/19	Human Mind and Learning: -brain structure and learning -nature v. nurture	Pre: TBD Post: TBD	Temple Grandin (120 min), Dr. Grandin's TED Talk (18 min)	Mini Quiz 6 (wk 8) (10/20 Tuesday 6pm) Writing Assignment 6 (10/25 Sunday)	

Week 10 10/26	The biology of anxiety: -mental and physical responses to stress -long term v. short term	Pre: TBD Post: TBD	Perks of Being a Wallflower (105 min)	Mini Quiz 7 (wk 9) (10/27 Tuesday 6pm) Writing Assignment 7 (11/1 Sunday)
Week 11 11/2	The biology of addiction: -revised understanding of addiction -the many faces of addiction	Pre: TBD Post: TBD	A Beautiful Boy (105 min)	Mini Quiz 8 (wk 10) (11/3 Tuesday 6pm) Writing Assignment 8 (11/8 Sunday)
Week 12 11/9	Public Health and Nutrition: -macromolecules found in food -the role and balance of energy in the body -all calories are not equal	<b>Pre:</b> pp. 51-55, 414-415 <b>Post</b> : pp. 416-427	Fed Up (92 min)	Exam 3 (wks 8-11) 11/12 <i>Wed-Thursday</i> 6:00 pm
Week 13	Public Health and Policies: -scientific facts v. pseudoscience -influence of science on policies	<b>Pre:</b> pp. 28-31 <b>Post</b> : pp. 22-35	Thank You for Smoking (92 min)	Mini Quiz 9 (wk 12) (11/17 Tuesday 6pm) Writing Assignment 9 (11/22 Sunday)
Week 14 11/23	Global Health and The Anthropocene: -humans direct and indirect influence on ecosystems -direct and indirect of environmental change on human health	Pre: TBD  Post: pp. 324-338	Wall-E (103 min), Cosmos: The World Set Free (40 min) (if time allows)	Mini Quiz 10 (wk 13) (11/24 Tuesday 6pm) Faith in Science 2 (11/29 Sunday)
Week 15 11/30	Global Health and The Anthropocene: -methods to reduce and reverse detrimental ecological changes to benefit future generations -living with the environment and ecological engineering to increase quality of life	Pre: TBD Post: TBD	Princess Mononoke (133 min)	Writing Assignment 10 (12/6 Sunday) SALG (12/6 Sunday) SEI (12/6 Sunday)

Final Exam (weeks 12-15, small portion of cumulative main concepts) Monday Dec  $7^{th}$ , 8:00pm-9:45pm