

Term Information

Effective Term Spring 2023
[Previous Value](#) Autumn 2021

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

We are proposing to change the course number to Biology 2105 to reflect an advanced approach while meeting the ELOs for the Health and Wellbeing Theme and Technology Embedded Literacy.

What is the rationale for the proposed change(s)?

The model for this course and its content make for an excellent match for the Health and Wellbeing Theme with modest changes to advance the content beyond a foundational level.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course?)

The course will continue to meet the 'old' GE Natural Science requirements, but there are no programs on campus that require this course.

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area	Biology
Fiscal Unit/Academic Org	Introductory Biology - D0326
College/Academic Group	Arts and Sciences
Level/Career	Undergraduate
Course Number/Catalog	2105
Previous Value	1105
Course Title	Human Biology in Cinema
Transcript Abbreviation	Hmn Bio in Cinema
Course Description	Human Biology in Cinema will explore biological insights related to human health and wellbeing through the lens of mainstream films. These biological insights will enhance comprehension and appreciation of films and in turn the films will provide a narrative structure that make the information more accessible and memorable. Films will serve as a starting point for a class discussion each week.
Previous Value	<i>Human Biology in Cinema will show that mainstream films with a core biological theme can be entertaining and educational and that having some basic biological insights will enhance your comprehension and appreciation of these films. Lectures and discussions will cover basic principles in biology that will help elucidate the content of each film.</i>
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week, 12 Week, 8 Week, 7 Week, 6 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture, Recitation
Grade Roster Component	Lecture

COURSE CHANGE REQUEST
2105 - Status: PENDING

Last Updated: Vankeerbergen, Bernadette
Chantal
01/28/2022

Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus, Lima, Mansfield, Marion, Newark, Wooster
<i>Previous Value</i>	<i>Columbus, Mansfield, Newark</i>

Prerequisites and Exclusions

Prerequisites/Corequisites	Sophomore (Rank 2) standing or by permission of instructor. High School Biology recommended.
<i>Previous Value</i>	
Exclusions	Not open to students majoring in the Life Sciences.
<i>Previous Value</i>	
Electronically Enforced	No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	26.0101
Subsidy Level	General Studies Course
Intended Rank	Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

General Education course:
Biological Science; Health and Well-being

Previous Value

General Education course:
Biological Science

Course Details

Course goals or learning objectives/outcomes

- Students will explain the process of science in relation to studying human health and disease considering the differing interests of players (stakeholders) involved.
- Students will evaluate the functions of the human body in good health.
- Students will apply knowledge of the body systems (and their interconnectedness) to different dimensions of human wellbeing and personal health decisions (e.g. making financial medical decisions based on knowledge of human health).
- Students will analyze sources of disease and disorder and their impact on the body (or sources and impacts of affronts on the human body), such as mental illness, infectious disease, genetic disease, cancer, and injury.
- Students will explain the biological basis of human phenotypic variation at the individual and population level in relation to societal reaction to each.
- Students will apply knowledge of evolutionary mechanisms to current cultural and societal issues.
- Students will analyze environmental wellbeing through the effects of humans on natural and man-made environments and the impact of those environments on humans themselves.
- Students will evaluate the interplay of science with technology development and the capability of each to both create and solve problems related to human biology and the ethical concerns that arise with new technology use.
- Students will synthesize information from lecture, films, and current social health issues to inform scholarly exploration of socio-economic, policy and personal wellbeing perspectives.
- Students will find reliable scientific resources and use them to solve problems related to human health and wellbeing.

Previous Value

- *Students will describe the mechanism of evolution by natural selection.*
- *Students will be able to solve basic Mendelian genetic problems specific to human reproduction.*
- *Students will recall the sources of human infectious and noninfectious diseases and describe society's historical and current response to them.*
- *Students will apply the requirements of human nutrition and energy to recognize healthy eating and activity.*
- *Students will distinguish sex, gender, and sexual orientation and describe society's understanding of each.*
- *Students will evaluate the effects of human population growth on the environment and on humans themselves.*
- *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.*
- *Students will synthesize information from lecture, films, and articles from the popular press regarding current social issues.*

Content Topic List

- Natural selection
- Basic physiology
- Genetics, genetic disease, and cancer
- Pathogens and pathogenic disease
- Addiction and neurobiology
- Human nutrition
- Sex, gender, and orientation
- Human population growth

Sought Concurrence

No

Attachments

- Biology 2105 Proposal Course Syllabus.docx: Sample Syllabus
(Syllabus. Owner: Andrews, Adam Lee)
- Biology 2105 Proposal Theme Cover Sheet.pdf: GE Proposal Summary
(Cover Letter. Owner: Andrews, Adam Lee)
- Proposal for Biology 2105.docx: Course Proposal
(Other Supporting Documentation. Owner: Andrews, Adam Lee)

Comments

- This proposal was approved by the CLSE Curriculum Committee by unanimous vote on December 17, 2021. *(by Andrews, Adam Lee on 01/19/2022 03:27 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Andrews, Adam Lee	01/19/2022 03:28 PM	Submitted for Approval
Approved	Kulesza, Amy Elizabeth	01/20/2022 06:28 PM	Unit Approval
Approved	Vankeerbergen, Bernadette Chantal	01/28/2022 05:08 PM	College Approval
Pending Approval	Cody, Emily Kathryn Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Hilty, Michael Vankeerbergen, Bernadette Chantal Steele, Rachel Lea	01/28/2022 05:08 PM	ASCCAO Approval



THE OHIO STATE UNIVERSITY

Sample Course Syllabus

Biology 2105

Human Biology in Cinema

Spring 2023

3 Credit Hours

Instructor: Erica Szeyller (she/her/hers)
Center for Life Sciences Education
255D Jennings Hall
1735 Neil avenue
Phone: 614-688-5495
email: szeyller.1@osu.edu
(Do not send emails to @buckeyemail.osu.edu)
Student Hours: Mondays from 1-2pm

Course Coordinator: Adam Andrews
Center for Life Sciences Education
255B Jennings Hall
1735 Neil Avenue
Phone: 614-247-6345
email: andrews.171@osu.edu
(Do not send emails to @buckeyemail.osu.edu)

Teaching Assistant: TBD
Department
Address
email:
Student Hours:

Program Assistant: Susan D'Agostino
240B Jennings Hall
email: dagostino.54@osu.edu

Class Meeting Schedule

Lecture: 150 Pomerene Hall
T: 6:00 p.m. – 7:50 p.m.
Th: 6:00 p.m. – 9:15 p.m.

Lyft Ride Smart
Service available from 9P-3A
<https://ttm.osu.edu/ride-smart>
Download the Lyft app.

Course Materials

Required

- Cell Phone or Internet-connected device (i.e. smart phone, laptop, tablet, etc.)
- **Internet Access:** Your access to Carmen is an integral and necessary part of this course. You must activate your OSU email account to have access to Carmen. The Carmen URL is <http://carmen.osu.edu> and Biology 2105 should be listed under My Courses on your Carmen homepage. The username to log on is your OSU name.# and the password is the one you use with all OSU email and registration systems. If you have a problem logging in or using Carmen, contact 688-HELP or carmen@osu.edu. **IMPORTANT:** The CLSE and its course staff will send email ONLY to your official OSU email account.
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Recommended

- *Biology of Humans: Concepts, Applications, and Issues* (6th Edition) by Judith Goodenough. Publication Date: 2017 | ISBN: 9780134386850. See Carmen for access details.

My Teaching Philosophy:

- We are a team that supports each other's learning.
- Our collective knowledge is greater than any one individual.
- Learning is fun! In this class we will develop a light-hearted, engaged atmosphere.

- Learning is accessible for all people & a diversity of views/experiences enrich the learning environment.
- We will use evidence-based teaching practices whenever possible – this means that the methods used have scientific evidence to suggest that they support student learning (e.g. Freeman et al. 2014).
 Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410-8415.
- Embrace curiosity! Get curious about the course material and the perspective of different people.
- Learning to learn – It is important that you leave this class knowing more about how you learn and feel empowered to seek out new information.

Course Description

Human biology is something that we all experience intimately, however as a single person it is impossible to explore all aspects of what it means to be a biological organism. Luckily, mainstream movies provide an opportunity to glimpse life from another person's viewpoint. In this class, we will use evidenced-based practices to actively learn about biological concepts and processes. These biological insights will enhance your comprehension and appreciation of films and in turn the films will provide a narrative structure that make the information more accessible and memorable. Following each film, we will learn from each other through class discussion that integrates biological science with real-world experiences. These explorations will be further deepened through reflections, essays, and other writing assignments that will synthesize multiple course concepts, discussions, and recent news. Content knowledge will be assessed with regular quizzes. At the end of the class you will have an opportunity to apply what you have learned to a personal health concern in a culminating project that we will work on throughout the semester. In addition to the learning outcomes, during this course, I hope you will gain skills in compassionately speaking and writing about human biological concepts, as well as grown as a life-long learner of human biological science by expanding your ability to critically consume and seek out new information.

Class Format:

We will meet for class 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 Thursday evenings.

General Education Objectives

Students who successfully complete this course will fulfill the following GE goals and objectives:

Theme: General

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

Objective 1.1 Engage in critical and logical thinking about the topic or idea of the theme.

Objective 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

Objective 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.

Objective 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Theme: Health and Wellbeing

GOAL: Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.)

Objective 1.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

Objective 1.2 Identify, reflect on, and apply the skills needed for resiliency and wellbeing.

Embedded Literacy: Technology Literacy

Goal 1: Successful students develop a critical appreciation of the relations between technologies and their contexts (social, cultural, and historical), and of the range of effects and consequences (legal, ethical, political) produced or enabled by particular technologies.

Objective 1.1 Critically describe the relationships between technology and society in historical and cultural contexts.

Objective 1.2 Recognize how technologies emerge and change.

Objective 1.3 Evaluate the social and ethical implications of technology.

Students who successfully complete Biology 2105 will meet the GEC learning outcomes by taking a scholarly approach to critically think about human health and wellbeing through the lens of popular film. This will be accomplished through a combination of lecture, in-class activities to learn biological principles related to health and wellbeing and scholarly discourse in reflections, writing assignments, and in-class discussions. Scholarly discourse will involve students synthesizing human biological information, cultural, historical, technological, and personal perspectives to provide logical arguments supported by discipline-specific sources. Students will further their personal study of Human Health and Wellbeing through the Health Plan writing assignment where they will be asked to create a solution to a personally relevant health problem while considering the potential societal, technological, and environmental impacts.

Biology 2105 Learning Outcomes

Students completing the course will achieve the following course outcomes:

1. Students will explain the process of science in relation to studying human health and disease considering the differing interests of players (stakeholders) involved.
2. Students will evaluate the functions of the human body in good health.
3. Students will apply knowledge of the body systems (and their interconnectedness) to different dimensions of human wellbeing and personal health decisions (e.g. making financial medical decisions based on knowledge of human health).
4. Students will analyze sources of disease and disorder and their impact on the body (or sources and impacts of affronts on the human body), such as mental illness, infectious disease, genetic disease, cancer, and injury.
5. Students will explain the biological basis of human phenotypic variation at the individual and population level in relation to societal reaction to each.
6. Students will apply knowledge of evolutionary mechanisms to current cultural and societal issues.
7. Students will analyze environmental wellbeing through the effects of humans on natural and man-made environments and the impact of those environments on humans themselves.
8. Students will evaluate the interplay of science with technology development and the capability of each to both create and solve problems related to human biology and the ethical concerns that arise with new technology use.
9. Students will synthesize information from lecture, films, and current social health issues to inform scholarly exploration of socio-economic, policy and personal wellbeing perspectives.
10. Students will find reliable scientific resources and use them to solve problems related to human health and wellbeing.











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 not 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.

Assignment	Points	Assignment Type
TopHat	200	
Pre-work (13 available – drop 3)	20 ea. / 200 total	
Reflections (14 available – drop 3)	15 ea. / 165 total	
Quizzes (6 total)	30 ea. / 180 total	†
Essays (3 total)	60 ea. / 180 total	
Health Plan (HP) Total	210	
HP Prep 1: Paraphrasing Activity	10	†
HP Prep 2: Reliable Resources	30	
HP Prep 3: Communicating to Different Audiences	30	
HP Topic Exploration	20	
HP Part 1	50	
HP Part 2	50	
Complete Health Plan	60	
Surveys Total	10	
Pre-survey	2.5	†
Post-survey	2.5	†
SALG	5	†
TOTAL COURSE POINTS	1145	

Course Components to Help You Learn:

Pre-work: This activity will guide your learning about basic biological concepts so that we can actively engage with the course material in class. Pre-work will consist of answering questions in the form of writing, flow charts, or drawing (you will typically be given choices) that references outside readings, websites, and videos. Pre-work will be posted at least a week before the due date, and must be submitted to Carmen by Tuesday at 5:30pm of the week assigned. It is expected that pre-work will take about 1-2 hours to complete. There is no specified length. There is no opportunity for late work with this assignment. If you hand write your responses you may submit a clear, readable picture of each individual page. Double check to make sure your work is submitted properly and is readable. Often the pre-work will be used in class so completion is necessary for effective participation during class time. In addition to your Carmen submission, you will also want to bring an electronic or hard copy to class. There will be 13 pre-works offered with 3 of the lowest scores dropped at the end of the term.

Reflections: How many times have you left a class session and almost immediately completely forgot what you did? If you are anything like me as an undergraduate student, the answer is “a lot”! Reflections are a great way to extend and solidify your learning by connecting your new knowledge to prior knowledge and by linking the course materials to topics that you care about. Also, these reflections will help you recognize areas of course material that are still unclear or that you are curious about. Reflections will be offered each week starting the Thursday after class and due on Sundays at 11:59PM. In some weeks we may begin the reflection process near the end of class on Thursdays. Reflections can be submitted as written, video, or audio format and are expected to take approximately 30 minutes to 1 hour to complete. There is no specified length. The 3 lowest scores will be dropped.

TopHat: TopHat will be used as a learning check throughout lecture and also for in-class activities. We will use TopHat every time we meet in 'lecture' to allow students to become active participants. **No makeup opportunities will be available for missed lectures or non-functioning technology.** For each *correctly answered* question in lecture, you will earn one point. Once you earn 200 points, the next 10 correctly answered questions will be worth 0.5 *bonus* points each. The subsequent 20 correctly answered questions will be worth 0.25 bonus points each, for a total of 10 possible bonus points. It is therefore beneficial for you to come to lecture and participate, even after you have earned the 10 participation 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.*

***TopHat Registration:** At the beginning of the semester, we will provide instructions on how to register so that we will be able to link your answers to your OSU name.#; this allows us to know who was in class and to record your answers to the questions. Proper registration is required by Tuesday, January 18. After this deadline, a student will not be eligible to recoup points from previous class sessions.

Course Components to Demonstrate Your Learning:

Quizzes: There will be 6 quizzes offered throughout the course to serve as an assessment of your biological content knowledge using the carmen quizzes feature. Each quiz will consist of 10 questions drawn from a bank of questions. You will have 20 minutes to take each quiz. If you would find it helpful, you are allowed one page (8.5x11 in sheet of paper) of notes during the quiz. The preparation of this note page will help reinforce content knowledge and will help you be more confident while taking your quiz. You will have two attempts and your final score will represent the average of both attempts (except for Quiz 1, where the highest score will represent the final score). It is expected that you will work independently on this assignment. Quizzes will be posted on Friday and be available through Monday at 11:59pm. There is no opportunity for late submission with this assignment. If you anticipate missing a quiz deadline or have any technological issues email Erica Szeyller.1@osu.edu as soon as possible.

Essays: There will be three written essays during each third of the class to assess your ability to synthesize biological knowledge, films, and discussion focused on 3 themes: the impact of technological innovations, societal views, and the environment on human biology. 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. Clarity of written ideas will be extremely important in the essays. With that in mind, I encourage all students to seek help from the [Writing Center](#). You may talk with your classmates about your essay, **but** your submitted work must represent your own independent thought and writing. There is no one correct answer to these essays so we will be assessing you on how you personally think about and work through, and articulate your response to the prompt. Essays are limited to 2 pages. All sources of information must be cited.

Course Components that Equally Facilitate Learning and Demonstrate Learning:

Health Plan: Throughout this course, you will investigate human health and how that intersects with society through the lens of film and the popular media. There will be 3 HP Prep writing assignments, these are meant to help you learn and practice skills that you will employ in the final Health Plan assignment. The culminating Health Plan (HP Part1, HP Part2, and Completed

Health Plan) will allow you to expand upon skills and knowledge learned in this course to a human health concern of personal interest. This assignment will empower you to use scientific evidence to learn about and take control of your personal health or advocate for the health of others. As a human, you will likely find these skills useful in many facets of life moving forward from this course. These writing assignments 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. I encourage all students to seek help from the [Writing Center](#). Except for the final submission, all HP assignments will be available at least one week prior to the due date and due on Mondays at 11:59pm. See the schedule for specific dates. Details about each of these writing assignments including associated rubrics will be posted on Carmen in the Modules section. This project will be broken up into multiple components:

HP Prep 1 (Paraphrasing Activity): Because we do a lot of writing in this class, it is imperative to learn how to appropriately paraphrase and about what constitutes plagiarism in a writing context. This activity is expected to take 1 hour; there is no specified length.

HP Prep 2 (Reliable Resources): For the health plan and throughout your life you will need to find reliable information related to your health or the health of people you care about. This writing assignment provides an opportunity to learn about different types of sources that are available and practice in determining their reliability. This activity is expected to take 1-2 hours; there is no specified length.

HP Prep 3 (Communicating to Different Audiences): To have your voice heard, it is important that your message is targeted to a particular audience. There is truly no “one size fits all” with messaging. In this activity, you will practice crafting a message to different audiences. This activity will also give you an opportunity to reinforce course content on finding reliable sources, and sensory disorders. This activity is expected to take 2-3 hours; the assignment should be 3-6 paragraphs in length.

HP Topic Exploration: This activity will give you a chance to think about what topic you might want to explore for your final health plan. This activity is expected to take 1 hour; there is no specified length.

HP Part 1 (The Problem): For Part 1, you will be identifying and explaining the human health problem that you would like to investigate. Length is approximately 1 page single spaced.

HP Part 2 (The Solution): For Part 2, you will be explaining a solution or a way to help with your chosen health concern. Length is approximately 1-2 pages single spaced.

Complete Health Plan: You will include revised versions of Part 1 and Part 2, as well as your first (and only) submission of Part 3. For Part 3 you will communicate your health plan using the skills and knowledge that you have learned this term to an audience of your choice. The statement for Part 3 should be approximately 1 paragraph. The communication artifact will vary greatly based on format but generally it should be brief, think 1-2 paragraphs written, or no more than 5 minutes audio/video.

SALG: The Student Assessment of Learning Gains is a survey to assess your perception of the course quality. It will be taken during the final week of the course and will be worth 5 points for completion. There will be no opportunity for late survey submissions. This is expected to take 30 minutes to complete.

Pre and Post-Surveys: These surveys will assess how your confidence in learning biology and empathy have changed throughout your time in the course. There will be no opportunity for late survey submissions. These are expected to take 20 minutes to complete.

Final Grades: Your final grade will be based on the percentage of the 1145 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

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

Posting of Grades: All grades will be posted on Carmen. After grades are posted you have 10 business 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 exam grades, contact the Program Assistant to set up an appointment to find your scantron. **IMPORTANT:** Make sure that all of your grades are properly posted on Carmen as you receive them. Challenges about grades, particularly after the end of the semester, will not be entertained after the 10-day grace period.

Late Assignments Policy: For pre-class work, quizzes, and the surveys no late assignments will be accepted. The reflections, essays, and health plan components can be submitted late (up to 48 hours after the deadline), but will incur a 1% deduction for each hour it is late. Time is rounded up, so if it is a minute late, you will lose a percent of the full grade.

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](https://go.osu.edu/canvas-notifications) (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:

Attendance and participation during class sessions will be assessed using TopHat. See the section on TopHat above for more information on grading.

Continuous engagement with this course is essential to learning the material. Students are expected to attend class and engage with assignments and discussion prompts for every scheduled meeting, participating at least once per week for courses with fully remote participation. Students who need to miss class or who are not able to participate due to illness (COVID-19 or other illnesses), exposure to COVID-19, care for family members exposed to COVID-19 or other reasons are expected to contact the instructor as soon as possible to arrange for accommodation. Students in special situations or those requiring specific, long-term or other accommodation should seek support from appropriate university offices including but not limited to: [Student Advocacy](#), [Student Life Disability Services](#) and the [Office of Institutional Equity](#).

Section Changes: All section changes and adds are done by the Course Coordinator.

Accommodation of Special Needs: The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with the course coordinator as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

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 WOnline 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.

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

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: <https://ttm.osu.edu/ride-smart>.

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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).

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 <http://studentlife.osu.edu/csc/>. 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 *and* 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 <http://titleix.osu.edu/> or by contacting the Interim Ohio State Title IX Coordinator, Molly Peirano, at titleix@osu.edu.

Discussion and communication guidelines:

- **Respectful Dialogue:** I like to follow the framework for Respectful Dialogue from the Office of Diversity and Inclusion “Respectful dialogue is engagement in honest, thoughtful, and reflexive conversation with the goal of understanding one another. Respectful engagement does not mean that everyone has to agree or adopt each another's perspectives. Rather, it is by sharing differing perspectives that we are able to effectively communicate across differences and boundaries and learn from one another. Each person involved in respectful dialogue takes responsibility for the impact of their words and actions regardless of intent, and strives to operate with curiosity, authenticity, and vulnerability. Each individual engaged in respectful dialogue is not only entitled to their perspectives but is also entitled to be treated with respect and dignity.”
 - The goal is to learn from each other, not change each other’s opinion.
- **Citing your sources:** When we have academic discussions, please cite your sources to back up what you say.

SP22 TENTATIVE SCHEDULE

Information in this syllabus is subject to change with as much notice to students as possible.

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
Week 1 1/10/2022	---	Ch.1	Tu: Course Introduction & What are humans? Th: <i>Ex-Machina (110m)</i> Focus: <ul style="list-style-type: none"> • Qualities of biological life • Categorization of living things • Defining a biological human 	Pre-Survey & Reflection 1: Sunday (1/16) at 11:59pm HP Prep 1: Monday (1/17) at 11:59pm
Week 2 1/17/2022	Pre-work1: Tuesday (1/18) at 5:30pm	Ch.1, Ch.13a	Tu: How do we study humans? Th: <i>The Story of Louis Pasteur (87m)</i> Focus: <ul style="list-style-type: none"> • The scientific method • Clinical trials vs epidemiological studies • History of disease treatment 	Reflection 2: Sunday at 11:59pm Quiz 1: Monday at 11:59pm
Week 3 1/24/2022	Pre-work2: Tuesday at 5:30pm	Ch.2, 4.1, Ch.15	Tu: What are humans made of? (Macromolecule focus) Th: <i>Fed Up (92m)</i> Focus: <ul style="list-style-type: none"> • Biological molecules • Carbohydrate digestion & diabetes • A healthy worldwide diet 	Reflection 3: Sunday at 11:59pm HP Prep 2: Monday at 11:59pm
Week 4 1/31/2022	Pre-work3: Tuesday at 5:30pm	Ch.3, Ch.19, Ch.21a	Tu: What are humans made of? (Cell focus) Th: <i>Wit (99m)</i> Focus: <ul style="list-style-type: none"> • Cell signaling in diabetes and cancer. • Biology of cancer • COI in clinical trials • Impact of clinical trials on participants 	Reflection 4: Sunday at 11:59pm Quiz 2 Monday at 11:59pm
Week 5 2/7/2022	Pre-work4: Tuesday at 5:30pm	7.1-7.3, Ch.9, Ch.18a	Tu: How do humans sense the world? (Cells working together) Th: <i>Temple Grandin (107m)</i> Focus: <ul style="list-style-type: none"> • Variation in sensory receptors. • Sensory perception. • Biology of autism • Autistic sensory perception 	Reflection 5: Sunday at 11:59pm Essay 1: Monday at 11:59pm
End 1 st Third (Theme: Impact of Technology on Human Health)				

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
Week 6 2/14/2022	Pre-work5: Tuesday at 5:30pm	Ch.20, Ch.21	Tu: How do humans vary? (Inheritance) Th: <i>Lorenzo's Oil (136m)</i> Focus: <ul style="list-style-type: none"> • Autosomal inheritance of specific genes. • Sex-linked inheritance. • Genetics of PTC tasting, hemophilia, and ALD. 	Reflection 6: Sunday at 11:59pm HP Prep 3: Monday at 11:59pm
Week 7 2/21/2022	Pre-work6: Tuesday at 5:30pm	Ch.22	Tu: How do humans vary? (Evolution and natural selection) Th: <i>Inherit the Wind (128m)</i> Focus: <ul style="list-style-type: none"> • Evolution of lactase persistence & skin pigmentation • Health consequences related to the social construct of race. • Coexistence of science & religion. 	Reflection 7: Sunday at 11:59pm Quiz 3 Monday at 11:59pm
Week 8 2/28/2022	Pre-work7: Tuesday at 5:30pm	Ch.22	Tu: How do humans vary? (Pathogen evolution) Th: <i>Contagion (106m)</i> Focus: <ul style="list-style-type: none"> • Fungal, bacterial, & viral pathogen evolution. • Evolution of superbugs • Treatment of pathogenic disease (i.e. antibiotics and vaccines) & their influence of evolution. 	Reflection 8: Sunday at 11:59pm HP Topic Exploration: Monday at 11:59pm
Week 9 3/7/2022	Pre-work8: Tuesday at 5:30pm	Ch.10, Ch.17	Tu: How do humans vary? (Sex, gender, and orientation) Th: <i>Moonlight (111m)</i> Focus: <ul style="list-style-type: none"> • Breaking down the equation phenotype = genotype + environment. • The genetics/biology associated with sex, gender, and orientation. • The environmental impacts on sex, gender, and orientation. • The role of epigenetics in the eqn. 	Reflection 9: Sunday (3/20) at 11:59pm
SPRING BREAK 3/14-3/18				
Week 10 3/21/2022	Pre-work9: Tuesday at 5:30pm	7.4, Ch8	Tu: What can go wrong? (Trauma – either PTSD or TBI) Th: You Pick it: Perks of Being a Wallflower or Concussion. Focus: <ul style="list-style-type: none"> • Brain development and structure. 	Reflection 10: Sunday at 11:59pm Quiz 4 & Essay 2: Monday at 11:59pm

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
			<ul style="list-style-type: none"> • Impacts of PTSD or Concussions on the brain or body. • How treatment affects the brain/body. • Intersection of PTSD or Concussions on society. 	
End 2 nd Third (Theme: Impact of Society on Human Health)				
Week 11 3/28/2022	Pre-work10: Tuesday at 5:30pm	Ch8a, Ch.12, 14.3-14.4	Tu: What can go wrong? (Addiction) Th: <i>A Star is Born (134m)</i> Focus: <ul style="list-style-type: none"> • Drug pathways through the body. • Drugs and homeostasis • The short- and long-term effects of drugs on the brain. • Biological and environmental risk factors for addiction. 	Reflection 11: Sunday at 11:59pm HPPart1: Monday at 11:59pm
Week 12 4/4/2022	Pre-work11: Tuesday at 5:30pm	Ch.11, Ch.13, 17a4	Tu: What can go wrong? (Pathogenic disease) Th: <i>And the Band Played On (141m)</i> Focus: <ul style="list-style-type: none"> • Biology of HIV • Function of different immune system components. • Role of epidemiologists in new emerging diseases. 	Reflection 12: Sunday at 11:59pm Quiz 5: Monday at 11:59pm
Week 13 4/11/2022	Pre-work12: Tuesday at 5:30pm	4.3, Ch.16	Tu: What can go wrong? (Injury) Th: <i>127 Hours (94m)</i> Focus: <ul style="list-style-type: none"> • Homeostasis in relation to water balance. • Kidney function. • Biology of dehydration and hypothermia. • Medical search and rescue. 	Reflection 13: Sunday at 11:59pm HPPart2: Monday at 11:59pm

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
Week 14 4/18/2022 4/25 last day	Pre- work13: Tuesday at 5:30pm	Ch23, Ch24	Tu: What can go wrong? (Humans and the environment) Th: <i>Wall-E (103m)</i> Focus: <ul style="list-style-type: none"> • Ecology of infectious disease in relation to climate change. • Life cycle of ticks and transmission of Lyme disease. • Human impacts on disease distribution. • Human population growth and sustainability. 	Reflection 14: Sunday at 11:59pm Quiz 6, Essay 3 & SALG due Monday at 11:59pm
End Final Third (Theme: The Intersection of Technology, Society, and Environment on Human Health)				
Finals 4/27(W)- 5/3(T)	Final Heath Plan due SUNDAY 5/1 at 11:59PM. Post Survey due MONDAY 5/2 at 11:59PM.			

Proposal for Biology 2105 – Human Biology in Cinema

3 Credit Hours

Course Description: *Human Biology in Cinema will explore biological insights related to human health and wellbeing through the lens of mainstream films. These biological insights will enhance comprehension and appreciation of films and in turn the films will provide a narrative structure that make the information more accessible and memorable. Films will serve as a starting point for a class discussion each week that analyzes the human biological content and considers the broader impacts of the content in relation with real-world experiences.*

Prerequisite: Sophomore (Rank 2) standing or by permission of instructor. High School Biology recommended. Not open to students majoring in the Life Sciences.

While many people may have perceptions of the hard sciences of being completely objective and devoid of emotion, when it comes to studying human biology there is tremendous room for considering the personal relevance and the very subjective nature of how we use and interpret biological information. Biology 1105: *Human Biology in Cinema* is a course that the Center for Life Sciences Education has offered for the last 6 years as a way of considering the personal, societal, and cultural impacts of human biology through the lens of popular film. We have taken the opportunity of the new General Education structure to revise this course in order to fit within the Health and Wellbeing Theme. To meet the Themes General Criteria, we have modified this course to increase the rigor of critical thinking and added opportunities for students to create inter-disciplinary connections such as the intersection between human biology and the arts, economics, communication, and policy. While Human Biology in Cinema has traditionally explored the biology of the human body and analyzed human health and wellbeing from multiple perspectives, we have added in more opportunity to find personal relevance and develop skills needed for personal wellbeing. Because this course relies on an understanding of technological advances and discussions about the moral and ethical implications of technology use, we are also proposing this course to fulfill the Technology Embedded Literacy badge. Although Biology 2105 has updated outcomes that increase the academic rigor and scholarly approach of the course (Appendix C), the new outcomes still meet the natural sciences criteria of the current general education structure.

We are requiring sophomore (Rank 2) standing as a pre-requisite for this course. While we would recommend students have a minimal background in Biology, a recommended course in High School Biology would be sufficient. It is not necessary that students have had another college biology course as we will review or provide review materials for the fundamental biology necessary to appreciate the human condition illustrated in the film du jour. It will, however, be important that students are able to make connections between the information from this course and other disciplines as a major focus of the course is that students discuss human health and well-being from a variety of

perspectives and appreciate the various stakeholders involved. The sophomore (Rank 2) standing will ensure that students have had some college level courses which we believe will be important to adding to the discussions in a meaningful and diverse way.

Structure of the Course:

The course will meet 2 times per week (e.g., Tuesdays and Thursdays) where students will meet for 1 hour and 50 minutes of lecture on the first session and for 3 hours and 15 minutes in recitation on the second session. Typically, the first session is devoted to covering the biology behind the topic covered that week and the second session is dedicated to watching and discussing the film. For example, in a week where the topic is Inheritance, students will review patterns of inheritance for Mendelian and non-Mendelian traits and genetic disorders during the first session, then watch and discuss a film such as *Lorenzo's Oil* in the second session. Films are chosen by faculty based on how well they exemplify biological content, how well they show societal interactions with the biological content, and how well they provide an opportunity for students to empathetically connect with the character(s). *Will* is an example of a film that not only demonstrates the physiological changes the body goes through when someone is fighting cancer, but also provides students with the opportunity to consider the conflict between medical researchers and patients as well as evoke emotions from students watching the main character's progression through cancer and a clinical trial.

A faculty member will teach the content and lead the discussion during both meetings with help from a teaching assistant to moderate the discussions. Enrollment will be limited to 60 students per section in order to facilitate the discussion that is such a critical component to this course and which will allow students the opportunity to synthesize biological content knowledge, the film, society, and personal experience. The proposed setup will keep the class size small enough to engage everyone in a class-wide discussion where all students have the opportunity to discuss potentially controversial or personal issues in a familiar community.

The need to build this familiar community is part of the justification to devote class time to watching the films together. The communal atmosphere of film watching adds to the emotional and empathetic climate, and the opportunity for discussion immediately following the film viewing provides, in our experience, a more effective gut-reaction type of discussion. Pedagogically, the intended learning cycle requires the lecture to prepare students with the content knowledge and film focal points necessary to appreciate the film. For students to receive this information on one day then have only 48 hours to watch a film before the discussion would put an undue schedule burden on the student. Logistically, watching the films in class ensures a higher proportion of students will have watched the film prior to the discussion and ensures that all students have easy access to all films. The CLSE owns DVD copies of all films shown, whereas students would need to purchase separate subscriptions to multiple streaming services (i.e. Netflix, Amazon Prime, Hulu, etc). in addition to those films available through the

Library. Expecting students to watch the films on their own has the potential to break the learning cycle, allow students to resort to a memory of the film they watched in the distant past without the benefit of the focal point instruction, and will overall reduce the total film viewership by students.

In addition to the discussions, an important part of this course will include an ongoing, scaffolded Health Plan writing assignment (Appendix E). In the Health Plan project, students will take a scholarly approach in building on skills and knowledge gained in the course to design either a personal or community health plan around a topic of their choice. This project is scaffolded and will involve preparatory written assignments and reflections throughout the semester culminating in a final artifact suitable for their Bookend Portfolio (scaffolding can be seen in the sample syllabus in Appendix D). We recommend that instructors use the Health Plan assignment as shown in Appendix E as the project is aligned to the course outcomes. If instructors would like to modify the project to tailor it to their course or teaching style, for any changes they do make, they know which outcomes need to be accomplished by students in other ways.

Individual instructors will have flexibility to integrate additional summative and formative assessments into the course to meet the general education theme, and course learning outcomes. For example, in the sample syllabus (Appendix D) the instructor also includes TopHat activities, biweekly quizzes, essays, and weekly reflections.

Justification for the course:

Using film to study human biology provides opportunities to make emotional or empathetic connections and think critically about the material in ways students might not otherwise. While we, as educators, want students to be able to critically evaluate science in media, students don't always get the opportunity to do that as a fundamental part of their course with guidance from instructors and feedback from their peers. Students will be doing just that in their film discussion. Using film as case studies for the biological concepts they are learning each week in class will allow students to observe the broad implications of human biology topics through creative storytelling. This will enhance students' abilities to consider the ways people are affected by disease and disorder, environmental impacts, technology development and research, etc. Throughout the semester, they will use the analytical skills and increased empathy to provide to provide solutions to common human health and wellbeing problems.

The new Health and Wellness theme is a good fit for an upgraded version of our current offering of Human Biology in Cinema 1105. Biology 2105 has many of the same elements as Biology 1105 in terms of an emphasis on human health and wellbeing. The updated Biology 2105 will work well as a theme course because of the increased academic rigor and updated learning outcomes to align with the GE and Theme Objectives (shown in Appendix C). It will be more advanced than foundational biology

courses because students will learn biology at a higher cognitive level than they would in the foundational courses (e.g. at the level of analyze versus recall or understand). Students will learn about and build on biological knowledge by applying or analyzing those concepts from multiple perspectives with a critical, scholarly lens. Students will use film and the health plan assignment to evaluate popular understanding of the concepts and how those impact individual experiences and society as a whole. Throughout the semester, they will use the class discussions to reflect on the socioeconomic, political, technological, and ethical implications of human biology. They will apply these reflections and knowledge they have gained during lecture and discussions to doing scholarly research in the health plan assignment. In this assignment, students will provide a unique solution to a problem relevant in human biology that is supported by research and data. Because of the level of critical thinking and the scholarly approach in this course, it will satisfy the General Education Theme outcomes for Goal 1.

In addition to the course having a higher level of learning through a more scholarly approach to understanding human biology, this course will meet the General Education Theme outcomes for Goal 2 because of its cross disciplinary approach. Course outcomes 6, 8, 9, and 10 will be met by students who incorporate knowledge from other courses or lived experiences to critically evaluate biology in film and to synthesize a health plan that demonstrates an understanding of the various ways human biology impacts individuals and society as a whole. With the Sophomore prerequisite, students won't need to have completed any specific themed course, but having engaged in another themed or disciplinary course will provide the student with the knowledge and experience they need to apply human biology to broader societal issues that will be presented in the various films. By the end of the course, students will have articulated the ways in which human biology relates to their own major or field of interest, current societal issues, and their personal health and wellness experiences.

This course will work well as a Health and Wellbeing Theme course because of the various ways students consider different dimensions of wellness when studying human biology. A fundamental part of this course involves students learning about how the body works both in good health and in distress or disorder. We will ask students to think about their own personal health and wellness experiences or those of others they know. In doing this, they will consider both physical and mental wellness through exploring topics such as genetic disorders, addiction, mental health, and disease of different body systems. Additionally, an important part of learning about human biology is learning about human impacts on the environment and vice versa. Through this, students will consider sustainability, conservation of resources, and impacts of technology on the environment thus learning about environmental wellness. Because of the advanced nature of this course, students will use the knowledge they've gained about human health and these dimensions of wellness to reflect upon their own health and wellness and the ways these topics are linked to socioeconomic status, technology and its ethical implications, policy, and culture. Through personal reflective activities,

students will consider their own wellbeing and resiliency. They will apply this information in their final health plan project when they formulate a health plan for either themselves or a defined community.

A fundamental part of this course is Course Outcome 8 which considers how technology is used to solve problems and the moral and ethical implications of that technology use. In human biology, various forms of technology are considered throughout the course, including genetic engineering, the development of treatments and devices to improve human health, and technology to help increase sustainability. Often, the introduction of new technology is met with misinformation and resistance to use. Additionally, the use of technology may come with tradeoffs and stir up ethical concerns. Students will be asked to discuss cultural responses to technology and describe ethical concerns for various parties involved consistently throughout course topics. This is a critical component to their analysis of the films as well their final project. For this reason, we believe our content meets the criteria of the technology literacy badge and students should earn that badge through successful completion of this course.

The Center for Life Sciences Education administers all of the courses under the 'Biology' heading. As an interdisciplinary unit within ASC, we draw our faculty, instructors, and TAs from multiple departments across campus which will support the multidisciplinary nature of the course. Given the large volume of students currently passing through our GE courses, we have a support staff of Course Coordinators and Assessment Specialists in place to facilitate the courses, provide continuity between sections, perform assessment, and administer the course logistics.

Appendix A: Health and Wellbeing Theme Objectives and Justification
(*See Attached*)

Appendix B: Technology Literacy Justification
(*See Attached*)

Appendix C: Biology 2150 Course Goals and Learning Objectives
(*See Attached*)

Appendix D: Sample Course Syllabus
(*See Attached*)

Appendix E: Sample Assignment
(*See Attached*)

Appendix A: Health and Wellbeing Theme Objectives and Justification

General Themes Goal 1:

Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

Expected Learning Outcomes:

1. Engage in critical and logical thinking about the topic or idea of the theme.

Justification: Because this course uses film as a way of addressing human biology, it requires students to go beyond the biological content knowledge they are gaining in the course. Films are chosen by the instructor based on how well they represent the biological content and provide opportunity for discussion about the interplay between societal issues and biological concepts. Students will use the information they are learning in lecture to analyze how biological concepts are represented in the media and think about their broader impacts. After each film, students will engage in a discussion where they spend time critiquing the film's portrayals of the biological concepts and connecting these portrayals to personal experiences or current societal issues. Through the scaffolded Health Plan assignment, students will demonstrate their abilities to think through problems that don't necessarily have one right solution. In the sample syllabus (Appendix D) critical and logical thinking about health and wellbeing is also explored in the essays (note, this is an optional example assessment). In this example, essays will ask students to think critically and answer a question about three themes: the impact of technological innovations, societal views, and the environment on human biology. There is no one correct answer so students will be evaluated on their ability to think critically and logically about a topic as well as provide discipline-specific sources and justification for their arguments.

2. Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme

Justification: This course is designed to go beyond foundational biology and have students synthesize different forms of knowledge to solve problems. Because the course uses film to represent biology, each week it focuses on a different societal issue in addition to the relevant human biology. This will involve students discussing the connections between the health and wellbeing theme and technology, sustainability, socioeconomic issues, social justice, etc. Students will synthesize a final health plan project that draws on their knowledge of these other issues to provide a solution for a health and wellness-relevant problem. For students to participate in scholarly discourse in the discussions and in the various writing assignments associated with the final project, they will need to logically incorporate the knowledge they are gaining in either their themed or their disciplinary courses as well as provide scientific sources that

support their work. In the sample syllabus (Appendix D) scholarly exploration about health and wellbeing is also explored in the essays (note, this is an optional example assessment). In the essays, students will need to synthesize information from multiple sources including lecture, film discussions, personal experience, and reliable internet sources to answer a question about human health and wellbeing. The questions ask students to go beyond scientific facts to consider the social, philosophical, ethical, personal implications of the topic while providing discipline-specific reliable sources.

General Themes Goal 2:

Successful students will integrate approaches to the theme by making connections to out-of classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

Expected Learning Outcomes:

1. Identify, describe, and synthesize approaches or experiences as they apply to the theme.

Justification: This course uses film to analyze human biology because film allows students to analyze biological topics from multiple societal and personal perspectives and evaluate their portrayal in popular media. Because students use these films to make connections between human biology and other subjects or issues as well as create a community or individual health plan, the course relies heavily on students synthesizing different types of knowledge related to human health and wellbeing. They will draw on information they are gaining from their other themed or disciplinary courses to think critically about the interplay between human biology and society, to evaluate the representation of biology in film, and to create a final Health Plan that provides a solution for biologically relevant problem faced by society.

2. Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Justification: A primary component of this course is the scaffolded Health Plan project in which students combine knowledge they have learned in the course with other forms of knowledge they have gained to build a personal or community health plan. This project is individual, and students will take a creative approach to building their unique health plan. In order to prepare them for this final project, they will spend time throughout the semester reflecting on the content they've learned, the films and the discussions they've had, and the personal relevance of the topics. Using these reflections, students will have the tools to create a meaningful and informative final project. Additionally, Part 3 of the Health Plan asks students to communicate their plan to an audience of their choosing. Successful completion of this task will require student

to integrate knowledge and skills gained from other disciplinary work or personal experience to a new challenge in Bio2105, creating a communication artifact.

Health and Wellbeing Theme Goal:

Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.)

Expected Learning Outcomes:

1. Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

Justification: Human biology in cinema allows for the class to explore many aspects of human biology in a way that is meaningful and relevant to the students. Because each week focuses on a film and a single topic, it opens the door to address all these perspectives as films are chosen based not only on the course content, but also how well the films do portray the various societal, historical, cultural, and personal perspectives related to health and wellbeing in the context of human biology. While each instructor may take a different approach, the course outcomes entail addressing the interplay between science and technology and how they can create and solve societal problems, and how society responds to variation in phenotypic expression. Furthermore, through discussions and a semester-long project, students will synthesize course content to explore socioeconomic, policy, and personal perspectives of the various topics discussed. There are a number of ways to address these, examples of what students can expect include discussing socioeconomic discrepancies and financial wellness in relation to healthcare, the moral, ethical, and physical wellbeing implications of genetic engineering, and representation of diseases, disorders, and conditions (including mental and emotional wellbeing) in the media.

2. Identify, reflect on, and apply the skills needed for resiliency and wellbeing.

Justification: Major objectives of 2105 are that students gain knowledge of how the body functions under good health and the sources of disease and disorder as well as how humans and the environment impact each other (see Objectives 2 and 4 in Appendix C). The setup of this course allows for us to expand beyond the content knowledge needed for those objectives and apply this information to students' own lives and decisions, particularly as it relates to their own wellness. Each week, students explore a different aspect of human biology (select body systems, mental health, human impacts on the environment, etc) through watching a relevant film followed with a class-wide discussion. In this way, the films are used as case studies and the discussion time is used for students to reflect upon and relate the topics to their own lives and decisions. In this discussion time and through embedded Health Plan Project

assignments, students are gaining the skills they need to inform their own physical, mental, and environmental wellness decisions. The health plan project will require students to synthesize what they have learned throughout the course to create a health and wellness plan for either themselves or their community that addresses multiple aspects of health and wellness, including the relevant physiology, the social impacts of the topic, and the personal implications for the various people involved affected by the topic.

Appendix B: Technology Embedded Literacy Justification

Technology Literacy Goal:

Successful students develop a critical appreciation of the relations between technologies and their contexts (social, cultural, and historical), and of the range of effects and consequences (legal, ethical, political) produced or enabled by particular technologies.

Overall Justification: The intersection of technology and human health in relation to social, cultural, and historical contexts is an integral part of Biology 2105 as can be seen in course outcome 8: Students will evaluate the interplay of science with technology development and the capability of each to both create and solve problems related to human biology and the ethical concerns that arise with new technology use. Because this outcome is essential in the course, students can expect to discuss technological developments in areas such as genetic engineering, medical research, and conservation. While the technology discussed is created and used to solve problems, it typically presents ethical concerns such as access to the technology, unintended consequences, or moral objections to its use. The technological literacy goal and subsequently the associated course outcomes will be assessed through quiz/exam questions, prompts within the Health Plan assignment and through one of the summative assessment essays (example assessment explained in the sample syllabus, Appendix C). In this essay, students will consider how the development of specific technologies has influenced historical and current societal perceptions of diseases and our ability to treat said diseases.

Expected Learning Outcomes:

1. Critically describe the relationships between technology and society in historical and cultural contexts.

Justification: An important part of understanding the development and use of technology considers how society was managing the problem before subsequent technological improvements. Students will learn about societal responses to common problems and how technology changed our understanding of the understanding of the problem and how society responded to the problem. Through discussion and in-class activities students will describe the way technology influenced or changed how society responded to a common problem. For example, students may learn about the development of germ theory and how prior to our understanding of microbes infectious disease was blamed on the wrath of God in some cultures. After the discovery of microbes, humans changed their behavior to reduce their spread and continued to develop technology to fight and treat infectious disease.

2. Recognize how technologies emerge and change.

Justification: Because we discuss technology in the context of solving problems, this involves learning about what the problems are and how the technology was created initially. Because technological development typically improves over time, this means that students think not only about what the technology looked like when it was first developed, but how it has changed and is currently being used. For example, if discussing infectious disease, students will learn about the transition from immunization and the challenges associated with that to current vaccination techniques and how those are continually being developed to improve safety and efficacy. Through class discussions and activities, students will explain the reason specific forms of technology were developed and how they have changed since that time.

3. Evaluate the social and ethical implications of technology.

Justification: It is not uncommon that when presented with something new, people are often skeptical about its use. Additionally, technology use may be beneficial in some contexts and potentially problematic in others. For example, genetically modified organisms are used to increase sustainability and food production. However, they may stir up (misguided) thoughts of "Frankenstein" plants and there are agro-economic implications of their use and accessibility. Or students may consider how new technology becomes available to the general public and how this can lead to discrepancies between people of different socioeconomic status. Through discussions and the health plan project, students will be asked to consider and describe the ways different forms of technology provide solutions to societal problems but also present with moral or ethical concerns that are critical to address if using this technology effectively.

Appendix C: Biology 2105 Course Goals Learning Objectives

The overarching goals for this course are as follows:

Goal 1: Become scientifically literate in relation to the science of Human Health and Wellbeing.

Goal 2: Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.

Goal 3: Use critical thinking to answer questions and make decisions about personal human health and wellbeing.

Goal 4: Compassionately evaluate the impact of norms, and situational contexts on human health and wellbeing in relation to themselves and others.

To meet these goals, we have developed the following course outcomes:

- 1.** Students will explain the process of science in relation to studying human health and disease considering the differing interests of players (stakeholders) involved.
- 2.** Students will evaluate the functions of the human body in good health.
- 3.** Students will apply knowledge of the body systems (and their interconnectedness) to different dimensions of human wellbeing and personal health decisions (e.g. making financial medical decisions based on knowledge of human health).
- 4.** Students will analyze sources of disease and disorder and their impact on the body (or sources and impacts of affronts on the human body), such as mental illness, infectious disease, genetic disease, cancer, and injury.
- 5.** Students will explain the biological basis of human phenotypic variation at the individual and population level in relation to societal reaction to each.
- 6.** Students will apply knowledge of evolutionary mechanisms to current cultural and societal issues.
- 7.** Students will analyze environmental wellbeing through the effects of humans on natural and man-made environments and the impact of those environments on humans themselves.
- 8.** Students will evaluate the interplay of science with technology development and the capability of each to both create and solve problems related to human biology and the ethical concerns that arise with new technology use.
- 9.** Students will synthesize information from lecture, films, and current social health issues to inform scholarly exploration of socio-economic, policy and personal wellbeing perspectives.

10. Students will find reliable scientific resources and use them to solve problems related to human health and wellbeing.

Below includes the alignment of the Biology 2105 learning outcomes to the four course goals above, the General Theme (GT), Health and Wellbeing (HW), and Technology Literacy (TL) outcomes:

1. Students will explain the process of science in relation to studying human health and disease considering the differing interests of players (stakeholders) involved.

- Course Goals
 - **1:** Become scientifically literate in relation to the science of Human Health and Wellbeing
- GT Outcomes
 - **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
 - **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.
- HW Outcomes
 - **1.1:** Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.
- TL Outcomes
 - **1.1:** Critically describe the relationships between technology and society in historical and cultural contexts.
 - **1.2:** Recognize how technologies emerge and change.

2. Students will evaluate the functions of the human body in good health.

- Course Goal
 - **2:** Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.
- GT Outcome
 - **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.

3. Students will apply knowledge of the body systems (and their interconnectedness) to different dimensions of human wellbeing and personal health decisions (e.g. making financial medical decisions based on knowledge of human health).

- Course Goal
 - **3:** Use critical thinking to answer questions and make decisions about personal human health and wellbeing.
- GT Outcomes

- **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
- **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.
- **2.2:** Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

- HW Outcome

- **1.2:** Identify, reflect on, and apply the skills needed for resiliency and wellbeing.

4. Students will analyze sources of disease and disorder and their impact on the body (or sources and impacts of affronts on the human body), such as mental illness, infectious disease, genetic disease, cancer, and injury.

- Course Goal

- **2** Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.

- GT Outcomes

- **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
- **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.

- HW Outcomes

- **1.1:** Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.
- **1.2:** Identify, reflect on, and apply the skills needed for resiliency and wellbeing.

5. Students will explain the biological basis of human phenotypic variation at the individual and population level in relation to societal reaction to each.

- Course Goal

- **2:** Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.

- GT Outcomes

- **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
- **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.

- HW Outcomes

- **1.1:** Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

6. Students will apply knowledge of evolutionary mechanisms to current cultural and societal issues.

- Course Goal

- **2:** Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.
- GT Outcome
 - **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.
- HW Outcome
 - **1.1:** Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

7. Students will analyze the effects of humans on natural and man-made environments and the impact of those environments on humans themselves.

- Course Goals
 - **2:** Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.
 - **4:** Compassionately evaluate the impact of norms, and situational contexts on human health and wellbeing in relation to themselves and others.
- GT Outcomes
 - **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
 - **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.
- HW Outcome
 - **1.1:** Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

8. Students will evaluate the interplay of science with technology development and the capability of each to both create and solve problems related to human biology and the ethical concerns that arise with new technology use.

- Course Goals
 - **2:** Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.
 - **4:** Compassionately evaluate the impact of norms, and situational contexts on human health and wellbeing in relation to themselves and others.
- GT Outcomes
 - **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
 - **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.
- HW Outcome

- **1.1:** Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.
- TL Outcomes
 - **1.1:** Critically describe the relationships between technology and society in historical and cultural contexts.
 - **1.2:** Recognize how technologies emerge and change.
 - **1.3:** Evaluate the social and ethical implications of technology.

9. Students will synthesize information from lecture, films, and current social health issues to inform scholarly exploration of socio-economic, policy and personal wellbeing perspectives.

- Course Goals
 - **2:** Understand basic human biological knowledge and examine how they intersect with other spheres of knowledge (society, technology, environment) and dimensions of wellness.
 - **3:** Use critical thinking to answer questions and make decisions about personal human health and wellbeing.
 - **4:** Compassionately evaluate the impact of norms, and situational contexts on human health and wellbeing in relation to themselves and others.
- GT Outcomes
 - **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
 - **1.2:** Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.
 - **2.1:** Identify, describe, and synthesize approaches or experiences as they apply to the theme.
 - **2.2:** Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.
- HW Outcomes
 - **1.1:** Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.
 - **1.2:** Identify, reflect on, and apply the skills needed for resiliency and wellbeing.
- TL Outcomes
 - **1.1:** Critically describe the relationships between technology and society in historical and cultural contexts.
 - **1.3:** Evaluate the social and ethical implications of technology.

10. Students will find reliable scientific resources and use them to solve problems related to human health and wellbeing.

- Course Goals
 - 1: Become scientifically literate in relation to the science of Human Health and Wellbeing

- 3: Use critical thinking to answer questions and make decisions about personal human health and wellbeing.
- GT Outcomes
 - **1.1:** Engage in critical and logical thinking about the topic or idea of the theme.
 - **1.2:** Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.
- HW Outcomes
 - **1.2:** Identify, reflect on, and apply the skills needed for resiliency and wellbeing.

Appendix D: Sample Course Syllabus



THE OHIO STATE UNIVERSITY

Biology 2105

Human Biology in Cinema

Spring 2022

3 Credit Hours

Instructor: Erica Szeyller (she/her/hers)
Center for Life Sciences Education
255D Jennings Hall
1735 Neil avenue
Phone: 614-688-5495
email: szeyller.1@osu.edu
(Do not send emails to @buckeyemail.osu.edu)
Student Hours: Mondays from 1-2pm

Course Coordinator: Adam Andrews
Center for Life Sciences Education
255B Jennings Hall
1735 Neil Avenue
Phone: 614-247-6345
email: andrews.171@osu.edu
(Do not send emails to @buckeyemail.osu.edu)

Teaching Assistant: TBD
Department
Address
email:
Student Hours:

Program Assistant: Susan D'Agostino
240B Jennings Hall
email: dagostino.54@osu.edu

Class Meeting Schedule

Lecture: 150 Pomerene Hall
T: 6:00 p.m. – 7:50 p.m.
Th: 6:00 p.m. – 9:15 p.m.

Lyft Ride Smart
Service available from 9P-3A
<https://ttm.osu.edu/ride-smart>
Download the Lyft app.

Course Materials

Required

- Cell Phone or Internet-connected device (i.e. smart phone, laptop, tablet, etc.)
- **Internet Access:** Your access to Carmen is an integral and necessary part of this course. You must activate your OSU email account to have access to Carmen. The Carmen URL is <http://carmen.osu.edu> and Biology 2105 should be listed under My Courses on your Carmen homepage. The username to log on is your OSU name.# and the password is the one you use with all OSU email and registration systems. If you have a problem logging in or using Carmen, contact 688-HELP or carmen@osu.edu. **IMPORTANT:** The CLSE and its course staff will send email ONLY to your official OSU email account.
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Recommended

- *Biology of Humans: Concepts, Applications, and Issues* (6th Edition) by Judith Goodenough. Publication Date: 2017 | ISBN: 9780134386850. See Carmen for access details.

My Teaching Philosophy:

- We are a team that supports each other's learning.
- Our collective knowledge is greater than any one individual.
- Learning is fun! In this class we will develop a light-hearted, engaged atmosphere.

- Learning is accessible for all people & a diversity of views/experiences enrich the learning environment.
- We will use evidence-based teaching practices whenever possible – this means that the methods used have scientific evidence to suggest that they support student learning (e.g. Freeman et al. 2014).
 Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410-8415.
- Embrace curiosity! Get curious about the course material and the perspective of different people.
- Learning to learn – It is important that you leave this class knowing more about how you learn and feel empowered to seek out new information.

Course Description

Human biology is something that we all experience intimately, however as a single person it is impossible to explore all aspects of what it means to be a biological organism. Luckily, mainstream movies provide an opportunity to glimpse life from another person's viewpoint. In this class, we will use evidenced-based practices to actively learn about biological concepts and processes. These biological insights will enhance your comprehension and appreciation of films and in turn the films will provide a narrative structure that make the information more accessible and memorable. Following each film, we will learn from each other through class discussion that integrates biological science with real-world experiences. These explorations will be further deepened through reflections, essays, and other writing assignments that will synthesize multiple course concepts, discussions, and recent news. Content knowledge will be assessed with regular quizzes. At the end of the class you will have an opportunity to apply what you have learned to a personal health concern in a culminating project that we will work on throughout the semester. In addition to the learning outcomes, during this course, I hope you will gain skills in compassionately speaking and writing about human biological concepts, as well as grown as a life-long learner of human biological science by expanding your ability to critically consume and seek out new information.

Class Format:

We will meet for class 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 Thursday evenings.

General Education Objectives

Students who successfully complete this course will fulfill the following GE goals and objectives:

Theme: General

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

Objective 1.1 Engage in critical and logical thinking about the topic or idea of the theme.

Objective 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

Objective 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.

Objective 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Theme: Health and Wellbeing

GOAL: Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.)

Objective 1.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

Objective 1.2 Identify, reflect on, and apply the skills needed for resiliency and wellbeing.

Embedded Literacy: Technology Literacy

Goal 1: Successful students develop a critical appreciation of the relations between technologies and their contexts (social, cultural, and historical), and of the range of effects and consequences (legal, ethical, political) produced or enabled by particular technologies.

Objective 1.1 Critically describe the relationships between technology and society in historical and cultural contexts.

Objective 1.2 Recognize how technologies emerge and change.

Objective 1.3 Evaluate the social and ethical implications of technology.

Students who successfully complete Biology 2105 will meet the GEC learning outcomes by taking a scholarly approach to critically think about human health and wellbeing through the lens of popular film. This will be accomplished through a combination of lecture, in-class activities to learn biological principles related to health and wellbeing and scholarly discourse in reflections, writing assignments, and in-class discussions. Scholarly discourse will involve students synthesizing human biological information, cultural, historical, technological, and personal perspectives to provide logical arguments supported by discipline-specific sources. Students will further their personal study of Human Health and Wellbeing through the Health Plan writing assignment where they will be asked to create a solution to a personally relevant health problem while considering the potential societal, technological, and environmental impacts.

Biology 2105 Learning Outcomes

Students completing the course will achieve the following course outcomes:

1. Students will explain the process of science in relation to studying human health and disease considering the differing interests of players (stakeholders) involved.
2. Students will evaluate the functions of the human body in good health.
3. Students will apply knowledge of the body systems (and their interconnectedness) to different dimensions of human wellbeing and personal health decisions (e.g. making financial medical decisions based on knowledge of human health).
4. Students will analyze sources of disease and disorder and their impact on the body (or sources and impacts of affronts on the human body), such as mental illness, infectious disease, genetic disease, cancer, and injury.
5. Students will explain the biological basis of human phenotypic variation at the individual and population level in relation to societal reaction to each.
6. Students will apply knowledge of evolutionary mechanisms to current cultural and societal issues.
7. Students will analyze environmental wellbeing through the effects of humans on natural and man-made environments and the impact of those environments on humans themselves.
8. Students will evaluate the interplay of science with technology development and the capability of each to both create and solve problems related to human biology and the ethical concerns that arise with new technology use.
9. Students will synthesize information from lecture, films, and current social health issues to inform scholarly exploration of socio-economic, policy and personal wellbeing perspectives.
10. Students will find reliable scientific resources and use them to solve problems related to human health and wellbeing.











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 not 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.

Assignment	Points	Assignment Type
TopHat	200	
Pre-work (13 available – drop 3)	20 ea. / 200 total	
Reflections (14 available – drop 3)	15 ea. / 165 total	
Quizzes (6 total)	30 ea. / 180 total	†
Essays (3 total)	60 ea. / 180 total	
Health Plan (HP) Total	210	
HP Prep 1: Paraphrasing Activity	10	†
HP Prep 2: Reliable Resources	30	
HP Prep 3: Communicating to Different Audiences	30	
HP Topic Exploration	20	
HP Part 1	50	
HP Part 2	50	
Complete Health Plan	60	
Surveys Total	10	
Pre-survey	2.5	†
Post-survey	2.5	†
SALG	5	†
TOTAL COURSE POINTS	1145	

Course Components to Help You Learn:

Pre-work: This activity will guide your learning about basic biological concepts so that we can actively engage with the course material in class. Pre-work will consist of answering questions in the form of writing, flow charts, or drawing (you will typically be given choices) that references outside readings, websites, and videos. Pre-work will be posted at least a week before the due date, and must be submitted to Carmen by Tuesday at 5:30pm of the week assigned. It is expected that pre-work will take about 1-2 hours to complete. There is no specified length. There is no opportunity for late work with this assignment. If you hand write your responses you may submit a clear, readable picture of each individual page. Double check to make sure your work is submitted properly and is readable. Often the pre-work will be used in class so completion is necessary for effective participation during class time. In addition to your Carmen submission, you will also want to bring an electronic or hard copy to class. There will be 13 pre-works offered with 3 of the lowest scores dropped at the end of the term.

Reflections: How many times have you left a class session and almost immediately completely forgot what you did? If you are anything like me as an undergraduate student, the answer is “a lot”! Reflections are a great way to extend and solidify your learning by connecting your new knowledge to prior knowledge and by linking the course materials to topics that you care about. Also, these reflections will help you recognize areas of course material that are still unclear or that you are curious about. Reflections will be offered each week starting the Thursday after class and due on Sundays at 11:59PM. In some weeks we may begin the reflection process near the end of class on Thursdays. Reflections can be submitted as written, video, or audio format and are expected to take approximately 30 minutes to 1 hour to complete. There is no specified length. The 3 lowest scores will be dropped.

TopHat: TopHat will be used as a learning check throughout lecture and also for in-class activities. We will use TopHat every time we meet in 'lecture' to allow students to become active participants. **No makeup opportunities will be available for missed lectures or non-functioning technology.** For each *correctly answered* question in lecture, you will earn one point. Once you earn 200 points, the next 10 correctly answered questions will be worth 0.5 *bonus* points each. The subsequent 20 correctly answered questions will be worth 0.25 bonus points each, for a total of 10 possible bonus points. It is therefore beneficial for you to come to lecture and participate, even after you have earned the 10 participation 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.*

***TopHat Registration:** At the beginning of the semester, we will provide instructions on how to register so that we will be able to link your answers to your OSU name.#; this allows us to know who was in class and to record your answers to the questions. Proper registration is required by Tuesday, January 18. After this deadline, a student will not be eligible to recoup points from previous class sessions.

Course Components to Demonstrate Your Learning:

Quizzes: There will be 6 quizzes offered throughout the course to serve as an assessment of your biological content knowledge using the carmen quizzes feature. Each quiz will consist of 10 questions drawn from a bank of questions. You will have 20 minutes to take each quiz. If you would find it helpful, you are allowed one page (8.5x11 in sheet of paper) of notes during the quiz. The preparation of this note page will help reinforce content knowledge and will help you be more confident while taking your quiz. You will have two attempts and your final score will represent the average of both attempts (except for Quiz 1, where the highest score will represent the final score). It is expected that you will work independently on this assignment. Quizzes will be posted on Friday and be available through Monday at 11:59pm. There is no opportunity for late submission with this assignment. If you anticipate missing a quiz deadline or have any technological issues email Erica Szeyller.1@osu.edu as soon as possible.

Essays: There will be three written essays during each third of the class to assess your ability to synthesize biological knowledge, films, and discussion focused on 3 themes: the impact of technological innovations, societal views, and the environment on human biology. 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. Clarity of written ideas will be extremely important in the essays. With that in mind, I encourage all students to seek help from the [Writing Center](#). You may talk with your classmates about your essay, **but** your submitted work must represent your own independent thought and writing. There is no one correct answer to these essays so we will be assessing you on how you personally think about and work through, and articulate your response to the prompt. Essays are limited to 2 pages. All sources of information must be cited.

Course Components that Equally Facilitate Learning and Demonstrate Learning:

Health Plan: Throughout this course, you will investigate human health and how that intersects with society through the lens of film and the popular media. There will be 3 HP Prep writing assignments, these are meant to help you learn and practice skills that you will employ in the final Health Plan assignment. The culminating Health Plan (HP Part1, HP Part2, and Completed

Health Plan) will allow you to expand upon skills and knowledge learned in this course to a human health concern of personal interest. This assignment will empower you to use scientific evidence to learn about and take control of your personal health or advocate for the health of others. As a human, you will likely find these skills useful in many facets of life moving forward from this course. These writing assignments 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. I encourage all students to seek help from the [Writing Center](#). Except for the final submission, all HP assignments will be available at least one week prior to the due date and due on Mondays at 11:59pm. See the schedule for specific dates. Details about each of these writing assignments including associated rubrics will be posted on Carmen in the Modules section. This project will be broken up into multiple components:

HP Prep 1 (Paraphrasing Activity): Because we do a lot of writing in this class, it is imperative to learn how to appropriately paraphrase and about what constitutes plagiarism in a writing context. This activity is expected to take 1 hour; there is no specified length.

HP Prep 2 (Reliable Resources): For the health plan and throughout your life you will need to find reliable information related to your health or the health of people you care about. This writing assignment provides an opportunity to learn about different types of sources that are available and practice in determining their reliability. This activity is expected to take 1-2 hours; there is no specified length.

HP Prep 3 (Communicating to Different Audiences): To have your voice heard, it is important that your message is targeted to a particular audience. There is truly no “one size fits all” with messaging. In this activity, you will practice crafting a message to different audiences. This activity will also give you an opportunity to reinforce course content on finding reliable sources, and sensory disorders. This activity is expected to take 2-3 hours; the assignment should be 3-6 paragraphs in length.

HP Topic Exploration: This activity will give you a chance to think about what topic you might want to explore for your final health plan. This activity is expected to take 1 hour; there is no specified length.

HP Part 1 (The Problem): For Part 1, you will be identifying and explaining the human health problem that you would like to investigate. Length is approximately 1 page single spaced.

HP Part 2 (The Solution): For Part 2, you will be explaining a solution or a way to help with your chosen health concern. Length is approximately 1-2 pages single spaced.

Complete Health Plan: You will include revised versions of Part 1 and Part 2, as well as your first (and only) submission of Part 3. For Part 3 you will communicate your health plan using the skills and knowledge that you have learned this term to an audience of your choice. The statement for Part 3 should be approximately 1 paragraph. The communication artifact will vary greatly based on format but generally it should be brief, think 1-2 paragraphs written, or no more than 5 minutes audio/video.

SALG: The Student Assessment of Learning Gains is a survey to assess your perception of the course quality. It will be taken during the final week of the course and will be worth 5 points for completion. There will be no opportunity for late survey submissions. This is expected to take 30 minutes to complete.

Pre and Post-Surveys: These surveys will assess how your confidence in learning biology and empathy have changed throughout your time in the course. There will be no opportunity for late survey submissions. These are expected to take 20 minutes to complete.

Final Grades: Your final grade will be based on the percentage of the 1145 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

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

Posting of Grades: All grades will be posted on Carmen. After grades are posted you have 10 business 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 exam grades, contact the Program Assistant to set up an appointment to find your scantron. **IMPORTANT:** Make sure that all of your grades are properly posted on Carmen as you receive them. Challenges about grades, particularly after the end of the semester, will not be entertained after the 10-day grace period.

Late Assignments Policy: For pre-class work, quizzes, and the surveys no late assignments will be accepted. The reflections, essays, and health plan components can be submitted late (up to 48 hours after the deadline), but will incur a 1% deduction for each hour it is late. Time is rounded up, so if it is a minute late, you will lose a percent of the full grade.

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](https://go.osu.edu/canvas-notifications) (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:

Attendance and participation during class sessions will be assessed using TopHat. See the section on TopHat above for more information on grading.

Continuous engagement with this course is essential to learning the material. Students are expected to attend class and engage with assignments and discussion prompts for every scheduled meeting, participating at least once per week for courses with fully remote participation. Students who need to miss class or who are not able to participate due to illness (COVID-19 or other illnesses), exposure to COVID-19, care for family members exposed to COVID-19 or other reasons are expected to contact the instructor as soon as possible to arrange for accommodation. Students in special situations or those requiring specific, long-term or other accommodation should seek support from appropriate university offices including but not limited to: [Student Advocacy](#), [Student Life Disability Services](#) and the [Office of Institutional Equity](#).

Section Changes: All section changes and adds are done by the Course Coordinator.

Accommodation of Special Needs: The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with the course coordinator as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

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 WOnline 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.

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

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: <https://ttm.osu.edu/ride-smart>.

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).

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 <http://studentlife.osu.edu/csc/>. 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 *and* 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 <http://titleix.osu.edu/> or by contacting the Interim Ohio State Title IX Coordinator, Molly Peirano, at titleix@osu.edu.

Discussion and communication guidelines:

- **Respectful Dialogue:** I like to follow the framework for Respectful Dialogue from the Office of Diversity and Inclusion “Respectful dialogue is engagement in honest, thoughtful, and reflexive conversation with the goal of understanding one another. Respectful engagement does not mean that everyone has to agree or adopt each another's perspectives. Rather, it is by sharing differing perspectives that we are able to effectively communicate across differences and boundaries and learn from one another. Each person involved in respectful dialogue takes responsibility for the impact of their words and actions regardless of intent, and strives to operate with curiosity, authenticity, and vulnerability. Each individual engaged in respectful dialogue is not only entitled to their perspectives but is also entitled to be treated with respect and dignity.”
 - The goal is to learn from each other, not change each other’s opinion.
- **Citing your sources:** When we have academic discussions, please cite your sources to back up what you say.

SP22 TENTATIVE SCHEDULE

Information in this syllabus is subject to change with as much notice to students as possible.

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
Week 1 1/10/2022	---	Ch.1	Tu: Course Introduction & What are humans? Th: <i>Ex-Machina (110m)</i> Focus: <ul style="list-style-type: none"> • Qualities of biological life • Categorization of living things • Defining a biological human 	Pre-Survey & Reflection 1: Sunday (1/16) at 11:59pm HP Prep 1: Monday (1/17) at 11:59pm
Week 2 1/17/2022	Pre-work1: Tuesday (1/18) at 5:30pm	Ch.1, Ch.13a	Tu: How do we study humans? Th: <i>The Story of Louis Pasteur (87m)</i> Focus: <ul style="list-style-type: none"> • The scientific method • Clinical trials vs epidemiological studies • History of disease treatment 	Reflection 2: Sunday at 11:59pm Quiz 1: Monday at 11:59pm
Week 3 1/24/2022	Pre-work2: Tuesday at 5:30pm	Ch.2, 4.1, Ch.15	Tu: What are humans made of? (Macromolecule focus) Th: <i>Fed Up (92m)</i> Focus: <ul style="list-style-type: none"> • Biological molecules • Carbohydrate digestion & diabetes • A healthy worldwide diet 	Reflection 3: Sunday at 11:59pm HP Prep 2: Monday at 11:59pm
Week 4 1/31/2022	Pre-work3: Tuesday at 5:30pm	Ch.3, Ch.19, Ch.21a	Tu: What are humans made of? (Cell focus) Th: <i>Wit (99m)</i> Focus: <ul style="list-style-type: none"> • Cell signaling in diabetes and cancer. • Biology of cancer • COI in clinical trials • Impact of clinical trials on participants 	Reflection 4: Sunday at 11:59pm Quiz 2 Monday at 11:59pm
Week 5 2/7/2022	Pre-work4: Tuesday at 5:30pm	7.1-7.3, Ch.9, Ch.18a	Tu: How do humans sense the world? (Cells working together) Th: <i>Temple Grandin (107m)</i> Focus: <ul style="list-style-type: none"> • Variation in sensory receptors. • Sensory perception. • Biology of autism • Autistic sensory perception 	Reflection 5: Sunday at 11:59pm Essay 1: Monday at 11:59pm
End 1 st Third (Theme: Impact of Technology on Human Health)				

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
Week 6 2/14/2022	Pre-work5: Tuesday at 5:30pm	Ch.20, Ch.21	Tu: How do humans vary? (Inheritance) Th: <i>Lorenzo's Oil (136m)</i> Focus: <ul style="list-style-type: none"> • Autosomal inheritance of specific genes. • Sex-linked inheritance. • Genetics of PTC tasting, hemophilia, and ALD. 	Reflection 6: Sunday at 11:59pm HP Prep 3: Monday at 11:59pm
Week 7 2/21/2022	Pre-work6: Tuesday at 5:30pm	Ch.22	Tu: How do humans vary? (Evolution and natural selection) Th: <i>Inherit the Wind (128m)</i> Focus: <ul style="list-style-type: none"> • Evolution of lactase persistence & skin pigmentation • Health consequences related to the social construct of race. • Coexistence of science & religion. 	Reflection 7: Sunday at 11:59pm Quiz 3 Monday at 11:59pm
Week 8 2/28/2022	Pre-work7: Tuesday at 5:30pm	Ch.22	Tu: How do humans vary? (Pathogen evolution) Th: <i>Contagion (106m)</i> Focus: <ul style="list-style-type: none"> • Fungal, bacterial, & viral pathogen evolution. • Evolution of superbugs • Treatment of pathogenic disease (i.e. antibiotics and vaccines) & their influence of evolution. 	Reflection 8: Sunday at 11:59pm HP Topic Exploration: Monday at 11:59pm
Week 9 3/7/2022	Pre-work8: Tuesday at 5:30pm	Ch.10, Ch.17	Tu: How do humans vary? (Sex, gender, and orientation) Th: <i>Moonlight (111m)</i> Focus: <ul style="list-style-type: none"> • Breaking down the equation phenotype = genotype + environment. • The genetics/biology associated with sex, gender, and orientation. • The environmental impacts on sex, gender, and orientation. • The role of epigenetics in the eqn. 	Reflection 9: Sunday (3/20) at 11:59pm
SPRING BREAK 3/14-3/18				
Week 10 3/21/2022	Pre-work9: Tuesday at 5:30pm	7.4, Ch8	Tu: What can go wrong? (Trauma – either PTSD or TBI) Th: You Pick it: Perks of Being a Wallflower or Concussion. Focus: <ul style="list-style-type: none"> • Brain development and structure. 	Reflection 10: Sunday at 11:59pm Quiz 4 & Essay 2: Monday at 11:59pm

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
			<ul style="list-style-type: none"> • Impacts of PTSD or Concussions on the brain or body. • How treatment affects the brain/body. • Intersection of PTSD or Concussions on society. 	
End 2 nd Third (Theme: Impact of Society on Human Health)				
Week 11 3/28/2022	Pre-work10: Tuesday at 5:30pm	Ch8a, Ch.12, 14.3-14.4	Tu: What can go wrong? (Addiction) Th: <i>A Star is Born (134m)</i> Focus: <ul style="list-style-type: none"> • Drug pathways through the body. • Drugs and homeostasis • The short- and long-term effects of drugs on the brain. • Biological and environmental risk factors for addiction. 	Reflection 11: Sunday at 11:59pm HPPart1: Monday at 11:59pm
Week 12 4/4/2022	Pre-work11: Tuesday at 5:30pm	Ch.11, Ch.13, 17a4	Tu: What can go wrong? (Pathogenic disease) Th: <i>And the Band Played On (141m)</i> Focus: <ul style="list-style-type: none"> • Biology of HIV • Function of different immune system components. • Role of epidemiologists in new emerging diseases. 	Reflection 12: Sunday at 11:59pm Quiz 5: Monday at 11:59pm
Week 13 4/11/2022	Pre-work12: Tuesday at 5:30pm	4.3, Ch.16	Tu: What can go wrong? (Injury) Th: <i>127 Hours (94m)</i> Focus: <ul style="list-style-type: none"> • Homeostasis in relation to water balance. • Kidney function. • Biology of dehydration and hypothermia. • Medical search and rescue. 	Reflection 13: Sunday at 11:59pm HPPart2: Monday at 11:59pm

Week # Start Date	Pre-class Work	Textbook Readings	Lecture topic	Post-class Work
Week 14 4/18/2022 4/25 last day	Pre- work13: Tuesday at 5:30pm	Ch23, Ch24	Tu: What can go wrong? (Humans and the environment) Th: <i>Wall-E (103m)</i> Focus: <ul style="list-style-type: none"> • Ecology of infectious disease in relation to climate change. • Life cycle of ticks and transmission of Lyme disease. • Human impacts on disease distribution. • Human population growth and sustainability. 	Reflection 14: Sunday at 11:59pm Quiz 6, Essay 3 & SALG due Monday at 11:59pm
End Final Third (Theme: The Intersection of Technology, Society, and Environment on Human Health)				
Finals 4/27(W)- 5/3(T)	Final Heath Plan due SUNDAY 5/1 at 11:59PM. Post Survey due MONDAY 5/2 at 11:59PM.			

Appendix E: Sample Writing Assignment-The Final Project

Course - Bio2105: Human Biology in Cinema

Health Plan Guidelines

Major Goal:

Throughout this course, we have been investigating human health and how that intersects with society through the lens of film and the popular media. This culminating assignment will allow you to expand upon skills in knowledge learned in this course to a human health concern of personal interest. This assignment will empower you to use scientific evidence to learn about and take control of your personal health or advocate for the health of others. As a human, you will likely find these skills useful in many facets of life moving forward from this course.

Learning Outcomes:

Following this activity, you will be able to:

- Identify a problem related to human health and wellness. (1105 LO 4)
- Create and describe an action plan to improve a problem associated with human health and wellness. (1105 LO 3, 9)
- Apply scientific concepts and terminology to explain how problem related human health and wellness influences the human body. (1105 LO 2, 4)
 - Both when functioning optimally and when not.
- Find reliable scientific sources and/or public support resources about a topic related to human health and wellness. (1105 LO 10)
- Describe the reciprocal relationship between society and the health concern (I.e. how does the health concern influence society and how does society respond to the health concern?) (1105 LO 9)
- Explain the relationship between the chosen topic and the ecological environment both in terms of how the environment influences the health concern and how the health concern influences the ecological environment. (1105 LO 7)
- Explain what technologies are necessary to enact your action plan to improve human health. (1105 LO 8)
- Synthesize information from multiple sources to communicate an action plan to address the human health concern including the biological, societal, and environmental implications to a specific audience. (1105 LO 9)

Project Flow:

3/7: Health Plan Topic Exploration

4/4: Health Plan Part 1

4/18: Health Plan Part 2

5/1: Complete Health Plan: This includes revised versions of Part 1 & Part 2 along with your submission for Part 3.

Main Prompt:

We all have something we could try to improve in our own health or the health of our community. For this assignment you will be tasked with identifying a personal or public health concern you would like to improve. Throughout this project, you will clearly articulate the problem, draft a plan to mitigate that concern, and communicate that plan using the skills and knowledge that you have learned this term to an audience of your choice.

Project Components:

PART 1 (The Problem Statement)

Identify your chosen health concern and describe it.

This section should include:

1. Identification of a health concern.
2. A developed argument for why the health concern is a problem. Including why it is a relevant or meaningful problem to pursue.
3. A description of **at least two** impacts of the health concern on the body, including:
 - a. Using terminology we learned from over the course
 - b. Influences on different body systems, genetics, behavior
4. (Theme 1) If applicable, the role of technology in causing or exacerbating the health concern (e.g. how the advent of vaping might increase nicotine addiction).
5. (Theme 2) An explanation of society's view of the health concern as well as the impact of the health concern on society.
6. (Theme 3) An explanation of the how the ecological environment influences the health concern and how the health concern influences the ecological environment.

Format: Approximately 1 page single spaced in paragraph form.

Important reminders: this should be in your own words, include in-text and literature cited.

PART 2 (The Action Plan)

Synthesize information from **at least 3 reliable sources** to describe a plan to help mitigate the health concern. You don't need to completely 'cure' or 'solve' the problem but your plan should help in some measurable way. This plan may be something completely new or include components from interventions that others have tried. Your plan should include:

1. A detailed description of the intervention. This intervention should be informed by at least 3 reliable sources.
2. A developed argument on why your action plan will be more effective than other options. Including how you will know if your action plan is successful.

3. How each part of the intervention will impact the body, including:
 - a. Using terminology we learned over the course
 - b. Influences on different body systems, genetics, behavior
4. A description of any public resources that are a part of the intervention (e.g. public programs, specific doctors or specialists, etc.).
5. (Theme 1) The role of technology in supporting your action plan.
6. (Theme 2) An explanation of how society might view the action plan and how the action plan might influence society.
7. (Theme 3) An explanation of how the ecological environment might influence the action plan and how the action plan might influence the environment.

Format: Approximately 1-2 pages single spaced in paragraph form.

Important reminders: this should be in your own words, include in-text and literature cited.

PART 3 (Communicate Your Plan in Your Way)

Now that you have described the problem (Part 1) and solution (Part 2), it is time to gather support for your plan. Part 3 is an opportunity for you to personally craft an effective communication of your action plan to a specific audience. You could think about this as a “sales pitch” for your plan. This section will contain some of the information you gathered for Parts 1 and 2 but rather than re-explain the whole plan, this section is an exercise in getting a point across in relation to a specific goal/audience.

Pick an audience you would like to address. You can choose from:

- Politicians
- Doctors
- Family member or friend (e.g. Workout accountability buddy or parent that you are helping)
- Social media followers
- An art consumers
- Business people (i.e. business owner, or upper-level management)
- Magazine editors (think Scientific American Blog post)
- Kids
- Parent Teacher Association
- Your choice (please reach out to your instructor or TA for approval)

Pick a format for communication. Some ideas include:

- Written non-artistic (e.g. letter, blog post, lesson plan)
- Written artistic (e.g. story or poem)
- Infographic
- Social Media Post (e.g. a series of posts or thread that explores your topic)
- Poster
- Art
- Video
- Podcast
- Presentation (e.g. presenting an idea to a business owner)
- Conversation (you can do this as a written transcript, audio, or video)

- Your choice (please reach out to your instructor or TA for approval)

This section should include:

1. A written statement that includes:
 - a. Your chosen audience.
 - b. The format of your communication and why you chose that format. (i.e. Why is this format meaningful/useful for you?)
 - c. The message that you want to communicate. (i.e. the goal of your communication).
 - d. A description of how you plan to frame your message. Basically how is your message accessible, relatable, and meaningful for your audience in your chosen format? How does your communication answer your audience's question of "Why should I care?"
 - e. **In not explicitly stated in your artifact**, what biological concepts that you are trying to convey in your communication artifact? This is particularly relevant for those of you doing art or some other form of communication that with implied (rather than explicitly stated) meaning or concepts.
2. A copy of your communication artifact.

Length/Effort: The statement should be approximately 1 paragraph. The communication artifact will vary greatly based on format but generally it should be brief, think 1-2 paragraphs written, or no more than 5 minutes audio/video. With whatever format you choose, make sure you have the knowledge/skills/tools necessary to communicate effectively (for example, if you choose to do social media posts, make sure you include the necessary components (pictures/hashtags/etc) to make sure your message is 'heard' by your chosen audience on the platform).

Important reminders: this should be in your own words or of your own creation, include any new sources used in a literature cited. If you use images or materials from other sources as part of your artifact be sure to provide appropriate citations and attribution.

Space for individuality:

Within this assignment there is room to explore the topic in a way that is personally, professionally, and/or culturally relevant to you.

1. You can choose whatever human health concern you like (e.g. diabetes management, sleep hygiene, exercise routine, stress level, impact of food deserts, multitasking). The health concern can be something you want to work on personally or a problem that you see in your community. You are welcome to choose a health concern that is as little or big as you like (e.g. on the small end: having trouble waking up in the morning, or on the larger end: opioid crisis in a particular community). Also, please know you don't have to choose the issue with the biggest emotional burden although you can if you like. This can be a topic that we have covered in class but does not need to be.
2. For Part 3, you can choose whatever audience you would like to communicate to. You might find it helpful to reflect on your career goals and choose an audience you will have to communicate with frequently in your future professional life (e.g. if you are in the business realm, you will likely have to do presentations to business professionals in the

private sector, if you are in education, you will likely be communicating to students). Regardless of your future profession, at some point you will likely need to communicate complex medical information to a loved one so you might choose a family member or friend as your intended audience.

3. For Part 3, you can choose to communicate your health plan in whatever format is most relevant to you. Again, this is a great time to consider your interests, career goals, personal connections.

Project Expectations:

- Throughout this whole assignment, it is expected that you are using reliable scientific resources with in-text citations after any ideas derived from the resources and a references section.
- Use a citation style guide that is appropriate for your discipline. If you are unsure, use APA.
 - Information on how to cite sources using APA:
<https://www.mendeley.com/guides/apa-citation-guide>
 - When citing in-class materials you can use the following structure:
 - You can cite specific materials used in class (e.g. research articles, films, websites) by following the recommendations within your chosen citation guide.
 - For class sessions: Speaker's Name. Date of class session. Session title (on syllabus). Descriptive label: Name of the class, location, university.
 - E.g. Szeyller, E. (2019, September 27). How do we study humans? Biology 1105 Class Session, Pomerene Hall, The Ohio State University.
 - In text citation: (Szeyller, 2019)
 - For film discussions:
 - The Story of Louis Pasteur. (2019, September 28). Biology 1105 Class Discussion, Pomerene Hall, The Ohio State University.
 - In text citation: (The Story of Louis Pasteur Discussion, 2019)
- It is considered academic misconduct if submit a response that has already been submitted as a gradable artifact in another class (e.g. do not submit a lesson plan for a grade in your education class and in Biology 1105).
- Failure to include citations will result in a 0 for this writing assignment.
- All work must be your original contribution. Failure to paraphrase properly (using someone else's words as your own) may result in your writing assignment being submitted to the Committee on Academic Misconduct.
- Quotations from sources will not be considered gradable objects within the writing assignment. In other words, you can include quotations but they won't be considered part of your response and therefore will not add to your grade.
- For Grade Disagreements: If you do not agree with how you are scored on a writing assignment you can provide a written email to your TA that clearly and logically explains

your reasoning. This must be done within 10 days of receiving your score. If you do not agree with the final decision made by the TA then you can request a re-grade by the course instructor. Note: the new grade by the instructor may go up, down, or stay the same and is final (barring a mistake in addition

General Grading Criteria:

HP Part 1

Criteria	Ratings	Pts
Identification	<p>6 to >0.0 pts Partial Credit In student's own words. Student identifies a human health concern and explains why the health concern is a problem and is relevant/meaningful. There may be some lack of clarity or some necessary details left out of the explanation.</p>	12 pts
Impact on Health	<p>7 to >0.0 pts Partial Credit In student's own words. Details at least one impacts of the human health concern on the body, including terminology and knowledge from class, as well as the influence of the health concern on body systems, genetics, behavior (as applicable to the particular health concern). OR details two health impacts with less than sufficient detail to fully understand the impact on the body.</p>	14 pts
	<p>12 to >6.0 pts Full Marks In student's own words. Student clearly identifies a human health concern and fully explains why the health concern is a problem and why the problem is relevant or meaningful.</p>	
	<p>14 to >7.0 pts Full Marks In student's own words. Details at least two impacts of the human health concern on the body, including terminology and knowledge from class, as well as the influence of the health concern on body systems, genetics, behavior (as applicable to the particular health concern).</p>	
	<p>0 pts No Marks Does not identify and explain a human health concern. OR Response does address some prompts but the explanations are severely lacking in detail that the problem is not clearly identified. OR Response is not in student's own words.</p>	
	<p>0 pts No Marks Not in student's own words. OR Details at least one impacts of the human health concern with less than sufficient detail to fully understand the impact on the body.</p>	

Broader Impacts of Course Themes	<p>12 to >6.0 pts Full Marks In student's own words. Clearly explains the reciprocal relationship between the health concern and society, the environment, and technology.</p>	<p>6 to >0.0 pts Partial Credit In student's own words. Explains the reciprocal relationship between the health concern and society, the environment, and technology. There may be some lack of clarity in explanations. OR Explains the reciprocal relationship between the health concern and either society, the environment, or technology.</p>	<p>0 pts No Marks Not in student's own words. Explanations are so unclear that the reader is unable to assess student understanding of the relationship between the health concern and society, the environment, and technology.</p>	12 pts
Format	<p>6 to >3.0 pts Full Marks The assignment contains a clear, logical flow of ideas that are expressed concisely. The assignment uses citations after all sourced information and has a complete literature cited.</p>	<p>3 to >0.0 pts Partial Credit The assignment has moderate interruption in the logical flow, and/or could be more concise. The assignment uses citations after most sourced information and has a complete literature cited.</p>	<p>0 pts No Marks The assignment has poor flow, sentence structure, and is overly wordy. The assignment does not use citations after sourced information or does not have a complete literature cited.</p>	6 pts
Reliable Sources	<p>6 to >3.0 pts Full Marks Includes 1 or more sources that are reliable.</p>	<p>3 to >0.0 pts Partial Credit Includes 1 or more sources that are questionably reliable.</p>	<p>0 pts No Marks Does not include sources. OR The sources are clearly unreliable and biased.</p>	6 pts
Total Points: 50				

HP Part 2

Criteria		Ratings		Pts
Action Plan Description	14 to >7.0 pts Full Marks In student's own words. Presents an action plan to address the health concern that synthesizes the main ideas of 3 or more sources. Clearly describes the action plan, remarks on how it is different from other interventions, and explains how people will know if the plan is successful.	7 to >0.0 pts Partial Credit In student's own words. Presents an action plan that synthesizes the main ideas of 2 or more sources. Describes the action plan, remarks on how it is different from other interventions, and explains how people will know if the plan is successful. There may be some lack of clarity or depth in description. May be missing some parts of the description.	0 pts No Marks The action plan does address some expected information but the explanations are severely lacking in detail that the plan is not clearly explained. OR The main idea of one source is presented. OR The action plan is not original contribution by the student (e.g. not in student's own words).	14 pts
	14 to >7.0 pts Full Marks In student's own words. Details how each part of the plan impacts of the the body or addresses the human health concern, including terminology and knowledge from class, as well as the influence of the health concern on body systems, genetics, behavior (as applicable to the particular health concern).	7 to >0.0 pts Partial Credit In student's own words. Details how some to most parts of the plan impacts of the the body or addresses the human health concern, including terminology and knowledge from class, as well as the influence of the health concern on body systems, genetics, behavior (as applicable to the particular health concern).	0 pts No Marks Not in students own words. OR Reader left unclear how the action plan will impact the human body in relation to the health concern.	14 pts
Broader Impacts of Course Themes	12 to >6.0 pts Full Marks In student's own words. Clearly explains the reciprocal relationship between the health concern and society, the environment, and technology.	6 to >0.0 pts Partial Credit In student's own words. Explains the reciprocal relationship between the health concern and society, the environment, and technology. There may be some lack of	0 pts No Marks Not in student's own words. Explanations are so unclear that the reader is unable to assess student understanding of the relationship between	12 pts

		clarity in explanations. OR Explains the reciprocal relationship between the health concern and either society, the environment, or technology.	the health concern and society, the environment, and technology.	
Format	4 to >2.0 pts Full Marks The assignment contains a clear, logical flow of ideas that are expressed concisely. The assignment uses citations after all sourced information and has a complete literature cited.	2 to >0.0 pts Partial Credit The assignment has moderate interruption in the logical flow, and/or could be more concise. The assignment uses citations after most sourced information and has a complete literature cited.	0 pts No Marks The assignment has poor flow, sentence structure, and is overly wordy. The assignment does not use citations after sourced information or does not have a complete literature cited.	4 pts
Reliable Sources and Resources	6 to >3.0 pts Full Marks Includes 3 or more sources that are reliable. One source should be a public resource.	3 to >0.0 pts Partial Credit Includes 2 or more sources that are reliable. One source should be a public resource. One source may have questionable reliability.	0 pts No Marks Does not include sources. OR The sources are clearly unreliable and biased.	6 pts
Total Points: 50				

Completed Health Plan

Criteria	Ratings		Pts
Part 1 & 2 Revisions	<p>5 to >2.5 pts Full Marks Student improves upon original submissions by thoughtfully incorporating suggested changes, and by submitting an assignment is very closely aligned with the assignment goals and outcomes.</p>	<p>2.5 to >0.0 pts Partial Credit Student improves upon original submissions by thoughtfully incorporating some suggested changes, and by submitting an assignment is more closely but not completely in line with the assignment goals and outcomes.</p>	<p>0 pts No Marks Student does not improve upon original submissions.</p> <p style="text-align: right;">5 pts</p>
Flow	<p>5 to >2.5 pts Full Marks Parts 1, 2, and 3 flow together logically and create one cohesive unit.</p>	<p>2.5 to >0.0 pts Partial Credit Parts 1, 2, and 3 have some deviations in logical flow (e.g. the information communicated in part 3 has a somewhat ambiguous link to part 1 and part 2).</p>	<p>0 pts No Marks Parts 1, 2, and 3 do not have any logical connection. The different project parts do not inform each other.</p> <p style="text-align: right;">5 pts</p>
Part 3 - Communication Artifact	<p>30 to >15.0 pts Full Marks Of student's own creation. Includes the necessary information about the health plan to achieve the goal of the communication. Communication is biologically accurate. Communication is completely understandable, relatable, and meaningful to the chosen audience. There is a clear connection between the communication artifact and the statement of explanation (i.e. the artifact clearly achieves the goal of communication in the way the student intends).</p>	<p>15 to >0.0 pts Partial Credit Of student's own creation. Includes a bit more or less information than necessary about the health plan to achieve the goal of the communication. Communication is mostly biologically accurate but may contain some inaccuracies. Communication is moderately to mostly understandable, relatable, and meaningful to the chosen audience, some parts may be above/below the level of the chosen audience or targeted to a different audience. There is a moderate connection between the communication artifact and the statement of explanation (i.e. the artifact clearly achieves the goal of</p>	<p>0 pts No Marks Not of student's own creation. Includes a lot more or a lot less information than necessary about the health plan to achieve the goal of the communication. Communication is not biologically accurate. Communication is not understandable, relatable, and meaningful to the chosen audience or targeted to a different audience. There is very little to no connection between the communication artifact and the statement of explanation (i.e. the artifact does not</p> <p style="text-align: right;">30 pts</p>

		communication in the way the student intends).	achieve the goal of communication in the way the student intends).	
	15 to >7.5 pts Full Marks In student's own words. Includes a chosen audience, and a format. Presents the message that they would like to communicate their audience. Explains how student's message is accessible, relatable, and meaningful for their audience in their chosen format. The reader is clear on the student's goals with their chosen audience.	7.5 to >0.0 pts Partial Credit In student's own words. Includes more than half of the requested information in this section. There might be some lack of clarity in explanation. The reader is clear on the student's goals with their chosen audience.	0 pts No Marks Not in student's own words. Includes less than half of the requested information. Explanations are unclear.	15 pts
Part 3 - Statement	5 to >2.5 pts Full Marks Communication artifact is thoughtfully designed and well executed. Does not contain any inconsistencies in quality like misspellings, or parts that are hard to read, see, or hear.	2.5 to >0.0 pts Partial Credit Communication artifact may contain some inconsistencies in quality like misspellings, or parts that are hard to read, see, or hear.	0 pts No Marks Communication is hard to assess due to formatting issues.	5 pts
Part 3 - Format				
Total Points: 60				

GE THEME COURSES

Overview

Courses that are accepted into the General Education (GE) Themes must meet two sets of Expected Learning Outcomes (ELOs): those common for all GE Themes and one set specific to the content of the Theme. This form begins with the criteria common to all themes and has expandable sections relating to each specific theme.

A course may be accepted into more than one Theme if the ELOs for each theme are met. Courses seeing approval for multiple Themes will complete a submission document for each theme. Courses seeking approval as a 4-credit, Integrative Practices course need to complete a similar submission form for the chosen practice. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you develop and submit your course.

Please enter text in the boxes to describe how your class will meet the ELOs of the Theme to which it applies. Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document. Because this document will be used in the course review and approval process, you should be *as specific as possible*, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Accessibility

If you have a disability and have trouble accessing this document or need to receive it in another format, please reach out to Meg Daly at daly.66@osu.edu or call 614-247-8412.

Course subject & number

General Expectations of All Themes

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

Please briefly identify the ways in which this course represents an advanced study of the focal theme. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities. (50-500 words)

Course subject & number

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Course subject & number

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met.

(50-700 words)

Course subject & number

Specific Expectations of Courses in Health & Wellbeing

GOAL Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.).

ELO 1.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 1.2 Identify, reflect on, or apply strategies for promoting health and well-being. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)