

## BSC4936: Critical Analysis of Biological Research Summer A/C 2025

### Instructor and Teaching Assistants

Office hours: Virtual office hours via Zoom or in person as arranged. Course is 100% online. Office for T. Mutahi is Bartram Hall 214B. Zoom or visits in our physical offices can be arranged; please email your assigned TA or instructor as needed to schedule an appointment time.

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### 1. General Course Information

#### 1.1 Course Description

Course open to biology, botany and zoology students in senior standing. Critical analysis of current life sciences research through online discussions and summaries of peer reviewed scientific publications. Through a PowerPoint presentation with audio, virtual exchange interaction, students interact online with global expert guest/s through lectures and Question & Answer sessions to enhance global citizenship skills. Students complete the Biology Exit Exam (BEE).

#### 1.2 Website

Access this course website through UF e-Learning Services (<https://lss.at.ufl.edu/>). Log in using your Gatorlink username and password. The software used to host the website is "Canvas."

#### 1.3 Required Materials

- Reliable computer and internet access that will allow completion and submission of assignments on time and completion of the Biology Exit Exam (BEE)
- Microsoft Office or equivalent (written assignments must be submitted in Word format).
- Microphone & camera for recording presentations or attending office hours via Zoom.

#### 1.4 Course Format

- This course contains 12 distinct modules (see "Module Descriptions" below). Each module will require students to participate in a combination of activities, including:
  1. Reading a peer-reviewed scientific article (or watching a seminar video).
  2. Participating in group discussions with approximately 6-8 people.
  3. Writing a summary of a scientific article and a reflection summary.
  4. Writing a peer review of another student's article summary.
  5. Taking brief online quizzes.
  6. Participating in a Virtual Exchange Interaction with global expert guest lecturer/s with a Question & Answer time via zoom to enhance your global citizenship skills.
  7. Submitting a virtual PowerPoint presentation

8. Participating in an online role-playing exercise.
9. Completing the Biology Exit Exam (BEE).

o These activities are described in more detail in **Section 2** below. Be aware that there are many deadlines in this course, and students should mark each of them in their calendars to stay on track. Each assignment deadline is documented in Section 2 “Module Descriptions and Dates” section of this syllabus below all due at 11:59PM EST.

## 2. Module Descriptions and Dates

**Module 1: Introduction (40 points):** Read syllabus, begin discussion and icebreaker activity.

- o Ice-breaker discussion (1 post required) (Opens MON May 12th - Closes TUE May 13<sup>th</sup>)
- o Discussion of the syllabus (1 post required) (Opens MON May 12th - Closes TUE May 13<sup>th</sup>)
- o Take a quiz on the syllabus (Due TUE May 13<sup>th</sup>)
- o Take a pre-quiz on ethics in research (Due TUE May 13<sup>th</sup>)

**Module 2: Discuss and Summarize a Research Paper (20 points):**

Beginning with Module 2, students will be assigned discussion groups of 6-8 students. Note that all assignments other than discussions should be completed (and will be graded) individually. In Modules 3 and 4, each student will be assigned an individual peer review to complete. Group membership will be visible in the "People" section of the course's canvas page at the beginning of this module.

**Research Article: Fong et.al (2024). Downscaled climate change threats to United States freshwater finfish aquaculture. Science of the Total Environment 957 (2024) 177596.**  
<https://doi.org/10.1016/j.scitotenv.2024.177596> .

- o Discuss a research article (Opens WED May 14<sup>th</sup> - Closes TUE May 20<sup>th</sup>)
- o Initial post Due THUR May 15<sup>th</sup>
- o Response posts Due MON May 19<sup>th</sup>
- o Submit a summary of the article (Due TUE May 20<sup>th</sup> )

**Module 3: Discuss and Summarize a Research Paper and Peer Review Exercise (25 points)**

**Research Article: Cappuccio et al. (2010). Quantity and Quality of Sleep and Incidence of Type 2 Diabetes: A Systematic Review and Meta-Analysis" by Sleep duration and all-cause mortality: a systematic review and meta-analysis of prospective studies.**

- o Discuss a research article (Opens WED May 21<sup>st</sup> - Closes May 27<sup>th</sup>)
- o Initial post Due THUR May 22<sup>nd</sup>
- o Response posts Due SAT May 24<sup>th</sup>
- o Submit a summary of the article (Due SUN 25<sup>th</sup>)
- o Submit a review of peer's summary (Due TUE May 27<sup>th</sup>)

**Module 4: Discuss and Summarize a Research Paper and Peer Review Exercise (25 points)**

**Research Article: Wilmaski et. al. (2021). Gut microbiome pattern reflects healthy ageing and predicts survival in humans. DOI: 10.1038/s42255-021-00348-0**

- o Discuss a research article (Opens WED May 28<sup>th</sup> - Closes June 3<sup>rd</sup>)
- o Initial post Due THUR May 29<sup>th</sup>
- o Response posts Due SAT May 31<sup>st</sup>
- o Submit a summary of the article (Due SUN June 1<sup>st</sup>)
- o Submit a review of peer's summary (Due TUE June 3<sup>rd</sup>)

**\*\*\*\* Break: June 23<sup>rd</sup> -27<sup>th</sup>\*\*\*\***

## **Module 5: Discuss a Research Paper, Virtual Guest Lecture, and Present a PowerPoint with Audio (20 points)**

**Research Article:** Lopez-Martínez et. al ( 2023). Plastic ingestion by two cetacean groups: Ziphiidae and Delphinidae. <https://doi.org/10.1016/j.envpol.2023.121932>

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|--|--|
| Discuss a research article                 | (Opens WED June 4 <sup>th</sup> - Closes TUE June 10 <sup>th</sup> ) |
| ○ Initial post                             | Due THUR June 5 <sup>th</sup>  |
| ○ Response posts                           | Due MON June 9 <sup>th</sup>   |
| ○ Attend virtual guest expert Q&A session  | TBD  |
| ○ Submit a virtual PowerPoint presentation | (Due TUE June 10 <sup>th</sup> )                                     |

## **Module 6: Participate and Discuss Ethics Role-Play Activity and Quiz (30 points)**

**Content:** The Lab: Avoiding Research Misconduct. 2024. USHHS, ORI. **The Lab**

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|-------------------------------------|---|
| ○ Discuss ethics in research        | (Opens WED June 11 <sup>th</sup> - Closes TUE June 17 <sup>th</sup> ) |
| ○ Initial post                      | Due THUR June 12 <sup>th</sup>  |
| ○ Response posts                    | Due MON June 16 <sup>th</sup>   |
| ○ Take a quiz on ethics in research | (Due TUE June 17 <sup>th</sup> )                                      |

## **Module 7: Seminar Discussion and Quiz (20 points)**

**Seminar:** *Exploring the crossroads of attention and memory in the aging brain.*

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|--------------------------------|---|
| ○ Discuss the assigned seminar | (Opens WED June 18 <sup>th</sup> - Closes TUE June 24 <sup>th</sup> ) |
| ○ Initial post                 | Due THUR June 20 <sup>th</sup>  |
| ○ Response posts               | Due MON June 30 <sup>th</sup>   |
| ○ Take a quiz on the seminar   | (Due TUE July 1st)  |

## **Module 8: Discuss and Summarize a Research Paper and Reflection Exercise (30 points)**

**Research Article:** Fuller et al 2022. Pollution and health: a progress update. Lancet Planet Health 2022; 6: e535-47. <https://doi.org/10.1016/>

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|-------------------------------|---|
| ○ Discuss a research article  | (Opens WED July 2 <sup>nd</sup> - Closes July 8 <sup>th</sup> ) |
| ○ Initial post                | Due THUR July 3 <sup>rd</sup>                                   |
| ○ Response posts              | Due MON July 7 <sup>th</sup>                                    |
| ○ Submit a Reflection summary | (Due TUE July 8 <sup>th</sup> )                                 |

## **Module 9: Discuss and Summarize a Research Paper and Reflection Exercise (30 points)**

**Research Article:** Luo M., Yang W., Bai L., et al., (2024). Artificial intelligence for life sciences: A comprehensive guide and future trends. The Innovation Life 2(4): 100105.

<https://doi.org/10.59717/j.xinn-life.2024.100105>

- |                               |  |
|-------------------------------|--|
| ○ Discuss a research article  | (Opens WED July 9 <sup>th</sup> - Closes July 15 <sup>th</sup> ) |
| ○ Initial post                | Due THUR July 10 <sup>th</sup>                                   |
| ○ Response posts              | Due MON July 14 <sup>th</sup>                                    |
| ○ Submit a Reflection summary | (Due TUE July 15 <sup>th</sup> )                                 |

## **Module 10: Discuss and Summarize a Research Paper and PowerPoint presentation (30 points)**

**Research Article:** AI-based mobile application to fight antibiotic resistance. NATURE COMMUNICATIONS | (2021) 12:1173 | <https://doi.org/10.1038/s41467-021-21187-3> | <https://rdcu.be/ecCHU>

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|------------------------------|---|
| ○ Discuss a research article | (Opens WED July 16 <sup>th</sup> - Closes July 22 <sup>nd</sup> ) |
|------------------------------|---|

- Initial post Due THUR July 17<sup>th</sup>
- Response posts Due MON July 21<sup>st</sup>
- Submit a PowerPoint presentation (Due TUE July 22<sup>nd</sup>)

### **Module 11: Discuss and Summarize a Research Paper and Project Report Exercise (35 points)**

**Research Article:** Luo M., Yang W., Bai L., et al., (2024). Artificial intelligence for life sciences: A comprehensive guide and future trends. The Innovation Life 2(4): 100105.

<https://doi.org/10.59717/j.xinn-life.2024.100105>

- Discuss a research article (Opens WED July 23<sup>rd</sup> - Closes July 29<sup>th</sup>)
- Initial post Due THUR July 24<sup>th</sup>
- Response posts Due MON July 28<sup>th</sup>
- Submit a Project Report (Due TUE July 29<sup>th</sup>)

### **Module 12: Take the Biology Exit Exam (BEE) (100 points):**

- **Biology Exit Exam (BEE must be scheduled between July 30<sup>th</sup> - August 5<sup>th</sup>)**
- **Take the online biology exit Exam 5<sup>th</sup> August ( 7AM to 7PM EST)**
- **Test Overview:**
  - The BEE is a 75 minutes test given primarily online proctored by honor lock. The University of Florida uses the results to assess student learning outcomes. It is in your best interest to try to do well on this exam. Study resources will be shared via a class announcement.
- **Scheduling: The test date will be announced soon. Online, take it during your time.**
- **Additional Information:**
  - The following link contains more information about a similar exam and a set of sample questions: <https://www.ets.org/mft/about/test-content.html>
  - A suggested study schedule for topics is provided below:

<b>Suggested Review Schedule for Preparation to take the Biology Exit Exam (BEE)</b>	
<b>Week</b>	<b>Biology Exam Topics*</b>
1	Biochemistry & Cell Energetics
2	Cellular Structure, Organization & Function
3	Molecular Genetics
4	Heredity
5	Diversity of Organisms
6	Animal Organ Systems
7	Animal Reproduction, Growth & Development
8	Plant Organ Systems
9	Plant Reproduction
10	Population Genetics & Natural Selection; Patterns of Evolution; Environmental Factors
11	Population Ecology; Community Ecology
12	Ecosystems
13	Human Impacts
Analytical skills are assessed withing each of the above topics	
*Use your BSC 2010 and 2011 (or equivalent) textbook for review. Go to this website to find specific subtopics: <a href="https://www.ets.org/s/mft/pdf/mft_testdesc_biology_4gmf.pdf">https://www.ets.org/s/mft/pdf/mft_testdesc_biology_4gmf.pdf</a>	

### 3. Assignment Guidelines

**Submitting assignments:** When submitting assignments electronically via Canvas, you are responsible for ensuring that all your work is uploaded correctly and completely by the deadline. Corrupted files will be treated as missing work (= 0 grade) until they are reuploaded correctly and late penalties will apply if your resubmission is past the deadline. So, please always double check your files right after you upload them! If you experience technical problems when submitting your work in Canvas, contact the UF Computing Help Desk for assistance: <https://helpdesk.ufl.edu>. Emailed or paper submissions for Canvas assignments will not be accepted.

#### 3.1 Discussion Assignments

- The purpose of this course is to give students an opportunity to engage in discussion, which is a necessary component of scientific thinking and discourse. You may find yourself in debates with your peers, which is an indication that you are thinking critically about yours and others' claims. In order to maintain a culture of respect in our course, please follow two basic guidelines. *First, back up your claims with evidence and/or scientific explanation. Second, keep the discussion about scientific ideas, not about the people presenting them. Offensive or abusive comments will not be tolerated.*
- *Discussion posts will be graded based on the discussion rubric given for each assignment's discussion.*

- The date associated with each discussion on Canvas is the due date (i.e. the final day posts can be made). The opening and closing dates for each discussion are listed in the module descriptions above.
- **Late discussion posts will *\*\*not\*\** be accepted!** Students cannot participate in a closed online discussion in which other students have already moved on to the next module.
- **Note, this course is 100% online. Students may access the course using the Canvas app on their phones if necessary to meet discussion timelines.**

## 2. Post Content:

- Each post must reflect genuine engagement in, and contribution to, the discussion. Posts that do not contribute new thoughts or questions to the discussion (e.g. “I agree with that.”) will not receive credit. Inappropriate and off-topic posts will also not receive credit.
- Keep the following guidelines in mind when participating in discussions:
  - When discussing an article, make connections between its content and your life. The point of the discussion is to provide a casual and thought-provoking environment to share what you think. If you find a website that relates to the topic, share it. If you have a funny story that relates, tell it. If material from previous courses comes to mind, share it. Do not be afraid to go beyond the article to have an authentic discussion on its importance and relevance to your life.
  - Make your comments to your peers’ discussion posts about the science and their ideas, not the quality of writing. Be assertive in your posts and share your original thoughts. If the sum of your posts amounts to you agreeing with your group mates’ or other scientists’ claims and not stating anything unique, you should not expect to receive full credit.
  - Remember that your interactions are meant to be discussions, not statements. Therefore, there should be substantial back-and-forth between group members over the course of every module. In other words, do not simply state what you think—respond to what others think.
  - When discussing scientific topics, it is inevitable that someone will express a misconception about a scientific principle. When this happens, it is the responsibility of the group to correct the misconception while still maintaining a respectful, productive atmosphere.

## 3.2 Summary Assignments

- The goals of writing these summaries are to: (1) learn how to identify the most important parts of an article (2) practice concise yet accurate scientific communication and (3) brush up on instances of relevant and/or current biology-related research before you graduate.
- Writing Article Summaries
  - Preparing a summary of a paper is not an easy task. Oftentimes the abstract or summary of a peer-reviewed paper is difficult part to write. Reading abstracts of scientific journal articles is a good way to introduce yourself to how scientists write concisely.
- Summary Format
  - Article summaries must be a Word Document (.docx) with double-spaced, 12-point text.
  - Place your name and the word count at the top of the page and include a title.
  - The length of the summary (excluding name, word count, and title) should not exceed 225 words.
  - Do not use (or reference) figures or tables in the summary.
  - The body of your summary must be structured into four paragraphs as follows:

1. A clear statement summarizing the primary purpose of the article. This may include the main scientific question or aspects of the hypothesis that the authors are addressing. It can often be termed “aims” or “objectives” in different papers. If there are multiple hypotheses, summarize the overarching theme from them.
  2. A description of the specific numerical results used by the authors, with particular emphasis on the data that support the overall conclusions of the study.
  3. A discussion of one or more broad implications of the study.
  4. A detailed and specific description of additional research that would build on the findings of the paper.
- Please see the assignment description on Canvas for more detailed instructions.

### **3.3 Peer Review Assignments**

- Reviewing a peer's work is very common among scientists and is a courtesy that can be learned. Peer-review or critique of another scientist's research paper is an important quality review process before a research article can be published. More information about peer reviews here <https://lib.dmu.edu/su/ethicaldoc/peerreview>. **(Peer review samples will be shared in module 3)**
- **When Writing Peer Reviews...**
  - Please note that although a peer review may include positive comments *it usually does not include gushing statements or praises*. The authors of the paper being reviewed are not looking for praise, but instead, they are hoping that another set of eyes will catch anything that might cause the paper to be rejected by the journal editor or anonymous reviewers (e.g., erroneous information presented, formatting issues, etc.). Most of the time, journal editors are attuned to reasons to reject a submitted paper, rather than reasons to accept a flawed paper.
  - *Your peer review will be graded on how well you comment on how the summary could be improved using the guidance provided regarding writing summaries. Your review must explicitly address how each of the four elements of the summary could be improved.*
- **Peer Review Format**
  - Peer reviews must be a Word Document (.docx) with double-spaced, 12-point Arial font.
  - The length of the peer review (excluding name, word count, and title) should be between 200-250 words.
  - **Page 1:**
    - Copy your peer's summary onto the first page (including their name, word count, and title)
  - **Page 2:**
    - Place your name and the word count at the top of the page and include a title.
    - The body of your peer must be structured into four paragraphs as follows:
      1. The first paragraph should begin with "The author's description of the primary purpose of the paper could be improved by..."
      2. The second paragraph should begin with "The author's use of specific data in support of the primary purpose could be improved by..."
      3. The third paragraph should begin with "The author's review of the major implications could be improved by..."
      4. The fourth paragraph should begin with "The author's description of additional research needed could be improved by..."



### **3.4 Virtual Powerpoint Presentation**

- This course requires students to submit a 5-minute, virtual PowerPoint presentation (.pptx format) **with embedded audio that advances automatically once the presentation is started.** More details will be provided on Canvas. Please make sure you have access to a well-functioning computer or a microphone that will allow you to record audio (built-in laptop microphones are fine). The functioning computer is also needed for the biology exit exam (BEE). This test cannot be done using a workplace computer due to issues like blocking of necessary pop ups related to the external test websites by some institutions.

### **3.5 Quizzes**

- Online quizzes will be administered through Canvas. Each quiz will be available for one full day (24 hours, dates listed in the module descriptions above). Quizzes are graded automatically, and only one attempt per quiz is allowed.

## **4. Policies and Support**

### **4.1 Grading**

- **There are a total of 405 points available in this course.**
- Final grades will be determined based on the GPA scale below (see table, below).
- BEE grade points will be determined based on the overall score on the exam.

Percentage	Letter Grade	GPA Equivalent
> or = 90.00	A	4.0
86.7–89.9	A-	3.67
83.3–86.6	B+	3.33
80.0–83.2	B	3.0
76.7–79.9	B-	2.67
73.3–76.6	C+	2.33
70.0–73.2	C	2.0
66.7–69.9	C-	1.67
63.3–66.6	D+	1.33
60.0–63.2	D	1.0
56.7–59.9	D-	0.67
<56.7	E	0

For more information on grades and grading policies, please visit:  
<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>.

**Disputing a grade:** *If you wish to dispute a grade for any exam/assignment, you must contact your assigned TA in writing within 7 days from when the assignment has been returned. In your message, you must include a specific explanation for why you think the grade is incorrect and how you think it should be changed. The instructor/TA will then arrange a meeting with you to discuss the issue and determine whether or not to the grade should be changed. The grade assigned following this meeting will be final.*

### **4.2 Changes to the Course or Syllabus**

- The instructor reserves the right to make changes to the course, schedule, and syllabus. If any



changes occur, students will be informed through a Canvas announcement, and a revised syllabus will be posted.

#### **4.3 Late Work**

- Without a valid, documented excuse, late assignments will receive a penalty of -20% of the maximum score for each day they are late (e.g., -2 points for a 10 point assignment for each day they are late). **Late discussion posts will not be accepted.** Revisions to submitted assignments will not be accepted.
- Documentation of a valid excuse (e.g. a doctor's note) is required to avoid a late penalty. **Please contact your assigned instructor as soon as possible if you will be unable to complete an assignment- preferably within 3 days with the note attached for unforeseen medical emergencies.**
- **Note: Discussion posts cannot be made up under any circumstance.**

#### **4.4 Communication with Instructors**

- It is best to use Canvas message utility for communication with the instructors. This will typically result in a more prompt response than email, and allows the instructors to **organize correspondence with students more efficiently.**
- **The Canvas site for this course also contains an ongoing discussion titled "Raise your Hand"** **This is a good place to post questions about the course. Before posting a new question or contacting an instructor, students should check this discussion to see if their question has been answered in a previous post.**

#### **4.5 IT Support**

- It is the student's responsibility to maintain access the course website on Canvas. Any unexpected difficulties related to accessing the site, submitting assignments, etc. should be brought to the attention of the UF Computing Help Desk (accessible via "Help" in canvas, or at <https://my.it.ufl.edu/CherwellPortal/UFITServicePortal>).

#### **4.6 Academic Integrity**

- All students registered at the University of Florida have agreed to comply with the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University." In addition, on all work submitted for credit the following pledge is either required or implied: "On my honor I have neither given nor received unauthorized aid in doing this assignment." If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). Kermit the Frog can be reached at (867- 5309). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines 4.040-1.pdf and Student Honor Code and Student Conduct Code - Regulation and Policy Hub. Violations may result in disciplinary action under the UF Student Honor Code.

#### **4.7 Accommodations for Students with Disabilities**

- Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <https://dso.ufl.edu>. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

#### **4.8 Software Use**

- All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

#### **4.9 Attendance and Make-ups**

- Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.
- Refer to the above link for more information on the university's attendance policy.

#### **4.10 AI Policy and Enforcement**

The final product submitted for grading must be the student's own work. Instructors have the right to use AI detection tools to check students' submissions for AI-generated content. Plagiarism, including from AI sources, is not permitted. It is the student's responsibility to understand and follow these AI policies. Violations may result in disciplinary action under the UF Student Honor Code.

#### **4.11 Course Evaluations**

- Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals.
- Guidance on how to give feedback in a professional and respectful manner is available at [gatorevals.ua.ufl.edu/students/](https://gatorevals.ua.ufl.edu/students/). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [ufl.bluer.com/ufl/](https://ufl.bluer.com/ufl/). Summaries of course evaluation results are available to students at <https://gatorevals.ua.ufl.edu/public-results/>

#### **4.12 Virtual Recordings**

- Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student

participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

## 5. Campus Resources

### 5.1 Health and Wellness; U Matter, We Care

- If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
- **Counseling and Wellness Center:** Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.
- **University Police Department:** Visit UF Police Department website or call 352-392-1111 (or 9- 1-1 for emergencies).
- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care, call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608.
- **GatorWell Health Promotion Services:** For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

### 5.2 Academic Resources

- E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu). Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services. Library Support: Various ways to receive assistance with respect to using the libraries or finding resources. Teaching Center: Broward Hall, 352-392- 2010 or to make an appointment 352- 392-6420. General study skills and tutoring. Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information. On-Line Students Complaints: View the Distance Learning Student Complaint Process.

### 5.3 Procedure for Conflict Resolution

- Any classroom issues, disagreements or grade disputes should be discussed first between the assigned instructor/TA and the student followed by the lead instructor if still unresolved. If the problem cannot be resolved, please contact the undergraduate Coordinator or the

Department Chair. Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that cannot be resolved departmentally will be referred to the University Ombuds Office (<http://www.ombuds.ufl.edu>; 392-1308) or the Dean of Students Office (<http://www.dso.ufl.edu>; 352-392-1261). For further information refer to [https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf) (for residential classes) or <http://www.distance.ufl.edu/student-complaintprocess> (for online classes).

#### **5.4 Course Content**

- Students are encouraged to employ critical thinking and to rely on data and verifiable sources to interrogate all assigned readings and subject matter in this course as a way of determining whether they agree with their classmates and/or their instructors view. No lesson is intended to espouse, promote, advance, inculcate, or compel a particular feeling, perception, viewpoint or belief. All discussions need to be respectful of all classmates and/or instructors.

## **6. Privacy and Accessibility Policies**

For information about the privacy policies of the tools used in this course, see the links below:

- Instructure (Canvas)
  - [Instructure Privacy Policy](#)
  - [Instructure Accessibility](#)
- Microsoft
  - [Microsoft Privacy Policy](#)
  - [Microsoft Accessibility](#)
- Sonic Foundry (Mediasite Streaming Video Player)
  - [Sonic Foundry Privacy Policy](#)
  - [Sonic Foundry Accessibility](#)
- Vimeo
  - [Vimeo Privacy Policy](#)
  - [Vimeo Accessibility](#)
- YouTube (Google)
  - [YouTube \(Google\) Privacy Policy](#)
  - [YouTube \(Google\) Accessibility](#)
- Zoom
  - [Zoom Privacy Policy](#)
  - [Zoom Accessibility](#)

Module	Assignment	Open	Close	Associated Material	
1	Ice Breaker Discussion (1 post required)	12-May	13-May	Syllabus	
	Syllabus Discussion (1 post required)				
	Ethics Pre-Quiz				
2	Article Discussion (3 posts required)	14-May	19-May	Fong et.al (2024) Downscaled climate change threats to United States freshwater finfish aquaculture. Science of the Total Environment 957 (2024) 177596. https://doi.org/10.1016/j.scitotenv.2024.177596 .	
	Initial Post		15-May		
	Response Posts		19-May		
	Submit a summary of the article		20-May		
3	Article Discussion (3 posts required)	21-May	27-May	Quantity and Quality of Sleep and Incidence of Type 2 Diabetes: A Systematic Review and Meta-Analysis" by Cappuccio et al. (2010). Sleep duration and all-cause mortality: a systematic review and meta-analysis of prospective studies.	
	Initial Post		22-May		
	Response Posts		24-May		
	Submit a summary of the article		25-May		
	Submit a review of peer’s summary		27-May		
4	Article Discussion (3 posts required)	28-May	3-June	Wilmaski et. al. (2021). Gut microbiome pattern reflects healthy ageing and predicts survival in humans. DOI: 10.1038/s42255-021-00348-0	
	Initial Post		29-May		
	Response Posts		31-May		
	Submit a summary of the article		1-June		
	Submit a review of peer’s summary		3-June		
5	Article Discussion (3 posts required)	4-June	10-June	Lopez-Martinez et. Al ( 2023). Plastic ingestion by two cetacean groups: Ziphiidae and Delphinidae. https://doi.org/10.1016/j.envpol.2023.121932	
	Initial Post		5-June		
	Response Posts		9-June		
	Attend virtual guest expert Q&A session		TBD		
	Submit a virtual PowerPoint presentation		10-June		
6	Ethics/ Role-Play Discussion (3 posts)	11-June	17-June	The Lab: Avoiding Research Misconduct. 2024. USHHS, ORI. The Lab	
	Initial Post		12-June		
	Response Posts		14-June		
	Take a quiz on ethics in research		17-June		
7	Seminar Discussion (3 posts & quiz required)	18-June	24-June	Exploring the crossroads of attention and memory in the aging brain.	
	**** Break: June 23 <sup>rd</sup> -27 <sup>th</sup> ****				
	Initial Post		20-June		
	Response Posts		30-June		
	Seminar Quiz		1-July		
8	Article Discussion (3 posts required)	2-July	8-July	Fuller et al 2022. Pollution and health: a progress update. Lancet Planet Health 2022; 6: e535-47. https://doi.org/10.1016/	
	Initial Post		3-July		
	Response Posts		7-July		

	Submit a Reflection Summary		8-July	
9	Article Discussion ( <b>3 posts required</b> )	9-July	15-July	Luo M., Yang W., Bai L., et al., (2024). Artificial intelligence for life sciences: A comprehensive guide and future trends. The Innovation Life 2(4): 100105. <a href="https://doi.org/10.59717/j.xinn-life.2024.10010">https://doi.org/10.59717/j.xinn-life.2024.10010</a>
	Initial Post		10-July	
	Response Posts		14-July	
	Submit a Reflection Summary		15-July	
10	Article Discussion ( <b>3 posts &amp; 1 presentation required</b> )	16-July	22-July	AI-based mobile application to fight antibiotic resistance. NATURE COMMUNICATIONS   (2021) 12:1173   <a href="https://doi.org/10.1038/s41467-021-21187-3">https://doi.org/10.1038/s41467-021-21187-3</a>   <a href="https://rdcu.be/ecCHU">https://rdcu.be/ecCHU</a>
	Initial Post		17-July	
	Response Posts		21-July	
	Submit a PowerPoint Presentation		22-July	
11	Article Discussion ( <b>3 posts &amp; project report required</b> )	23-July	29-July	Luo M., Yang W., Bai L., et al., (2024). Artificial intelligence for life sciences: A comprehensive guide and future trends. The Innovation Life 2(4): 100105. <a href="https://doi.org/10.59717/j.xinn-life.2024.10010">https://doi.org/10.59717/j.xinn-life.2024.10010</a>
	Initial Post		24-July	
	Response Posts		28-July	
	Submit a Project Summary		29-July	
12	Take the Biology Exit Exam (BEE)	30-July	5-August	BSC 2010/BSC 2011 Textbook