MCB 3841W – ANTI-AGING THERAPEUTICS Syllabus (Spring 2026)

Course Description

Behavioral, nutritional, and pharmacological interventions that counteract the biological bases of aging and age-associated diseases. Emphasis on exploring the literature and writing about research on the biology of aging.

Course and Instructor Information

Format:	In-person
Meeting Times:	Tu/Th 11:00am-12:15pm
Meeting Location:	CHM T215
Credits:	3
Prerequisites:	ENGL 1007 or 1010 or 1011 or 2011
Recommended:	MCB 2210 (Cell Biology), MCB 3895 (Cell Biology & Genetics of Aging)
Target Audience:	Advanced MCB or BIO students interested in pursuing research careers
Instructor:	Kenneth Campellone, PhD
Email:	kenneth.campellone@uconn.edu → *always* include 3841W in subject line
Teaching Assistants:	Rosie Mirabella (rosie.mirabella@uconn.edu)
	Lianna Wagner (lianna.wagner@uconn.edu)
Availability:	In-person or online by appointment → *always* include 3841W in subject line

Course Materials

Required Book(s):
None

Required Materials (posted to HuskyCT by the instructor):
1. Links to publications written for non-scientists
2. Research review articles
3. Primary research papers

Technical Requirements

- Laptop computer and/or tablet
- Reliable access to high-speed internet, HuskyCT/Blackboard, and WebEx videoconferencing
- Adobe Acrobat Reader
- Microsoft Word

Course Format

Tuesdays: Research paper discussions
Thursdays: Review of writing + revising
Outside of Class: Read paper assignments + complete writing assignments and revisions
Note: This is a writing-intensive 'W' course (geoc.uconn.edu/writing-competency/)

Course Assessments and Grading

1. Short writings, including peer revisions and instructor revisions (almost weekly)
   Format: summaries, abstracts
2. Long papers, including instructor revisions (mid-semester, end-of-semester)
   Format: popular article for non-scientists, review article for scientists
3. Presentation, including oral communication (end-of-semester)
   Format: presentation of aging 'hallmark' and proposed intervention
4. Participation/Discussion, including oral communication (weekly)
   Format: asking and answering questions, presenting articles

Expected Basis for Course Grading:

Paragraphs (8-10) = 40%
Papers (2) = 40%
Presentation (1) = 10%
Participation (weekly) = 10%
(Students must pass the writing component to pass the course.)

Estimated Grading Scale

Numerical	Letter
94-100	A
90-93.9	A –
87-89.9	B +
84-86.9	B
80-83.9	B –
77-79.9	C +
74-76.9	C
70-73.9	C –
67-69.9	D
<67	F

Weekly Time Commitment:

Expect to dedicate 6-12 hours per week to this course *outside of the classroom*. This expectation is based on the course reading assignments, and UConn's credit hr policy: policy.uconn.edu/2012/08/22/credit-hour/.

Pages of Revised Writing:

Paragraphs = 8-10 pages
Papers = 2x5 pages
Total = 18-20 pages

Assignment due dates and late policy: The submission dates and times for written and other assessments will be listed in advance. If justified, some flexibility will be allowed for missed assignments or for those turned in after the designated deadline. However, some late work may also be subjected to grade deductions. The instructor reserves the option to change due dates if necessary as the semester progresses.

Course Objectives

Students in this course will:

- Acquire experience in identifying, reading, and summarizing non-scientific publications, research review articles, and the primary research literature
- Advance their understanding of the molecular, cellular, and genetic bases of aging
- Develop their skills in critically evaluating the primary research literature
- Improve their abilities to write for a lay audience and for other scientists
- Become better prepared for a career in research and communicating with the public

Course Outline

This course is focused on improving students' abilities to understand the scientific literature and to communicate (in written and verbal form) scientific ideas to (i) general non-scientific audiences and (ii) scientists.

1. Introduction to core Geroscience concepts and the 'Hallmarks of Aging'
2. Navigating PubMed, review articles, abstracts, and the primary research literature
3. Exploring 'Headline vs Study' topics
4. Physical Activities and Aging
5. Diet/Nutrition and Aging
6. Drugs and Aging
7. Understanding Guest Lectures
8. → *Paper #1*
9. Understanding Guest Lectures +/- AI Exercises
10. Understanding Guest Lectures +/- AI Exercises
11. The Publication Process
12. → *Paper #2*
13. → *Presentations*
14. → *Presentations*

Final Exam: NONE

Students with Disabilities

UConn is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please inform the instructor so that options can be discussed. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020, csd.uconn.edu.

Student Health Resources

UConn is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The

university believes that academic, personal, and professional development can flourish only when each member of our community is assured equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity, and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement. Students who want to speak with a mental health professional can find support and resources at the Student Health and Wellness-Mental Health (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for a mental health or psychological concern. Even if you do not have UConn's student health insurance, most major insurance plans are accepted.

Students can contact the Student Health and Wellness-Mental Health office in Storrs on the 4th Floor of the Arjona Building, (860) 486-4705, studenthealth.uconn.edu.

Student Responsibilities and Misconduct

As a member of the UConn student community, you are held to certain standards and academic policies. Review these important UConn community standards at community.uconn.edu, which includes information about The Student Code, Student Behavior, and Academic Integrity.

Misconduct: Academic misconduct in any form is in violation of the UConn Student Code and will not be tolerated. This includes copying or sharing answers on assignments, having someone else do your work, and plagiarism. If submitted work is deemed to be in violation of this policy, that assignment will be given a grade of zero points. Subsequent violations will be dealt with according to the guidelines given in The Student Code. Depending on the act, a student could receive an F grade on the assignment, an F for the course, or be suspended.

Plagiarism: It is never appropriate to copy anything written or created by someone else (including from other students, published materials, or internet sources). This includes the use of AI-generated text. The work that you turn in must be your own. All facts and interpretations of facts that are not your own must include a literature citation. When describing factual material, you should describe it in your own words. Do not take phrases from the published work and connect them with your own words. Do not use text from sources and surround it with quotation marks. You need to restate what you read in your own terms. Do not perform "creative reiteration" and simply rearrange the words from another author's text and present it as your own. If evidence of plagiarism or the use of AI is found on any assignment, that assignment will receive a grade of zero points and you may be removed from the course.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the Office of Institutional Research and Effectiveness (OIRE).