

DEP 6059 (Seminar: Special Topics in Developmental Psychology)
Class/Section Number: 12185
Biological Aging
University of Florida
Spring 2023
3 credits

Instructor: Darlene Kertes, Ph.D.
Office: Psychology 084
E-mail: email me via e-learning for class-related topics
Office Hours: I am available to meet by appointment

Class Time: W Period 6-8 12:50-1:40
Classroom: Turlington 2328

Website: This course uses e-learning in Canvas for posting important announcements. To access e-learning: Go to <http://lss.at.ufl.edu/> Login using your Gatorlink ID and password. Once in personal homepage for Canvas, click on DEP 6059 to enter the specific page for the course.

Course Description: The primary goal of the course is to introduce you to biological aging and its relation to the social environment and biobehavioral health. There are three broad learning goals for the course: (1) to gain a working knowledge of methods, concepts, and issues in cellular and other markers of biological aging; (2) to understand how biological aging relates to human development, behavior, neurobiology, and psychopathology, and (4) to apply knowledge of research methods and core concepts to critically evaluate biological aging studies of human behavior.

Required Reading: Required readings will be posted in the e-learning portal.

Class Format: The class format will include multiple methods. Group discussion will play a central role throughout the course.

Course Requirements: Assigned readings must be completed before each class period and students must complete all the following requirements:

1. **Participation.** This is primarily a discussion course. Each student is expected to participate in class discussion throughout the semester. You should come to class prepared to comment on the readings, actively listen to the comments of others, and expand discussion with continued reflection and synthesis of the discussion.
2. **Discussion Questions.** To facilitate discussion, each week you should generate a list of approximately 3-4 discussion questions or points from the readings. Focus on a few issues you think are particularly important or interesting, or conversely, are lacking in explanation or conceptualization. Generate questions you think need to be answered to move the field to the next step. Briefly describe why you think the issue is important to discuss or why you generated the question. This should total 1 or 2 typed, single-spaced pages. Minor points of clarification should be raised in class but should not be included in your written list of questions/issues. Be prepared to discuss some, if not all points, in class.
3. **Leading Class Discussion.** Each student will sign up to lead class discussions on designated days. You should feel free to review any other articles of interest to prepare for the discussion. The seminar leader will give a brief overview of each of the required readings, e.g., major theoretical issues, methodological concerns, points of controversy, unresolved issues, a discussion of empirical studies, key findings, challenges for future research, etc. The leader will raise questions to structure and facilitate the class discussion. Use of handouts, powerpoints, and/or video can be used at the leader's discretion. Written discussion questions turned in on

weeks you are leading will be considered as part of your contribution to leading the class, and as such the page limitation is lifted for those days.

4. **Research/Review Paper.** There are two options for the paper:

Option 1: Write a grant application proposing a study on cellular or biological aging related to some aspect of development or behavior. The proposal can be either a new data collection or a secondary data analysis project utilizing publicly available data in the NIH or CDC DNA repositories (see <http://www.ncbi.nlm.nih.gov/gap> or <https://www.ncbi.nlm.nih.gov/gds> or <http://www.cdc.gov/rdc>). The proposal should be written in the format of the NIH RO3 (small grant), NRSA, or similar fellowship application. The goal is to produce an application that could be readily submitted to a funding agency.

Option 2: Write a standard review paper of any topic related to the study of genes in development. It should be done in the style of a Psychological Bulletin or Developmental Review article. The length should be 15-20 double-spaced pages in APA format. This paper should be written with the goal of eventual publication. For students interested in following through with publishing, request an individual appointment.

Due dates: The paper topic should be submitted March 22. The paper is due April 26.

Grading:

Participation 10%
Submitted questions 20%
Leading class discussions 30%
Paper 40%

Grading Standards:

93% = A	90% = A-	87% = B+
83% = B	80% = B-	77% = C+
73% = C	70% = C-	67% = D+
63% = D	60% = D-	59% or less = E

Grading Standards:

A achievement outstanding relative to the level necessary to meet course requirements
B achievement significantly above the level necessary to meet course requirements
C achievement that meets the course requirements in every respect
D achievement worthy of credit even though it fails to meet fully the course requirements
E represents failure (no credit) and signifies that the work was either 1) completed but at a level of achievement that is not worthy of credit or 2) was not completed and there was no agreement between the instructor and the student that an I would be awarded.
I (Incomplete) Assigned at the discretion of the instructor when, due to an extraordinary circumstance (e.g., hospitalization) a student is prevented from completing the work of the course on time. Requires a written agreement between an instructor and student.

Course Policies:

1) Assignments are due at the beginning of class on the designated day. Late assignments, unless specifically excused in advance, are subject to a grade reduction. Faxed and e-mail assignments are generally not accepted unless pre-authorized. Thus, if you know you will miss a class, please make every effort to contact Dr. Kertes ahead of time.

ACADEMIC DISHONESTY

University policy defines scholastic dishonesty as any act that violates the rights of another student with respect to academic work or that involves misrepresentations of a student's own work. Academic dishonesty includes (but is not limited to): cheating on assignments or examinations; plagiarizing (misrepresenting as one's own work anything done by another); submitting the same or substantially similar papers for more than one course without consent of all instructors concerned; depriving another of necessary course materials; or sabotaging another's work. For a full description of what constitutes academic dishonesty and plagiarism, see the University of Florida Student Honor Code at: <http://regulations.ufl.edu/chapter4/4017.pdf>

- 2) Students requiring accommodations: Students with disabilities or special needs are encouraged to discuss by appointment whatever arrangements may be needed to facilitate their work in the course. Students with special needs must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation when requesting accommodation. See <http://www.dso.ufl.edu/drc/> for details.
- 3) Professional Feedback: 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 <https://gatorevals.aa.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 <https://ufl.bluera.com/ufl/>. Dr. Kertes also welcomes students to be in touch via email or in person for questions, comments, and concerns.
- 4) Student privacy: There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>
- 5) Harassment: Sexual harassment is not tolerated at the University of Florida. Sexual harassment includes: the inappropriate introduction of sexual activities or comments in a situation where sex would otherwise be irrelevant. Sexual harassment is a form of sex discrimination and a violation of state and federal laws as well as of the policies and regulations of the university. All UF employees and students must adhere to UF's sexual harassment policy which can be found here: <https://hr.ufl.edu/forms-policies/policies-managers/sexual-harassment/>. Please review this policy and contact a university official if you have any questions about the policy. As mandatory reporters, university employees (e.g., administrators, managers, supervisors, faculty, teaching assistants, staff) are required to report knowledge of sexual harassment to UF's Title IX coordinator. For more information about UF's Title IX office see: <https://titleix.ufl.edu/>. You can also complete a Sexual Harassment Report online (Title IX) at: <https://titleix.ufl.edu/title-ix-reporting-form/>.
- 6) Announcements/Changes. The Instructor, if necessary, may change the dates and assignments on this syllabus. Students are responsible for all announcements made in class AND posted on e-learning (Canvas system).

Additional Resources

Library: For access to the UF Libraries - <http://www.uflib.ufl.edu/computing.html>

Writing support: The UF Writing Center offers additional support for writing, in the form of individual tutoring and workshops. Specialized help for students for whom English is a second language is also available. See <https://writing.ufl.edu/>

Schedule of topics:

Date	Topic
1/11	Introduction, organizational meeting, biological aging primer (no required readings)
1/18	Introduction to Cellular Aging (<i>understanding the biology</i>)
1/25	Cellular age as a Predictor of Morbidity and Mortality (<i>does cellular age predict physical and mental health?</i>)
2/1	Cellular age and Mental Health (<i>digging deeper into mental health correlates</i>)
2/8	Stress and Trauma impacts on Cellular Age (<i>how are stress, trauma, and stress biology activity linked with cellular age?</i>)
2/15	Cellular Age and the Social Environment (<i>examples of social environment predictors of cellular age</i>)
2/22	Methylation age: a primer (<i>epigenetic approaches to estimating biological age</i>)
3/1	Stress, Mental Health, and Methylation Age
3/8	Methylation Age: which age is the “right” age? (<i>the methylation age controversy and efforts to improve accuracy</i>)
3/15	NO CLASSES (Spring Break)
3/22	Biomarker Composites (<i>peripheral blood and physiological bioage</i>)
3/29	Out of class assignment – register (free) and virtually attend Telomere Research Network meeting
4/5	Immune Age (<i>immunological approaches to biological age</i>)
4/12	Brain Age (<i>MRI approaches to biological age</i>)
4/19	Applications of biological aging research: personalization and prevention
4/26	Conclusions

*Note: Schedule of lecture topics are subject to change at the Professor’s discretion.