## ST. BONAVENTURE UNIVERSITY HON-299: Aging and the Human Body: Changes, Challenges and Healthcare Fall 2025

## A. PREFIX, NUMBER, AND TITLE: **HON- 299:** Aging and the Human Body: Changes, Challenges and Healthcare

Instructor: Stephanie Richards, PT, DPT Office: Francis Hall 208 Office Hours: M 9:00am-12:00pm, T 12:00pm-2:00pm; Th: 11:00am-1:00pm Office Phone: (716) 375-2537 Email: srichards@sbu.edu

### B. REQUIRED TEXTBOOK/MATERIALS:

Saxon, S.V., Etten, M.J., Perkins, E.A. (2021). *Physical change and aging: A guide for helping professions* (7<sup>th</sup> ed.). Spring Publishing Company.

Additional required articles and resources will be posted to the course Moodle site.

C: Credit Hours: 3

## D: COURSE DESCRIPTION:

This course explores the science behind aging, examining lifespan and life expectancy, perspectives on aging, and key theories that explain why and how we age. Students will study physiological changes across multiple systems of the body. This course also addresses critical health concerns associated with aging, including fall prevention, medication management, and end-of-life care. Strategies for promoting longevity and healthy aging will be examined in-depth.

E. PREREQUISITES: None

F. METHOD OF INSTRUCTION: In-person, T/Th 8:30am-9:45am

# G. COURSE LEARNING OBJECTIVES:

By the end of this course, students will be able to:

- 1. Differentiate between lifespan and life expectancy and analyze factors that influence longevity.
- 2. Evaluate major biological theories of aging, including genetic, cellular, and environmental influences.
- 3. Describe age-related changes in the sensory systems and their clinical significance.
- 4. Examine the structural and functional changes in the cardiovascular, respiratory, musculoskeletal, nervous, gastrointestinal, and urinary systems and their impact on health and mobility.
- 5. Distinguish between normal cognitive aging, dementia, and delirium.
- 6. Assess age-related changes in drug metabolism and the risks of polypharmacy.
- 7. Explain the role of nutrition and hydration in maintaining health in older adults.
- 8. Discuss the benefits of physical activity and health promotion strategies in aging populations.
- 9. Analyze evidence-based approaches for fall prevention and injury reduction.
- 10. Discuss ethical challenges related to aging, palliative care, and the dying process.
- 11. Critically analyze current research and healthcare strategies aimed at enhancing longevity and quality of life.

# H. COURSE CALENDAR/OUTLINE:

\*This course outline and weekly topical schedule is subject to change. It is meant to be a guide to facilitate learning and may be changed at the discretion of the instructor. \*

Week #:	Торіс	Readings	Assignment
1 (9/2 & 9/4)	Course and Syllabus Overview Lifespan & Life Expectancy	Bishop (2022) Chapter 1	Course introduction self-reflection assignment
2 (9/9 & 9/11)	Perspectives on Aging Theories of Aging	Saxon et al. Chapters 1 & 2 Bishop (2022) Chapter 2	

3 (9/16 & 9/18)	Physiological Changes with Aging -Skin, hair and nails -Sensory Systems	Saxon et al. Chapters 3 &7	Theories of Aging written assignment
4 (9/23 & 9/25)	Physiological Changes with Aging -Cardiovascular System -Respiratory System	Saxon et al. Chapters 8 & 9	
5 (9/30 & 10/2)	Physiological Changes with Aging -Musculoskeletal System -Nervous System	Saxon et al. Chapters 4 & 5	
6 (10/7 & 10/9)	Physiological Changes with Aging -Gastrointestinal System -Urinary System	Saxon et al. Chapters 10 & 11	Biology of Aging in Film assignment
7 (10/16) ***No class 10/14 due to Fall Break***	Midterm Exam		Midterm Exam
8 (10/21 & 10/23)	Dementia & Delirium	Saxon et al. Chapter 6	
9 (10/28 & 10/30)	Age Related Medication Issues	Saxon et al. Chapter 20 Beers Criteria article	Medication presentations
10 (11/4 & 11/6)	Falls & Fall Prevention	Saxon et al. Chapter 16 STEADI website HSSAT Tool	
11 (11/11 & 11/13)	Health Promotion & Exercise for Healthy Aging	Saxon et al. Chapter 17	Exercise and Health Promotion Case Study

12 (11/18 & 11/20)	Nutrition & Hydration	HHS Physical Activity Guidelines Saxon et al Chapter 19	
13 (11/25) ***No class 11/27 due to Thanksgiving Recess***	Healthy Aging Group Presentations		Healthy Aging Group Presentations
14 (12/2 & 12/4)	Advance Directives End of Life Care Dying and Death	Saxon et al. Chapter 24	HSSAT Fall Risk assignment due
15 (12/9 & 12/11)	Lifespan and Longevity Interventions	Martinovic et al. (2024) article	Final Self Reflection Assignment
Week 16 Finals Week	Final Exam		Final Exam

Course Bibliography and Resources:

Alzheimer's Association (2025). https://www.alz.org/

Bishop, A. (2022). *Successful aging*. Oklahoma State University Library. https://open.library.okstate.edu/successfulaging/

By the 2023 American Geriatrics Society Beers Criteria® Update Expert Panel (2023). American Geriatrics Society 2023 updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society*, 71(7), 2052–2081. <u>https://doi.org/10.1111/jgs.18372</u>

Centers for Disease Control and Prevention. (n.d.). *STEADI-Older Adult Fall Prevention*. https://www.cdc.gov/steadi/index.html

Dattani S., Rodés-Guirao L., Ritchie H., Ortiz-Ospina E. & Roser M. (2023). *Life Expectancy*. <u>https://ourworldindata.org/life-expectancy</u>

Drugs.com (2025). For Healthcare Professionals. <u>https://www.drugs.com/professionals.html</u>

Hospice Foundation of America. (2025). *Hospice: It's something more*. https://hospicefoundation.org/

Martinovic, A. Mantovani, M. Trpchevska, N., Novak, E., Milev, N.B., Bode L., Ewald, C.Y., Bischof, E., Reichmuth, T., Lapides, R., Navarini, A., Saravi, B., & Roider, E. (2024). Climbing the longevity pyramid: Overview of evidence-driven healthcare prevention strategies for human longevity. *Frontiers in Aging*, *5*, 1-23. https://doi.org/10.3389/fragi.2024.1495029

Office of the New York State Attorney General. (2025). *Advance directives*. https://ag.ny.gov/publications/advance-directives

Tomita, M.R. (2017). *Home safety self-assessment tool version 5 international*. <u>https://www.cgakit.com/e-1-hssat</u>

U.S. Department of Agriculture. (n.d.) *Older Adults*. https://www.nutrition.gov/topics/nutrition-life-stage/older-adults

U.S. Department of Health and Human Services (n.d.). *Healthy People 2030*. <u>https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/older-adults</u>

U.S. Department of Health and Human Services (2023). *Physical Activity Guidelines for Americans Midcourse Report: Implementation Strategies for Older Adults*. <u>https://odphp.health.gov/sites/default/files/2023-08/PAG\_MidcourseReport\_508c\_08-10.pdf</u>

Other articles and websites will be assigned.

# I. EVALUATION PROCESS/GRADING:

Assignment	Points
Self-Reflection Assignments (2x10 points each)	20
Theories of Aging Written Assignment	10
Biology of Aging in Film Assignment	20
Medication Presentation	20
Exercise and Health Promotion Case Study	10
HSSAT Fall Risk Assessment Assignment	20
Healthy Aging Group Presentation	20
Midterm Exam	40
Final Exam	40
Total Possible:	200 points

# I. ADDITIONAL COURSE INFORMATION:

<u>Late assignment policy</u>: It is expected that students complete all assignments in a timely fashion. <u>Late assignments will not be accepted and will receive a score of zero.</u> <u>If</u> <u>there is an emergency that prevents you from submitting an assignment or exam on-time, please contact Dr. Richards in advance of the due date.</u>

<u>ADA statement</u>: Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the Office of Accessibility Services and Academic Support, Student Success Center-Plassmann Hall, at (716) 375-2065 as soon as possible to better ensure that such accommodations are implemented in a timely fashion.

<u>Academic Honesty</u>: Academic dishonesty is inconsistent with the moral character expected of students in a university committed to the spiritual and intellectual growth of the whole person and with the ethics of the profession. It also subverts the academic process by distorting all measurements. It is a serious matter and will be dealt with accordingly. A list of unacceptable practices, penalties to be assigned, and procedures to be followed in prosecuting cases of alleged academic dishonesty may be found in the Student Handbook. Cheating, plagiarism (passing off others' work as your own) or submitting a paper from another course or a previous course is not acceptable and will result in a zero on the assignment, exam, or quiz in question, with no opportunity for make-up, and could result in failing the course. If a student consults the internet for background information about the author or the work, it must be cited properly by listing (APA style) the author, title, website and providing a link. Electronic devices are NOT allowed during quizzes or exams.

http://web.sbu.edu/friedsam/governing/academic\_policies/academic\_honesty\_policy.pdf

<u>Statement on Student Mental Health</u>: Everyone is on their own mental health journey, but sometimes you can feel like no one understands what you're going through. This is why the University's Center for Student Wellbeing has partnered with Togetherall — an anonymous, online peer-to-peer community where students can connect with others who have real lived experience. The community is free to our students and available 24/7. You must register with your university email to access the platform at https://account.v2.togetherall.com/register/student . If you would prefer a more formal experience, counseling services is available on-campus to students and can help you address a variety of concerns. You can schedule an appointment by calling 716-375-2310, option 1 or submit a Counseling Request Form through your patient portal — https://sbu.medicatconnect.com. If you find yourself in a crisis, you can walk-in and be seen for crisis intervention during regular business hours. You may also contact campus safety & security at 716-375-2525 for assistance after-hours. Other resources are the Crisis Text Line – text HOME to 741741 or the suicide hotline at 988.For additional information, please go to www.sbu.edu/studentwellbeing