

Clinical Neuroscience of Aging

Course Syllabus

Course Number: GMS6771

Credit Hours: Three (3) credit hours

Course Format: This online course is tailored for asynchronous distance learners.

Instructor: Dr. Sung Min Han(han.s@ufl.edu)

Teaching Assistant: Dr. Taylor McElroy (t.mcelroy@ufl.edu)

Course Description:

Clinical Neuroscience of Aging will be taught using a clinical science approach that examines the relationship between aging and change in the cognitive and central nervous system, such as the brain, as they relate to clinical disorders. Overviews of modern clinical neuroscience methodology, clinical assessment, intervention strategies, functional neuroanatomy, and major cognitive systems will serve as a foundation for students' understanding of how the human brain changes with age and how these changes affect brain function. Discussion of major research articles and issues critical to the clinical neuroscience of aging will be used to develop “critical thinking” skills.

Prerequisites:

This post-graduate course is designed to meet the needs of those BA and BS graduates who wish to better understand the clinical implications of brain aging as it applies to medical, professional, and research fields. This course will provide information essential for students that seek to further their general knowledge of aging in the central nervous system, such as the brain. This course will also serve as a foundation for students that wish to research in-depth in the field of clinical neuroscience of aging and pursue admission to a research Ph.D. program.

Contacts:

If you have questions about the course or its content contact the **Course Instructor at han.s@ufl.edu (Sung Min Han).**

Course Goals:

The goals of the course are three-fold: (1) to provide a foundation of the fundamental concepts and terminology of the clinical neuroscience of aging; (2) to understand how cognitive and brain function change with age; and (3) promote critical thinking about the clinical consequences of brain aging.

Learning Outcomes:

Upon completion of this course, students will be able to:

1. demonstrate an understanding of modern clinical neuroscience methods and terminology;
2. describe the function of major neuroanatomical structures and how they change during aging;
3. describe the major components used in a clinical neuroscience assessment;
4. identify common clinical manifestations of aging-related disorders;
5. demonstrate critical thinking skills to evaluate how age-related changes in brain structure and function contribute to cognitive and physical aspects of aging-related disorders.

Learning Resources:

1. Online videos will provide topic-related content knowledge.
2. Topic articles will be placed on the course website. The information in these articles is coordinated with online video materials and serves as the required text for the course.
3. Discussion boards will stimulate critical thinking about issues relevant for the clinical neuroscience of aging.
4. Assignments will consolidate knowledge of materials.

Grading:

Each student's final grade for the course will be calculated as follows:

- Weekly Module Projects and Discussions/Online forums: 50 points for each assignment or discussion for 14 weeks (1000 points)
- Final project: 150 points

Grading Scale (Your total points / 1000 points X 100 = your %)	
A = 93-100%	C+ = 77-79.9%
A- = 90-92.9%	C = 73-76.9%
B+ = 87-89.9%	C- = 70-72.9%
B = 83-86.9%	D+ = 67-69.9%
B- = 80-82.9%	D = 63-66.9%
	D- = 59-62.9%
	E < 59.9%

I = An incomplete grade will be given if a student fails to complete the course as scheduled without excuse.

Example

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15: Final project	Final point
Point	100	100	50	50	50	50	50	50	50	50	50	50	100	50	150	1000
Your point	100	100	50	45	50	50	50	50	50	45	50	50	100	50	145	985

Final grade (Your total points / 1000 points X 100 = your %): $985/1000 \times 100 = 98.5\%$ (Grade A)

Grading Policy:

There are no make-up examinations unless otherwise granted by the course coordinator prior to the examination date. If personal circumstances prevent taking an examination, it is the student's responsibility to contact the course coordinator. Failure to take an examination without prior permission will be recorded as a 0.

Late Work Policy:

All assignments/projects must be submitted via the deadline provided on the course web site.

For assignments that require manual grading (e.g., research papers, projects), unless you have an approved excused absence, a 10% deduction will be applied for each week the assignment is late.

Assignments:

The course is divided into 3 modules.

Each module consists of selected topics with specific reading assignments. For each module, students will: (1) review the learning objectives and corresponding lecture notes; (2) read the assigned topic papers; (3) watch the assigned topic videos, (4) participate in online discussions of course material; and/or (5) complete assignments. In addition, (6) you will complete a final project - details in the next section.

Final Project:

For the final project, you can freely pick one topic in the two options below as the final project.

First option: you can create an infographic/diagram/PowerPoint Poster to compare and contrast the differences between the clinical diagnosis of Alzheimer's disease and the research framework for characterizing the disease from a biological perspective (see below).

Second option: you can create an infographic/diagram/PowerPoint Poster to introduce recent research findings or news articles about how Covid-19 could potentially affect brain function (See example articles below). A reference and some examples of infographics will be provided.

- Some examples of Infographics include:
- <http://visual.ly/aging-america> (Links to an external site.)Links to an external site.
- <http://visual.ly/brief-glimpse-aging> (Links to an external site.)Links to an external site.

Attendance:

Attendance is not mandatory. A student's overall success, however, is based on following the course schedule for learning the assigned materials, completing the recommended exercises, and participating in online telephone sessions and discussion board. Students are strongly encouraged to develop self-discipline to complete all text readings and online exercises, including the practice examinations.

Academic Integrity:

Please review the University's complete policy regarding academic dishonesty, found online in the student

handbook: <http://www.dso.ufl.edu/judicial/pdf/files/handbook2003.pdf> (Links to an external site.)

Students are expected to abide by the University's Academic Honesty Policy, and to adhere to the following pledge:

"We, the member of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

According to the UF Student Guide, Academic dishonesty includes the following:

- Cheating - copying another's work for academic gain.
- Plagiarism - representing another's work as your own.
- Bribery - offering, giving, soliciting, or receiving goods or services of value for academic gain.
- Misrepresentation - altering facts (e.g., signing an absent classmate's name to an attendance sheet).
- Conspiracy - planning with others to commit academic dishonesty.
- Fabrication - making up information to avoid punishment or another difficulty.

Copyright Information:

Please also review the use of copyrighted materials, which can be found on the Health Science Center Library's web

page: <http://www.library.health.ufl.edu/services/copyright.htm> (Links to an external site.)

Artificial Intelligence (AI) Use Policy

For this graduate level course, GMS6771 Clinical Neuroscience of Aging, it is imperative that all work submitted is your own. The use of AI tools, including but not limited to, generative language models, code generation tools, and automated essay writer, is strictly prohibited for all assignments. Any work found to have been produced with the aid of such AI tools will result in a zero for that assignment. This policy is in place to ensure the integrity of your learning experience and to respect the academic standards of this course. If you have any questions about this policy or need assistance with your work, please do not hesitate to reach out to your instructor.

Accommodation Policy:

Students requesting classroom accommodation must first register with the Dean of Students' office, 202 Peabody Hall, 392-1261. The DSO will provide documentation to the student who must then provide this documentation to the instructor.

Student Support Services

As a student in a distance learning course or program, you have access to the same student support services that on-campus students have. For course, content questions contact your instructor.

For any technical issues you encounter with your course please contact the UF computing Help Desk at 352-392-4357. For Help Desk hours visit: <http://helpdesk.ufl.edu/>(Links to an external site.)

For a list of additional student support services links and information please visit: <http://www.distance.ufl.edu/student-services>

[Links to an external site.](#) (Links to an external site.)

Special Accommodations

Students requesting disability-related academic accommodations must first register with the Disability Resource Center. <http://www.dso.ufl.edu/drc>

[Links to an external site.](#) (Links to an external site.)

The Disability Resource Center will provide documentation to the student who must then provide this documentation to the Instructor when requesting an accommodation.

Complaints

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> (Links to an external site.) to submit a complaint.