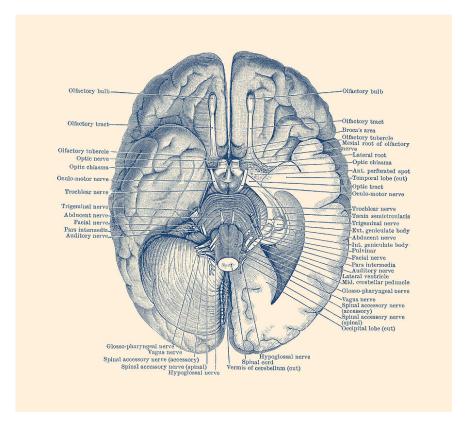
Fall 2023 BIO 330: Diseases of the Nervous System Every Tuesday and Every Thursday 8:30 - 9:45 AM 2 1 0 East

Dr. Larimore <u>jlarimore@agnesscott.edu</u>

Office hours: Email to schedule an

appointment



Read each part of this syllabus to understand the expectations for this class. If you email your professor with a question that is covered in this syllabus, you will be asked to find the answer in the syllabus. Professors take time and care to include information they find important in the syllabus. Understanding what your professor thinks is important is one of the keys to success in any class

Course Summary

<u>Description:</u>

This class examines the cell types that make up the human brain and how each of these cell types function properly to make us who we are. We will examine the sub-cellular nature of several different neurological diseases to fully understand the important functions of individual brain cells.

Objectives:

Upon successful completion of this course, the student will demonstrate knowledge of altered cellular functions in neurological diseases. Students will be able to translate neuroscience knowledge and disease proficiency into a review article.

Scientific skills gained:

- Critical thinking/Problem Solving through weekly article analysis, students will be able to critically read and evaluate scientific literature. Through designing experiments, students will sharpen their ability to think critically about neuroscience.
- Written Communication through weekly assignments and the review paper, students will demonstrate their ability to write scientifically.
- Research Skills as a result of this course, students can design an experiment, analyze results, draw conclusions, and critically analyze the overall conclusions.

Required Texts:

Diseases of the Nervous System. Harald Sontheimer. Academic Press. ISBN: 978-0-12-800244-5

Expectations:

This is an upper-level **scientific writing and reading course**.

- No late work is accepted without permission of the instructor prior to the due date/time.
- Canvas discussion board: use this to crowdsource explanations to specific questions
- Based on assignments for lecture, you will spend 8 hours studying for this class outside of class time (~ 2 hours of chapter reading, ~4 hours of article reading, ~2 hours of HW or project work). If you are not spending 8 hours outside of class time, you will not earn a high grade. If you are taking 4 classes, the math is 8 hours out of class, 2 hours in class, so 10 hours per class each week, or a 40 hour work week your job is your course work. Please come see your instructor early in the semester if you are struggling.
- Canvas syllabus tab lets you see this syllabus and the schedule for this course.
- Course Calendar in Canvas and share it with your Google Calendar. See: https://community.canvaslms.com/t5/Student-Guide/How-do-I-subscribe-to-the-Calendar-feed-using-Google-Calendar-as/ta-p/535
- Must have access to a computer or tablet. If you need help with this, visit ITS.
- Cell phones should NEVER be visible/used during class time and can result in tardiness (see rubric below). Cell phone use when a professor is talking is rude.
- Email/Canvas: Instructors will make announcements regularly via email. It is your responsibility to check your Agnes Scott email AND Canvas page daily. When responding to a professor via email, take care that your email is professional AND that you identify what class you are in.

Grading Policy

It is your responsibility to keep up with the class material. The final grade for this course will be based on the following:

Course Participation 60 points

Paper & Chapter Analysis Form 320 points (8 assignments x 40 points each)

Tests 100 points (2 tests, 50 points each)

Outline for Final Project 50 points
Draft #1 final Project 45 points
Final Project 100 points

You and you alone are responsible for your grade. Treat your grade with all the seriousness of your career aspirations.

^{**} additional points/assignments may be added by the professor

This course will <u>require your active</u>, <u>regular participation in lecture times</u>. You will receive 1 grade (60 points) for the entire semester for your attendance, participation, and quality of participation in class. See the rubric below, which will evaluate your entire semester.

	Excellent 20	Good Work 15	Fair 10	Below Average 5	Poor 0
Semester Attendance	Attended all sessions or received approval for necessary absences	1 unexcused absences	2 unexcused absences	3 unexcused absences	4 or more unexcused absences
Semester Tardies	Was on time and did not leave early for all sessions and/or received approval for necessary altered hours	1 unexcused tardy (came more than 5 minutes late or left more than 5 minutes early, or was on a website/ app that did not contribute to class)	2 unexcused tardy (came more than 5 minutes late or left more than 5 minutes early, or was on a website/app that did not contribute to class)	3 unexcused tardy (came more than 5 minutes late or left more than 5 minutes early, or was on a website/app that did not contribute to class)	4 or more unexcused tardy (came more than 5 minutes late or left more than 5 minutes early, or was on a website/app that did not contribute to class)
Semester evaluation of student's contribution to class discussions	Engaged in the conversation. Comments were almost always insightful and constructive. Comments were almost always balanced, using scientific terminology and showed critical analysis skills	Mostly engaged in the conversation. Comments were mostly insightful and constructive. Comments were mostly balanced, using scientific terminology and showed critical analysis skills. Occasionally comments were too general or not relevant.	Partially engaged in the conversation. Comments were sometimes insightful. Comments were sometimes balanced, using scientific terminology and showed critical analysis skills. Often comments were too general or not relevant.	Often inattentive in class. Comments were infrequent and the student appeared inattentive.	Not engaged with the conversation - to others or make insightful comments.

Academic Honesty and Citations

Artificial Intelligence Models

Artificial intelligence (AI) language models, such as ChatGPT, may be used for any assignment with appropriate citation. Examples of citing AI language models are below. You are responsible for fact checking statements composed by AI language models.

EXAMPLE:

When prompted with "Is the left brain right brain divide real or a metaphor?" the ChatGPT-generated text indicated that although the two brain hemispheres are somewhat specialized, "the notation that

people can be characterized as 'left-brained' or 'right-brained' is considered to be an oversimplification and a popular myth" (OpenAI, 2023).

Reference

OpenAI. (2023). ChatGPT (Mar 14 version) [Large language model]. https://chat.openai.com/chat

Parenthetical citation: (OpenAI, 2023) Narrative citation: OpenAI (2023)

You are responsible. Violations of the honor code can result in <u>failure</u> of the assignment, failure of the course, to <u>expulsion</u> from the college. Speak with your professors if you need clarification about any of these policies.

By placing your name on ANY assignment, you are stating that you completed that assignment with academic honesty. Cheating in this class may keep your grade where you want it, but it will not help your career long term.

Academic dishonesty is reported to medical schools and graduate schools as per their request. Finally, anyone caught cheating relinquishes the privilege of asking for a letter of recommendation from the professors and will receive a o on the assignment. Acts of academic dishonesty will be turned over to Honor Court.

Plagiarism: Do attribute all ideas taken from other sources; this shows respect for other scholars. Plagiarism can include portraying another's work or ideas as your own, buying a paper online and turning it in as if it were your own work, or not citing or improperly citing references on a reference page or within the text of a paper.

Plagiarism is passing off any work that is not yours as your own work ** EVEN WITH A CITATION***. If you are using a source and citing the source, the information from that source STILL must be reworded in your own voice.

All Citations must be in APA style.

Putting a citation behind a statement gives ownership to that source, but, if you do not reword that information, it is plagiarism.

Do not cut and paste from the slide, your book, your neighbor, Wikipedia, or the internet. To further your science education, you need to be able re-word science in your own voice. If your answers are not your own, you will receive a o for the assignment.

Intellectual Fraud: Do not falsify or create data, resources or alter a graded work without the prior consent of your professor. This includes making up a reference for a works cited page or making up statistics or facts for academic work.

Cheating: Do not allow another party to do your work/exam or submit the same or similar work in more than one course without permission from the course instructors. Cheating also includes taking an exam for another person, <u>looking on another person's exam for answers</u>, <u>using exams from previous classes without permission</u>, or bringing and using unauthorized notes or resources (i.e., electronic, written, or otherwise) during an exam. Cheating also includes when you help another student complete a take home exam, give answers to an exam, talk about an exam with a student who has not taken it, or collaborate with others on work that is supposed to be completed independently.

Course Components

All assignments are to be uploaded on Canvas as a word doc or a PDF.

Weekly Reading:

Each week, you will be assigned reading from the Sontheimer textbook and peerreviewed articles from primary literature (one clinical and one basic research article). These are on the schedule below.

Each chapter in the book has a relatively similar outline.

- 1. Case Story
- 2. History
- 3. Clinical Presentation/Diagnosis/Epidemiology
- 4. Disease Mechanism/Cause/Basic Science
- 5. Treatment/Standard of Care/Clinical Management
- 6. Experimental Approaches/Clinical Trials
- 7. Challenges and Opportunities

When covering the chapter reading, this should serve as a background of sorts for the paper information you will cover. When covering the paper, you should pick a figure or key piece of information, a key takeaway that impacts our understanding of the disorder/disease. If you are reading this sentence before the start of the start of the first class day, email the professor a picture of your favorite animal, explain why it is your favorite and which class you are in. That email will earn you a bonus point. Do not indicate to your classmates where the bonus sentence is. The clinical portions of the chapter include: Case Story, History, Clinical Presentation/Diagnosis/Epidemiology, Treatment/Standard of Care/Clinical Management. The basic research portions of the chapter include: Disease Mechanisms/Causes/Basic Science, Experimental Approaches/Clinical Trials, and Challenges and Opportunities.

Weekly Paper Analysis:

Two peer-reviewed articles from primary literature – one clinical paper and one basic research paper- will be assigned to each disease. The assignments are below. The papers for these assignments are on the schedule below. **Due dates for the paper analysis are on Canvas.**

Basic Research Paper & Chapter Analysis

INSTRUCTIONS:

- 1. Answer the questions below based on the basic research article. Read the articles that are linked above.
- 2. <u>LEAVE</u> the question on the page with your answer.
- 3. Answer or question needs to be bolded or in a different color to distinguish between the 2.
- 4. Answer questions fully to help you learn the material. The answer to any of these questions CANNOT be a quote from the article, book or any other source. You cannot copy and paste from the article or any other source. You MUST rephrase any material.
- 5. **Upload as a google doc, word doc or PDF only**. Any other file types are not accepted and will earn a o on the assignment. No late work will be accepted without prior permission of the instructor.

Student Name:

Date:

(30 points) Basic Research Article name:

- 1. (3 points) Use 9 bullet points to summarize the basic research information from the Sontheimer book chapter only (not the article). Each chapter in the book has a relatively similar outline.
 - a. The basic research portions of the chapter include give 3 pieces of information from each of the sections below
 - i. Disease Mechanisms/Causes/Basic Science
 - ii. Experimental Approaches/Clinical Trials
 - iii. Challenges and Opportunities.
- 2. (2 points) Using bullet points and the assigned basic research article, what are 3 key facts from the introduction that lead to the formation of the hypothesis?
- 3. (10 points) Pick one figures from the paper. If there is no figure, use a table. Cut and paste that figure/table here.
 - a. What is the hypothesis of the paper?
 - b. What technique was used to generate this figure? Describe the technique in a way that you would explain it to a student taking BIO 110 for the first time.
 - c. What does the figure include? If there is an a-f, describe what we are looking at.
 - d. What does the data conclude from this figure? Explain this as you would to a fellow student in an upper level science class.
 - e. How does the data from this figure support the hypothesis? Defend your answer. Simply saying "it does or does not" support is not an appropriate answer.
- 4. (5 points) From the discussion portion of the paper, list the all the results.
- 5. (10 points) Address the discussion prompt from the syllabus in 200 300 words. Put your word count just before your summary.

Clinical Research Paper & Chapter Analysis

INSTRUCTIONS:

- 1. Answer the questions below based on the basic research article AND the clinical article. Read the articles that are linked above.
- 2. Make sure you leave the question on the page with your answer.
- 3. Answer or question needs to be bolded or in a different color to distinguish between the 2.
- 4. Answer questions fully to help you learn the material. The answer to any of these questions CANNOT be a quote from the article, book or any other source. You cannot copy and paste from the article or any other source. You MUST rephrase any material.
- 5. **Upload as a google doc, word doc or PDF only**. Any other file types are not accepted and will earn a o on the assignment. No late work will be accepted without prior permission of the instructor.

Student Name:

Date:

(30 points) Clinical Research Article name:

- 1. (3 points) Use 9 bullet points to summarize the clinical information from the Sontheimer book chapter only (not the article). Each chapter in the book has a relatively similar outline.
 - a. The clinical portions of the chapter include: give 3 pieces of information from each of the sections below
 - i. Case Story, History (combine these 2 sections)
 - ii. Clinical Presentation/Diagnosis/Epidemiology,
 - iii. Treatment/Standard of Care/Clinical Management.
- 2. (2 points) Using bullet points and the assigned basic research article, what are 3 key facts from the introduction that lead to the formation of the hypothesis?
- 3. (10 points) Pick one figures from the paper. If there is no figure, use a table. Cut and paste that figure/table here.
 - a. What is the hypothesis of the paper?
 - b. What technique was used to generate this figure? Describe the technique in a way that you would explain it to a student taking BIO 110 for the first time.
 - c. What does the figure include? If there is an a-f, describe what we are looking at.
 - d. What does the data conclude from this figure? Explain this as you would to a fellow student in an upper level science class.
 - e. How does the data from this figure support the hypothesis? Defend your answer. Simply saying "it does or does not" support is not an appropriate answer.
- 4. (5 points) From the discussion portion of the paper, list the all the results.
- 5. (10 points) Address the discussion prompt from the syllabus in 200 300 words. Put your word count just before your summary.

Final Project Description

In lieu of a final, you will create a book chapter based on a neurological disease that is not covered by our book. Use google to identify a neurological disease that is not included in our text. You will use the general outline that our book uses:

- 1. Case Story
- 2. History
- 3. Clinical Presentation/Diagnosis/Epidemiology
- 4. Disease Mechanism/Cause/Basic Science
- 5. Treatment/Standard of Care/Clinical Management
- 6. Experimental Approaches/Clinical Trials
- 7. Challenges and Opportunities

Final Project Outline – 50 points

For your outline due at the beginning of the semester, you will use the outline above.

Your outline that is turned in must have at least 5 substantial bullet points that are in your own words (not quotes or cut and paste abstracts) for each of the sections.

Each bullet point is worth 1 point. A bullet point will earn the full point if it demonstrates mastery of the material and organization necessary of the information.

For your outline that is due at the beginning of the semester, you need to turn in at least 2 referenced, unique sources for each section. Create a reference section at the END of your outline that will serve as a reference section for the final project. Cite the work in the outline with the first author and date in parenthesis.

Some sources may be used in multiple sections, however, for the outline, each section needs at least 2 sources that are unique to that section. The sources for each section are worth 1 point each, so 2 points total per section.

APA format.

Additionally, add figures/images. If these are data images/figures, they count as a unique source.

If it is an image of a scientist or a diagram that is common, then it doesn't count as a unique source. Each of the sections, except of the case study, are easily enhanced with the use of diagrams or figures. Look to your book for how the author incorporated figures and data to explain the material.

Outline of the Final Project Rubric

1 point for following directions plus the following 49 points:

Section	o points	2-6 points	7 points
Case Study	Bullet points do not demonstrate mastery of the material and organizing necessary information	Bullet points demonstrate some mastery of the material and some organization of the necessary information	Bullet points demonstrate mastery of the material and organization of the necessary information
	No references	1 unique reference	2 unique references
History	Bullet points do not demonstrate mastery of the material and organizing necessary information	Bullet points demonstrate some mastery of the material and some organization of the necessary information	Bullet points demonstrate mastery of the material and organization of the necessary information
	No references	1 unique reference	2 unique references
Clinical Presentation	Bullet points do not demonstrate mastery of the material and organizing necessary information	Bullet points demonstrate some mastery of the material and some organization of the necessary information	Bullet points demonstrate mastery of the material and organization of the necessary information
	No references	1 unique reference	2 unique references
Disease Mechanism	Bullet points do not demonstrate mastery of the material and organizing necessary information	Bullet points demonstrate some mastery of the material and some organization of the necessary information	Bullet points demonstrate mastery of the material and organization of the necessary information
	No references	1 unique reference	2 unique references
Treatment	Bullet points do not demonstrate mastery of the material and organizing necessary information	Bullet points demonstrate some mastery of the material and some organization of the necessary information	Bullet points demonstrate mastery of the material and organization of the necessary information
	No references	1 unique reference	2 unique references
Experimental Approaches	Bullet points do not demonstrate mastery of the material and organizing necessary information	Bullet points demonstrate some mastery of the material and some organization of the necessary information	Bullet points demonstrate mastery of the material and organization of the necessary information
	No references	1 unique reference	2 unique references
Challenges	Bullet points do not demonstrate mastery of the material and organizing necessary information	Bullet points demonstrate some mastery of the material and some organization of the necessary information	Bullet points demonstrate mastery of the material and organization of the necessary information
	No references	1 unique reference	2 unique references

<u>Draft #1 Final Project - 45 points</u>

For Draft that you turn in later in the semester, you will incorporate feedback from the outline. This draft cannot contain bullet points and MUST be in paragraph form. This Draft #1 should look like a rough draft of a book chapter (single column, not 2 columns), with complete sentences and proper formatting. The closer this is to a final draft, the more substantial feedback the professor can give you so that you can earn all your points for the final.

so that you can ea	irn all your points for			
	opoints	1 points	2 points	3 points
Case study	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
History	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Clinical Presentation	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Disease Mechanism	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Treatment	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Experimental Approach	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Challenges	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Grammar/Spelling	Poor Grammar and spelling.	Some Grammar and spelling errors.	Very few grammar and spelling errors	No grammar or spelling errors
	o points	1 points	3 points	4 points
Formatting	Proper formatting was not followed	Proper formatting was followed some of the time	Proper formatting was followed most of the time	Proper formatting was followed.
	o points	4 points	8 points	10 points
Overall Cohesion/ Flow of the paper	The paper was choppy and did not flow.	The paper flowed/was cohesive some of the time.	The paper flowed/was cohesive most of the time.	The paper was cohesive.
	o points	4 points	8 points	10 points
		+	-	·

<u>Final Project – 100 points</u>

This draft must be formatted to look like a chapter from our text, but only as a single column (do not make 2 columns). The text should be in paragraph form, with a polished scientific voice. It must incorporate any feedback received.

	o points	4 points	8 points	10 points
Case study	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
History	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Clinical Presentation	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Disease Mechanism	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Treatment	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
Experimental Approach	Section does not contain appropriate knowledge or integration to the theme. No mastery of the subject is evident.	Section has some knowledge of the topic and some integration to the theme. Some mastery of the information is evident.	Section contains most of the knowledge for the topic and most of the integration of the them. Mastery of the material is mostly present.	Section contains necessary knowledge and integration of knowledge to the theme. Mastery of the information is evident,
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Grammar/Spelling	Poor Grammar and spelling.	Some Grammar and spelling errors.	Very few grammar and spelling errors	No grammar or spelling errors
Formatting	Proper formatting was not followed	Proper formatting was followed some of the time	Proper formatting was followed most of the time	Proper formatting was followed.
Overall Cohesion/ Flow of the paper	The paper was choppy and did not flow.	The paper flowed/was cohesive some of the time.	The paper flowed/was cohesive most of the time.	The paper was cohesive.

Academic Policies

E-mail: Instructors will make announcements regularly via e-mail. *It is your responsibility to check your Agnes Scott email account daily*. When responding to a professor over email, ensure your email is professional. Examples here: https://medium.com/@lportwoodstacer/how-to-email-your-professor-without-being-annoying-af-cf64aeoe4087#.jldd3bxes

Plagiarism and Citations: In your review article at the end of this class, you will need several outside sources. At no point can you copy work from another student. If you do so, you will receive a o on the assignment. If you use an outside source, you MUST reword the content from that source in your own words. If you do not reword the content from the outside source, you will receive a o on the assignment. If you use an outside source as a reference, make sure you use the first occurrence (first person to describe a mutation/animal model, etc. – don't simply cite a review that mentions the first mutation).

Honor Code: All work performed in this course must be in accordance with the Agnes Scott College Honor Code.

ADA: If you have a disability that may have some impact on your work in this class and for which you may require accommodations, please the Office of Academic Advising to register for services. Students that receive accommodation checklists, please meet with me to discuss the provisions of those accommodations as soon as possible.

Title IX: For the safety of the entire community, any incidence of or information about sexual misconduct must be reported immediately to Title IX Coordinator Karen Gilbert (kgilbert@agnesscott.edu, 404-471-6435) or Deputy Title IX Coordinator Kristian Contreras (kcontreras@agnesscott.edu, 404-471-6394).

Inclusion: This course adheres to the principles of diversity and inclusion integral to the Agnes Scott community. We respect people from all backgrounds and recognize the differences among our students, including racial and ethnic identities, religious practices, and gender expressions. We strive for our campus to be a safe space in which all students feel acknowledged and supported. At the same time, we understand that course content, critical inquiry, and classroom dialogues give us opportunities to examine topics from a variety of perspectives. Such discourse is a defining feature of a liberal arts education, and can compel debates that challenge beliefs and positions, sometimes causing discomfort, especially around issues related to personal identities. While we uphold and preserve the tenets of academic freedom, we request and invite your thoughtful and constructive feedback on ways that we can, as a community of learners, respectfully assist and challenge one another in our individual and collective academic work.

Content Warning: This course will explore the human brain and behavior, which might raise issues of racism, sexism, classism, heterosexism, cissexism, ableism, and other kinds of privilege. I invite you to come see me if want more information. If you feel you will be unable to fully participate in the course requirements, set up a meeting with the course instructor to determine appropriate accommodations.

Deadlines: It is your responsibility to keep up with the class material. It is also your responsibility to stay on top of presentation, quiz and exam deadlines.

Course Evaluations: At the end of the semester you will receive an e-mail asking you to submit an evaluation of the course. Please give feedback! Your input is important to the college as a whole and to us as instructors. We take your comments very seriously.

Academic Honesty: The Agnes Scott College honor code embodies an ideal of character, conduct, and citizenship, and is an important part of the College's mission and core identity. This applies especially to academic honesty and integrity. Passing off someone else's work as your own represents intellectual fraud and theft and violates the core values of our academic community. To be honorable, you should understand not only what counts as academic dishonesty, but also how to avoid engaging in these practices. You should:

- review each course syllabus for the professor's expectations regarding course work and class attendance.
- attribute all ideas taken from other sources; this shows respect for other scholars. Plagiarism can include portraying another's work or ideas as your own, buying a paper online and turning it in as if it were your own work, or not citing or improperly citing references on a reference page or within the text of a paper.
- not falsify or create data and resources or alter a graded work without the prior consent of your professor. This includes making up a reference for a works cited page or making up statistics or facts for academic work.
- not allow another party to do your work/exam or submit the same or similar work in more than one course without permission from the course instructors. Cheating also includes taking an exam for another person, looking on another person's exam for answers, using exams from previous classes without permission, or bringing and using unauthorized notes or resources (i.e., electronic, written, or otherwise) during an exam.
- not facilitate cheating, which can happen when you help another student complete a take home exam, give answers to an exam, talk about an exam with a student who has not taken it, or collaborate with others on work that is supposed to be completed independently.
- be truthful about the submission of work, which includes the time of submission and the place of submission (e.g., e-mail, online, in a mailbox, to an office, etc.).

You should understand that penalties result from dishonest conduct, ranging from failure of the assignment to expulsion from the college. You should speak with your professors if you need clarification about any of these policies.

- The chapter reading should be completed BEFORE class.
- The cells in grey are days are not in person. You still have work to be completed.
- You will complete two Paper & Chapter Analysis Form per chapter assigned one on the basic research and one for the clinical aspects. Each form is worth 30 points. Discussion Prompts for Question #5 below. And the Assigned Papers for each form is below.

Date	Chapter Reading	Assignments	Discussion Prompts for Question #5	Assigned Articles
TR 8/24	Syllabus	Read the syllabus before class, begin looking at the final project		
T 8/29	Chapter 1 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss the role of tPA in stroke management.	Goncalves 2022 - https:// pubmed.ncbi.nlm.nih.gov/ 35576527/
TH 8/31		Basic Research Paper and Chapter Analysis	Discuss the penumbra and how that impacts stroke.	Belayev 2018 - https:// pubmed.ncbi.nlm.nih.gov/ 29858774/
T 9/5	Chapter 2 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss the implications of CNS trauma in college athletes.	Angoa-Perez 2014 - https:// pubmed.ncbi.nlm.nih.gov/ 24673291/
TH 9/7		Basic Research Paper and Chapter Analysis	Discuss the role of estrogen in neuroprotection	Crain 2010 - https:// pubmed.ncbi.nlm.nih.gov/ 21961028/
T 9/12	Chapter 3 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss the role of novel treatments in epilepsy	Montero-Oleas 2020 - https:// pubmed.ncbi.nlm.nih.gov/ 32020875/
TH 9/14		Basic Research Paper and Chapter Analysis	Discuss the role of glutamate in epilepsy	Green 2021 - https:// pubmed.ncbi.nlm.nih.gov/ 34571003/
T 9/19		Work on your Project Outline		
TH 9/21		Work on your Project Outline		
T 9/26	Chapter 4 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss the pros and cons of current clinical models of AD.	Cen 2020 - <u>https://</u> pubmed.ncbi.nlm.nih.gov/ 33184293/
TH 9/28		Basic Research Paper and Chapter Analysis	Discuss the importance of tau in AD.	Sun 2021 - https:// pubmed.ncbi.nlm.nih.gov/ 34116706/
T 10/3		Begin Draft #1 Final Project		
TR 10/5		Prep for Oral Exam		
T 10/10		Fall Break		
TR 10/12	Chap 1- 4	Test #1: Oral Exam		
T 10/17	Chapter 5 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss the importance of deep brain stimulation in PD.	Habits 2018 - https:// pubmed.ncbi.nlm.nih.gov/ 30357911/
TH 10/19		Basic Research Paper and Chapter Analysis	Discuss the genets implicated in PD basic research.	Simon 2020 - https:// pubmed.ncbi.nlm.nih.gov/ 31733690/

Date	Chapter Reading	Assignments	Discussion Prompts for Question #5	Assigned Articles
T 10/24	Chapter 7 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss gene targeting techniques in Huntington's	Fields 2021 - https:// pubmed.ncbi.nlm.nih.gov/ 34098113/
TH 10/26		Basic Research Paper and Chapter Analysis	Discuss the role of glia in Huntington's	Palpagama 2019 - https:// pubmed.ncbi.nlm.nih.gov/ 31708741/
T 10/31	Chapter 8 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss the 4 types of MS and how treatments are different.	Clinical – Amato 2022 - https:// pubmed.ncbi.nlm.nih.gov/ 35359637/
TH 11/2		Basic Research Paper and Chapter Analysis	Discuss the role of neurons and glia in MS.	Schemer 2019 - https:// pubmed.ncbi.nlm.nih.gov/ 31316211/
T 11/7	Chapter 9 in Sontheimer	Clinical Research Paper and Chapter Analysis	Discuss the ethical implications of Death with Dignity as it relates to Gliablastoma multiform	Fortunato 2020 - https:// pubmed.ncbi.nlm.nih.gov/ 33898050/
TH 11/9		Basic Research Paper and Chapter Analysis	Discuss the role of macrophages in brain tumors	Chen 2017 - https:// pubmed.ncbi.nlm.nih.gov/ 28235764/
T 11/14		Project Work and prep exam #2		
/ - 1		Project Work and prep exam #2		
TH 11/16	Chap 5, 7, 8 and 9	Test #2: Oral Exam		
·	Chap 5, 7, 8 and 9			
TH 11/16	Chap 5, 7, 8 and 9 Chapter 11 in Sontheimer	Test #2: Oral Exam	Discuss how interventions improve the outcomes in Autism	Neurodevelopment Disorders - Clinical - Dawson 2010 - https:// pubmed.ncbi.nlm.nih.gov/ 19948568/
TH 11/16	8 and 9 Chapter 11 in	Test #2: Oral Exam No Class - Thanksgiving Break Clinical Research Paper and	interventions improve	Disorders - Clinical - Dawson 2010 - https:// pubmed.ncbi.nlm.nih.gov/
TH 11/16 11/20 - 24 T 11/28	8 and 9 Chapter 11 in	Test #2: Oral Exam No Class - Thanksgiving Break Clinical Research Paper and Chapter Analysis Basic Research Paper and	interventions improve the outcomes in Autism Discuss the various mouse models used in clinical research for	Disorders - Clinical - Dawson 2010 - https:// pubmed.ncbi.nlm.nih.gov/ 19948568/ Neurodevelopment Disorders - Basic Research - Pillerova 2022 - https:// pubmed.ncbi.nlm.nih.gov/
TH 11/16 11/20 – 24 T 11/28 TH 11/30	Chapter 11 in Sontheimer Final Project	Test #2: Oral Exam No Class - Thanksgiving Break Clinical Research Paper and Chapter Analysis Basic Research Paper and Chapter Analysis Final Project Due - no late	interventions improve the outcomes in Autism Discuss the various mouse models used in clinical research for Autism Per the student handbook, faculty cannot accept work of the semester after the	Disorders - Clinical - Dawson 2010 - https:// pubmed.ncbi.nlm.nih.gov/ 19948568/ Neurodevelopment Disorders - Basic Research - Pillerova 2022 - https:// pubmed.ncbi.nlm.nih.gov/