

Southeastern University
College of Natural and Health Sciences
Introduction to Neuroscience BIOL 4653
TR 1:25-2:40
Fall 2018

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Required Text:

Neuroscience 5th Edition, 2012, Editors: Purves et al.

Disclaimer: The resources utilized in this course provide information, thoughts and insights that should encourage critical thinking on the part of the student. Please note as well that as an Assembly of God institution, Southeastern University does not necessarily endorse specific personal, religious, philosophical, or political positions found in these resources.

Scheduling appointments/Office hours:

To schedule a meeting with me please go to the following link.

<https://calendar.google.com/calendar/selfsched?sstoken=UUFoQndISk1YU2VSfGRIZmF1bHR8NDY3MTk1MjU3ZTBmNGRkMWRkYjIwOTY3MTNI NTZhODI>

Each Friday I will add available times for the following week.

You may not schedule more than one time slot per week in order to allow other students the opportunity to meet with me.

If you sign up for an appointment and do not show up without notifying me, you will no longer be allowed to schedule meetings with me using this mechanism for the rest of the semester. You will have to email to request a meeting and I will determine what is available after all other students have had opportunity to sign up.

Mission Statement:

Equipping students to discover and develop their divine design to serve Christ and the world through Spirit-empowered life, learning, and leadership.

(Please go to SEU web page listed below and read our Vision Statement and our position on Human Sexuality: <http://www.seu.edu/about/what-we-believe/>)

Catalog Description:

In this course, students are introduced to the organization and function of the nervous system. Topics covered include neural signaling, channels and transporters, neurotransmitters, synaptic transmission, sensory processing, synaptic plasticity, and memory. Students will also be introduced to pathophysiology of neurological and psychological disorders.

Prerequisite: Biol 2633

Credit Hours: (3)

Vision Statement:

Southeastern University is anchored by Spirit-empowered education in a Christ-centered, student-focused learning community. Southeastern's global impact is marked by a deep commitment to transforming minds and engaging culture through the integration of faith, learning, and service. Each student's divine design is nurtured and unleashed through the investment of faculty and staff, relationships within the community, the rigor of scholarship, diverse learning experiences, and the discipline of spiritual formation, which propels students into a lifetime of serving the world in the Spirit of Christ.

Official Communication Statement:

Southeastern University requires all faculty, staff and students to use their Southeastern email address for official university communication. Students are required to check Southeastern email daily as they will be held accountable for all communications sent through this medium.

SEU Title IX Statement

Southeastern University is committed to creating an environment for every student to thrive academically spiritually and socially. An aspect of creating this culture is providing avenues for students to discuss and report any activity that may compromise this commitment.

Under a federal law known as Title IX, "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance" (Title IX of the Education Amendments of 1972).

While students should feel comfortable approaching faculty with issues they may be struggling with or concerns they may be having, students should know that all faculty and staff are required to report certain information about Sexual Misconduct and certain crimes to University administration, in order to help keep the University community safe, and to connect students to all of the resources and reporting options that are available.

For example, if you inform faculty or staff (in private or during class discussions) of an incident of Sexual Misconduct, that individual will keep the information as private as possible, but is required to bring it to the attention of the institution's Title IX Office. If a student would like to talk to the Title IX office directly, they can do so by e-mail at smpowell@seu.edu, by phone at 863-667-5236, or in

person at Pansler U225. For more information about Title IX reporting options at Southeastern, please go to: <http://www.seu.edu/titleix>.

If you are struggling with an issue that is traumatic, unusually stressful, or results in disruptive behavior, faculty and staff will likely inform the Care Team. If students would like to reach out directly to the Care Team for assistance, they can do so at the Campus Counseling Center (<http://myseu.seu.edu/services/counseling-health-wellness-services/seu-care-team/>) located in Health Services in Smith Hall, by phone at 863-667-5205, or by e-mail at care@seu.edu.

CAMPUS RESOURCES

ACADEMIC SUPPORT SERVICES – 863-667-5283

COUNSELING SERVICES – 863-667-5205

STUDENT CONDUCT OFFICE – 863-667-5143

SAFETY & SECURITY OFFICE – 863-667-5190

Purpose:

This course is designed as an introduction to Anatomy/ Physiology.

Topics to be covered:

Please see Lecture Schedule below

Intended Learning Outcomes:

1. Describe the fundamental mechanisms underlying normal function of neurons.
2. Describe the contributions of anatomical, physiological, behavioral, pharmacological, developmental, and cell and molecular bases of neuroscience.
3. Identify structural and functional areas of nervous system
4. Apply knowledge of functional mechanisms and their regulation to explain the pathophysiology underlying common neurological and psychiatric diseases.
5. Use primary literature readings to understand basic physiological principles and mechanisms in neuroscience.
6. Read and critically evaluate the design, results and conclusions of experiments published in primary neuroscience literature
7. Increasingly engage in critical and creative thinking and apply these skills in writing on basic physiological principles and mechanisms found in the primary literature.
8. Understand effective structure and development of a research paper, including proper citation and documentation of sources.

Instructors Method:

The course will include lecture and group discussion, as well as incorporate web-based learning where applicable. Additionally, models will be used as references

as needed throughout the semester. Lectures will be made available online for printing purposes.

NOTE: Lectures will be posted on MyFIRE. The syllabus and lecture schedule can also be found on the course website through MyFIRE. **An additional study guide will NOT be provided. The lecture notes ARE your study guide.**

Student Responsibilities:

- a. You are adults. I expect you to behave as such. This means not talking when I am talking or when a fellow classmate is asking a question. If you are talking to another student I will ask that you leave the classroom.
- b. **BE ON TIME. If you are more than 5 minutes late you will sign the TARDY sheet.** If you are a commuter please set aside plenty of travel time. Three tardy arrivals = one absence.
- c. Attend all classes and participate in group discussions- the attendance policy of the university will be enforced. It is important that you come to every class to stay abreast of the material. **You will be penalized for excessive absenteeism (see student handbook and below).**
- d. Students are responsible for material missed by not attending class. This includes assignments, tests or changes which can be announced during class time.
- e. READ YOUR TEXTBOOK- It is a wonderful resource- use it and you will do well!
- f. Assignments will be completed and turned in on time. **No late assignments will be accepted** without PROPER documentation.
- g. Please see Student Handbook for academic honesty policy- which will be strictly enforced.
- h. *****Check your SEU email account EVERY day!*****

RESPONSIBILITIES OF THE INSTRUCTOR:

- Come to class on time and be prepared
- Clearly state expectations
- Give advance notice of due dates
- Explain the evaluation scale
- Teach the content skills needed to complete the assigned tasks
- Encourage questions and offer help to students when needed
- Enforce discipline so that students work in a productive atmosphere
- Return assignments in a timely manner
- Evaluate student work consistently and fairly
- Provide constructive feedback to students
- Treat all students professionally without showing favoritism
- Keep a positive attitude
- Be willing to reevaluate teaching materials/methods

- Be available during office hours or by appointment
- Provide contact information
- Infuse a Christian worldview into the course content

Evaluation:

- 3 **exams** worth 100 points each will be given over the course of the semester.
- A **cumulative final exam** will be given worth 200 points.
- Journal Article Critique will be worth 100 points.
- Quizzes will be worth a total of 120 points
- Total possible points = 720.**
- Attendance: Please see below, you are expected to be in class.

The following **Grading Scale** will be in place:

GRADING SCALE: Undergraduate

Grade	Explanation	Points	Quality
		Range	Points
A	Superior performance in all aspects of the course 100% 4.0 with work exemplifying the highest quality Unquestionably prepared for subsequent courses in field.	94-	
A-	Superior performance in most aspects of the course; high quality work in the remainder Unquestionably prepared for subsequent courses in field.	90-93%	3.67
B+	High quality performance in all or most aspects of the course- Very good chance of success in subsequent courses in field.	87-89%	3.33
B	High quality performance in some of the course; satisfactory performance in the remainder- Good chance of success in subsequent courses in field.	84-86%	3.0
B-	Satisfactory performance in the course- Evidence of sufficient learning to succeed in subsequent courses in field.	80-83%	2.67
C+	Satisfactory performance in most of the course, with the remainder being somewhat substandard Evidence of sufficient learning to succeed in subsequent courses in field with effort.	77-79%	2.33

C	Evidence of some learning but generally marginal performance-Marginal chance of success in subsequent courses in field.	74-76%	2.0
C-	Minimal learning and substandard performance throughout the course-Doubtful chance of success in subsequent courses.	70-73%	1.67
D+	Minimal learning and low quality performance throughout the course-Doubtful chance of success in subsequent courses.	67-69%	1.33
D	Very minimal learning and very low quality performance in all aspects of the course-Highly doubtful chance of success in subsequent courses in field.	64-66%	1.0
D-	Little evidence of learning-Poor performance in all aspects of the course-Almost totally unprepared for subsequent courses in field.	60-63%	.67
F	Failure to meet requirements of the course-Unprepared for subsequent courses in field.	0-59%	0.0
W	Course Withdrawal		N/A
WF	Administrative Withdrawal/Fail		N/A
WD	College Withdrawal		N/A
I	Incomplete		N/A
P	Pass		N/A
S	Satisfactory		N/A
CR	Credit		N/A
NC	No Credit		N/A

Course Policies/Technical Difficulties:

In the event of an unexpected server outage or unusual technical difficulty that prevents students from completing a time-sensitive activity or assessment within MyFIRE, students should immediately report the situation to their instructor and the 24x7 MyFIRE Support Center @ [1-800-985-9781](tel:1-800-985-9781). A link to the 24/7 Support Center is also provided within each course in MyFIRE .

Missed exams:

If a student misses an exam that is NOT an extreme, documented emergency the student will receive a zero for that exam. If a student misses an exam for an extreme emergency (that is documented and reported to the instructor) then an make-up exam will be scheduled. Documentation for the missed exam must be presented to the professor within one week or the missed exam will become a zero. This policy does not cover a final exam. Every student must take a final exam. **This opportunity is offered one time only for a documented emergency only.**

Student Athletes: You know your away schedule now. It is YOUR responsibility to email me and set up a time to take your **exam PRIOR to your absence if you will be away on an exam day.** If you do not do so you will receive a zero for that exam.

Extra Credit:

The College of Natural Science and Health Sciences has a policy that no extra credit is to be offered.

Drop Date: 1/17/17**COURSE WITHDRAWAL DATE:**

Deadline for traditional students to withdraw from a course is 3/14/17
A Course Withdrawal form (available in the Office of the Registrar or on the University website under Academics/Registrar/Forms) must be submitted no later than 11:59 PM on 3/14/17.

Final Exam Policy:

Every professor is obligated to administer a final exam or hold an appropriate class during the regularly scheduled exam period. Every student is obligated to take the final exam or attend that appropriate class during the regularly scheduled exam period. Please plan accordingly and carefully for final exams. *You must not plan vacations, ministry appointments, weddings, airline flights, or any other similar activity or engagement that will conflict with the final exam schedule. Also, do not schedule any of these activities so close to your final exam that the commute to the activity conflicts with the final exam schedule.*

Final exams will be administered in the room where the class normally meets. Students with **more** than 3 exams scheduled on one day can petition the instructor and department chair/college dean to take one of the exams another day.

Class Attendance Policy:

Students are both expected and encouraged to attend classes regularly. The lack of attendance may affect a student's grade.

For traditional fall and spring semesters, a student may miss a class without penalty equal to the number of times a class meets per week as follows:

- If the class meets once a week a student may miss one class.
- If the class meets two times a week a student may miss two classes.
- If the class meets three times a week a student may miss three classes.

If a student's absences exceed the number of times a class meets per week, a professor may:

- Subject the student to a penalty of not more than one letter grade based on attendance alone.
- Recommend to the Vice President for Academic Affairs that a student with excessive absences be withdrawn from the course.

Program directors must provide lists of students participating in authorized university activities or field trips to the Office of the Vice President for Academic Affairs. Once approved, program directors must provide copies of the lists to the participating students for submission to the students' instructors.

Prolonged and/or unusual absences not covered by the policy may be appealed to the Vice President of Academic Affairs by either the professor or the student. Appeals must be submitted in writing.

Course Evaluations:

In order to help us to assess the effectiveness of our courses and instructors, all registered students must complete a course evaluation at the end of the semester. You must complete a course evaluation form for this course before your grade can be posted.

Disability Statement:

Southeastern University is committed to the provision of reasonable accommodations for all students with learning and/or physical disabilities, as defined in Section 504 of the Rehabilitation Act of 1973 and with the American with Disabilities Act (ADA) of 1990. This legislation guarantees educational rights for the physically and learning disabled.

Students with medical diagnoses which qualify them for accommodations must contact ADA Services at 863-667-5283 or email ADAservices@seu.edu. Once medical documentation is provided and a confidential consultation is completed, the student will then be responsible to provide the Director of Academic & Auxiliary Services with a list of his or her

current professors and their emails.

Contact with the Office of Academic & Auxiliary Services is mandatory for each new semester.

For more information, visit the SEU [Students with Disabilities](#) page on our website.

Academic Center for Enrichment:

The ACE center provides academic support (through individual tutoring, group study sessions, and academic improvement workshops) for all students, including those who struggle with learning strategies and/or content knowledge.

Retention

The retention office exists to empower and equip students to overcome academic, financial, and/or social challenges that may put them at risk of withdrawing.

ACADEMIC HONESTY POLICY:

Integrity is based on the simple standard, “What would Jesus do?” Plagiarism, cheating and other forms of dishonesty will be dealt with in accordance with academic policy.

COURSE SCHEDULE/ Assigned Reading

Date	Content
Sept 4	1
Sept 6	2 (through slide 21)
Sept 11	2/4
Sept 13	4
Sept 18	2 (slide 22-27)
Sept 20	3
Sept 25	Quiz
Sept 27	5
Oct 2	5
Oct 4	5/6
Oct 9	6
Oct 11	6
Oct 16	8
Oct 18	no class
Oct 23	Exam 1
Oct 25	10
Oct 30	10
Nov 1	13-OPTIONAL ROUGH DRAFT DUE
Nov 6	No class-out of class assignment (quiz)
Nov 8	13/15
Nov 13	15
Nov 15	Exam II
Nov 20	31-CRITIQUE DUE
Nov 22	No Class
Nov 27	31
Nov 29	29
Dec 4	30
Dec 30	EXAM III

DATES MAY CHANGE DEPENDING ON THE PACE OF THE CLASS

Consent to Comply

I _____ have read, understand, and

Student's Name (print)

will keep in my possession the Course Syllabus for _____,

Southeastern University, Spring 2017. I understand that in compliance with the syllabus and the Student Handbook, for both instructional and evaluation purposes, I may be responsible for electronically submitting my written work to Turnitin®. With the affixing of my signature below, I agree to comply to the terms therein.

My Signature

Date