Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.

LIBERTY UNIVERSITY

COURSE SYLLABUS

BIOM 610

HUMAN NEUROLOGY & NEUROANATOMY

COURSE DESCRIPTION

This course will provide an introduction to the structural and functional features of the nervous system. Topics covered will include the gross anatomy of the brain and spinal cord, cellular and molecular neurobiology, sensory and motor systems, the major neurotransmitter systems, and brain regulation of behavior and body physiology.

RATIONALE

This course introduces the essential anatomy and physiology of the human nervous system. The role of the nervous system in regulating and directing the systems of the body is a crucial component of understanding human physiology. Specifically, this course is designed to prepare the student in the biomedical disciplines to correlate functional neuroanatomy with clinical outcomes, and provide the necessary foundation for future studies in the neurosciences.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING

A. Computer with basic audio/video output equipment

B. Internet access (broadband recommended)

C. Blackboard recommended browsers

D. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

A. Identify fundamental principles of the anatomy, development, and physiology of the nervous system.

B. Analyze the structure and function of brain systems.

C. Appraise several forms of psychiatric and neurological illness.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations

B. Course Requirements Checklist

After reading the Course Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (3)

Discussion boards are collaborative learning experiences. Therefore, the student is required to provide a thread in response to the provided prompt for each forum. Each thread must be at least 500 words, demonstrate course-related knowledge, and include at least 1 scholarly reference in addition to the Bible. Along with the thread, the student is required to reply to 2 other classmates' threads. Each reply must be 250 words and contain at least 1 scholarly reference in addition to the Bible.

D. Article Reviews (3)

The student will review current peer-reviewed, scholarly articles selected by the instructor and write a 750-word review on his/her findings. All citations must be in current APA format.

E. Case Study Review

The student will write a 5–8-page research paper that focuses on a neurological case study. The student must include at least 5 references from current, published scientific journals. All citations must be in current APA format.

F. Neuroanatomy Midterm Exam

The exam will cover all neuroanatomy presented in Module/Weeks 1–4. The exam will be open-book/open-notes, contain 50 short answer questions, and have a 70-minute time limit.

G. Midterm Exam

The exam will cover the Reading and Study in Module/Weeks 1–4. The exam will be open-book/open-notes, contain 60 multiple-choice and 2 essay questions, and have a 2-hour time limit.

H. Neuroanatomy Final Exam

The exam will cover the neuroanatomy topics in Modules/Weeks 1–8. The exam will be open-book/open-notes, contain 100 short answer questions, and have a 70-minute time limit.

I. Final Exam

The exam will cover the Reading and Study in Modules/Weeks 1–8. The exam will be open-book/open-notes, contain 100 multiple-choice and true/false questions, and have a 2-hour time limit.

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist			10
Case Study Topic Approval			10
Discussion Board Forums	(3 at 60 pts ea)		180
Article Reviews	(3 at 70 pts ea)		210
Case Study Review			100
Neuroanatomy Midterm Exam	(Modules 1–4)		100
Neuroanatomy Final Exam	(Modules 1–4)		150
Midterm Exam	(Modules 1–8)		100
Final Exam	(Modules 1–8)		150
		Total	1010

B. Scale

A = 940–1010 A- = 920–939 B+ = 900–919 B = 860–899 B- = 840–859
C+ = 820–839 C = 780–819 C- = 760–779 D+ = 740–759 D = 700–739
D- = 680–699 F = 0–679

C. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Accommodation Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

If you have a complaint related to disability discrimination or an accommodation that was not provided, you may contact ODAS or the Office of Equity and Compliance by phone at (434) 592-4999 or by email at equityandcompliance@liberty.edu. Click to see a full copy of Liberty's Discrimination, Harassment, and Sexual Misconduct Policy or the Student Disability Grievance Policy and Procedures.

COURSE SCHEDULE

BIOM 610

Textbooks: Nolte, *The Human Brain: An Introduction to Its Functional Anatomy* (2016).
Nolte & Angevine, *The Human Brain in Photographs and Diagrams* (2013).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Nolte: chs. 1–3 Nolte & Angevine: ch. 1 3 presentations 2 websites	Course Requirements Checklist Class Introductions Article Review 1	10 0 70
2	Nolte: chs. 4–8 Nolte & Angevine: ch. 1 3 presentations 2 websites	Case Study Topic Approval Article Review 2	10 70
3	Nolte: chs. 9–10 Nolte & Angevine: chs. 2, 8 2 presentations 4 websites	Article Review 3	70
4	Nolte: chs. 11–12, 15 Nolte & Angevine: chs. 3, 8 2 presentations 1 website	Neuroanatomy Midterm Exam Midterm Exam	100 100
5	Nolte: chs. 13–14, 17 Nolte & Angevine: ch. 5–8 2 presentations	DB Forum 1	60
6	Nolte: chs. 16, 18–19 Nolte & Angevine: chs. 5–8 2 presentations 4 website	DB Forum 2	60
7	Nolte: chs. 20–22 Nolte & Angevine: chs. 5–8 2 presentations 2 websites	DB Forum 3	60
8	Nolte: chs. 23–24 Nolte & Angevine: chs. 5–8 2 presentations	Case Study Review Neuroanatomy Final Exam Final Exam	100 150 150
		TOTAL	**1010**

DB = Discussion Board

NOTE: Each course begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.