

<b>INSTRUCTOR:</b>	Dr. Chris Pulido	<b>E-MAIL:</b>	cpuido@alvincollege.edu
<b>OFFICE HOURS:</b>	By Appointment Only		
<b>WEBSITE:</b>	www.Alvincollege.edu/neurodiagnostic-technology-NDT		

**WELCOME TO:**

**Neuroanatomy and Physiology- Electroencephalopathy**

**ENDT 1310 – Hybrid Course**

**Credit Hours: 3**

**Total Contact Hours: 48**

**Term and Year: Fall 2017**

**Class Days & Times: Friday 1:30pm-3:00pm**

**Classroom Location: S250**

- A. **COMMUNICATION WITH YOUR INSTRUCTOR:** The preferred method for communicating with is through ACC email or you may call/text me at 281-797-8822. Please leave a name, number, or email address where I can contact you and tell me what you would like to discuss.
- B. **COURSE DESCRIPTION** Basic neuroanatomy and physiology. Includes neurologic structure & function, neurologic exam, and diagnostic tools applied to the study of various neurologic disorders.
- C. **Student Learning Outcomes:** Identify normal neuroanatomy and physiology; summarize the etiology, pathology, and clinical picture of selected neurological disorders; and summarize the process of measuring the electromechanical functions of the human body including extracellular potentials created by cardiac, brain, muscle, and integumentary cells.
- D. **PRE-REQUISITES:** Biology 2402
- E. **REQUIRED TEXTBOOK AND SUPPLEMENTAL MATERIALS**  
*Human Anatomy and Physiology (9<sup>th</sup> edition)- Marieb and Hoehn*  
 - USB/Jump drive  
 - Scantron grade sheets

For more information about the textbooks, including details about how to order your book online and have it delivered to you, visit the ACC College Store at [ACC Bookstore](#).

- F. **COURSE OUTLINE** The class is a hybrid which will include in-class lecture, in-class discussion, online supplemental information, and online assignments. The tentative course schedule will be distributed during the first week of class, however there is some flexibility, and updates to the schedule may be distributed as needed.

**Unit 1:** Organization and Communication of the nervous System

**Unit 2:** The Brain, Brain waves & Brain protection

**Unit 3:** The Spinal cord and Peripheral Nerves

**Unit 4: The Peripheral Nervous system and Cerebral Circulation**

**UNIT 1 OBJECTIVES**

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

1. Understand the divisions of the nervous system (Chapter 11)
2. Understand the histology of the nervous System (Chapter 11)
3. Understand the classifications of the nerves (Chapter 11)
4. Understand the resting membrane potential/ graded poten./ action poten. (Chapt. 11)
5. Understand the different types of synapses & Neurotransmitters (Chapter 11)
6. Understand basic neural integration

**UNIT 2 OBJECTIVES**

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

1. Understand the Brain and its components (Chapter 12)
2. Understand the structures that protect the brain (Chapter 12)
3. Understand damage and imbalances of the brain (Chapter 12)

**UNIT 3 OBJECTIVES**

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

1. Understand the spinal cord and its pathways (Chapter 12)
2. Understand spinal cord trauma and disorders (Chapter 12)
3. Understand and differentiate Sensory receptors (Chapter 13)
4. Understand the location and function of the cranial nerves (Chapter 13)

**UNIT 4 OBJECTIVES**

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

1. Understand the spinal nerves and what they innervate (Chapter 13)
2. Understand the cervical, brachial, lumbar, sacral plexus (Chapter 13)
3. Understand the components of a reflex (Chapter 13)
4. Understand the structures of blood supply to the brain (Chapter 19 + supplemental)

**G. EXAMS AND MAJOR ASSIGNMENTS**

**ASSIGNMENTS**

Assignments are to be completed and turned in on the date and time specified in the class schedule found under course content on Blackboard. It is the student's responsibility to ensure that the assignment is turned in on the date and time specified. Ten (10) percent will be deducted on the assignment for every day (24 hour period –week or weekend) the assignment is late. An assignment is considered late if it is 1 minute late as recorded within the MyBlackboard system.

**EXAMS POLICY**

An exam will be given at the completion of each unit. There will be a total of 4 exams. Unit exams will be administered in the classroom. This exam will contain cumulative material pertaining to that unit only and may contain True/False, multiple choice, short answer, and matching questions. Any missed exam can be made up at a time decided upon by the instructor if a medical excuse or family emergency can be shown. In the case of a family emergency advanced notice must be given prior to the test time expiring

(preferably via email) to an ACC Electroneurodiagnostic Program Instructor. In the event of an unexcused missed exam no makeup will be given. There will be no exceptions to this rule.

**QUIZZES**

A weekly quiz will be given. At the end of the semester, the lowest quiz grade will be dropped. Any missed quiz will be used as the dropped quiz grade.

**BLACKBOARD DISCUSSIONS**

During each week there will be various discussion topics assigned. Most will correlate with weekly readings or special topics. Students will be expected to participate on each topic. If a blackboard discussion is assigned a minimum of one well thought and written post for each topic will be required. Credit will not be given for a post if it is unsatisfactory. This will replace classroom participation and should be completed before Friday at 6:00 p.m. each week.

**BONUS POINTS**

1. Bonus points in the form of bonus questions will be available on each exam.

**H. POLICIES ABOUT COURSEWORK AND DEADLINES**

*Late Course work policy:* Any missed exam will be made up at a time decided upon by the instructor **IF** a medical excuse or family emergency can be shown. In the case of a family emergency advanced notice must be given prior (preferably via e-mail) to any ACC Neurodiagnostic Program Instructor. In the event of an unexcused missed exam or presentation no make-up will be given. There will be no exceptions to this rule.

*Classroom Protocol:* It is the right of each student to participate in his or her learning, and it is the responsibility of each student to not interfere with the learning of other students. Policies governing the classroom are provided in the ACC Student Handbook and students who repeatedly violate one or more of these policies will be subject to disciplinary action.

**I. GRADING SUMMARY**

GRADING SUMMARY	% of final grade
Quizzes	30%
Blackboard Discussion and Assignments	10%
Unit Exams	60%
<b>Total</b>	100%

Grading Scale	Grade
90-100	A
80-89	B
70-79	C
60-69	D
Any grade below 60	F

**J. WITHDRAWING FROM CLASS/COLLEGE**

It is recommended that the student talk to the instructor before withdrawing. Current course withdrawal information can be found in the printed version of the ACC Schedule for this semester or online at [ACC Course Withdrawal Instructions](#). Students who file withdrawal requests by the published deadline and have not exceeded the withdrawal maximum will receive a grade of W.

**K. Six Drop Limit**

The Texas Legislature passed a ruling that limits the number of classes a student can drop during their years as an undergraduate student to six. This policy applies to any student who was a first time college freshmen fall, 2007, or later, who attends a Texas public institution of higher education. Courses dropped  
 ACC ENDT 1310 Course Syllabus {Rev. August 2017}

while attending a private or out of state college do not count toward the six drop limit. For further information, refer to the [ACC Catalog](#) or contact Student Services. **GRADE APPEAL PROCESS**  
Students have one year from the date of the grade assignment to challenge a grade. Refer to the [grade appeal process](#) as published in the ACC Catalog.

**L. CLASS ATTENDANCE POLICY**

**Students missing more than 2 classes will have their final score reduced by one letter grade for each additional absence**

Alvin Community College students are required to attend classes. If an absence is unavoidable, the student is responsible for completing all work missed during the absence. Instructors will not withdraw students for non-attendance, except in developmental courses. Absences in excess of two weeks are to be reported to the Office of Advising Services, along with appropriate recommendations. Departments and faculty may have other attendance policies for their course.

**M. CODE OF ACADEMIC INTEGRITY AND HONESTY**

Alvin Community College students are members of an institution dedicated to the pursuit of knowledge through a formalized program of instruction and learning. At the heart of this endeavor, lie the core values of academic integrity which include honesty, truth, and freedom from lies and fraud. Because personal integrity is important in all aspects of life, students at Alvin Community College are expected to conduct themselves with honesty and integrity both in and out of the classroom. Incidents of academic dishonesty will not be tolerated and students guilty of such conduct are subject to severe disciplinary measures.

**N. CLASSROOM PROTOCOL**

It is the right of each student to participate in his or her learning, and it is the responsibility of each student to not interfere with the learning of other students. It is the expectation of the college that each student assumes the responsibility to follow college policies and procedures governing classroom conduct on campus and online. This information is published in the ACC Student Handbook on page 42.

**O. EVALUATION OF INSTRUCTION**

Alvin Community College is dedicated to student success. As part of its ongoing improvement efforts, students will provide input for each course prior to the end of the semester enrolled. Evaluations will be completed in either online or paper format as directed by the Office of Institutional Effectiveness & Research.

**P. ACC ACADEMIC SUCCESS AND SUPPORT SERVICES**

The [ACC Tutoring/Learning Lab](#), located upstairs in building A, provides students with a variety of services including tutoring (math, writing, and other disciplines); computers and printers; and tables/carrels. Call 281-756-3566 or visit the **ACC Tutoring/Learning Lab Website** for more information.

The [ACC Library](#) is an excellent source for research and writing help. Quiet rooms are available for studying and doing class work. For more information, visit the **ACC Library Website** or call 281-756-3559.

[ACC Counseling Services](#) assist students with issues that may negatively impact academic success. To contact a counselor, call the office of Advising Services at 281-756-353.

**Q. Americans with Disabilities Act**

ACC complies with ADA and 504 Federal guidelines by affording equal access to individuals who are seeking an education. Students who have a disability and would like classroom accommodations must register first with the Office of Disability Services, A 136, or call 281-756-3533. Instructors are not able to provide accommodations until the proper process has been followed.

**R. Assessment and Care Team (ACT)**

The Assessment and Care Team is committed to improving community safety through a proactive, collaborative, coordinated, objective, and thoughtful approach to the prevention, identification, assessment, intervention and management of situations that pose a threat to the safety and well-being of the campus community. To educate and empower all members of the College community, resources and procedures are in place to prevent, deter, and respond to concerns regarding acts of violence. Alvin Community College offers assistance to departments and individuals in detecting indicators for concern and resources to protect themselves and their environments.

The Alvin Community College ACT accepts reports regarding any individual or incident at any time through an online referral form on the [Assessment and Care Team page](#), or direct email to [this email address](#) or by contacting the Alvin Community College Police Department at 281-756-3700 or 832-250-3365 (after hours).

[MY Blackboard](#) support can be obtained by completing the **Online Support Form**.

**WEBACCESS, Passwords or ACC Computer Lab Information:** If you experience problems with WebACCESS, please call the Help Desk at 281-756-3544 or email [helpdesk@alvincollege.edu](mailto:helpdesk@alvincollege.edu).

**S. MENTAL HEALTH COUNSELING AND SUICIDE PREVENTION SERVICES**

As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating, and/or lack of motivation. These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. Advising services employs two Licensed Professional Counselors who can assist students with issues that negatively impact academic success. Consultation and referrals are confidential. Access the [Counseling Referral form](#)

**T. Emergencies:**

If you or someone you know at ACC feels overwhelmed, hopeless, depressed, and/or is thinking about dying by suicide, supportive services are available by requests at the Enrollment Services Center or by calling 281-756-3531, ask for a Counselor. You may also call the National Suicide Prevention Hotline 1-800-273-8255. This is a 24 hour, toll free, confidential suicide prevention hotline available to anyone in suicidal crises or emotional distress. If, however, you or someone you know is in an immediate crisis, go to the nearest Emergency Room, or call 911.

**U. DISCLAIMER**

(The instructor reserves the right to modify this syllabus as needed and will notify the students of any changes using email or Blackboard.)

**1310 Electroneurodiagnostic Tech NeuroAnatomy**

<b>FALL 2017 SCHEDULE Week</b>	<i>Description</i>	<i>Sections(Pages)</i>
1	-Functions and Divisions of the Nervous System -Histology of the Nervous system	Pages 386-395 Chapter 11
2	Quiz from week #1 Pg 386-395 -Membrane Potentials -Graded and Action potential	Pages 395-406 Chapter 11
3	Quiz from week #2 Pgs 395-414 -The Synapse -Neurotransmitters and Their Receptors -Basic Concepts of Neural Integration	Pages 407-422 Chapter 11
4	Unit #1 Test Lecture and Textbook materials Chapter 11 Pages 386-423	
5	Quiz over brain regions (from blackboard assignment) The Brain: -Embryonic Development -Regions and Organization	Pages 428-437 Chapter 12
6	Quiz from week #5 Pgs 428-437 The Brain: -Basal Nuclei -Diencephalon & Hypothalamus -Epithalamus & Midbrain - Pons & Medulla Oblongata -Cerebellum & Cerebellar Peduncles	Pages 437-449 Chapter 12
7	Quiz from week #6 437-449 -The Limbic System -Brain Waves EEG,Sleep/Wake cycles -Language & Memory -Protection of the Brain & Brain Damage	Pages 449-464 Chapter 12
8	Unit #2 Test Lecture and Textbook materials Chapter 12 Pages 428-464	
9	NO QUIZ -The Spinal cord -Spinal Cord Pathways -Spinal Cord Trauma	Pages 464-474 Chapter 12
10	Quiz from week #9 Pages 464-474 -Sensory receptors and sensation -Sensory Integration -Nerves Structure and Repair	Pages 483-491 Chapter 13
11	Quiz from week #10 -Cranial Nerves	Pages 492-501 Chapter 13
12	Unit #3 Test Lecture and Textbook Material Chapter 12 & 13	

13	-Spinal Nerves -Cervical & Brachial Plexus -Lumbar & Sacral Plexus Reflex activity	Pages 501-511 Pages 513-519 Chapter 13 (Subject to Changes)
14	Thanksgiving Break	
15	Quiz from week #13 -Systemic Circulation -Cranial Circulation -Review	Pages 723-727 Chapter 19 +Additional handouts
16	Unit #4 and Final exam Lecture and Textbook material pages 501-519, 723-727	