Instructor: Kyung-An Han, Ph. D.
Office: 3.152 Biosciences Building
Hours: by appointment
Email: khan@utep.edu

Class Meetings: 6:00 PM - 7:20 PM, MW

Classroom: Health Science/School of NURS Bldg 212

Course Objectives: The objective of this course is to provide contemporary knowledge and insights into the genetic, molecular, cellular and neural basis of brain diseases. The course will focus on the brain disorders that are prevalent in our society as listed below.

Topics to be covered
Overview on the nervous system – neurophysiology
Overview on the CNS – brain and spinal cord
Alzheimer’s Disease
Parkinson’s Disease
Huntington’s Disease
Prion Disease/CJD
Overview on brain development
Autism Spectrum Disorders
Depression
Learning and memory disorders - ADHD, mental retardation (RTS) and PTSD

Text: A general textbook – e.g Neuroscience (Purves et al., 6th Ed, Sinauer Associates, 2017; or earlier Ed) or Human Anatomy & Physiology (Elaine N. Marieb & Katja Hoehn, 11th Ed, Pearson Benjamin Cummings, 2018; or earlier Ed) - is recommended for background information on CNS functions and anatomy. Readings on review and primary research papers on selected topics will be provided.

Examinations and grading:
1st exam: 25% of the grade
2nd exam: 25%
Paper assignment: 25% (due on October 28)
Review assignment: 10% (due on November 18)
Paper presentation 10%
Attendance/Participation 5%

Exams consist of short-answer and essay questions and will be take-home (1st exam) and open-book (2nd exam) tests. A paper is a compare/contrast critique of three current primary literatures on the topics covered in this course (detailed instructions will be given separately). The papers will be reviewed and graded by your classmates in addition to myself. Paper presentation is a group effort with each group consisting of 2 students. Topics and format will be discussed in the class. Final grades will be assigned as follows: A=90-100, B=80-89, C=70-79, D=60-69, F=0-59

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148 or by email to cass@utep.edu, or visit their office located in Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.
# Course Schedule

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Topic</th>
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| 1-3      | Introduction  
The Nervous System – overview, neurophysiology  
(ref: any *Human Anatomy & Physiology* textbook) |
| 4-5      | The Central Nervous System  
(ref: any *Human Anatomy & Physiology* textbook) |
| 6-10     | NG Introduction, Alzheimer’s Disease and FTD  
(review articles posted in blackboard) |
| 11-15    | Parkinson’s and Huntington’s Diseases  
(review articles) |
| 16-17    | Prion diseases (review articles)  
Paper presentations |
| 18-21    | Neurodevelopment & Autism Spectrum Disorders  
(review articles)  
Paper presentations |
| 22-25    | Depression (review articles)  
Paper presentations |
| 26-28    | Learning & Memory (LM: ADHD, RTS, PTSD)  
(review articles posted)  
Paper presentations |
| Dec 9 7-9 pm | Second Exam:  
Open book test |

The schedule is subject to change. Please check Blackboard regularly for changes or important announcements.