

# Neurobiology Overview: Mental Health and Illness NURS 5359 Fall 2023

**Scheduled Class Days and Times: Online** 

Instructor's Name: Aaron Langford APRN, DNP, PMHNP-BC, CARN-AP

Office: Virtual

Phone: 915-257-7981

Email: alangford@uttyler.edu

**Virtual Office Hours**: I am available via appointment through email, conference call, and Zoom Monday-Thursday from 12pm CST-1pm CST or after 4:00pm CST, and Friday 8:00am CST-

4:00pm CST.

There will be four live office hour Zoom meetings hosted the weekend prior to each exam. The date and time for the scheduled Zoom meetings will be posted to the course announcements. All virtual office hour meetings will be recorded and posted to the course announcements for students to watch in the event they are unable to attend.

The best way to reach your instructor is either sending a message via the Canvas inbox or emailing through UT Tyler. For urgent matters, you may text your instructor and include your name and course with all correspondence.

**Course Description:** This course provides an overview of prescribing principles and best practices for treating mental health disorders across the lifespan. Drug action and pharmacogenomics are discussed. Polypharmacy within vulnerable populations is considered. A case-based approach is used to examine the clinical uses, neuropharmacological mechanisms, risks, benefits, and outcomes of commonly used psychotropic drugs in the context of comprehensive treatment plans.

**Prerequisites:** Admission to PMHNP Program.

**Corequisites: None** 

#### **Student Learning Outcomes:**

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

1. **Professionalism:** Demonstrate and apply professional and ethical behavior.

- 2. **Patient-Centered Care:** Differentiate an individualized plan of care for patients who are acutely ill and for patients of special populations.
- 3. Evidenced-Based Practice (EBP): Synthesize and apply evidence to evaluate and improve patient outcomes. Demonstrate knowledge of psychoactive medications and neurotransmitter syntheses, biochemical basis of the neuronal impulse, the various classes of psychopharmacological agents, various brain circuits involved in psychological symptomatology and appropriate prescribing of psychoactive medications, biochemical theories underlying schizophrenia, mood disorders, and anxiety disorders, and demonstrate knowledge of the proprietary names, mechanisms of action, therapeutic indications, and side effects of a wide array of psychopharmacological agents.
- 4. Informatics & Technology: Apply informatics and technology in new environments.
- 5. **Quality Improvement:** Critique the effectiveness of quality improvement using a systematic data- guided approach.
- 6. **Teamwork and Collaboration:** Appraise the effectiveness of teamwork and mutual respect with different communication styles.
- 7. **Wellness and Prevention:** Critique health, wellness, and prevention programs and their impact on a variety of communities and populations.
- 8. **Leadership:** Differentiate between leadership styles and how each impact professional practice.
- 9. Safety: Appraise safety and quality measures Implemented in the work environment.

#### **Required Textbooks and Readings:**

- 1. American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed. Text rev.)(DSM 5-TR). ISBN-13: 978-0-89042-576-3
  - The DSM–5 was updated to the DSM–5-TR in March 2022. For this course, either the DSM–5 or the DSM–5-TR is acceptable.
  - See DSM-5-TR Fact Sheets for information on changes to disorders in the DSM-5-TR which can be found at:
     <a href="https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/dsm-5-tr-fact-sheets">https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/dsm-5-tr-fact-sheets</a>
- 2. Stahl, S. (2021). *Stahl's essential psychopharmacology: Neuroscientific basis and practical applications* (5th ed.). Cambridge University Press. ISBN-13: 978-1-1089-7163-8

#### **Recommended Textbooks and Readings:**

1. Stahl, S. (2017). *Prescriber's guide: Stahl's essential psychopharmacology* (6th ed.). Cambridge University Press. ISBN-13: 978-1-31661-813-4

#### **Special Course Notes:**

#### 1) Proctoring Notice:

The exams in this course will be proctored using ProctorU. You will need to have a webcam and microphone. Please see the Canvas Page that discusses ProctorU specifically. Students must sign up with *ProctorU* at the beginning of the semester for all four exams.

If you are not able to provide these items, you must contact me by the 2<sup>nd</sup> week of this course so we can arrange for you to take your exam on campus.

- 2) This course requires you to access the following free external websites in order to complete homework or assessments:
  - ScientiaCME https://www.scientiacme.org/
  - SMI Adviser https://smiadviser.org/
  - Psychiatric Times <a href="https://www.psychiatrictimes.com/">https://www.psychiatrictimes.com/</a>
  - Stanford Center for Continuing Medical Education <a href="https://stanford.cloud-cme.com/">https://stanford.cloud-cme.com/</a>
  - Providers Clinical Support System (PCSS) <a href="https://learning.pcssnow.org/">https://learning.pcssnow.org/</a>

Specific instructions for how to access these external websites, create accounts, and what to submit for assignment credit are detailed within the individual assignment instructions.

#### Assignments and Weights/Percentage/Point Values

- 1) Exams: 50%\*
  - Exam 1: 12.5%\*
  - Exam 2: 12.5%\*
  - Exam 3: 12.5%\*
  - Exam 4: 12.5%\*
- 2) Small Group Assignments 10%
- 3) Discussion Boards: 20%
- 4) Assignments: 20%

\*The average of your exams must be greater than or equal to 80 to pass the course. Even if you have enough points to pass otherwise, you will not pass the course without making an 80 average on the four exams.

#### **Grading Scale:**

Specific guidelines and grading criteria for all assignments are in the Modules. Final grades for the course will be determined based upon the following point assignments:

A - 90-100

B - 80-89

C - 70-79

D - 60-69

F - Below 60

Grades will not be rounded when calculating the average (79.5 is not rounded to 80, and 89.5 is not rounded to 90). The simple average of all unit exam grades, including a final must be at or above 80% to pass the course. Once the student has achieved a simple unit exam average of 80% or higher, course grades will be determined based on the weighted calculation of exams and other required course work. Students are required to achieve an average of 80% (B) to complete the course successfully.

Although the university policy allows 60 days for grade appeals, the School of Nursing follows a stricter timeline of 10 days to facilitate students' timely progression through the curriculum. In the case of extenuating circumstances, please consult the Associate Dean of Academic Affairs for guidance.

**Academic Integrity:** Cheating of any kind, as defined in Section 8 of the UT Tyler Manual of Policies and Procedures (MOPP) for Student Affairs (<a href="https://www.uttyler.edu/mopp/">https://www.uttyler.edu/mopp/</a>), will not be tolerated. Consequences may include:

- reprimand
- exam failure
- course failure
- expulsion from the Nursing program
- expulsion from the University
- other consequences as assigned

# Exam and homework materials, questions, and problems are the intellectual property of faculty, UT Tyler, or publishers.

- These materials may not be distributed without permission.
- Distributing or uploading them to online resources destroys the integrity of the assignment and the course, allowing others an unfair advantage by letting them view the materials.
- Uploading these materials to online resources is a violation of UT Tyler's academic misconduct policies and may result in formal conduct charges.
- Sanctions for uploading or otherwise divulging the contents of these materials can include:
  - a reduced or failing grade on an assignment
  - a reduced or failing grade for the course
  - removal from the Nursing program

removal from UT Tyler

**Late Policy**: 5% will be deducted each day an assignment is past due unless prior arrangements have been made with your course faculty. Extenuating circumstances may apply.

**Repeating a Course:** Students repeating this course may not use previously submitted assignments nor utilize the same patients for an assignment. Submitting the same or slightly modified assignments from previous semesters is considered self-plagiarism and is subject to academic discipline, including failing the assignment or the course.

**Attendance and Make-up Policy:** Attendance/participation is expected. Make-up for exams, quizzes, assignments, and missed clinical time is at the instructor's discretion.

## **Graded Course Requirements Information:**

# 1) Exams (50% of total grade; 50 possible points per exam)

- Exams in the course will be given online, using a proctored service called ProctorU.
- Exams must be taken during the time specifically designated unless other arrangements
  are made with instructors <u>prior</u> to the test. As previously stated, special arrangements
  must be decided on an as needed basis. There is no guarantee that your request will be
  approved.
- If you are unable to take the exam on the posted date, notify the course faculty as soon as possible. If the course faculty decide that an alternate exam will be given, the format and times will be at the discretion of the course facilitator, and the exam will be comprised of essay and fill-in-the-blank questions.
- Exam dates are listed in the Course Calendar.
- Students must achieve an **AVERAGE** of 80 on all four exams to pass the course. Even though you may have enough percentage in other areas to raise your overall grade, you still will not pass the course without an 80 overall **AVERAGE** on all exams.
- Each exam may be opened during the designated hours listed within Canvas, but you will only have 75-minutes to complete the exam—including the verified time with *ProctorU*. And, you must finish the exam by the end time established for the exam. Please pay strict attention to this time limit!
- The module objectives and assigned readings will guide the selection of items for the tests. Emphasis will be on application and synthesis of knowledge.
  - Exam 1 will cover Modules 1-5
  - Exam 2 will cover Modules 6-8
  - Exam 3 will cover Modules 9-11

#### Exam 4 will cover Modules 12-15

### 2) Assignments (20% of total grade)

- Assignments will be individual case study papers or completion of educational modules through third party sites.
- Case study papers should be a <u>formal paper in APA format</u>, complete with a title page and reference list.
- For educational modules through third part sites, you will submit a certificate of completion to satisfy the assignment requirements.

#### 3) Discussion Boards (20% of total grade)

Discussion boards may include a variety of topics relevant to the weekly module content in order to enhance learning. Initial responses are due by day 3 (Wednesday) and two peer responses are due by day 6 (Saturday).

#### 4) Small Group Assignments (10% of total grade)

You will be assigned to work in small groups to complete specific tasks. It is every group member's responsibility to make sure each week's group assignment is completed.

Each group will need to decide on a time and date for their live discussion. Groups can use Zoom or any other platform they feel comfortable using to chat.

#### **Group Roles**

#### **Facilitator**

- Each week, when applicable, review the assignment and be ready to lead the discussion on that assignment within the live chat.
- Lead a purposeful discussion.
- Guide the discussion to stay focused and on task.
- Equalize participation.
- Watch the tone of the group discussion.
- Give feedback to each participant at least once during the discussion.

#### Note Taker

- Follow the Participant guidelines.
- Maintain discussion notes to be made available upon request from the instructor.

- Submit the group assignment to the applicable assignment by the end of Day 7 with the names of everyone within your small group.
- Review the similarity score after the assignment is submitted. Communicate with group members and the instructor if an assignment has an elevated score.

#### **Participant**

- Actively participate in the group task. Your participation will be noted.
- Be respectful. Use proper netiquette.
- Do not just agree or disagree, but support your comments with examples from class content, current events, and other resources.

#### **Important Course Dates:**

Classes Begin: August 20, 2023

Census Date (withdraw without penalty): September 6, 2023

Last Date to Withdraw: November 4, 2023

Students please notify your course faculty and contact your advisor.

Final Exam: 12/3-12/9

# Calendar of Topics, Readings, and Due Dates:

The specific assigned textbook and article readings, lectures, and video resources are detailed within each weekly course module within Canvas.

Course Schedule			
Week # and Topic	Assignments	Due Date	
Week 1	DB 1.1: Icebreaker	Initial Post: due by Wednesday Day 3	
Introduction to		2 Peer Responses: on different days, final post due	
Neuroscience		by Saturday Day 6	
8/27-9/2			
Week 2	Assignment 2.1	Due by Saturday, Day 6	
Neurotransmitters,			
Receptors, and			
Signaling the Nucleus			
9/3-9/9			
Week 3	DB 3.1: CYP450 System	Initial Post: due by Wednesday Day 3	
Principles of		2 Peer Responses: on different days, final post due	
Psychopharmacology		by Saturday Day 6	
9/10-9/16			
Week 4	Assignment 4.1	Due by Saturday, Day 6	
Antipsychotic pt1			

9/17-9/23		
Week 5	Assignment 5.1	Due by Saturday, Day 6
Antipsychotics pt2 9/24-9/30		
Week 6 Antidepressants pt1 10/1-10/7	Exam 1	Opens: Tuesday, Day 2 at 7:00am CST Closes: Friday, Day 5 at 7:00am CST
Week 7 Antidepressants pt2 10/8-10/14	Assignment 7.1 Assignment 7.2	Due by Saturday, Day 6
Week 8	Group Assignment 8.1	Due by Saturday, Day 6
Mood Stabilizers	DB 8.1	Due by Saturday, Day 6
10/15-10/21	Assignment 8.2	Due by Saturday, Day 6
Week 9 Anxiolytics 10/22-10/28	Assignment 9.1	Due by Saturday, Day 6
	Exam 2	Opens: Tuesday, Day 2 at 7:00am CST Closes: Friday, Day 5 at 7:00am CST
Week 10 Chronic Pain	Assignment 10.1	Due by Saturday, Day 6
10/29-11/4	Assignment 10.2	Due by Saturday, Day 6
Last Day to Drop/Withdraw November 4, 2023		
Week 11 Sleep/Wake Disorders and Treatment 11/5-11/11	Assignment 11.1	Due by Saturday, Day 6
Week 12	Assignment 12.1	Due by Saturday, Day 6
ADHD <b>11/12-11/18</b>	Exam 3	Opens: Tuesday, Day 2 at 7:00am CST Closes: Friday, Day 5 at 7:00am CST
Week 13	Groups Assignment	Due by Saturday, Day 6
Dementia	13.1	
11/19-25	DB 13.1	Due by Saturday, Day 6
Week 14 Alcohol Use and Opiate Use Disorders 11/26-12/2	PCSS Alcohol Use PCSS Opiate Use	Due by Saturday, Day 6

12/3-12/9	Final Exam	Opens: Monday, Day 1 at 7am CST
	Thial Exam	Closes: Friday, Day 5 at 7am CST
	Reflection DB	Due by Saturday, Day 6

## **School of Nursing Policies and Additional Information:**

https://www.uttyler.edu/nursing/college/student\_guide\_and\_policies.php

#### Student Resources to assist you in this course:

<u>UT Tyler Student Accessibility and Resource (SAR) Office</u> (provides needed accommodations to students with document needs related to access and learning)

**UT Tyler Writing Center** 

The Mathematics Learning Center

**UT Tyler PASS Tutoring Center** 

**UT Tyler Supplemental Instruction** 

Robert Muntz Library and Library Liaison

<u>Canvas 101</u> (learn to use Canvas, proctoring, Unicheck, and other software)

Digital Support Toolkit (for supported courses only. Students are automatically enrolled in the toolkit for supported courses)

LIB 422 -- Computer Lab where students can take a proctored exam

The Career Success Center

**UT Tyler Testing Center** 

Office of Research & Scholarship Design and Data Analysis Lab

#### **Resources available to UT Tyler Students**

<u>UT Tyler Counseling Center</u> (available to all students)

TAO Online Support Center (online self-help modules related to mental & emotional health)

Military and Veterans Success Center (support for all of our military-affiliated students)

**UT Tyler Patriot Food Pantry** 

UT Tyler Financial Aid and Scholarships

**UT Tyler Registrar's Office** 

Office of International Programs

#### Title IX Reporting

Patriots Engage (available to all students. Get engaged at UT Tyler.)

#### **University Policies and Information**

Withdrawing from Class: Students, you are allowed to withdraw (drop) from this course through the University's Withdrawal Portal. Texas law prohibits students who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at other 2-year or 4-year Texas public colleges and universities. Make sure to consider the impact withdrawing from this class has on your academic progress as well as the financial implications. We encourage you to consult your advisor(s) and financial aid for additional guidance. CAUTION #1: Withdrawing before census day does not mean you get a full refund. Please see the Tuition and Fee Refund Schedule.

CAUTION #2: All international students must check with the Office of International Programs before withdrawing. All international students are required to enroll full-time for fall and spring terms.

**Final Exam Policy:** Final examinations are administered as scheduled. If unusual circumstances require that special arrangements be made for an individual student or class, the dean of the appropriate college, after consultation with the faculty member involved, may authorize an exception to the schedule. Faculty members are required to maintain student final examination papers for a minimum of three months following the examination date.

Incomplete Grade Policy: If a student, because of extenuating circumstances, is unable to complete all of the requirements for a course by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in lieu of a grade only when all of the following conditions are met: (a) the student has been making satisfactory progress in the course; (b) the student is unable to complete all course work or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor, and (c) the student presents these reasons prior to the time that the final grade roster is due. The semester credit hours for an Incomplete will not be used to calculate the grade point average for a student.

The student and the instructor must submit an Incomplete Form detailing the work required and the time by which the work must be completed to their respective department chair or college dean for approval. The time limit established must not exceed one year. Should the student fail to complete all of the work for the course within the time limit, then the instructor may assign zeros to the unfinished work, compute the course average for the student, and assign the appropriate grade. If a grade has not been assigned within one year, then the Incomplete will be changed to an F or NC if the course was originally taken under the CR/NC grading basis.

**Grade Appeal Policy:** UT Tyler's Grade Appeal policy requires the completion of a Grade Appeal form for this action to take place. The grade appeal begins with the instructor of your course. If you do not agree with the decision of the instructor, you may then move your appeal to the department chair/school director for that course. If you are still dissatisfied with the decision of the chair/director, you may move the appeal to the dean of the college offering that course, who has the final decision. Grade appeals must be initiated within sixty (60) days from the date of receiving the final course grade. The grade Appeal form is found on the <u>Registrar's Form Library</u>.

**Disability/Accessibility Services:** The University of Texas at Tyler has a continuing commitment to providing reasonable accommodations for students with documented disabilities. Students with disabilities who may need accommodation(s) in order to fully participate in this class are urged to contact the Student Accessibility and Resources Office (SAR) as soon as possible to explore what arrangements need to be made to ensure access. If you have a disability, you are encouraged to visit the SAR Portal (<a href="https://hood.accessiblelearning.com/UTTyler/">https://hood.accessiblelearning.com/UTTyler/</a>) and complete the New Student Application. For more information, please visit the <a href="SAR webpage">SAR webpage</a> or call 903.566.7079.

Military Affiliated Students: UT Tyler honors the service and sacrifices of our military-affiliated students. If you are a student who is a veteran, on active duty, in the reserves or National Guard, or a military spouse or dependent, please stay in contact with me if any aspect of your present or prior service or family situation makes it difficult for you to fulfill the requirements of a course or creates disruption in your academic progress. It is important to make me aware of any complications as far in advance as possible. I am willing to work with you and, if needed, put you in contact with university staff who are trained to assist you. Campus resources for military-affiliated students are in the Military and Veterans Success Center (MVSC). The MVSC can be reached at MVSC@uttyler.edu or via phone at 903.565.5972.

**Academic Honesty and Academic Misconduct:** The UT Tyler community comes together to pledge that "Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do." Therefore, we enforce the <u>Student Conduct and Discipline policy</u> in the Student Manual Of Operating Procedures (Section 8).

**FERPA:** UT Tyler follows the Family Educational Rights and Privacy Act (FERPA) as noted in <u>University Policy 5.2.3</u>. The course instructor will follow all requirements in protecting your confidential information.

**COVID Guidance:** The UT Tyler community of Patriots respects the rights of others to wear a mask if they desire to do so. COVID guidelines may change as the situation warrants, and students should follow the instructions warranted by the situation.

**Absence for Official University Events or Activities:** This course follows the practices related to approved absences as noted by the Student Manual of Operating Procedures (Sec. 1 -501).

**Absence for Religious Holidays:** Students who anticipate being absent from class due to a religious holiday are requested to inform the instructor by the second class meeting of the semester.

**Campus Carry:** We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <a href="http://www.uttyler.edu/about/campus-carry/index.php">http://www.uttyler.edu/about/campus-carry/index.php</a>.