



**Neurobiology Overview: Mental Health and Illness**  
**NURS 5357**  
**Spring 2023**

**Scheduled Class Days and Times: Online**

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

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**Office Hours:** 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 is foundational for advanced practice nurses caring for individuals with mental disorders as well as substance use disorders. The course focuses on key mental disorders across the lifespan. Multifactorial causes for these disorders are explored, including developmental, genetic, injury, trauma, infection, and neurodegeneration. Maintenance of homeostasis within the mind- body relationship will be examined with respect to mental disorders.

**Prerequisites:** NURS 5350 Advanced Pathophysiology; NURS 5352 Advanced Health Assessment; NURS 5354 Advanced Pharmacotherapeutics

**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: <https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/dsm-5-tr-fact-sheets>
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
3. Higgins, Edmund (2018). *The Neuroscience of Clinical Psychiatry*. Philadelphia: Wolters Kluwer, 2018. ISBN-13 : 978-1496372000.
  - This text is available to students through the UT Tyler Library as an EBook

**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 - <https://www.psychiatrictimes.com/>
- Stanford Center for Continuing Medical Education - <https://stanford.cloud-cme.com/>
- Providers Clinical Support System (PCSS) - <https://learning.pcssnow.org/>

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: 60%\*

- *Exam 1: 15%\**
- *Exam 2: 15%\**
- *Exam 3: 15%\**
- *Exam 4: 15%\**

3) Discussion Boards: 20%4) Weekly Quizzes: 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% in order 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.

**Academic Integrity:** Cheating of any kind, as defined in Section 8 of the UT Tyler Manual of Policies and Procedures (MOPP) for Student Affairs (<https://www.uttyler.edu/mopp/>), 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 (60% 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 **prior** 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 6-7**
  - **Exam 3 will cover Modules 8-10**
  - **Exam 4 will cover Modules 11-13**

#### **2) Weekly Quizzes (20% of total grade)**

There will be short quizzes throughout the weekly modules. These quizzes will open on the Saturday evening before the corresponding module week. The combined total of points for all quizzes will account for 20% of the final grade.

### 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).

#### Important Course Dates:

**Classes Begin:** January 9, 2023

**Census Date (withdraw without penalty):** January 20, 2023

**Last Date to Withdraw:** March 20, 2023. Students please notify your course faculty and contact your advisor.

**Final Exam:** April 9<sup>th</sup> - 15<sup>th</sup>

#### 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
<b>Week 1</b> Introduction to Neuroscience <b>1/9-1/14</b>	DB 1.1: Icebreaker	<b>Initial Post:</b> due by Wednesday Day 3 <b>2 Peer Responses:</b> on different days, final post due by Saturday Day 6
<b>Week 2</b> Neurotransmitters, Receptors, and Signaling the Nucleus <b>1/15-1/21</b>	Quiz 2	Due by Saturday, Day 6
<b>Week 3</b> Modulators <b>1/22-1/28</b>	Quiz 3	Due by Saturday, Day 6
<b>Week 4</b> Schizophrenia and Psychosis <b>1/29-2/4</b>	Quiz 4	Due by Saturday, Day 6
<b>Week 5</b>	<b>Exam 1</b>	<b>Opens:</b> Tuesday, Day 2 at 7:00am CST <b>Closes:</b> Friday, Day 5 at 7:00am CST

DSM-5 and Psychiatric Diagnoses <b>2/5-2/11</b>	DB 5.1	<b>Initial Post:</b> due by Wednesday Day 3 <b>2 Peer Responses:</b> on different days, final post due by Saturday Day 6
<b>Week 6</b> Depression <b>2/12-2/18</b>	Quiz 6	Due by Saturday, Day 6
<b>Week 7</b> Bipolar Disorder <b>2/19-2/25</b>	DB 7.1	<b>Initial Post:</b> due by Wednesday Day 3 <b>2 Peer Responses:</b> on different days, final post due by Saturday Day 6
<b>Week 8</b> Anxiety <b>2/26-3/4</b>	Quiz 8	Due by Saturday, Day 6
	<b>Exam 2</b>	<b>Opens:</b> Tuesday, Day 2 at 7:00am CST <b>Closes:</b> Friday, Day 5 at 7:00am CST
<b>Week 9</b> Pain <b>3/5-3/11</b>	Quiz 9	Due by Saturday, Day 6
<b>Week 10</b> Sleep/Wake Disorders <b>3/12-3/18</b>	Quiz 10	Due by Saturday, Day 6
<b>Last Day to Drop/Withdraw</b>		<b>March 20, 2023</b>
<b>Week 11</b> ADHD <b>3/19-3/25</b>	Quiz 11	Due by Saturday, Day 6
	<b>Exam 3</b>	<b>Opens:</b> Tuesday, Day 2 at 7:00am CST <b>Closes:</b> Friday, Day 5 at 7:00am CST
<b>Week 12</b> Dementia <b>3/26- 4/1</b>	Quiz 12	Due by Saturday, Day 6
	Assignment 12.1	Due by Saturday, Day 6
<b>Week 13</b> Substance Use Disorders <b>4/2-4/8</b>	PCSS: Overview of SUD	Due by Saturday, Day 6
	DB 13.1	<b>Initial Post:</b> due by Wednesday Day 3 <b>2 Peer Responses:</b> on different days, final post due by Saturday Day 6
	Quiz 13	Due by Saturday, Day 6
<b>Week 14</b> Final Exam <b>4/9-4/15</b>	<b>Final Exam</b>	<b>Opens:</b> Monday, Day 1 at 7am CST <b>Closes:</b> Friday, Day 5 at 7am CST

### UT Tyler School of Nursing Justice, Equity, Diversity and Inclusion Statement:

The University of Texas at Tyler School of Nursing aspires to create, foster, and sustain a culture of justice, equity, diversity, and inclusion irrespective of one's identity. We value and embrace all backgrounds, experiences, and identities, realizing that no one group, person or perspective has all the answers. We are richer when our individual skills, knowledge, experiences, cultures,

backgrounds, and identities are combined in an accepting community. We strive to ensure that every individual gets a fair and equal chance to participate and thrive in a nurturing environment where all feel a sense of belonging. We are committed to intentionally and deliberately creating a diverse community that instills a sense of equitable justice and belonging for everyone affiliated with our school.

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

[https://www.utt Tyler.edu/nursing/college/student\\_guide\\_and\\_policies.php](https://www.utt Tyler.edu/nursing/college/student_guide_and_policies.php)

**Student Resources and University Policies are provided in Canvas.**