

NR 546 Comprehensive Exam Study Guide

Midterm Exam

Review the weekly Explore section content and required readings as noted within your Student Lesson Plan for Learning Success. Review the medication and neurotransmitter tables you have completed. Each weekly module will 17-18 questions on the exam.

Study tips:

1. These questions are very similar to what you will see on boards.
2. **Neuroscience matters-** Neuroscience is the foundation for mental health prescribing, especially as the future moves toward symptom-based prescribing rather than selecting a drug class based on a diagnosis. Know what area of the brain is associated with presenting symptoms AND how the medication works on that area of the brain to treat that symptom (the medication mechanism of action)
3. **Use this study guide** -As you use your study guide and medication sheets to prepare for the exams, take note of outliers and unique properties. What medication in that class has the most adverse effects? Who should not take that medication? Which medication has no CYP450 interactions? Which medication is the first line? What area of the brain is affected by these medications?
4. **Read the questions carefully-** It is my recommendation that you take the available time to read the questions and consider what is being asked. This is often how you can discriminate between the two most likely answers.

Week 1	Functional neuroanatomy- brain anatomy and physiology covered in both the course Explore section and readings. If a particular area of the brain is affected, what is the expected response? What symptoms would you expect to see? Link the assessment to the affected brain area. For example, if a client comes to your office with complaints of (fill in physical complaint) what area of the brain is affected? Focus on those specific examples within the Explore section and your readings. A client cannot copy a written word or drawing; what area of the brain is affected?
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	<p>Ethical issues- covered in both the course Explore section and readings.</p> <p>Epigenetics- covered in both the course Explore section and readings. Why is epigenetics important? How does epigenetics impact a person's mental health?</p> <p>Genetics- the CYP 450 impact is discussed in the course Explore section. How does the CYP450 affect pharmacodynamics and pharmacokinetics? What are some very common/concerning interactions? Also see Stahl Ch 2.</p> <p>Incidence of mental illness-what factors are increasing the incidence? This is covered in the course Explore section</p>
<p>Week 2</p>	<p>CYP450-how this affects metabolism. Review Stahl Ch 2.</p> <p>Inducers & Inhibitors- review Stahl p.49.</p> <p>How does an inhibitor or inducer affect medication efficacy? Note the most common inhibitors and inducers noted in your Stahl readings. You will see these mentioned on boards. Make sure to review carbamazepine. Is this medication an inhibitor or an inducer? How does combining carbamazepine with another medication affect your prescribing? Are dose adjustments necessary? What happens if you prescribe an inducer or an inhibitor with a substrate?</p> <p>Agonists/Antagonists (full, partial, reverse)- know definitions, and be able to apply this to a clinical situation. Think about how this is applied clinically. For example- if a medication is an agonist, how does that affect transmission? Review Stahl's agonist spectrum section. Review the figures regarding agonists.</p> <p>Neurotransmission- covered in both the course Explore section and readings. What are the types of neurotransmission? Review retrograde, and signal transduction cascades.</p> <p>Why do some medications take weeks for the client to notice a response? Which neurotransmission process causes this?</p>
<p>Week 3</p>	<p>Dopamine pathways-know the four pathways, the functions, and adverse effects. If given a scenario with an adverse effect, you should be able to select the responsible pathway.</p> <p>FGA/SGA- know the risks and benefits of each class including affected neurotransmitters and adverse effects.</p> <p>Which medication class is the first line?</p> <p>Which medication is associated with a higher incidence of EPS or</p>