

Psychopharmacology: Biological Basis (CE)

Instructor: Dr. Bita Sharifzadeh, OPQ # 10884-07	Class Instruction: Online at the student's own pace.
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Course Syllabus

Problem & Need:

The Psychopharmacology: Biological Basis course is an introduction to psychopharmacology. This segment is a starting point for students wishing to gain a deeper understanding of the basics of psychopharmacology, starting with the basic functions of the cell and nervous systems. This knowledge will act as a foundation for understanding the role of neurotransmitters in mental disorders.

Students will then learn the qualities and mechanics of drugs used to treat mental disorders as well as the impact these drugs have on the body. Finally, students will learn about drug non-adherence.

Length of Activity and Course Format:

The course is a total of 2.5 hours and will be available online on [DBN Elite](#). The course must be completed within 6 months of purchasing it.

Trainer:

Dr. Bita is a Clinical Psychologist with over 20 years of experience in treating individuals, couples, and families. She holds a doctoral degree in Clinical Psychology from Concordia University as well as a postdoctoral degree in Psychopharmacology from Alliant University. Her specialties include the treatment of depression, anxiety, trauma, and OCD, amongst others. Her preferred modalities are CBT, mindfulness, and sensorimotor psychotherapy.

Course Objectives

By the end of this course, students will achieve the following outcomes:

1. Define the various structures of functions that make up the human nervous system at different levels.
2. Identify the various qualities and mechanics of drugs commonly used in the treatment of psychiatric disorders.
3. Recognize the major considerations associated with drug use and non-adherence.

Course Evaluation

The course is pass/fail, no numeric grade will be provided.

-Final Exam (100%): The course evaluation will be a cumulative exam that consists of 20 multiple-choice questions and true or false designed to assess your knowledge of psychopharmacology. The final exam will be available to you once you have completed the lecture.

Content

<i>Topics Covered</i>	<i>Required Reading(s)</i>
<p>Neurobiology</p> <ul style="list-style-type: none"> -Human nervous system -Neuroanatomy and brain structures -Intracellular communication -Neurotransmitters 	<p>Preston et al. (2017): pages 29-44 Freberg (2017): pages 64-99</p>
<p>Pharmacology</p> <ul style="list-style-type: none"> -Kinetic profile -Medication effects -Drug interactions 	<p>Preston et al. (2017): pages 45-56 Freberg (2017): pages 101- 125</p>
<p>Diagnostic Considerations</p> <ul style="list-style-type: none"> -State vs. trait variables -Personality disorders and primary disorders -Impact of substance abuse on diagnosis -Impact of physical illness on diagnosis 	<p>Preston et al. (2017): pages 65-76 Hooley et al. (2016): pages 106-134 Preston et al. (2017): pages 57-64</p>
<p>Medication Non-Adherence</p>	

Segment 1: Pre-recorded Q&A Exercise

This exercise is to be done as in-class work and should take students up to 5 hours to complete.

Required Readings

Resources for the class are available on [DBN Lib](#). The references link to the resources themselves or to their purchase pages if they are unavailable for free.

Freberg, L.A. (2017). *Discovering behavioral neuroscience: an introduction to biological psychology*. USA: Cengage Learning

Hooley, J. M., Butcher, J., Knock, M., & Mineka, S. (2016). *Abnormal psychology*. Essex, England: Pearson Education Limited.

Preston, J., O'Neal, J. H., & Talaga, M. C. (2017). *Handbook of clinical psychopharmacology for therapists*. Oakland, CA: New Harbinger Publications, Inc.

Recommended Readings

American Psychiatric Association, (2017) *Diagnostic and statistical manual of mental disorders: DSM-5*. Arlington, VA

Bezchlibnyk-Butler, K. Z., Jeffries, J. J., & Procyshyn, R. M. (2019). *Clinical handbook of psychotropic drugs*. Boston, MA: Hogrefe.

Buxbaum, J.D., Charney, D.S., Nestler, E.J., Sklar, P., (2014) *Neurobiology of Mental Illness* Oxford: Oxford University Press

Healy, D. (2009). *Les médicaments psychiatriques démythifiés (5^e éd.)*. Issy-les-Moulineaux : Elsevier Masson SAS.

Muse, M., & Moore, B. A. (2012). *Handbook of clinical psychopharmacology for psychologists*. Hoboken, NJ: John Wiley and Sons.

Stahl, S. M., & Muntner, N. (2017). *Stahl's essential psychopharmacology: neuroscientific basis and practical applications*. Cambridge: Cambridge University Press.