

EXPECTED LEARNING OUTCOMES

Topic 7: Biological Perspectives on Psychopathology

Key Terms You Should Be Able to Define and Apply:

(in order they appear in the text)

Part IIIA

General paresis
Directionality
Reductionism
Treatment-etiology fallacy

Unit 21

Chromosome
Genotype
Allele
Phenotype
Monozygotic (MZ)/Dizygotic (DZ)
Concordance
Heritability
Genetic linkage
Phenylketonuria
Fragile X syndrome

Unit 22

Cerebral cortex
Neurotransmission/Neurotransmitter
Action potential
Synapse
Monoamine hypothesis (depression)
Dexamethasone suppression test

Hormone
REM sleep
Exposure model of addiction
Susceptibility model of addiction
“Pleasure pathway”
Dopamine hypothesis (schizophrenia)
Ventricle
Down syndrome/Trisomy 21
Fetal alcohol syndrome

Unit 23

Medical model
Psychopharmacology
Psychotropic medication
Monoamine oxidase inhibitor (MAO-I)
Selective serotonin reuptake inhibitor (SSRI)
Tardive dyskinesia
Lithium
Agonist/Antagonist
Aversion drugs
Electroconvulsive therapy (ECT)
Lobotomy
Phototherapy

Key Concepts You Should Be Able to Understand:

(in order they appear in the text)

Unit IIIA

- Summarize what is currently known about mental disorders that can be primarily attributed to specific, identifiable biological causes

Unit 21

- Describe how twin and adoption studies are used to investigate heritability
- Explain at least two reasons why researchers have found it so difficult to pin down specific genetic causes in psychopathology
- Identify specific disorders for which moderate or strong evidence for genetic influence exists

Unit 22

- Explain why researchers pay so much attention to neurotransmitters
- Identify specific neurotransmitters and the role they are thought to play in specific mental disorders
- Explain why it is so hard to pin down specific neurochemical causes in psychopathology
- Describe specific disorders for which moderate or strong evidence for abnormalities in brain chemistry exist
- Identify specific examples of how brain anatomy might be a factor in specific mental disorders
- Contrast the disease versus moral weakness views of alcohol and drug use disorders
- Identify biological factors that are known or strongly suspected to play an important role in the etiology of intellectual disability
- Identify specific pre-natal, peri-natal, and post-natal aspects of the physical environment that might contribute to certain mental disorders
- Critique the legitimacy of viewing ADHD as a neurological disease

Unit 23

- List and define the 5 major categories of medications used in mental health
- Summarize the potential benefits of using prescription medication to treat different mental disorders
- Identify the potential drawbacks of using prescription medication to treat different mental disorders
- Describe a major factor that seems to explain the high relapse rate when treating schizophrenia with antipsychotic drugs
- Summarize the issues involved in the controversy over using stimulant medications to treat ADHD
- Summarize what is known about the potential value of ECT