

**MARGARET H. ROLLINS SCHOOL OF NURSING**  
**N-201 Nursing Care of Special Populations**  
**MENTAL HEALTH NURSING**  
**Class Preparation #1**

**Directions:** Fill in the charts below. Identify what mental health disorders can occur when each neurotransmitter is increased or decreased.

	<b>Functions</b>	<b>Increase</b>	<b>Decrease</b>
<b>Dopamine</b>	Fine muscle movement, integration of emotions and thoughts, decision making, stimulates hypothalamus to release hormones	Schizophrenia, mania	Parkinson Disease, Depression
<b>Norepinephrine</b>	Mood, attention and arousal, fight or flight in response to stress	Anxiety, mania, schizophrenia	depression
<b>Serotonin</b>	Mood, sleep regulation, hunger, pain perception, aggression and libido	anxiety	depression
<b>GABA</b>	Reduces anxiety, aggression, pain perception, anticonvulsant and muscle relaxing properties	Reduction of anxiety	Anxiety disorders, schizophrenia, mania
<b>Acetylcholine</b>	Plays a role in learning and memory, regulates mood, mania, sexual aggression, stimulates the parasympathetic nervous system	depression	Alzheimer disease, dementia, Parkinson disease, Huntington's Chorea

Structures of the Brain

<b>Brain Structure</b>	<b>Function</b>
The limbic System	Processes and regulates emotion and memory while regulating sexual stimulation and learning. It is composed of the amygdala, hypothalamus, thalamus, and hippocampus.
Frontal Lobe	Controls thinking, planning, problem-solving, short-term memory, movement, and personality
Parietal Lobe	Helps with sensory information, such as touch, temperature, and pressure. It can also help identify objects and spatial relationships.
Temporal Lobe	Processes information from the senses of smell, taste, and sound. It also helps store memories and manage emotions.
Occipital Lobe	Processes visual information from the eyes, such as object recognition and images.