

**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>	Reward and pleasure, motivation and drive, movement and coordination.	Schizophrenia (delusions and hallucinations), mania, addiction.	Depression, ADHD, bipolar disorder.
<b>Norepinephrine</b>	Fight or flight response, being able to attention and focus, sleep-wake cycle, memory and learning.	Anxiety, manic phase of bipolar disorder, aggression.	Depression, anxiety, ADHD
<b>Serotonin</b>	Mood regulation, sleep, appetite.	Serotonin syndrome-agitation, muscle twitching.	OCD, depression, anxiety.
<b>GABA</b>	Calms and relaxes nervous system. Regulates anxiety and stress, improves mood and sleep, regulates brain development.	Bipolar	Autism spectrum disorder (ASD), epilepsy, ADHD, anxiety.
<b>Acetylcholine</b>	Muscle contraction, involuntary bodily functions (digestion, HR and salivation), attention and focus.	Depression, mania, anxiety.	Alzheimer's, dementia.

Structures of the Brain

<b>Brain Structure</b>	<b>Function</b>
The limbic System	Located in cerebrum that controls emotions, motivation, learning, memory, and behaviors like hunger and sense of smell.
Frontal Lobe	Organization, planning, problem solving, decision making, speech.
Parietal Lobe	Regulation of pain, touch, temperature.

Temporal Lobe	Memory, auditory processing, language comprehension.
Occipital Lobe	Visual cortex and stimuli.