

**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>	Dopamine controls fine motor movements, coordinates emotions and thoughts, supports decision-making, and signals the hypothalamus to release hormones	Schizophrenia, Mania	Parkinson Disease, Depression
<b>Norepinephrine</b>	Norepinephrine regulates mood, attention, and alertness, activates the fight-or-flight response during stress	Anxiety, Mania, Schizophrenia	Depression
<b>Serotonin</b>	Serotonin influences mood, regulates sleep, appetite, and pain perception, and affects aggression and sexual drive.	Anxiety	Depression
<b>GABA</b>	GABA functions by reducing anxiety, aggression, pain perception, anticonvulsant and has muscle-relaxing properties.	Reduction of anxiety	Anxiety disorders, schizophrenia, mania
<b>Acetylcholine</b>	Acetylcholine is important in the role of learning and memory, regulates mood, mania, sexual aggression, and stimulates the PSN.	Depression	Alzheimer disease, Dementia, Parkinson disease, Huntington's Chorea

**Structures of the Brain**

<b>Brain Structure</b>	<b>Function</b>
The limbic System	The limbic system regulates emotions, memory, and basic drives such as hunger and survival.
Frontal Lobe	The frontal lobe controls reasoning, decision-making, problem solving, voluntary movement, and personality.
Parietal Lobe	The parietal lobe processes touch, temperature, pain, and helps with spatial awareness
Temporal Lobe	The temporal lobe handles hearing, language comprehension, memory, and emotion
Occipital Lobe	The occipital lobe is responsible for vision, including processing color, shape, and motion.

