

**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	Influences emotional and aggressive behavior and basic drives, such as feeding and sexual behavior. Input from limbic system can help regulate body temp, water balance, circadian rhythm, and emotional expression.
Frontal Lobe	Control higher cognitive function, memory retention, voluntary eye movements, voluntary motor movements, and motor functions involved in speech production. Judgement
Parietal Lobe	Integrates somatic and sensory input. Interprets spatial information
Temporal Lobe	Integrates somatic, visual, and auditory data. Integrates past experiences.
Occipital Lobe	Registers and processes visual images