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## Student Success \ Brain, Emotion, and Health

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# Limbic System, Emotions & Memory

## ANATOMY

- Memory and emotions are anatomically linked to the limbic system: emotional or “reptilian” brain. This part of the brain includes the hippocampus and amygdala.

## HIPPOCAMPUS

- This part is implicated in the transition of memory items from short-term to long-term memory. Damage to this part of the brain can impair people from learning new items.

## AMYGDALA

- This part mediates the basic emotions with each memory. The amygdala works hand in hand with the hippocampus. As a result, every memory has an emotional signature to it.

## THE EVOLUTION GAME

- We evolved an inter-linked system of memory and emotions in order to survive in the evolution game. For example, simply having a pictorial memory of what a snake looks like is not enough; we need to have feelings (i.e. fear) associated with it as well in order to survive (i.e. avoid it).