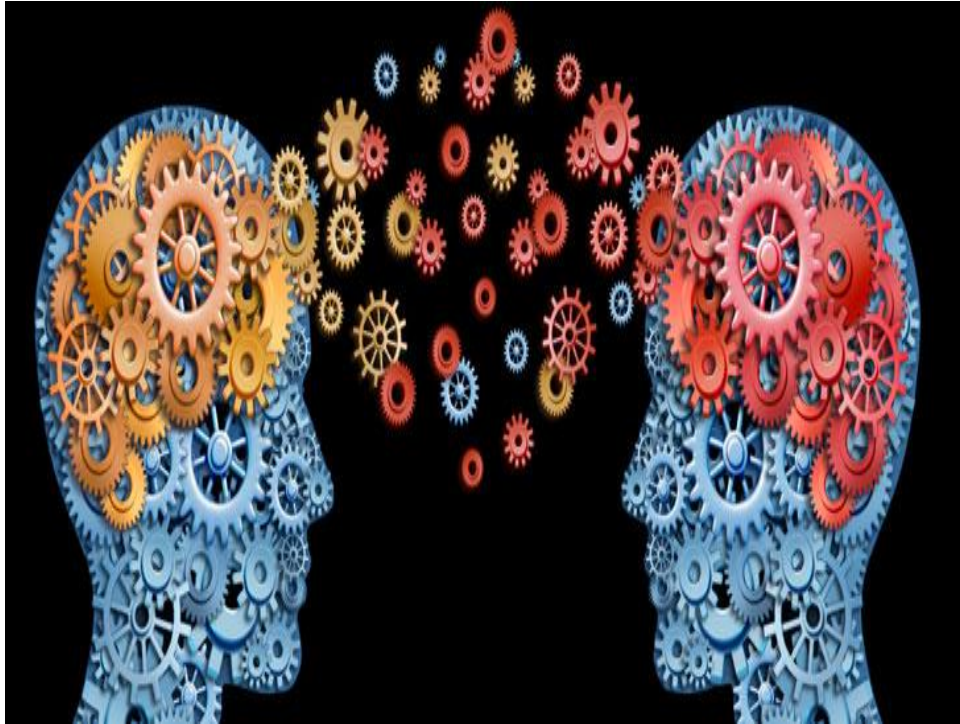


Psychology

essential understanding

Students will develop a greater working knowledge of the human psyche and behavior while expanding their understanding of themselves and their place in the world.



overview

This course offers students an engaging introduction to the content, terminology, methodology and application of psychology as an academic discipline. Students will do this by exploring current theories and research in four distinct and interconnected domains of psychology: physiological, behavioral, cognitive and affective. Through individual and group assignments, students will complete research experiments, dialogues, analysis of case studies and interactive assignments. Students will explore many topics while continually relating the course to their own development and psychological growth.

Guiding Question 1: How is the human brain interconnected to mental processes and behavior?

lessons

- _____ What is psychology?
- _____ Neuroscience
- _____ Brain parts and function
- _____ Research Methods
- _____ Perception and Sensation
- _____ Neuroplasticity

group work

Due September 3/ September 24

Dialogue grades for Psychology/TOK are based upon

1. Participation in dialogue (i.e. speaking)
2. Submission of a dialogue question

_____ **Dialogue 1**- “What does the body remember?” Dialogue based upon written article

_____ **Dialogue 2**- “How your phone affects your brain and body?” Dialogue based on video

Due September 27 (m/th section)/ 28 (tu/f section)

_____ **Research Methods/Neurology Project**- Groups will develop their own psychological question they want answered through research and experiment. Groups will then conduct a research project using 2 different research methods. Groups will present a 4-5-minute summary of their research, experiment and findings.

Students must submit their question and research methods to Mr. Boyd prior to conducting experiments. Groups will base their psychological question and experiment upon subjects from the first study guide.

Topics:

-neuroscience –brain parts and function –perception –sensation –neuroplasticity

Research Methods:

-Lab Experiment -Field Experiment -Case Study -Interviews -Questionnaire - Observation -Content Analysis

Students will use the following as questions to guide their presentation:

Why did you choose your question? Why did you choose your 2 specific research methods to answer your question? Which research method was most effective in providing data to answer your question? What were challenges your group faced in your research project? What are the results of your research and experiment? What are the correlations and causations related to your research and experiment? Have you concluded upon an answer to your question?

individual work

Students must complete a concept proposal for all assignments except lesson notes

Due Every 2 weeks (Sep. 7; Sep. 14; Sep. 28; Oct. 5)

_____ **Lesson Notes-** Students will take notes for all lessons presented. Lesson notes will be checked for completion every two weeks.

Due September 6 (m/th section)/ September 7 (tu/f section)

_____ **Brain regions and function-** Students will choose 1 of 2 assignments below

1. Students will create an original visual representation of the brain regions or central nervous system and its parts and label all regions listed below. Students will choose 5 terms from each list below. Students may use mediums such as illustration, painting or video. Students will define and label the function of each brain or central nervous system region listed above.

a. Brain Regions

Medulla-Pons-Hypothalamus-Thalamus-Cerebellum-Optic Tectum-Cerebral Cortex
Hippocampus-Basal Ganglia-Olfactory Bulb-All four lobes (Frontal, Parietal, Temporal, Occipital)- Cerebrum-Brainstem-Amygdala-Spinal Cord

b. Central Nervous System at a Cellular Level

Neurotransmitters-Neurons-Glial Cells- Axon- -Dendrite-Soma-Synapse- Reflex Arc-
somatic nervous system-automatic nervous system- nuclei-ganglia –myelin sheath-
schwann cell- receptor

2. Students will choose 3-5 actions, behaviors or emotions and give 3-5 regions of the brain which have a primary contribution to their chosen action or behavior. For example, when you are running what are 3-6 brain regions and their functions that contribute to your ability to run.

Due September 13 (m/th section)/ 14 (tu/f section)

_____ **Perception and Sensation-** Students will complete 2 of 3 assignments and will present 1 of 3 assignments to the class in a 2-3-minute presentation.

1. Students will choose 2 different senses and choose 4-6 of their own vocabulary terms pertaining to each of their chosen senses. Vocabulary may not be from the provided list above. Students may show understanding of the vocabulary through a written definition, visual illustration or demonstration.
2. Students will choose 2 different senses and choose to describe how these senses “work” within the brain and body. Students may show understanding through a written explanation, visual illustration, song, or video using vocabulary terms related to each sense.
3. Students will choose 2 different senses and create a kinesthetic (movement) activity demonstrating how the senses “work” within the brain and body.

assessment

Due October 4 (m/th section)/ October 5 (tu/f section)

_____ **Neurology Quiz-** Students will be able to use their lesson notes during the quiz on neurology, brain parts and functions, and psychology topics discussed during the first study guide

Due October 11 (m/th section)/ 12 (tu/f section)

_____ **Neuroplasticity Project-**

Students will practice a new skill or challenging activity for 2 hours to personally experience neuroplasticity and its relationship to human psychology. Students will use this assessment as an opportunity to reflect on the process of neuroplasticity and how the human brain is interconnected to mental processes and behavior. Students will demonstrate mastery of this unit by clearly answering the guiding question within their reflection, incorporating psychological vocabulary and research, and reflecting on how practicing the activity impacted you psychologically (mental process and behavior).

Students will spend 1 hour of their practice time during class time. Students may break the remaining 1 hour of practice into smaller increments of time (i.e. 4x15minute sessions). Students will complete the 1 hour of out of class activity time by the due date of the assignment. Students must document the time, place, and date of when they practiced their activity and must submit one visual document as proof (i.e. picture, video).

What do you submit?

1. Students will give a 4-6 minute individual presentation detailing their neuroplasticity project to the class
2. Students will complete a 2-3 paragraph written reflection (or other form of reflection) detailing their neuroplasticity project

Within their presentations and summary students should consider the following questions:

-how does your activity relate to neuroplasticity? -what does your project show about the interconnection between the brain, mental processes and behavior?
how did your behavior influence your mental process (thinking)? -how did your thinking influence your behavior? - how did you personally experience the effects of neuroplasticity?

Students will choose to complete 1 neuroplasticity activity

Activities could include: -physical exercise -lumosity.com activities
- learn a new skill or hobby- brainturk.com activities- practice a new language
- practice an instrument- listen to binaural beats- n back memory tests- meditation

Students will submit all digital assignments to the google classroom below.

Google Classroom:

lutsqa4