

Board/Authority Authorized Course:
 Psychology 11
 Biopsychology and Cognition

School District/Independent School Authority Name:

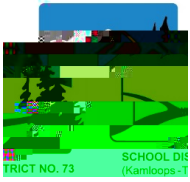
	November 2017
School Name: NorKam Senior Secondary School	Principal's Name: Jon Brady
Superintendent Approval Date (for School Districts only):	Superintendent Signature (for School Districts only):
Board/Authority Approval Date:	Board/Authority Chair Signature:
Course Name:	
	120

Board/Authority Prerequisite(s):
 English 9, Social Studies 9

Special Training, Facilities or Equipment Required:
 Teacher will possess three upper level university courses in related field or related teaching experience.

Course Synopsis:
 The purpose of the Biopsychology course is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with the biological level of analysis in Psychology. Students also learn about the ethics and methods psychologists use in their science and practice. There is extensive overlap between neuroscience in the Biology curriculum and Career Life Education in the BC Curriculum.

Goals and Rationale:
 Learning Psychology helps us to learn about ourselves and others. Due to the nature of the discipline, students will be encouraged to evaluate research, pursue inquiry and synthesize information in a meaningful and often personal way. Understanding how brain function, emotions and human behavior interact enables student understanding and helps them to lead healthier lifestyles.

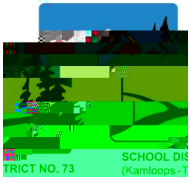


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Aboriginal Worldviews and Perspectives:

Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors – In psychology students will be asked regularly to discuss how what they are learning can contribute to their mental health and that of others.

Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place). Reaction and reflection journals allow students to take the time to deeply think about course contents and the classroom context in Psychology. Discussions are directed in a collaborative, Socratic manner rather than being competitive or conflictual in nature.



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Big Ideas – Elaborations

The field of psychology supports thinking that examines assumptions, weighs evidence, and tests conclusions.

- Students will be exposed to studies using various research methods: case studies, surveys, observation, correlational studies, experimentation, longitudinal studies etc.
- Understanding the limits and strengths of case studies is central to exercising caution when discussing human behaviour – i.e. focus on small participant group or sample can allow a more in-depth analysis but limits the applicability of the conclusions to the general population

Curricular Competencies – Elaborations

Gather, Interpret and Analyze and Critical Thinking Skills – Students can use critical thinking to evaluate and interpret psychological studies

Comparing and contrasting MRI, EEG, PET and fMRI images used in studies such as brain localization, Alzheimer's studies, Maguire et al (2006) study of changes in hippocampus, Smith (2013) U of Texas study on electrodes and the brain's self-control circuit, Massimini (2013) degree of consciousness test studies, structural vs functional imaging

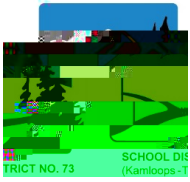
Evaluate and Apply research methods in psychology, respecting ethical guidelines and best practices in human science research.

Numerous studies used throughout the course will be discussed for their academic merit HM-epilepsy amnesia Raine et al (1997) study on brains of murderers vs controls for brain activity, vs experiments like Martinez and Kesner (1991) on rats re role of neurotransmitter acetylcholine in learning and memory Passamonti et al (2012) study of low levels of serotonin and aggression, Gustella et al (2008 and 2010) about oxytocin and behavior as well as the Stanford Prison Experiment of models for sample size, case studies, experimentation, ethics in research etc.

Communicate Ideas Effectively – Students can demonstrate the ability to interpret data from both theorists in the field and of their own studies, making connections to both prior knowledge and potential future impact. Students must replicate a simple experiment on a small scale: the Stroop effect, sense deprivation activities, and sense of smell as influences sense of taste experiment. In all activities students respect the scientific method for a basic lab write-up. In the analysis students identify how this data further reinforces claims made in class, predictions, and hypotheses.

Demonstrate Self -Awareness – Students can discuss how the neuroscience is evident in and has an effect on their everyday functioning as an organism

By learning about the role of the amygdala and stress in brain function, students can examine techniques we h



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Content – Elaborations

- digital imaging in biopsychology
- anatomy of the brain, the cerebral cortex, hemispheres, lobes, neurons, the brain and central nervous system parasympathetic vs sympathetic
- localization of function in the brain
- neurotransmitters and neurotransmission
- deregulation of neurotransmission due to stimulants, depressants, opioids, hallucinogens, chemical dependence
- genetics in psychology and special conditions: Attention Deficit Hyperactivity Disorder, Fetal Alcohol Syndrome, Autism, Spectrum Disorder, Schizophrenia, intro to abnormal psychology
- hormones, the endocrine system, and behaviour
- sensation and perception (overlapping theme from biological level of analysis into cognition)
- states of consciousness