DEPARTMENT Humanities and Social Sciences

COURSE OUTLINE – Fall 2023

PY1040(B2): Basic Psychological Processes – 3 (3-0-0) 45 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR:	Dr. Bruce Galenza (he/him)	**PHONE:**	780-539-2994
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OFFICE HOURS:	Mon & Wed: 8 – 10; Tues & Thurs: 10 – 11:30		

CALENDAR DESCRIPTION: This first introductory course in psychology gives students an understanding of themselves and other people through the study of basic concepts, principles, theories, and methods used in the scientific study of behaviour. The course covers research methods in psychology, the biological bases of behaviour, neurophysiology, sensation, perception, learning, states of consciousness, memory and cognition.

PREREQUISITE(S)/COREQUISITE: None

REQUIRED TEXT/RESOURCE MATERIALS: Chapters of the open-sourced textbook are posted to the D2L site for this course. However, as I shall not be testing you on this one particular textbook, any good introductory psychology text will suffice.

DELIVERY MODE(S): On-Campus lecture and discussion

COURSE OBJECTIVES: As a result of taking this course in Introductory Psychology, students will gain the abilities to define, explain, and give examples through short summary papers the following basic concepts of psychology: Lecture dates are included.

1. The Scientific Perspective: formal thinking skills, determinism, mechanism/monism (Dates covered in lecture: Sep 7)

2. The genetic determinism of behaviour (Nature): Wilson's Sociobiology, evolutionary psychology, behavioural genetics, genetic transference and variability, natural selection, evolution, reflexes, fixed action patterns, animal parallels (Sep 12-14).

3. The environmental determinism of behaviour through Behaviourism (Nurture): learning, Pavlov's Classical Conditioning, conditioned and unconditioned stimuli and response, associations, acquisition, extinction, stimulus generalization, and discrimination (Sep 19).

4. Skinner's Operant Conditioning: The three-term contingency, reinforcement and punishment, extinction, stimulus control, generalization and discrimination, positive and negative contingencies (Sep 21-26).

5. Nature with Nurture determinism: Evolutionary psychology, Epling & Pierce's Biobehaviourism, natural selection of learning potential, enabling and constraining influences of biology, species-specific learning differences (Sept 28-Oct 3).

6. Cognitive determinism: Bandura's Social Learning theory, latent learning, internal symbolic representation, Tolman's cognitive maps, observational learning (Oct 5-10).

7. Critical thinking and the scientific perspective: Theories versus opinions, evidence, evaluation of theories, operational definitions, measurement, description, correlation, controlled experimentation, quasi-experimental designs, statistics, hypothesis testing (Oct 12-19).

8. Neurophysiological determinism: The brain, the biological basis of behaviour, emotion, and cognition, structures and functions, lateralization and specialization, biological rhythms, dreams, and drugs (Oct 24-31).

9. Sensation: Vision, audition, transduction, discrimination of quantity and quality of environmental energies, neural coding, psychophysics, Feature Detection (Nov 2-7).

10. Perception: Feature Analysis, Perceptual Organization, Gestalt, Constructivism, prototypes (Nov 9).

11. Atkinson and Shiffrin's Information Processing model: Cognitive determinism, intelligence, sensory, short, and long term storages, modelling structures and processes, metacognition (Nov 21-23).

12. Craik and Lockhart's Levels of Processing: Principles of semantic encoding (Nov 28-30).

13. Schema theory: Categories/prototypes, stereotypes, frames, story schemas, scripts, narratives, person schemas, self-schemas, formal and informal/irrational thought, intelligence (Dec 5-12).

LEARNING OUTCOMES: GENERAL GOALS: This course may be different from any other course you have ever taken. There will be no memorizing lists of facts or definitions; students must learn the material, organize it for themselves so that they understand it, and apply it to their own lives such that they can reflect upon how these principles have been at work creating the people that they are now. Further, students are required to develop the skills of discussing, both through written and verbal communication, their knowledge of course material.

   Please be aware that your normal strategies for passing classes may not work here and new strategies may have to be developed; do so quickly. We will not follow the text chapter by chapter. Thirteen major theories and perspectives of human behaviour and cognitive processes will be introduced in the lectures moving from the simplest to the most complex; students are expected to find and read the topics in the text using the Index as a guide. Extra readings will be recognized; going beyond lecture material will be rewarded.

BEHAVIOURAL OBJECTIVES: Eight minor summary papers (2-3 pages minimum, typed and double spaced) are assigned, each worth 10%, plus a comprehensive 20% final essay summarizing the course. As a result of taking this course, students will demonstrate the ability to:

1. define and explain the theories, concepts, principles, and perspectives listed below in their own words.

2. give practical examples from their own lives as to how these concepts and principles have been at work to develop the persons they are now.

3. develop the skills of structuring, organizing, and interrelating knowledge of these perspectives, not simply a rote listing of details and definitions, as demonstrated by writing structured, organized, related, interrelated, and applicable summary papers and taking part in class discussions.

4. begin to develop the skills of evaluation of the concepts and principles of these perspectives on the basis of how well they describe and explain the students' behaviour and that of others by using higher order cognitive skills of independent thought, logic, reason, and data, rather than relying on authority, tradition, emotion, personal feelings, or personal experiences.

5. express themselves in written and verbal form using higher academic standards of grammatically correct and properly spelled Standard English.   See "Word Crimes":
http://www.weirdal.com/?musicvideo#

ESSAY TOPICS AND DUE DATES.

1. The genetic determinism of behaviour (Nature): Wilson's Sociobiology, mechanistic perspectives, monism, evolutionary psychology, genetic transference and variability, natural selection, evolution, reflexes, fixed action patterns, animal parallels (chapters 1 and 3). Suggested thesis: "Genetically Hardwired Nervous Systems." Due Sept 21st.

2. The environmental determinism of behaviour through Behaviourism (Nurture): learning, Pavlov's classical conditioning, conditioned and unconditioned stimuli and response, association, acquisition, extinction, stimulus generalization and discrimination, Skinner's operant conditioning, the three-term contingency, reinforcement and punishment, extinction, stimulus control, generalization and discrimination, positive and negative contingencies (chapter 6). Suggested thesis: "Learning as Behaviour Change." Due Oct 3rd.

3. Nature with Nurture determinism: Evolutionary psychology, Epling & Pierce's Biobehaviourism, natural selection of learning potential, enabling and constraining influences of biology, species-specific learning differences. Suggested thesis: "Natural Selection of Learning Potential."   Or: Cognitive and reciprocal determinism: Bandura's social learning theory, latent learning, internal symbolic representation, Tolman's cognitive maps, observational learning (chapter 6).   Suggested thesis: "Representation of Internal Cognitive Processes."   Due Oct 17th.

4. Critical thinking, the scientific perspective, theories versus opinions, evidence, evaluation of theories, operational definitions, measurement, description, correlation, controlled experimentation, statistics (chapter 2) Suggested thesis: "Scientific Empiricism."
Options:
  - Discuss how principles of science (theory, evidence, and reason) are used in psychology.
  - Identify and discuss the use of the scientific method in any published study in psychology.

- Propose and design a controlled experiment that would test a prediction of any theory.
- Carry out an experiment that would test a prediction of any theory. Due Oct 26th.

5. Neurophysiological determinism: The brain, the biological basis of behaviour, emotion, and cognition, structures and functions, lateralization and specialization, biological rhythms, dreams, and drugs (chapters 3 & 4). Suggested thesis: "Neurological Substrate." Due Nov 7th.

6. Sensation and Perception: vision, audition, discrimination of quantity and quality of environmental energies, neural coding, psychophysics, feature detection, feature analysis, Gestalt, ecological optics (chapter 5). Suggested thesis: "Sensory Transduction" and/or "Perceptual Construction." Due Nov 23rd.

7. Cognitive determinism through Atkinson and Shiffrin's information processing model: intelligence, sensory, short, and long term storages, structures and processes, metacognition, Craik and Lockhart's depth of processing principles (chapters 7 & 8). Suggested thesis: "Modelling Cognitive Structures and Processes" and/or "Semantic Encoding." Use 1040 principles as examples for semantic encoding. Due Dec 7th,

8. Final Exam: Essay Component (10%): Cognitive determinism: Schema theory, categories/prototypes, stereotypes, frames, story schemas, scripts, narratives, person schemas, self schemas, formal and informal/irrational thought, intelligence (chapters 7 & 8). Suggested thesis: "Epistemology." The Big Picture (20%) : what is psychology, what does it seek to do, how does it do it, how well does it succeed (chapters 1 through 8). Due Final Exam day, TBA.

GRADING RUBRIC:

Papers will be graded according to the extent that students have achieved the following criteria:

1. Written organized and structured papers reflecting the students' organized and structured schemas of knowledge concerning the concepts in the field of Learning.
2. The thesis shall be clearly stated and shall form the organizing structure for the entire paper such that all discussed points shall relate to that thesis (1 point).
3. All concepts shall be placed correctly in their proper context within the field of Learning. Students shall present the Big Picture of the concepts before rushing to the details (1 point).
4. The essential elements of theories and principles shall be identified, abstracted out, defined, explained, and examples generated thereof (5 points).
5. Proper sequencing of ideas and concepts, written from the general to the specific, and from the simple to the complex. Organization shall follow the logical or chronological sequences inherent in these theories and principles. Papers shall show cohesion, a unified whole.

and there shall be no padding. (2 points).

6. There shall be a complete lack of extraneous information, unnecessary detail, or padding, demonstrating the students' ability to differentiate the essential information from the optional. Writing shall be precise and concise, terms shall be defined. (1 point).

7. Students shall express themselves in written and verbal form using higher academic standards of grammatically correct, properly punctuated, and correctly spelled Standard English (-2 points).

8. APA format is required (-1 point).

9. Particular requirements concerning the perspectives, theories, and principles to be covered are listed in Learning Outcomes listed above.

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page http://www.transferalberta.ca.

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. **Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability,** Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

EVALUATIONS:

GRADING CRITERIA:

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

GRADING CONVERSION CHART			
Alpha Grade	**4-point Equivalent**	**Percentage of Class**	**Designation**
A+	4.0	2%	EXCELLENT
A	4.0	3%	
A−	3.7	7%	FIRST CLASS STANDING
B+	3.3	9%	
B	3.0	13%	GOOD
B−	2.7	16%	
C+	2.3	16%	SATISFACTORY
C	2.0	13%	
C−	1.7	9%	
D+	1.3	7%	MINIMAL PASS
D	1.0	3%	
F	0.0	2%	FAIL
WF	0.0	0	FAIL, withdrawal after the deadline

The Percentage Guidelines listed above will obtain only if a perfectly normal distribution results. Deviations from the assumptions of normality will result in modified percentages. In short, this grading technique is NOT grading on the curve.

ASSESSMENT:

Research psychology recognizes the authority of, and bases its judgments on, carefully collected data, as opposed to opinion, tradition, or authority. In keeping with this philosophy, rather than me imposing my authority on you and telling you what you must know and then arbitrarily assigning cut-off points for grades through non-standardized tests, you as a class will inform me what you are capable of, through my careful measurement of your performance. Students will be assessed according to their relative position within the class. The field of psychology always measures human behaviour in this way. This method will be explained fully in the first class period; a handout is available if

requested. Following the final grade assignments, students will be subjectively assessed for bonus points on the basis of their involvement in, and contributions to, the class, and attendance.

COURSE SCHEDULE:

Sep 5   Introduction

Sep 7-14   Sociobiology
Sep 21   Paper #1 due.

Sep 19   Learning: Classical Conditioning
Sep 21–26   Operant Conditioning
Oct 3   Paper #2 due.

Sep 28-Oct 3   Advanced Learning Theories: Biobehaviourism
Oct 5-10   Social Learning Theory
Oct 17   Paper #3 due.

Oct 12-19   Research Methods
Oct 26   Paper #4 due.

Oct 24-31   Brain & Behaviour
Nov 7   Paper #5 due.

Nov 2-7   Sensation
Nov 9   Perception
Nov 23   Paper #6 due.

Nov 21-23   Information Processing
Nov 28-30   Levels of Processing
Dec 7   Paper #7 due.

Dec 5-12   Schema Theory
                 Paper due Exam Day, TBA

STUDENT RESPONSIBILITIES: This is adult education. You will be treated as such and are expected to behave accordingly.   It is expected that all students will display a professional attitude and behaviour in the classroom. This includes reliability, respect for and cooperation with your fellow

students and the instructor, attention to fellow students' questions and instructors' responses, determination to achieve first-class work, effective time management, and constructive response to criticism. Engaging in cell phone behaviour will result in bone spurs on the back of your skull and you being asked to leave the classroom. Missing three or more lectures or coming in late without being excused will result in you being barred from submitting your final paper and essay.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at https://www.nwpolytech.ca/programs/calendar/ or the Student Rights and Responsibilities policy which can be found at https://www.nwpolytech.ca/about/administration/policies/index.html.

**Note: all Academic and Administrative policies are available on the same page.

If you cheat in any way, penalties will be pursued, potentially including a zero for the paper, an "F" for the term, and suspension from the institution.

ADDITIONAL INFORMATION:

There is so much more to learn than we can cover in our limited class time. Make the most of your college experience by reading the text and other sources beyond what is called for in the papers. It will also make your papers all the more insightful. Note that there are no assigned papers for many parts of the text; however, you are still responsible for this material for the final exam.

My preferred teaching style is interactive lecture, derived from the teaching philosophy that little is learned until responses are made (either verbally or written).

Papers are due at the beginning of the class period on the specified dates. Late papers will be graded but penalized 2 points per day. As adequate time is allotted between the end of the unit and the due date, no excuses other than medical situations, major emergencies, or single parenthood will be accepted. Ensure that you have an adequate supply of ink cartridges and paper and back up all papers on disk. Again, students must express themselves in written and verbal form using higher academic standards of grammatically correct and properly spelled Standard English. If I cannot read your papers, I shall return them ungraded. You may have three free papers where I will indicate spelling and grammatical errors but not penalize them.

I am extremely available for student consultation, and I will be happy to proof students' rough drafts of papers and to further discuss course material. If you are unsure whether you have understood a topic, prewrite your paper and submit it to me at least 48 hours before the due date and I will give you

feedback. Please append your prewrites in Word to my e-mail address. DO NOT use Brightspace, Google, Clouds, Sharepoint, pdf files, or anything else.