Course Code	HP3201	
Course Title	Evolutionary Psychology	
Pre-requisites	HP1000 Introduction to Psychology	
	HP1100 Fundamentals of Social Science Research	
	HP2100 Research Design and Data Analysis in Psychology	
No of AUs	3	

#### **Course Aims**

Designed for students interested in evolutionary theory and how it is applied to psychology, this course aims to explore how human behavior and our minds have adaptive function. You will learn the basics of evolutionary theory, the concept of adaptation, and the problems of variation. The course will cover methods of applying evolutionary theory to psychology, going through evolutionary accounts of human behavior, sociality, development, cognition, and mental illness. The course applies to students seeking stronger theoretical background in psychology, supporting careers in both application and research of psychology.

#### **Intended Learning Outcomes (ILO)**

By the end of this course, you should be able to:

- 1. Apply evolutionary theory to human psychology
- 2. Recognize misconceptions and oversimplifications of evolution by natural selection
- 3. Explain evolution and concepts of adaptation, variation, and natural selection
- 4. Describe sociobiological theories and their application to psychology
- 5. Evaluate studies and experiments pertaining to evolutionary psychology.
- 6. Articulate possible roles of evolution on human behavior and mental illness
- 7. Explain methods used by evolutionary psychologists
- 8. Develop a research proposal derived from evolutionary theory

#### **Course Content**

Evolution is the idea that across generations organisms adapt in form and behavior to the local conditions of the environments in which they interact. Today, the mechanism for that is largely considered to be natural selection on individuals, a process that winnows out the genetic basis of traits that are less successful in survival and reproduction. As many of you will be untrained in evolutionary science, the first part of the course will fill this necessity. The course begins with an overview of evolutionary theory and its application to biology and psychology. This will involve a brief history of ideas leading to evolutionary psychology, and examination into the concepts of natural selection, sexual selection, and adaptation, as well as covering other important theories and mechanisms of evolution. The second part of the course, will focus on behavior and development, covering mate selection and sexuality, social behavior, cooperation, conflict, and behavioral and cognitive development. In the final section of the course, we will apply the adaptation concept to human mind and cognition, wrestling with the notion of whether adaptation can aid us in understanding humanities' highest faculties and features. Here, you will examine whether adaptation directly affects thinking, language, culture, and morality. The section on mind ends by embedding mental illness into an evolutionary context, questioning how the imperfect process of evolution itself could be maintaining deleterious components of our minds that lead to illness and dysfunctional behavior. By the end of the course, we will have applied evolutionary theory to many fields of psychology, showing how an evolutionary psychology is a practical and unifying basis for social scientists to understand the foundations and origins of human behavior.

Assessment	(Continuous	Assessment)
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Component	ILO	LO or Attributes	Weighting	Team/Individual
1. In-class tests and evaluation: Communicate acquired knowledge and apply theory to problems	1-7	Communication, Civic-mindedness, Creativity, Competence	45%	Ind
2. Experience-based activities and quizzes	1-6	Communication, Creativity, Character, Civic- mindedness	25%	Ind
3. Project: Applying Evolutionary Theory to Human Behavior	1-8	Communication, Character, Civic- mindedness, Creativity, Competence	30%	Ind
Total			100%	

#### Formative feedback

Feedback is central to this course, and all evaluation components are designed to give detailed feedback directly to you.

<u>In- class tests and evaluations</u>: Tests and evaluations are given in class, so that there is greater student-teacher interaction during them and also so that immediate feedback can be given. After taking a test, you will receive its evaluation with written feedback about 1 week later during a lecture period dedicated to covering the test and its answers. Here, I will cover all answers, point out common mistakes, reinforce correct answers, and provide you with an opportunity to ask questions and discuss issues directly with me.

<u>Activities and quizzes</u>: Activities will be provided to expose you more broadly to evolutionary theory than is provided in your text and lectures. You will be provided additional readings and educational films covering the history of evolutionary theory, and its development into the modern synthesis. Evaluation on these activities will be measured through in-class objective quizzes, which will take about 15-20 minutes of class time. Quizzes will be group-graded in class, with immediate feedback and discussion provided.

<u>Project</u>: All of you will receive a detailed and personalized evaluation report on their class project within 2-3 weeks after the last day of class. Here, I will write about the strengths and weaknesses of your project, give recommendations for improvement, and reinforce aspects that were well done. These reports provide a complete discussion of how your project was evaluated, and will help you better understand your performance and areas needed for improvement.

### **Learning and Teaching approach**

Approach	How does this approach support you in achieving the learning outcomes?
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Lecture	All course material will be covered during lectures. Material is drawn from the text books, primary literature, lecturer's research and experience, experts in the field, and other sources. The goal is to provide you with a broad perspective about the field, and to direct you into the topics. Lecture is taught in a way that is engaging, and provides relevant examples and opportunities for discussion to keep class interesting. Lecture is meant to augment and direct course reading, not replace it.
Discussion	From time to time, discussion will be held during lecture slots. These discussions will be on course topics, particularly related to the application of evolutionary theory to psychology. Here, you are all given an opportunity to present your ideas into a class-wide discussion on the announced topic.
Supplementary Experience	This class will provide experiences beyond the lecture and textbooks, providing you will out-of-class activities to better expose you to evolutionary theory. Here, you will watch the 2001 Evolution series by PBS, which covers broad aspects of evolutionary history and science, then is provided in the curriculum. This is necessary since most social science students have little or no background in evolutionary science. These activities should bring you up to a basic understanding, so that you can better understand how evolutionary theory can apply to humans, and the limits in its application.
Reading	In the course, you will need to read the course text books. You are required to purchase the main text in a legally permissible manner. You must also access supplementary text provided to you via our course web portal or on reserve in the library. Reading gives you better detail than lecture, while lecture gives you easier access to the basics of the material. To fully master the material, you need to experience both the lecture on the topic and the readings associated with it. Additional non-required readings will also be made available for the more ambitious students, and those wishing to specialize in related fields.
Project	Immersion in a project is one of the best ways to learn. In this course, you will have the opportunity over the entire course to develop a project applying evolutionary theory to a problem. Generally, in the form of proposal, report, or presentation, you will develop the project on a relevant question in the field. From this, you will gain intellectual and experience, and gain competence in using evolutionary theory.

# **Reading and References**

Workman L., & Reader W., (2014). *Evolutionary Psychology: An Introduction*. 3<sup>rd</sup> Edition. Cambridge University Press. Cambridge, UK. (Main Text – purchase from book store) (WR)

Buss, D.M. (2011) Evolutionary Psychology: The New Science of the Mind. 4<sup>th</sup> Edition. Pearson, Allyn Bacon. New York, NY. (Supplementary text in HSS library) (B)

Evolution (2001) WGBH Video, narrated by Liam Neesen. AV Collection Call Number: GN281.E93 (4 Discs /7 episodes)

### **Course Policies and Student Responsibilities**

<u>Lecture Attendance</u>: Attendance is mandatory for general lecture classes, but you are given 3 excused absences from lecture. More than three absences from class, can result in grade reductions, if formal school-certified leave is not provided to justify the absences.

<u>Activity Attendance</u>: Attendance during activities, i.e., tests, discussions, project presentations, and other required activities can only be excused with formal school-certified leave provided by you. Make-up assignments for such activities are devised case-by-case. Notification of intent to miss the activity must be provided before the start of the activity, except for genuine emergency situations.

### **Academic Integrity**

You must have read and be familiar with the <u>academic integrity website</u> prior to the start of the course. You are responsible to adhere to these guidelines. Failure to do so for any aspect of the course, will be subject to relevant University procedures regarding breaches in Academic Integrity.

## **Planned Weekly Schedule**

Week	Торіс	ILO	Readings/ Activities
Week 1	Introduction to Evolutionary Psychology	1-3	WR1
Week 1	Evolution Overview – Natural Selection and Variation	1-4	WR2
Week 2	Evolution Overview – Sexual Selection & Sociobiology	1-4	WR 3
Week 3	Human Evolution and Physical Anthropology	1-4	(Klein, 2000)
Week 4	Adaption and Learning – Cases in Animal Behavior	1-5	(Marler, 1991)
Week 5	Methods in Evolutionary Psychology	7	B2
Week 6	Mate Choice and Human Sexuality	4-6	WR4
Week 7	Cognitive and Social Development	4-6	WR5
Week 8	Social Behavior – Altruism, Cooperation, Conflict	4-6	WR6,7
Week 9	Evolution of Mind, Thought & Cognition	4-6	WR8
Week 10	Perspectives on Language Evolution	4-6	WR9
Week 11	Evolutionary Psychology of Emotional Expression	4-6	WR10
Week 12	Evolutionary Approaches to Culture, Morality & Religion	4-6	WR11,14
Week 13	Evolutionary Psychopathology & Darwinian Medicine	6	WR12