University of Waterloo
Department of Psychology
Psychology 361
Evolutionary Psychology
Winter 2021
January 11 - April 14th

#### Instructor and T.A. Information

Instructor: Jennifer Stolz, PhD

Office: PAS 4056

Office Phone: Instructor Phone Number

Office Hours: by appointment Email: jstolz@uwaterloo.ca

T.A. Madison Stange

Email mstange@uwaterloo.ca

Office Hours By appointment

#### **Course Description**

This course examines the impact of evolution on human behaviour. There is growing evidence that many facets of our mind and behaviour, as well as our anatomy and physiology, were shaped by our evolutionary history. Evolution is not about survival. Evolution is about the perpetuation of genes. Evolution is not about competition for scarce resources, it is about reproductive competition. Sex is the final common path for all evolutionary change. This course focuses on emerging scientific evidence for a variety of reproductive strategies that humans unwittingly use to compete amongst each other to maximize their genetic representation in future generations.

## **Course Goals and Learning Outcomes**

Upon completion of this course, students should be able to:

- A. Explain the basic processes that led to present-day life on the planet, including
  - Variation, Selection, and Retention
- B. Explain how evolutionary pressures shape our current day behaviour, including
  - Competition for reproductive success
- C. Explain important concepts in evolution, including
  - Kin selection and inclusive fitness

#### **Required Text**

 Ray, W. J. (2013). Evolutionary Psychology: Neuroscience Perspectives Concerning Human Behavior and Experience. Sage.

#### **Information Available on LEARN**

The course web page can be found on LEARN at <a href="https://learn.uwaterloo.ca/">https://learn.uwaterloo.ca/</a>. Here, you will find links to the syllabus, to my lecture slides with accompanying audio, and to important announcements. Supplemental readings may be posted here, as well.

### **Course Requirements and Assessment**

There will be four non-cumulative tests, each worth 25% of the final grade (see dates below). The tests will be comprised a timed multiple choice (conducted on Learn) section and a take-home short answer section. All tests will be based on material presented in the text and in the lectures.

Assessment Date of Evaluation (if k		Weighting
Test #1	Week of January 25th, 2021	
Test #2	Week of February 22nd, 2021	25%
Test #3	Week of March 22nd, 2021	25%
Test #4	Week of April 12 <sup>th</sup> , 2021	25%
Total	·	100%

Students will also have the opportunity to earn 4 bonus marks by participating in research studies.

#### **Course Outline**

Notes on readings.

Week	Date	Topic	Readings Due
1	1/11	Evolutionary Theory	Chapter 1,2
		INTRODUCTION	
		LECTURE 1	
2	1/18	Evolutionary Theory; Fitness, Selection,	Chapter 2, 3
		Mutation	
		Behavior Genetics, Correlational	
		Approach	
		LECTURE 2	
3	1/25	Strain Comparisons, Selective Breeding,	Chapter 4
	TEST 1	Evolution as an Existential Game	
		LECTURE 3	
		Test 1: Chapters 1-4	
4	2/1	Kin Selection, Inclusive Fitness	Chapter 5
		Proportionate vs. Net Genetic	
		Representation	
		LECTURE 4	
5	2/8	Inbreeding Depression, C/B Ratios	Chapter 6,7
		Sex Specific Maxmization Strategies	
		LECTURE 5	

Week	Date	Topic	Readings Due
6	2/22	Parental Assurance, Parental Investment,	Chapter 8
	TEST 2	Reproductive Potential	
		LECTURE 6	
		Test 2: Chapters 5-8	
7	3/1	Female Infidelity & Parental Assurance,	Chapter 9
		Sex Differences in the Design of Sexual	
		Expression	
		LECTURE 7	
8	3/8	Breeding Patterns, Mating Arrangements,	Chapter 10, 11
		Proximate vs. Ultimate Causes	
		LECTURE 8	
9	3/15	Sexual Motivation vs. Sexual Pleasure,	Chapter 12
	Scheduled	Concealed Ovulation, Permanent Breast	
	Pause (3/15-16)	Enlargement	
		LECTURE 9	
10	3/22	Mate Selection, Sperm Retention	Chapter 13
	TEST 3	LECTURE 10	
		Test 3: Chapters 9-12	
11	3/29	Homosexuality, Homophobia	Chapter 14
		Rape: Crime of Violence or Passion?	
		LECTURE 11	
12	4/5	Psychobiology of Human Semen,	Chapter 15
		Semen Familiarity & Pregnancy	
		Complications	
		LECTURE 12	
	4/12	Test 4: Chapters 13-15	
	TEST 4		

#### **Research Experience Marks**

*Information and Guidelines:* Experiential learning is considered an integral part of the undergraduate program in Psychology. Research participation is one example of this, article review is another. A number of undergraduate courses have been expanded to include opportunites for Psychology students to earn points while gaining research experience.

Because experiential learning is highly valued in the Department of Psychology, students may earn a "bonus" grade of up to 4% in this course through research participation. Course work will constitute 100% of the final mark and a "bonus" of up to 4% may be earned and will be added to the final grade if/as needed to bring the final grade up to 100%. The two options for earning research experience credits (participation in research and article review) are described below. Students may complete any combination of these options to earn research experience grades.

**Option 1: Participation in Psychological Research**. Research participation is coordinated by the Research Experiences Group (REG). Psychology students may volunteer as research participants in lab

and/or online (web-based) studies conducted by students and faculty in the Department of Psychology. Participation enables students to learn first-hand about psychology research and related concepts. Many students report that participation in research is both an educational and interesting experience. Please be assured that all Psychology studies have undergone ethics review and have been cleared through the Office of Research Ethics.

**Educational focus of participation in research**: To maximize the educational benefits of participating in research, students will receive feedback information following their participation in each study. This feedback will detail the following elements:

- Purpose or objectives of the study
- Independent and dependent variables
- Expected results
- References for at least two related research articles
- Provisions to ensure confidentiality of data
- Contact information of the researcher should the student have further questions about the study
- Contact information for the Director of the Office of Research Ethics should the student wish to learn more about the general ethical issues surrounding research with human participants, or specific questions about the study in which s/he participated.

Participation is worth 0.5 participation credits (grade percentage points) for each half-hour of participation. Researchers will record students' participation and REG will advise the course instructor of the total credits earned by each student at the end of the term.

Study scheduling, participation and grade assignment is managed using the SONA online system. All students enrolled in this course have a SONA account. It is VERY IMPORTANT that students get an early start on their studies. For detailed instructions on when and how to access your SONA account and for a list of <u>important dates and deadlines</u>, please, as soon as possible, click on:

http://www.arts.uwaterloo.ca/~regadmin/regparticipant/sonainfo/#SonaSignUp

\*\*\*Please do not ask the course instructor or REG Coordinator for information unless you have first thoroughly read the information provided on this website.\*\*\*

**Option 2: Article Review as an alternative to participation in research**. Students are not required to participate in research, and not all students wish to do so. As an alternative, students may opt to gain research experience by writing short reviews (1.5-2 pages) of research articles. Please contact your TA in order to be given an approved article. Each review counts as one percentage point. To receive credit, you must follow specific guidelines. The article review must:

- Be submitted before the last day of classes (April 14<sup>th</sup>). Late submission will NOT be accepted under ANY circumstances.
- Be typed

- Fully identify the title, author(s), source and date of the article.
- Identify the psychological concepts in the article. Critically evaluate the application or treatment of those concepts in the article. If inappropriate or incorrect, identify the error and its implications for the validity of the article. You may find, for example, misleading headings, faulty research procedures, alternative explanations that are ignored, failures to distinguish factual findings from opinions, fault statements of cause-effect relations, errors in reasoning, etc. Provide examples whenever possible.
- Clearly evaluate the application or treatment of those concepts in the article.
- Keep a copy of your review in the unlikely event that we misplace the original.

#### **Electronic Device Policy**

Laptops for notetaking are permitted during lectures.

All electronic devices (e.g., phones, laptops, tablets) must be stowed away and inaccessible during exams.

#### **Attendance Policy**

From time to time, we may schedule a class-wide virtual discussion session. Because it is likely that we may not all be in the same time zone, or may not all have equivalent access to the internet, we will do this as rarely as possible. Attendance is not mandatory, therefore, for these sessions.

Because I want to be able to provide prompt feedback for exams, exams will need to be written during the appropriate exam window. If a student is ill and unable to write an exam the instructor must be notified PRIOR to the exam. Furthermore, the student must provide appropriate documentation of illness from the Office of Health Services. Failure to do so will result in a mark of 0% for the exam.

# Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009

#### **Cross-listed course**

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

#### **Academic Integrity**

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For

information on categories of offenses and types of penalties, students should refer to <u>Policy 71 - Student</u> <u>Discipline</u>.

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read <u>Policy 70 - Student</u> Petitions and <u>Grievances</u>, Section 4.

**Appeals:** A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals.

#### Other sources of information for students

Academic integrity (Arts) Academic Integrity Office (uWaterloo)

#### **Accommodation for Students with Disabilities**

Note for students with disabilities: The AccessAbility Services office, located in Needles Hall Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

## A Final Note about Exam Integrity

This academic year (along with the end of last year) has brought tremendous challenges to all of us. In my experience with teaching this course, I believe I have developed a fair method of evaluating student progress (and I have accumulated several years of normative data which can be used to point out a student's standing in the event that I am asked to later write a letter of recommendation for a student). For that reason, I would like to be able to keep the format of examination used this term as close in nature to those used in previous years. In order to be able to do so, however, I require your help. My ability to provide a fair evaluation of student performance depends on YOUR willingness to complete the examination in a fair manner. That means no discussion of questions with other students, and no use of outside aids during an exam. We will speak more about this as exam time draws near, but I will be including a testimonial statement of student integrity on the top of each exam. Each student will be asked to read and sign the statement before beginning the exam.