Course Objectives

This course covers the biological basis of motivation and emotion in humans and other mammals. The approach is strictly scientific, with an integration of evolutionary, physiological, developmental, and social perspectives. We will begin with fundamental biological dimensions of motivation and emotion common to all mammals, and will move progressively to more distinctively human and social issues.

General Policies

Students are expected to attend regularly. Some information that is not available in assigned readings will be given in lectures, and vice versa. Skeleton lecture notes will be posted online, so students may wish to print copies of these skeletons and enhance them with their own notes. Full lecture notes will not be posted online. Lecture slides will be posted online following lectures; however, all copyrighted material will be removed from lecture slides prior to being posted online. Therefore, the lecture slides may not contain all information presented in lecture. Students are responsible for both lecture material and assigned readings.

Lecture Info

Tuesday, Thursday, Friday: 11:30am-12:20pm
ITB AB102

Textbook and Readings


2) Additional required readings will be made available on Avenue, including updates to a subset of the chapters of the textbook.
Evaluation

1) Midterm Test #1 – 24% of Final Grade – Friday February 2\textsuperscript{nd}
   The test will be held in the normal class hour on Friday February 2\textsuperscript{nd}.
   The test covers chapters 1-5 and corresponding lectures and supplemental readings.

2) Midterm Test #2 – 24% of Final Grade – Tuesday March 20\textsuperscript{th}
   The test will be held in the normal class hour on Tuesday March 20\textsuperscript{th}.
   The test covers chapters 6-10 and corresponding lectures and supplemental readings.

3) Assignment – 10% of Final Grade – Thursday March 29\textsuperscript{th}
   The assignment will take place in class on Thursday March 29\textsuperscript{th}.
   The requirements for this assignment will be described in detail in lecture prior to the assignment.
   Students will read a primary scientific research article on a specific topic in motivation
   and emotion, as well as 3 recent articles which have cited it. Students will then complete an in class
   assignment on the research and it’s significance.

4) Final Examination – 42% of Final Grade
   The exam will be scheduled by the Registrar’s Office.
   The exam will cover the whole course, with some extra emphasis on material not previously tested.

Midterm tests can only be written at the times indicated, so plan to attend. There can normally be no make-up tests or special sessions for any student. If you are absent from the university for a minor medical reason, lasting fewer than 3 days, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form (MSAF). Absences for a longer duration or for other reasons must be reported to your Faculty or Program office, with documentation, and relief from term work may not necessarily be granted. When using the MSAF, report your absence to greville@mcmaster.ca within two working days. You then may be granted relief for the missing course evaluation component as described below. Please note that the MSAF may not be used for the final examination. If absence from a midterm test is approved, the final examination will be reweighted to 66% of the final grade. If there is approved absence from the assignment completion session, the value of that component will be added to the final exam. The tests and examination may consist of questions in diverse formats, including true-false, multiple choice, short answer, and essay questions, at the instructor’s discretion. Grades will be assigned according to the following convention: 90-100% = A+, 85-89% = A, 80-84% = A-, 77-79% = B+, 73-76% = B, 70-72% = B-, 67-69% = C+, 63-66% = C, 60-62% = C-, 57-59% = D+, 53-56% = D, 50-52% = D-, 0-49% = F. Appeal procedures for grading of the midterm tests are strictly structured and involve a written submission with a deadline approximately one week following the return of graded tests in class, as will be explained by the instructor.

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and the Avenue course page weekly during the term and to note any changes.

Attention is drawn to the Statement on Academic Ethics and the Senate Resolutions on Academic Dishonesty. Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on a test or assignment, loss of credit with a notation on the transcript, and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy (https://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf).
Schedule of Lecture Topics, Readings, Tests and Examinations

Chapter 1 – History and Overview
Prescientific notions. Views from physiology, evolutionary biology, experimental psychology. Modern integration of scientific disciplines.

Chapter 2 – The Evolution of Motivation and Emotion

Chapter 3 – Genetics, Learning, and Development
Perspectives on individual differences in motivation and emotion, from behavioural genetics, development, learning, and culture.

Chapter 4 – General Physiological Perspective
General structure of relevant nervous and endocrine systems. Autonomic nervous system, peripheral endocrine systems, hypothalamus and pituitary, limbic system, ventricular system, neurochemical systems.

Chapter 5 – Thirst, Hunger, and Elimination

MIDTERM TEST #1 – Friday February 2nd

Chapter 6 – Pain, Fear, and Comfort
Adaptive value and expression of pain and fear, escape and avoidance. Thermoregulation. Physiological substrates.

Chapter 7 – Reproduction
Reproductive strategies, competition, neurohormonal substrates of various forms of reproductive behaviour.

Chapter 8 – Arousal and Stress

Chapter 9 – Anger, Hate, and Aggression

Chapter 10 – Happiness, Sadness, and Coping Strategies

MIDTERM TEST #2 – Tuesday March 20th

Chapter 11 – Love and Attachment
Mother-child attachment. Familial love and peer bonding. Romantic attraction and pair-bonding.

Chapter 12 – Motivation to Learn
Reinforcers and punishers, acquired goals, imitation, incentives, cognitive mediation, need to achieve. Chapter 12 Update.

ASSIGNMENT – Thursday March 29th

Chapter 13 – Conflicts Among Motives
Concurrent emotions, hierarchies, conflict resolution.

Chapter 14 – Self, Family, and Community
Embarrassment, shame, guilt, and pride.

FINAL EXAMINATION – Scheduled by the Registrar’s Office