

University of Alberta**PSYCO 354 “Foundations of Cognitive Science”****Section: A1****Fall Term 2019****Instructor: Professor Michael R.W. Dawson****Office:** BSB P-203 (Biological Computation Project Lab)**Phone:** 780-492-5175**E-mail:** mdawson@ualberta.ca**Web Page:** http://www.bcp.psych.ualberta.ca/~mike/Pearl_Street/PSYCO354/**Office Hours:** See web page (URL given above) for hours, contact information, etc. for the instructor and for the teaching assistant.**Lecture Time & Room:** Tuesdays and Thursdays, 11:00 am – 12:20 pm, Tory B-87

Course Description:

An introduction to the theories and research practices of cognitive science by examining contributions of cognitive psychology, artificial intelligence, linguistics, and neuroscience to a variety of research areas. [Faculty of Science]

Course Prerequisites: STAT 141 or 151 and PSYCO 258.

Course Objectives and Expected Learning Outcomes: This course exposes students to the interdisciplinary study of mind, cognitive science. Students are introduced to the three major schools of thought in cognitive science: classical, connectionist, and embodied. The major theme of the course is determining whether there are three qualitatively distinct cognitive sciences, or whether there are commonalities that permit them to be unified in a single approach. In addition to learning about the three different schools of thought, students will be exposed to the interdisciplinary nature of cognitive science, including formal, empirical, and simulation studies.

Required Textbooks:

Dawson, M.R.W. (2013) *Mind, Body, World: Foundations of Cognitive Science*. Athabasca University Press: Edmonton, AB

Recommended or Optional Learning Resources:

N/A

Lecture Schedule & Assigned Readings:

DATE	TOPIC	QUIZ	TEXT READING
September 3	The Cognitive Sciences: One or Many?		Dawson Chapter 1
September 5			
September 10	Multiple Levels of Investigation		Dawson Chapter 2
September 12		Quiz 1 (On Chapter 1)	
September 17	Elements of Classical Cognitive Science		Dawson Chapter 3
September 19		Quiz 2 (On Chapter 2)	
September 24	Elements of Connectionist Cognitive Science		Dawson Chapter 4
September 26		Quiz 3 (On Chapter 3)	
October 1	Elements of Embodied Cognitive Science		Dawson Chapter 5
October 3		Quiz 4 (On Chapter 4)	
October 8	Examples of The Cognitive Sciences		No Reading – time to catch up!
October 10		Quiz 5 (On Chapter 5)	
October 15	REVIEW CLASS		No Reading – exam time!
October 17	MIDTERM EXAM		
October 22	Classical Music and the Cognitive Sciences		Dawson Chapter 6
October 24			
October 29	Marks of the Classical?		Dawson Chapter 7
October 31		Quiz 6 (On Chapter 6)	
November 5	Seeing and Visualizing		Dawson Chapter 8
November 7		Quiz 7 (On Chapter 7)	
November 19	Towards A Cognitive Dialectic		Dawson Chapter 9
November 21		Quiz 8 (On Chapter 8)	
November 26	Case Studies And Implications		No Reading – time to catch up!
November 28		Quiz 9 (On Chapter 9)	
December 3	Course Reflections		No Reading
December 5	REVIEW CLASS	Quiz 10 (On Chapters 6-9)	
<p>Final exam will likely be Friday, December 14, 9:00 am in the course classroom according to the exam planner. This schedule is likely, but cannot be 100% guaranteed.</p> <p>WARNING: Students must verify this date on BearTracks when the Final Exam Schedule is posted</p>			

Representative Evaluative Material: Past or representative material for evaluating performance in the course will be available from the course website.

Grade Evaluation:

10 Ten Minute Quizzes = 20% (2% per quiz)

Midterm Exam = 30%

Final Exam = 50%

For exam and quiz dates, please see Lecture Schedule on Page 2

All course evaluations involve written answers. The midterm and final exam both require students to define 10 terms from a choice of 12. Students are also required to write one long essay answer from a choice of three questions. Both exams are graded out of 65 marks; 30 marks for definitions (3 marks each) and 35 marks for the essay question. Example exams are available from the course website.

The ten minute quizzes are designed to keep students up to date in the required readings. Students will have 10 minutes to write a short answer to a question presented in class. The question will be about the assigned reading (see Lecture Schedule on Page 2 to see what reading is associated with each quiz) . When scheduled, a ten minute quiz will always be given ***at the start of a class.***

How I Assign Your Letter Grade:

Letter Grade For Course	Final Mark (In Percent) To Obtain That Letter Grade
A+	89 – 100
A	85 – 88.9
A-	80 – 84.9
B+	77 – 79.9
B	71 – 76.9
B-	66 – 70.9
C+	61 – 65.9
C	57 – 60.9
C-	52 – 56.9
D+	50 – 51.9
D	48 – 49.9
F	0 – 47.9

Grades are unofficial until approved by the Department and/or Faculty offering the course.

Missed Term Exams and Assignments:

Students who miss the midterm exam will, with an appropriate and documented excuse, receive an excused absence. The weight of the midterm will be added to the final exam. Students who miss the final exam must make arrangements with the Registrar's office for a deferred examination (see below). *There will be no excused absences for the ten minute quizzes, because of their small individual worth.* Misrepresentation of facts to gain a deferral is a serious breach of the *Code of Student Behaviour*.

For an excused absence where the cause is religious belief, a student must contact the instructor(s) within two weeks of the start of Fall or Winter classes to request accommodation for the term (including the final exam, where relevant). Instructors may request adequate documentation to substantiate the student request.

Deferred Final Examination:

A student who cannot write the final examination due to incapacitating illness, severe domestic affliction or other compelling reasons can apply for a deferred final examination. Such an application must be made to the student's Faculty office within 48 hours of the missed examination and must be supported by a Statutory Declaration or other appropriate documentation (Calendar section 23.5.6). Deferred examinations are a privilege and not a right; there is no guarantee that a deferred examination will be granted. Misrepresentation of Facts to gain a deferred examination is a serious breach of the *Code of Student Behaviour*. . In all cases, instructors may request adequate documentation to substantiate the reason for the absence at their discretion.

Exams: Your student photo I.D. is required at exams to verify your identity. Students will not be allowed to begin an examination after it has been in progress for 30 minutes. Students must remain in the exam room until at least 30 minutes has elapsed. Electronic equipment cannot be brought into examination rooms and hats should not be worn.

Cell phones: Cell phones are to be turned off during quizzes. Cell phones are not to be brought to exams.

Policies about course outlines can be found in Section 23.4(2) of the University Calendar. The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behavior (online at www.ualberta.ca/secretariat/appeals.htm) and avoid any behavior which could potentially result in suspicions of cheating, plagiarism, misrepresentations of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

Student Responsibilities:**ACADEMIC INTEGRITY:**

"The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize

themselves with the provisions of the Code of Student Behaviour (online at <http://www.governance.ualberta.ca/en/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx>) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University."

All forms of dishonesty are unacceptable at the University. Any offence will be reported to the Senior Associate Dean of Science who will determine the disciplinary action to be taken. Cheating, plagiarism and misrepresentation of facts are serious offences. Anyone who engages in these practices will receive at minimum a grade of zero for the exam or paper in question and no opportunity will be given to replace the grade or redistribute the weights. As well, in the Faculty of Science the sanction for **cheating** on any examination will include a **disciplinary failing grade** (no exceptions) and senior students should expect a period of suspension or expulsion from the University of Alberta.

STUDENTS ELIGIBLE FOR ACCESSIBILITY-RELATED ACCOMMODATIONS (students registered with Student Accessibility Services - SAS): Eligible students have both rights and responsibilities with regard to accessibility-related accommodations. Consequently, scheduling exam accommodations in accordance with SAS deadlines and procedures is essential. Please note adherence to procedures and deadlines is required for U of A to provide accommodations. Contact SAS (www.ssds.ualberta.ca) for further information.

STUDENT SUCCESS CENTRE: Students who require additional help in developing strategies for better time management, study skills or examination skills should contact the Student Success Centre (2-300 Students' Union Building). You might want to list additional resources specific to your course – for example, the Decima Robinson Support Centre).

RECORDING AND/OR DISTRIBUTION OF COURSE MATERIALS: Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Policy about course outlines can be found in the University Calendar ([http://calendar.ualberta.ca/content.php?catoid=6&navoid=806&hl="syllabus"&returnto=search - Evaluation Procedures and Grading System](http://calendar.ualberta.ca/content.php?catoid=6&navoid=806&hl=)).

Disclaimer: Any typographical errors in this Course Outline are subject to change and will be announced in class. The date of the final examination is set by the Registrar and takes precedence over the final examination date reported in this syllabus.

Note: Recording is permitted only with the prior written consent of the professor or if recording is part of an approved accommodation plan.