# **Psychology 457 Introduction To Course**

Who is the instructor? How is the course organized? What is the course about?

#### Michael R.W. Dawson

- PhD from University of Western Ontario
- Research interests in foundations of cognitive science, artificial neural networks, embodied cognitive science
- Research methods include computer simulation and LEGO robot fabrication
- For details about my research, go to my home web page





#### **Credentials**

- · Dawson has published several books on cognitive
- He posts cognitive science material at Twitter.com/mrwdawson











### **Course Objectives**

- To introduce some aspects of embodied cognitive science, and contrast it with classical cognitive science
- To expose to the differences between synthetic and analytic methodologies in cognitive science
- To provide hands-on experience with embodied cognitive science via robot construction



## **Course WWW Support**

- There is extensive web site support for this course.
  - Syllabus
  - Slide handouts
  - · Course readings

  - · Notices to class (on home page)
  - · Links to relevant material on other sites

http://www.bcp.psych.ualberta.ca/~mike/Pearl\_Street/INTD554/

### **Course Evaluation**

- Scaffolded final paper worth 50%
  - Handed in in stages throughout the term
- Three media reviews (30% total)
  - Reaction paper, 3-5 pages, on variety of material described in the syllabus
- Robot project worth 20%
  - Usually done in groups of 2 or 3 students, involves building, programming, and describing a LEGO robot; done mostly outside of class time
- Check the syllabus for the schedule!

# **Scaffolded Paper**

Stage	Content	Worth	Max Raw Score
1	Title, Topic, Three References	5%	5
2	Annotated Bibliography	10%	50
3	Introductory Paragraphs, Outline, Reference List	10%	70
4	Final Term Paper	25%	70
		50% Total	

### **Required Textbooks**

- Shapiro, L. A. (2011). Embodied Cognition. New York: Routledge Dawson, M.R.W., Dupuis, B., & Wilson, M. (2010). From Bricks To Brains: The Embodied Cognitive Science of LEGO Robots, Athabasca University Press
- We will try to make time each class to for you to discuss content raised in each of these texts





### **Course Purposes**

- · What is this course about?
- It is an introduction to embodied cognitive science
- It attempts to use the synthetic approach to teach this material
- Let us start by watching some short videos, and a longer movie, to get into the spirit of the course

