

**MEMORIAL UNIVERSITY OF NEW FOUNDLAND**  
**Department of Computer Science**

**Computer Science 4752 – Winter 2017**  
**Introduction to Computational Intelligence**

Instructor:	David Churchill	Phone:	864-6140
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**Course Website**

<http://www.cs.mun.ca/~dchurchill/courses/4752/>

**Course Objectives**

Computational Intelligence comprises concepts, paradigms, algorithms and implementations of systems that exhibit intelligent behaviour in complex environments. This course offers an introduction to algorithms in the following 4 sub fields of Computational Intelligence:

Heuristic Search, Evolutionary Algorithms, Neural Networks, Reinforcement Learning

**Textbooks and Reference Books** (optional)

*Computational Intelligence: A Methodological Introduction*

R. Kruse, C. Borgelt, F. Klawonn, C. Moewes, M. Steinbrecher, and P. Held, Springer, 2013.

*Reinforcement Learning: An Introduction*, R. Sutton and A. Barto, MIT Press, 1998

HTML Version: <https://webdocs.cs.ualberta.ca/~sutton/book/ebook/the-book.html>

**Evaluation**

The final grade in the course will be determined as follows:

Assignments (5 total)	55%
Project proposal	5%
Final project + report	40%
	100%

**Format**

Lectures, three hours per week, from January 6<sup>th</sup> to April 5<sup>th</sup>, 2017.

**Lecture Time:** Slot 7 - M, W, F, 11:00 – 11:50 a.m.

**Lecture Room:** EN-2006