

Autumn 2011

COSC 5P71 – Genetic Programming

Instructor: Brian Ross

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<http://www.cosc.brocku.ca/Offerings/5P71/>

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Objective: An introduction to genetic programming: evolutionary computation, principles, methodology, technologies, and applications.

Text: *A Field Guide to Genetic Programming* by R. Poli, W.B. Langdon, N. F. McPhee. ISBN 978-1-4092-0073-4. 2008.

- Get free PDF version here: <http://www.gp-field-guide.org.uk/>

Reading: Assigned reading will be available online and at the library reserve reading desk. Many useful references are currently available at the reserve reading desk.

Evaluation:

Assignments:	25% (3)
Project:	40%
Term test:	15%
Seminars:	20%

Assignments: The assignments will give you practical experience in applying evolutionary techniques in problem solving. Assignment will require you to use an existing genetic programming package. Details about assignment requirements will be given with the first assignment handout.

Late assignments: 25% penalty up to 3 days past deadline. Thereafter 100% penalty.

Project: The project handout describes this in more detail. It will be due at the end of term.

Seminars: Each student will present seminars on topics in evolutionary computation and genetic programming. You can decide on your own topic. A helpful list of suggested topics is available if you wish. When you have chosen a topic, please let me know, and give me any related papers you will be discussing. I will make it available to the class, preferably at least 1 week prior to your scheduled seminar.

Other comments:

- All assignments must include a department cover page and are to be submitted to me.
- Please be familiar with the department and university policies on plagiarism.
- Please read the department's policy on medical notes, found on the web.