

Professor: Guy-Vincent Jourdan

EMP 5117
Foundations of Software Engineering

Course outline (Fall 2006)

Lectures:	Wednesday	7:00-10:00 pm	Lamoureux 219
Office hours:	Tuesday	12:00-2:00 pm	SITE 5-110

Course description:

Foundations of software engineering for non-software engineers; basic principles of software engineering; practical laboratories and programming examples using modern programming languages.

Prerequisite:

Experience with programming in at least one common language over the last decade. Cannot count for credit in CEG, CSI and SEG programs.

Grading scheme:

Assignments and class presentations: 80%
In class participation: 20%

Books: *several sources will be used. The following is a list of suggested readings*

Van Vliet, H. *Software Engineering: Principles and Practice, 2nd Edition*, Wiley, 2000

Christensen, M.J. and Thayer, R.H. *Project Manager's Guide to Software Engineering's Best Practices*, IEEE Press, 2002

Sommerville, I. *Software Engineering, 7th Edition*, Addison-Wesley, 2004

Maciaszek, L.A. and Liang, B.L. *Practical Software Engineering. A Case Study Approach*, Addison-Wesley, 2005

Futrell, R., Shafer, D. and Shafer L., *Quality Software Project Management*, Prentice Hall PTR, 2002

IEEE *Guide to the Software Engineering Body of Knowledge*, www.swebok.org

Course outline:

Software life cycle models
Model checking
Requirements Engineering
Software architecture
Software Design
OO analysis and design
Secure systems
Software maintenance
Software configuration management
Software metrics
Software engineering management

Special Topics

Plagiarism and academic integrity

Absolutely no cheating will be tolerated.

See <http://www.uottawa.ca/plagiarism.pdf> for some definitions, and http://www.grad.uottawa.ca/regulations/academic_fraud/sanctions.html for the possible sanctions.