

COMP 303 — Lecture 01

Introduction; Software Process; Version Control; Course Overview

Martin Robillard

02 September 2014

- Software development principles, mechanisms, techniques, and tools and important to keep control of the complexity of software projects.
- According to a 2005 article by Bob Charette, software projects fail for all sorts of reasons, including the use of immature technology, the inability to handle the project’s complexity, and sloppy development practices.
- A *software process* is a “set of related activities that lead to the production of a software product” [Sommerville].
- Two major philosophies for software processes include planned vs. incremental development.
- Activities of the software process can be grouped into different disciplines. The three disciplines most relevant to the course are Analysis and Design, Implementation, and Test.
- Source code control: the problems it solves, a basic model of its functionality as illustrated by CVS, two important differences between centralized and distributed source code controls systems (slides).
- Source code systems are especially effective when integrated with other software development tools, such as issue databases.