

**Course Outline**

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Department of Computing Science  
Faculty of Science

**COMP 4910 – 3  
Computing Science Project  
Winter, 2015**

**Instructor:**

Office:  
Office Hours:

Phone/Voice Mail:

E-Mail:

**Course / Calendar Description:**

Students in this “capstone” project course must complete a practical design and implementation of a supervised project in an area of specialisation in Computing Science. Students will develop a ‘live’ project either working with an external client or a research project with an individual faculty supervisor.

**Course Objectives / Learning outcomes:**

Upon successful completion of the course, the student will demonstrate the ability to:

1. Design and implement a supervised “live” project.
2. Integrate the computing science knowledge gained at TRU in one project.
3. Work effectively in co-operation with external clients or researchers.

**Prerequisites:**

COMP 3520: Software Engineering  
COMP 4530 Advanced Software Engineering is a co-requisite.  
Fourth year standing.

**Textbook:** None

**References:**

<http://agilemanifesto.org/>  
<http://www.agilealliance.org/>  
<http://www.mountaingoatsoftware.com/>

<http://www.ccpace.com/resources/documents/agileprojectmanagement.pdf>  
[http://en.wikipedia.org/wiki/Agile\\_software\\_development](http://en.wikipedia.org/wiki/Agile_software_development)  
<https://www.gravitydev.com/>

Sommerville Ian, *Software Engineering*, 9th Edition, Addison Wesley; ISBN-10: 0137035152.

**Lecture Topics:**

N/A

**Lab Topics:**

N/A

**ACM / IEEE Knowledge Area Coverage**

Knowledge Areas that contain topics and learning outcomes covered in the course

| Knowledge Area            | Total Hours of Coverage |
|---------------------------|-------------------------|
| Software Engineering (SE) | 29                      |
| Project Experience        | 150                     |

**Body of Knowledge coverage**

| KA | Knowledge Unit                       | Topics Covered                         | T1 hours | T2 hours | Elective hours |
|----|--------------------------------------|--|----------|----------|----------------|
| SE | Software Processes                   | Usage of T1                            | 2        | 0        | 0              |
| SE | Software Project Management          | Usage of T2                            | 0        | 2        | 0              |
| SE | Tools and Environments               | Usage of T2                            | 0        | 2        | 0              |
| SE | Requirements Engineering             | Usage of T1; T2                        | 3        | 3        | 0              |
| SE | Software Design                      | Usage of T1; T2                        | 3        | 5        | 0              |
| SE | Software Construction                | Usage of T1                            | 2        | 0        | 0              |
| SE | Software Verification and Validation | Usage of T2                            | 0        | 4        | 0              |
| SE | Software Evolution                   | Usage of T2                            | 0        | 2        | 0              |
| SE | Software Reliability                 | Usage of T2                            | 0, 1     | 1        | 0              |
|    | Project Experience                   | Development of a semester long project | 150      | 0        | 0              |