

### Department of Electrical Engineering and Computer Science

# COURSE OUTLINE EECS 4313: Software Engineering Testing Winter 2019

### Instructor:

Dr. Zhen Ming (Jack) Jiang

Office Hours: Time: Mondays 4 – 5 pm or by appointment

Email: zmjiang at cse dot yorku dot ca

Location: LAS 1012E

For course related questions, please post to the forum. For personal issues (e.g., grading etc.), please email with the subject "EECS4313".

#### Lectures:

Mondays and Wednesdays 14:30 - 16:00 pm

Location: DB 1005

# Course TA:

Mr. Minke Xiu

### **Calendar Descriptions for this Course:**

This course gives an introduction to systematic methods of testing and verification, covering a range of static and dynamic techniques and their use within the development process. The course emphasizes the view that design should be carried out with verification in mind to achieve overall project goals.

### **Learning Outcomes:**

- Learn testing techniques and the situations in which they apply
- Apply real-world testing tools and frameworks
- Learn how to file bug reports
- Understand and apply different manual and automated software testing techniques
- Understand the importance of systematic testing

### **Topics Covered:**

- Limits and objectives of software testing
- Reporting and analyzing bugs
- Black-box testing techniques
- White-box testing techniques
- Non-functional testing techniques (if time permits)

### **Required Textbooks:**

N/A

# **Optional Textbooks:**

Title/Edition: Software Testing: A Craftsman's Approach

Author: Paul C. Jorgensen Publisher: CRC Press, 2002.

Title/Edition: Introduction to Software Testing

Author: Paul Ammann and Jeff Offutt

Publisher: Cambridge University Press, Cambridge, UK, 2008.

### **Significant Dates:**

| First Class                                     | Jan. 7, 2019                  |
|---|-------------------------------|
| Winter Reading Days (no class, university open) | Feb. 16 – Feb. 22, 2019       |
| Family day (no class)                           | Feb. 18, 2019                 |
| Midterm Exam                                    | Feb. 13, 2019                 |
| Drop Date                                       | Mar. 8, 2019                  |
| Good Friday                                     | Apr. 19, 2019                 |
| Last Class                                      | Apr. 3, 2019                  |
| Winter Class Ends                               | Apr. 3, 2019 (Assignment Due) |
| Winter Study Day                                | Apr. 4, 2019                  |
| Exam Period                                     | Apr. 5 – Apr. 20, 2019        |

#### Assessment:

Assignments: 35%Midterm: 20%Final: 45%

Note1: No late deliverables will be accepted.

Note2: Missed tests with good reason (normally medical and documented with attending physician form: <a href="http://www.registrar.yorku.ca/pdf/attend\_physician\_statement.pdf">http://www.registrar.yorku.ca/pdf/attend\_physician\_statement.pdf</a>) will have their weight transferred to the final exam. There are no "make up" tests. Tests missed for no reason are deemed to have been written and failed and are marked "F".

# **Academic Honesty and Cheating:**

Cheating, plagiarism and other forms of academic fraud are taken very seriously by the University, the Faculty, and the teaching staff. Consult York's policy on academic honesty: http://www.cse.yorku.ca/admin/coscOnAcadHonesty.html