

# **ECE 322**

## **SOFTWARE TESTING AND MAINTENANCE**

### **Fall 2019**

#### **PROJECT**

##### **Scope**

The objective of the project is to propose, analyze, and evaluate efficiency various testing strategies used for testing some selected software system. You may exercise a significant level flexibility in choosing the software to be tested. This could be some requirement document or code you have developed in some previous courses. For instance, the testing could involve Web application, user interface (say, GUI), package of numeric computing or optimization procedures, etc. Both black box and white box (some units) testing *must* be completed. If possible, consider using freeware testing tools that could be available on the web. In this case, fully describe this freeware. It is anticipated that you may need to augment the material presented during lectures by studying some additional reference material.

##### **Structure and teamwork**

Teamwork (4 students) is required.

Make sure that the final report *clearly* identifies responsibilities and contributions of each team member.

##### **Deadlines**

###### Proposal submission

**Wednesday, October 23, 2019 by 3:00 PM**

The proposal should briefly identify the topic of the project (software under testing), outline anticipated testing activities and present a team composition along with a clearly defined role of each team member. Submit a hardcopy (ECE 322 assignment mailbox).

###### Brief progress report

**Friday, November 8, 2019 by 3:00 PM**

Submit 1-2 page report presenting a concise update on the progress of the project. Submit a hardcopy (ECE 322 assignment mailbox).

Presentation (up to 10 minutes) **in class, Monday, December 2, 2019 and Wednesday, December 4, 2019**

###### Final report

**Friday, December 6, 2019 by 3:00 PM**

Your final report should cover the description of the software tested, formulation of the testing strategy, its justification, testing activities, a list of test cases, outcomes of the testing, and conclusions. The report should not exceed 10 pages. Submit a hardcopy (ECE 322 assignment mailbox).

**Distribution of marks (note that the projects counts for 10% of the total mark in the course)**

Proposal	10%
Report	65%
Presentation	25%