**Module Code**: STU11001  
**Module Name**: SOFTWARE APPLICATIONS I  
**ECTS Weighting**: 5 ECTS  
**Semester taught**: Semester 1  
**Module Coordinator/s**: Assistant Professor Mimi Zhang

### Module Learning Outcomes

On successful completion of this module, students will be able to:

- LO1. Develop spreadsheet models in Excel.  
- LO2. Design and develop web sites using Microsoft Expression.  
- LO3. Learn a programming language – Python.  
- LO4. Work independently and also as part of a team to develop software solutions.  
- LO5. Source relevant reference material to help in solving software issues.

### Module Content

- Spreadsheets using Microsoft Excel 2016  
- Designing and Publishing WWW pages using Microsoft Expression, including CSS and JavaScript.  
- Programming using Python.

### Teaching and Learning Methods

The purpose of this module is to provide an introduction to the practical uses of computer applications particularly in the area of spreadsheets, web page design and development, and programming language. This module is a computer laboratory based module. Students are given notes that encourage self-paced learning. Interaction with the module instructor and peers is encouraged.

### Assessment Details

<table>
<thead>
<tr>
<th>Assessment Component</th>
<th>Brief Description</th>
<th>Learning Outcomes Addressed</th>
<th>% of total</th>
<th>Week set</th>
<th>Week due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>This will be multiple choice questions, and you will have 45mins to complete it. It will take place immediately in the beginning of the class. Material covered will be the first two lectures on Python.</td>
<td>LO3, LO4, LO5</td>
<td>14%</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Assignments</td>
<td>There will be 6 assignments: 3 on Excel, 2 on Expression, and 1 on Python.</td>
<td>LO1-LO5</td>
<td>81%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Attendance</td>
<td>You are required to attend all the classes.</td>
<td></td>
<td>5%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

1 TEP Glossary  
2 TEP Guidelines on Workload and Assessment
Reassessment Details

Failure to achieve the passing grade may result in students having to undertake additional project work satisfactorily over the summer in order to pass the year.

Contact Hours and Indicative Student Workload

<table>
<thead>
<tr>
<th>Contact Hours (scheduled hours per student over full module), broken down by:</th>
<th>22 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>lecture</td>
<td>0 hours</td>
</tr>
<tr>
<td>laboratory</td>
<td>22 hours</td>
</tr>
<tr>
<td>tutorial or seminar</td>
<td>0 hours</td>
</tr>
<tr>
<td>other</td>
<td>0 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent study (outside scheduled contact hours), broken down by:</th>
<th>25 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>preparation for classes and review of material (including preparation for examination, if applicable)</td>
<td>0 hours</td>
</tr>
<tr>
<td>completion of assessments (including examination, if applicable)</td>
<td>25 hours</td>
</tr>
</tbody>
</table>

Total Hours 47 hours

Recommended Reading List

2. Excel 2016 Formulas and Functions, Paul McFedries, Que.

All these texts are available on the Safari Tech Books Online database. These can be accessed from the local TCD library page at www.tcd.ie/Library/collections/databases.php


Module Pre-requisites

Prerequisite modules: n/a
Other/alternative non-module prerequisites: n/a

Module Co-requisites

n/a

Module Website

n/a

Last Update

17/06/2019 by Mimi Zhang