SM1103A: INTRODUCTION TO MEDIA COMPUTING

Effective Term
Semester A 2022/23

Part I Course Overview

Course Title
Introduction to Media Computing

Subject Code
SM - School of Creative Media

Course Number
1103A

Academic Unit
School of Creative Media (SM)

College/School
School of Creative Media (SM)

Course Duration
One Semester

Credit Units
3

Level
B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
Nil

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
CS1103B Media Computing
Part II Course Details

Abstract
This course will teach fundamental programming concepts via creative exercises and small projects. Toward this end, students will explore the concepts of variables, sequential programming, loops, conditionals, arrays, functions with the programming of multimedia, such as image, audio, video, animation, and interactivity.

Course Intended Learning Outcomes (CILOs)

<table>
<thead>
<tr>
<th>CILOs</th>
<th>Weighting (if app.)</th>
<th>DEC-A1</th>
<th>DEC-A2</th>
<th>DEC-A3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand fundamental procedural programming concepts.</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
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<tr>
<td>2. Apply simple multimedia programming to handle image, audio and video.</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>3. Develop basic user interactions through mouse and keyboard events.</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>4. Solve problems independently by finding resources, breaking down problems into sub-problems, and debugging.</td>
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<td>x</td>
<td>x</td>
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A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing/constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

<table>
<thead>
<tr>
<th>TLAs</th>
<th>Brief Description</th>
<th>CILO No.</th>
<th>Hours/week (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lectures/Workshops</td>
<td>All CILOs will be introduced, explained, discussed and demonstrated through lectures. Online resources will also be given for out-of-classroom reading and learning</td>
<td>1, 2, 3, 4</td>
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The exercises will give students hands-on experience on computer programming and exploring media computing technology. Students will be expected to actively contribute to class discussions, and complete weekly programming exercises.

<table>
<thead>
<tr>
<th>Assessment Tasks / Activities (ATs)</th>
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<tbody>
<tr>
<td><strong>ATs</strong></td>
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<tr>
<td>Assignments/Quizzes</td>
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**Continuous Assessment (%)**
100

**Examination (%)**
0

**Assessment Rubrics (AR)**

**Assessment Task**
1. Quiz

**Criterion**
ABILITY to UNDERSTAND and APPLY fundamental Programming concepts to the context of media computing

**Excellent** (A+, A, A-)
High

**Good** (B+, B, B-)
Significant

**Fair** (C+, C, C-)
Moderate

**Marginal** (D)
Basic

**Failure** (F)
Not even reaching marginal levels

**Assessment Task**
2. Assignment

**Criterion**
- ABILITY to APPLY learnt knowledge for creative media
- CAPACITY for knowledge and creativity in applying and implementing media computing technologies
Excellent (A+, A, A-)
High

Good (B+, B, B-)
Significant

Fair (C+, C, C-)
Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal levels

Additional Information for AR
All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

Part III Other Information

Keyword Syllabus
- Computational Literacy
- Creative Coding: Animation
- Interactive Media: Image, Sound, Input device (e.g. mouse and keyboard)

Reading List

Compulsory Readings

<table>
<thead>
<tr>
<th>Title</th>
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<tbody>
<tr>
<td>1 Nil</td>
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Additional Readings

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