City University of Hong Kong
Course Syllabus

offered by School of Creative Media
with effect from Semester A 2018 /19

Part I   Course Overview

Course Title: Introduction to Media Computing

Course Code: SM1103A

Course Duration: One semester

Credit Units: 3

Level: B1

Proposed Area: ☐ Arts and Humanities
(for GE courses only)   ☐ Study of Societies, Social and Business Organisations
                               ☐ Science and Technology

**Medium of
Instruction:**   English

**Medium of
Assessment:**   English

Prerequisites:
(Course Code and Title)   Nil

Precursors:
(Course Code and Title)   Nil

Equivalent Courses:
(Course Code and Title)   Nil

Exclusive Courses:
(Course Code and Title)   CS1103B Media Computing

Part II   Course Details

1. **Abstract**
    (A 150-word description about the course)

    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.

2. **Course Intended Learning Outcomes (CILOs)**
    (CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs[#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	Understand fundamental procedural programming concepts.		√	√	
2.	Apply simple multimedia programming to handle image, audio and video.		√	√	√
3.	Develop basic user interactions through mouse and keyboard events.		√	√	√
4^	Solve problems independently by finding resources, breaking down problems into sub-problems, and debugging.			√	√

* If weighting is assigned to CILOs, they should add up to 100%.   100%

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

^ Negotiated Learning Outcome (NLO) explicitly articulating the elements of Discovery oriented learning.

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 self-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.

3. **Teaching and Learning Activities (TLAs)**
   (TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No. 1	2	3	4	Hours/week (if applicable)
Lectures/Workshops	All CILOs will be introduced, explained, discussed and demonstrated through lectures. Online resources will also be given for out-of-classroom reading and learning	√	√	√	√	
Workshop Exercises	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.		√	√	√	

4. **Assessment Tasks/Activities (ATs)**
   (ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No. 1	2	3	4	Weighting*	Remarks
Continuous Assessment: __70__ %						
Midterm Quiz	√	√	√		20%	
Assignments		√	√	√	50%	
Examination: _30_ % (duration: 2 hours , if applicable)						
* The weightings should add up to 100%.					100%	

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Quiz - mid-term	ABILITY to UNDERSTAND and APPLY fundamental Programming concepts to the context of media computing	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Assignment	- ABILITY to APPLY learnt knowledge for creative media - CAPACITY for knowledge and creativity in applying and implementing media computing technologies	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Final exam	- Ability to apply learnt knowledge to solve problems in creative media	High	Significant	Moderate	Basic	Not even reaching marginal levels

Note: All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

Part III   Other Information (more details can be provided separately in the teaching plan)

1.   Keyword Syllabus
(An indication of the key topics of the course.)

   • Computational Literacy
   • Programming Fundamentals: Variable, Sequential, Conditional, Loops, Array, System
Functions.
   • Creative Coding: Animation
   • Interactive Media: Image, Sound, Input device (e.g. mouse and keyboard)

2.   Reading List
2.1   Compulsory Readings
(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

   Nil

2.2   Additional Readings
(Additional references for students to learn to expand their knowledge about the subject.)

1.	Marijn Haverbeke (2014). Eloquent JavaScript: A Modern Introduction to Programming. No Starch Press, 2nd edition.
2.	Lauren McCarthy, Casey Reas, and Ben Fry. Getting Started with p5.js. Published October 2015, Maker Media. 246 pages. Paperback.
3.	Dan Saffer (2010). Designing for Interaction: Creating Innovative Applications and Devices. New Riders, 2nd edition
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