### **COURSE SPECIFICATION DOCUMENT**

Academic School / Department:	School of Liberal Arts	
Programme:	Digital Minor	
FHEQ Level:	5	
Course Title:	Coding, Content and Context 2	
Course Code:	DGT 5100	
Course Leader:	Jane Norris	
Student Engagement Hours: Lectures: Seminar / Tutorials: Independent / Guided Learning:	120 (standard 3- credit BA course) 30 15 75	
Semester:	Fall, Spring	
Credits:	12 UK CATS credits 6 ECTS credits 3 US credits	

### **Course Description:**

This course builds on DGT 4100 Coding, Content and Context 1 class. In this course students develop more advanced digital skills using software such as Adobe XD CC, Appery, Appy Pie, AppMkr across the three themes of code, media and objects combined with a critical analysis of their use. At this level, different digital media are combined with haptics to drive user engagement. Coding can be introduced to computer hardware such as MaKey MaKey, Raspberry Pi etc to produce interactive devices. Data sampling is explored through real time visualisation. Outcomes are developed using research through design methodologies where students will design digital outcomes and test them in appropriate digital environments. This course combines transformation design and decolonial theories to critically connect digital practice with its implementation. This class is relevant to students of all majors. It is highly recommended that students have access to the use of a laptop and a smartphone for the duration of the course.

# Prerequisites: DGT 4100 Coding, Content and Context II

## Aims and Objectives:

The aim of this course is to extend student skills in the use of digital code, to enable students to successfully combine basic digital languages in different environments. Gaining better control over outcomes in digital environments. Students will focus on developing a working understanding of more advanced coding script to enable haptic interaction. They will combine digital skills to negotiate different digital spaces across a range of environments such as interactive games, gathering data for research and interactive audio and image editing. Students will be encouraged to curate a selection of their own software and critically evaluate the quality, range of application and ethical use of their selections in relation to current developments in the field. They will be expected to contextualise this through appropriate examples of academic debate. Alongside using a range of software, students will be required to maintain a reflective technical journal that can act as a reference point for problem solving in the future.

### **Programme Outcomes:**

The learning outcomes satisfy the program outcomes of the Digital Minor 5Ai, 5Bi, 5Ci

Programme Outcomes for Digital Minor Level 5

- Demonstrate a detailed understanding of different digital environments and their respective digital languages. (5Ai)
- Demonstrate the ability use digital software to produce high quality relevant outcomes and critically reflect on the results. (5Bi)
- Appreciate the connections between theories and their applications in specific digital environments and to be able to critically evaluate these. (5Ci)

A detailed list of the programme outcomes are found in the Programme Specification.

This is located at the archive maintained by the Registry and found at: <u>https://www.richmond.ac.uk/programme-and-course-specifications/</u>

### Learning Outcomes:

By the end of this course, successful students should be able to:

- Demonstrate a critical analysis and evaluation of appropriate digital tool for the production of specific digital outcomes
- Demonstrate a developed use of mobile and online applications to successfully generate, edit and combine digital languages and media,

- Demonstrate functioning code or digital media outcomes that address self-identified issues.
- Engage in informed self-directed research to problem solve technical issues to produce innovative solutions.

## Indicative Content:

- Mobile coding using apps such as Adobe XD CC, Appery, Appy Pie, AppMkr.
- Online code learning programmes such as Learn Python
- Interactive digital Audio editing via Audacity and Processing.
- Interactive digital image editing (PC & Mac) via Processing
- The critical analysis of digital applications and media and evaluation of their use in different digital environments.
- Contextualisation of own work in the current discourse on coding bias, and the implications of digital work on current debates on race, gender, surveillance, behaviour prediction.
- Reflective technical Journal writing.

### Assessment:

This course conforms to the University's Special Programme Assessment Norms for ADM approved at Academic Board and located at: (<u>https://www.richmond.ac.uk/policies/</u>)

## **Teaching Methodology:**

- Lecture presentations with the key concepts
- Group discussions on journal articles and online resources.
- Lecture demonstration with the key applications and software.
- Teamwork solving technical problems.
- Individual research on online sites related to coding and the use of digital media
- Videos and On-line demonstrations.
- Intra-net access to lecture notes, links to applications and online tutorials and reading material.

### Indicative Text(s):

Goodfellow I, Bengio Y, Courville A, Bach F, (2017) *Deep Learning (Adaptive Computation and Machine Learning Series)* MIT Press. USA

Hui Kyong Chun W, Ed. Watkins Fisher A, Ed. Keenan T, Ed. (2015) *New Media, Old Media: A History and Theory Reader* Routledge publications USA.

## Joshi P, (2016) Python Machine Learning Cookbook Packt Publishing USA

Spiller N, (2002) Cyber Reader: Critical Writings for the Digital Era Phaidon Press

### Journals

Virtual Creativity, Intellect Journals Digital Scholarship in the Humanities Oxford Academic Frontiers in Digital Humanities Journal Boundery2 Journal International Journal of Information and Coding Theory *Cultural Studies* Journal

### Web Sites

Please Note: The core and the reference texts will be reviewed at the time of designing the semester syllabus.

See syllabus for complete reading list

### Change Log for this CSD:

Nature of Change	Date Approved & Approval Body (School or AB)	Change Actioned by Registry Services