

# **CSCM10 Computer Science Project Research Methods 2019/20 Assignment Handout**

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2 December 2019

## **1 Statement about Academic Integrity**

By submitting coursework for this module, electronically and/or hardcopy, you state that you fully understand and are complying with the university's policy on Academic Integrity and Academic Misconduct. The policy can be found at

<https://www.swansea.ac.uk/academic-services/academic-guide/assessment-issues/academic-integrity-academic-misconduct>

## **2 Overview**

The aims of this module are to introduce you to research in computer science. As well as discussing various current research topics you will be introduced to some fundamental research methodologies and good practice in research. In the second semester you will undertake some background research including a study of the literature in order to allow you to fully specify the aims of your summer MSc project. The module will consist of a series of lectures/seminars on various topics including:

- Computer Science research culture.
- Academic Integrity.
- The main research areas in the department – Visual Computing, Theoretical Computer Science and HCI.

- Writing documents: bibliographies, the typesetting system Latex.
- Project Planning and Management and the Ethics of Computer Science Research.
- How to write a background research report.
- How to give a presentation.
- How to write a project specification.

In the second semester you are expected to have regular meetings with your allocated project supervisor to discuss your progress. You are also expected to write a report on background research to your project, to give a 10-minute presentation on your project ideas, and to write a specification for your project.

### **3 Schemes with Different Project Arrangements**

The MSc Computer Science Informatique (Grenoble schemes) and the MRes schemes have project arrangements which are different from the other MSc schemes. For these schemes the deadline and precise content of the coursework assignments are adjusted, and determined by coordinator of CSCM10 in discussion with the scheme coordinators and project supervisors.

## **4 Assessments**

The assessment for this module is 100% coursework based. There are three assignments. Detailed marking criteria are provided on the module Blackboard site.

### **4.1 General Comments on the Assessments**

The assignment descriptions below are intended to be indicative rather than prescriptive. The detailed content is likely to vary according to the precise nature of the project you are undertaking. Some will involve the production of a software solution to a given problem which has been fairly precisely specified – in such instances the background research required, for example, is likely to be largely about finding the tools/algorithms to complete the task set. Other projects may be more speculative or investigative in nature so the background research is likely to be more wide ranging in order to

determine what can be achieved. The final project plan is also likely to have to be more flexible as it may be impossible to predict precisely the outcome of some of the initial stages. You should discuss with your supervisor exactly what is required in each document and in the presentation.

The reports are expected to be technical/scientific reports, not essays. So typically we would expect it to have a title page, an abstract or summary, a contents list, and a list of references. The main body of the work would be split into numbered sections and sub-sections. A technical/scientific report is characterised by a logical structure; clear and concise writing; and the incorporation of diagrams, tables, figures, bullet points etc. which help to present the work in a precise and unambiguous manner. Figures should be labelled (and with a short description) so that they can be referred to from the text.

#### 4.1.1 Electronic Submission of Documents

The report, specification and the slides need to be submitted electronically via blackboard. As a backup (in case of submission problems via blackboard) we will provide an email address (to be confirmed) you can send your document to in addition to submitting it via blackboard. We recommend to send your document to this email address. We reserve the right to reduce marks if the document is submitted only by email.

In case of the report and the specification the document needs to be submitted in **pdf format**.

- The **file name** should be in case of the report and specification of the form

<studentnumber>.pdf

In case of the presentation slides the file name should be

<lastname>-<firstname>-<studentnumber>.<filenameextension>

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- The subject line of your email should be in case of the report  
CSCM10-report <studentnumber>

in case of the presentation

CSCM10-presentation <lastname>-<firstname>-<studentnumber>

and in case of the specification

CSCM10-specification <studentnumber>

- If you don't follow these instructions marks may be deducted.

## 4.2 Report

This coursework component consists of a report on a topic related to your project. Note that the report is **not** a literature review over your project but a report on a topic related to your project. You should agree the precise topic with your project supervisor, who will be assigned to you between end of semester 1 and beginning of semester 2.

The report should give a very brief description of your project. Then you should present the chosen topic in detail, including a description of related research. The report contributes 25% of the mark for the module. The size is approximately 3000 words (excluding references), due on Monday, 10 February 2020 (11:00 am).

## 4.3 Presentation

This coursework component consists of a presentation on your project and initial plans for it. It contributes 25% of the mark for the module. It consists of a 10-minute presentation (plus 2 minutes questions). You will need to submit an electronic copy via Blackboard of your slides/presentation on Monday 23 March 2020 (11:00 am) (date subject to change once date of presentations is determined).

We are currently exploring whether it is feasible to create an abstract booklet for the presentations; if this is the case you will be required to submit as well a short abstract – we will inform you about the details nearer that date. The presentations will take place at a student conference. The place (we plan to use a conference facility) and date is to be confirmed.

The presentations will probably take place in parallel sessions. A detailed schedule will be made available nearer the time. You will be assessed by at least two members of academic staff or postgraduate markers.

## 4.4 Project Specification and Design Document

This coursework contributes 50% of the mark for the module. The size is approximately 5000 words (excluding references) – due on Wednesday 29 April 2020 (11:00 am).

This report should give a literature review over your project and describe any background research that you have carried out. You should state the motivation and aims of the project. It should include a complete specification of your project. It should describe the project clearly and the components of the work which need to be developed. An outline project plan for the

summer should be included. This plan should take into account the development methodology being used. You should provide a risk analysis for the project. You should view this document as providing the plan for the work you expect to carry out over the summer.