

# CS1701 Level 1 Group Project

## Undergraduate Study Guide for 2015/16

### TABLE OF CONTENTS

Module details .....	1
Access to support material and additional information .....	1
Introduction/aims/background.....	1
Learning outcomes.....	2
Method of teaching.....	2
Lecture Seminar Programme .....	3
Reading List .....	4
Assessment .....	5
Deliverables and Feedback - important dates.....	5
Additional Vital Information.....	6

### MODULE DETAILS

<b>Module leader</b>	Prof Jasna Kuljis	
<b>Department</b>	Computer Science	
<b>Credits</b>	40	
<b>Other staff</b>	Dr Crina Grosan Dr Stasha Lauria	
<b>Contact and private study time</b>	Lectures	9 hours
	Tutorials	16 hours
	Labs/Seminars	18 hours
	Coursework Study	313 hours
	General Study	44 hours
	Total	400 hours
<b>Assessment</b>	Method	[Proportion of marks]
	Coursework	100%

### ACCESS TO SUPPORT MATERIAL AND ADDITIONAL INFORMATION

The majority of the teaching, learning and support material is provided electronically via the University's Blackboard Learn system. Note that the details provided in this study guide are based on the formal module syllabus for this module which sets out the agreed content, learning outcomes, assessment and teaching methods. Module syllabus and scheme of studies documents for your programme of study can be found by on the University's Quality Assurance web pages.

### INTRODUCTION/AIMS/BACKGROUND

The aim of this module is to:

*integrate skills covered by the other Level 1 modules into a non-trivial, practical group task including a significant degree of programming and technical engagement. It is also intended to help the student gain confidence in their technical abilities.*

A number of aspects of the Group Project are intentionally open-ended to encourage your creativity and develop open-ended problem solving skills. Typically the coursework will include some requirements analysis and understanding of the problem context, software design and development, communication, team working, and project management. Each team will be supervised by a member of academic staff with whom they will have regular contact; thus, the project will serve as a vehicle for small group-based interactive tutorials providing you, and us, an opportunity to get to know each other.



**LEARNING OUTCOMES**

Whatever module or programme of study you are studying at Brunel University London, there are learning outcomes (LO) that you must meet/achieve in order to be awarded the credits which comprise the module and programme of study. This module comprises of the taught component referred to as study block (CS1701) and three associated assessment blocks (CS1803, CS1809, and CS1810). Each of the three assessment blocks has its own learning outcomes, which taken together comprise the learning outcomes for the study block. To pass all three assessment blocks you must demonstrate the ability to:

- LO1: Plan, manage and track a non-trivial activity.
- LO2: Take an open-ended problem and define and refine the requirements.
- LO3: Effectively present and communicate solutions.
- LO4: Create and use technical documentation.
- LO5: Produce a working computer program as a solution to a given non-trivial problem.
- LO6: Develop skills in the use of high-level object-oriented languages.
- LO7: Reflect and learn from your group project experiences.
- LO8: Understand and apply the principles of professional and ethical behaviour in a group context.

The learning outcomes associated with each of the assessment blocks are given below.

**CS1809 Software Design Task (10 credits)**

In order to get a pass grade (D- or above) in this assessment block you must meet the learning outcomes below, that is, you must demonstrate ability to:

- LO1: Plan, manage and track a non-trivial activity.
- LO2: Take an open-ended problem and define and refine the requirements.
- LO3: Effectively present and communicate solutions.
- LO4: Create and use technical documentation.

**CS1810 Software Implementation Event (20 credits)**

In order to get a pass grade (D- or above) in this assessment block, you must meet the learning outcomes below, that is, you must demonstrate ability to:

- LO1: Plan, manage and track a non-trivial activity.
- LO4: Create and use technical documentation.
- LO5: Produce a working computer program as a solution to a given non-trivial problem.
- LO6: Develop skills in the use of high-level object-oriented languages.

**CS1803 Level 1 Group Project Reflection (10 credits)**

In order to get a pass grade (D- or above) in this assessment block, you must meet the learning outcomes below, that is, you must demonstrate ability to:

- LO3: Effectively present and communicate solutions.
- LO7: Reflect and learn from your group project experiences.
- LO8: Understand and apply the principles of professional and ethical behaviour in a group context.

**METHOD OF TEACHING**

This module is intended to be primarily practical in its nature; in other words you learn by doing and, most importantly, reflecting after-the-event. We understand that on occasions you will be asked to do something new and this may seem daunting. However, it is by actually *engaging* with a problem that you have the best opportunity to learn. We appreciate the challenges you face and so do not expect perfection first time. Teaching is organised as follows:

1. Lectures.  
There are nine scheduled classroom lectures (see next section)
2. Supervised lab sessions.  
There are regular supervised lab sessions (so called labs). The schedule of activities is given in the next section.
3. Group tutorials.  
You will be placed in small groups in order to create diverse but balanced teams – groups will normally comprise 4-6 students. The group will work on tasks that integrate much of the material taught across the modules in the year. Typically, this will include some requirements analysis and understanding of the problem context, software design and development, communication, team working, project management. Each group will be supervised by a member of academic staff (group tutor) who will provide support and guidance during the regular scheduled tutorials (normally once a week). You are expected to attend the



tutorials; attendance is monitored. Your group tutor will also act as your personal tutor and, when and if required, you will be able to arrange to meet with your tutor individually outside of the tutorial sessions.

Our advice is to engage in this important module right from the start. You are unlikely to be able to pass them unless you have done the work consistently across the module.

## LECTURE SEMINAR PROGRAMME

### Lectures schedule

Week	Date	Lecture Topic	Lecturer
1	21-Sep	Introduction to the Module	Jasna Kuljis
2	28-Sep	Planning and Time Management. Assignment 1 (CS1809) Briefing	Jasna Kuljis
3	05-Oct	Basics of Written and Verbal Presentations	Jasna Kuljis
4	12-Oct	Library Briefing	Subject Librarian
5	19-Oct	Software Quality from the User's Perspective: Functionality and Usability	Jasna Kuljis
6	26-Oct	Prototypes. Assignment 2 (CS1809) Briefing	Crina Grosan
7-12		No lectures	
13-16		Christmas Break	
17	11-Jan	What to expect in Term 2. Assignment 3 (CS1810) Briefing	Jasna Kuljis
18	18-Jan	Software Quality from the Designer's Perspective: Requirements' Compliance, Correctness and Maintainability	Crina Grosan
19	25-Jan	Assignments 3 & 4 (CS1810) and Assignments 4&5 (CS1803): Hints and Guidance	Stasha Lauria
20-26		No lectures	

### Lab activities schedule

Week	Date	Activity
1	21-Sep	No labs
2	28-Sep	Design Task 1
3	05-Oct	Design Task 2
4	12-Oct	Design Task 3 and catch-up on Design Tasks 1 & 2
5	19-Oct	Assignment 1 (CS1809): Problem Solving and Solution Design
6	26-Oct	Assignment 1 (CS1809): Problem Solving and Solution Design
7	02-Nov	No labs (ASK Week)
8	09-Nov	Assignment 2 (CS1809): System Design and Prototype
9	16-Nov	Assignment 2(CS1809): System Design and Prototype
10	23-Nov	Assignment 2(CS1809): System Design and Prototype
11-12	30-Nov	No supervised labs. Assignment 2(CS1809) Presentations
13-16		Christmas Break



Week	Date	Activity
17	11-Jan	Assignment 3 (CS1810): System design
18	18-Jan	Assignment 3 (CS1810): System design
19	25-Jan	Assignment 3 (CS1810): Coding
20	01-Feb	Assignment 3 (CS1810) : Coding and testing
21	08-Feb	No supervised labs (ASK Week)
22	15-Feb	Assignment 3 (CS1810): Coding and testing
23	22-Feb	Assignment 3 (CS1810): Putting it all together and submission
24	29-Feb	Assignment 4 (CS1810): Robot Code VIVA (Wednesday 2 <sup>nd</sup> March 2016) Assignment 5 (CS1803): Reflection and Group Review - Preparation of Presentation
25	07-Mar	Assignment 5 (CS1803): Reflection and Group Review - Preparation of Presentation
26	14-Mar	No supervised labs. Assignment 5 (CS1803) Presentations
27-29		Easter Break
30	11-Apr	No supervised labs. Assignment 5 (CS1803) Presentations
31	18-Apr	No supervised labs
32	25-Apr	Revision Week
33-35	03-May	Examinations

**Please note:** Weeks 7 in Term 1 and 21 in the Spring Term are Academic Skills (ASK) weeks. There are no scheduled lectures or labs on undergraduate programmes offered by the Department of Computer Science during these two weeks. However, this does not mean that these weeks are holidays. You should use this time for study and to catch up with your work. Your tutor may schedule tutorial meetings during ASK weeks, so you should be available.

## READING LIST

### Core reading list

Levin, P. *Successful teamwork! For Undergraduates and Taught Postgraduates Working on Group Projects*, (Student-Friendly Guides series), OU Press, 2005.

### Supplementary Reading

HRA Consulting Ltd. *Project Management Book*, available at <http://www.hraconsulting-ltd.co.uk/project-management-book-0101.htm> (Free to download).

Hughes, B. and Cotterell, M. *Software Project Management*, (4<sup>th</sup> Edition) McGraw-Hill, 2005.

*The Java Tutorials* (available at <http://java.sun.com/docs/books/tutorial/>).

Please note that there is a wealth of material, much of it freely available on the web or in the library. The above are suggestions but you are encouraged to search for and make use of other sources.

It is important that you learn to become self-reliant and are able to access and assimilate material for yourself. Many of the topics necessary for this project will not be covered by lectures. Therefore you will need to work through the exercises and guidance material provided in labs, via Blackboard Learn and from your own investigations.



## ASSESSMENT

The assessments related to Group Project comprise of six discrete but related tasks. Detailed information will be provided in the Assessment documents for each of the three assessment blocks associated with the group project (CS1809, CS1810, and CS1803) and separately for each assignment according to the release dates given in the table in the next section. The project is a major and complex activity. Please study the dates and regulations carefully and ensure you adhere to them. As you will appreciate, we cannot start making exceptions for teams or individuals. If you are in any doubt please discuss the matter with your group tutor. Even though the project is a group-based activity, all assignments contributing to the assessment are individual. In order to pass the three assessment blocks you will have to demonstrate that you passed all of the associated learning outcomes (detailed on page 2 of this study guide).

## DELIVERABLES AND FEEDBACK - IMPORTANT DATES

You should prepare and submit all coursework according to the Department's instructions for assessments available in the Student Handbook on [Blackboard Learn](#). You should make sure that you are fully aware of the Department's policy on plagiarism and the marking of joint work. You should also be aware that you *cannot* later claim that you did not know the rules and regulations as you must make yourself familiar with them. If you cannot complete any work on time, you should look at the Department's instructions on what to do. The Department policy is that all coursework must be submitted electronically via the University's Blackboard system. Please navigate to the [Blackboard Learn](#) pages for this module for further details. You will get feedback on your performance via the Blackboard Learn pages for this module. If do not receive your feedback by the given date, you should first contact the module leader. If it proves necessary, you should also contact your Level Co-ordinator.

### The important dates:

Module Code	Weighting	Assignment Task #	Assignment Title	Group/ Individual	Submission Deadline	Feedback Due
CS1809	None	1	Problem Solving: Solution Design	Group – formative assignment	Week 6 (Friday 30 <sup>th</sup> Oct 2015)	Week 8
CS1809	100%	2	System Design and Prototype	Individual	Week 10 (Friday 27 <sup>th</sup> Nov 2015) Presentations in weeks 11 & 12	Week 18
CS1810	100%	3	Robot Coding	Individual	Week 23 (Friday 26 <sup>th</sup> Feb 2016)	Week 30
CS1810	Pass/ Fail	4	Robot Code VIVA	Individual	Week 24 (Wednesday 2 <sup>nd</sup> Mar 2016) Venue to be announced	Week 30
CS1803	100%	5	Reflection and Group Review	Individual	Week 25 (Friday 11 Mar 2016) Presentations in weeks 26 & 30	Week 32
CS1803	Pass/ Fail	6	Ethical and Professional Behaviour	Individual	Nothing to submit	Week 32



Note: Detailed description of all assignments for CS1809 will be made available on the Blackboard in Week 2. Assignments for CS1810 and CS1803 will be made available by Week 11. The submission deadline date ends at @ 23:59GMT (e.g., if the deadline is 6<sup>th</sup> November, it means the deadline is up to 23:59 GMT on 6th November)

## **ADDITIONAL VITAL INFORMATION**

The College Student Handbook can be found on the College's SharePoint site on the University's web pages. The handbook is a useful source of information for all aspects of your studies, including procedures of how to inform us of problems you are facing with your studies, how to apply for an extension to your coursework, plagiarism, house style for assignments, joint and group work submissions and other important matters. The Department assumes that you familiarise yourself with this information, so you will need to look at these pages carefully at various times throughout your studies. The Department also operates within the rules and regulations of the University more generally, and you should also look at what are known as 'Senate Regulations' under the University's web pages. These policies and procedures might change from one academic year to another and it is in your own interest to keep yourself aware about them and their possible changes.

