University of Bristol Design & Computing AENG11600

Detail Design & Manufacture Course outline

(formerly Design and Graphical Communication)

This part of the unit will be delivered and supported by:-

Richard Martin

Set A (Lab groups A1.1-A1.15)	Set B (Lab groups A1.16-A1.30)
Rob Worboys	Gordon Clarke
Sam Scott	Max Dixon
Ashwin Kristnama	Aewis Hii
Jonathan Stacey	Jakub Rycerz

(Supporting staff attendance may vary depending on availability, and may include: Muhammad Othman, Oliver Nixon-Pearson, Bruce Bardsley and Bradley Cox)

Session dates

There are 10 sessions on Thursday afternoons from 14:00 to 17:00:-

Lab Groups-	Set A	Set B	**Drawing exercises/assignments**	**Marks (max.)**
Session 1	28/9/17	5/10/17	A1 Orthographic projection	5
Session 2	12/10/17	19/10/17	A2 Construction and sectioning	5
Session 3	26/10/17	2/11/17	A3 Isometric drawing	5
Session 4	9/11/17	23/11/17	A4 Orthographic/Isometric visualisation	10
Session 5	30/11/17	7/12/17	A5 Dimensions and tolerances	5
Session 6	14/12/17	25/1/18	A6 Drawing study	25
			Manufacturing	
Session 7	1/2/18	8/2/18	Assignment 7	
Session 8	15/2/18	22/2/18	Workshop tours/lectures in CDO	
Session 9	8/3/18	15/3/18	Workshop tours/lectures in CDO	
Session 10	22/3/18	19/4/18	Assignment 7	35

Your attendance is required at all 10 sessions. It will be recorded and contribute to your marks. Make sure you have an attendance mark before you leave the session. They will not be given retrospectively.

Assessment

The Detail Design and Manufacturing sessions and assignments contribute 20% to the overall marks for this module. You will be given exercises and assignments to complete, which will attract marks:-.

For each attendance 1 mark, giving a maximum of 10
Assignments 1-6 (Drawing): a maximum of 55 marks.
Assignment 7 (Manufacturing): a maximum of 35 marks.

The maximum for DD&M (formerly D&GC) is therefore 100.

Assignment content

Drawing assignments 1-6 - subject areas
May include: drawing projection (First, Third, Isometric); dimensions and tolerances; standards and conventions.

Manufacturing assignment - subject areas
Part 1 – Detail Design. Design and draw a shaft to compete the assembly of existing components (bearings, etc.), with consideration for function and manufacture.
Part 2 – Machining processes. Construct a process plan listing machining processes (e.g. sawing, turning, milling) and associated procedures and equipment.