

Higher Graphic Communication

Week No.	Final grades are determined by an external exam. The Course Assessment consists of an Assignment (50 marks) and a Question Paper(90 marks)			Homework
1	Introduction to course Learning Outcomes – e.g. Impact on Environment	Manual sketching Orthographic & Pictorial sketches of Lego block	CAD Modelling: Using Inventor to create modelling plans, model and assembly of Lego blocks	Download Inventor at Home. Use 3D Made Easy website
2	Desktop Publishing - Festival Ticket: <ul style="list-style-type: none"> DTP Elements & Principles Produce preliminary layout designs for document with effective use of design elements and principles (thumbnails in line with the specification) Master page conforming to DTP criteria using grid structure etc. Multi-page promotional publication in line with the target market and using design elements and principles. Describe and justify the use of promotional graphics used in industry and commerce and their impact on the environment.			H/W - Inventor exercises
3				
Summer Holiday				
1	Inventor exercises: Extrude/Revolve/Loft/Helix/Extrude along a path			H/W - Interpenetration drawings
2	Standards & Conventions: <ul style="list-style-type: none"> Line Types Dimensioning Internal and External screw threads Symbols <ul style="list-style-type: none"> Knurling Flat Face Manufacturing Tolerances 3rd Angle Projection Symbol CAD Library Digital vs Manual			H/W - 3D Made Easy Online Video Tutorials
3	Course Overview: Breakdown of marks / Topics covered within Course Assessment Specification Re-cap on Inventor skills	Interpenetration: Inventor models / Boardwork		
4	Interpenetration: Boardwork / Inventor model of Cup & Straw Holder	CAD Modelling: Past Paper 2015 Q1 – Fire Extinguisher (Create model and answer written questions)	CAD Modelling: Past Paper 2017 Q1 – Bicycle (Create model and answer written questions)	H/W – Revision (CAD Modelling Techniques)
5	Tangency: HJ1 (Complete drawing) HJ2 / HJ3 (Create Inventor models and complete drawings) Past Paper – 2018 Q1b (Ellipses) Q1c (CAD Modelling/Tangency) Q4c (PCD) Past Paper – 2016 Q1g (Tangency)			
6	CAD Modelling: Past Paper 2016 Q1 – Guitar (CAD Library, Benefits of CAD Models, Top Down / Bottom Up Modelling, Offset Command, Radial Array, PCD) Model Q1e			H/W – DTP Elements and Principles

7	<p>DTP - Image Manipulation Task (Kite Image)</p> <p>DTP Task – Venue / Event Leaflet</p> <ul style="list-style-type: none"> • Research Page • Formatting options • Thumbnail sketches • Presentation Visual • Master Page • Final Promotional Document • Evaluation 	
8	<p>DTP Task – Venue / Event Leaflet (Cont.)</p>	<p>H/W – Revision for class test</p>
9	<p>DTP Task – Venue / Event Leaflet (Cont.)</p> <p>Class Test Revision</p> <ul style="list-style-type: none"> • CAD Modelling • The 3 Ps • Standards and Conventions • Ellipses • Tangency • DTP • CAD Library • Digital vs Manual 	
October Week		
10	<p>Class Test</p> <p>Class Test Results / Marking Scheme</p> <ul style="list-style-type: none"> • Breakdown of marks using Marking Scheme • Model components from CAD question 1 paper Autodesk Inventor <p>Freehand Sketching / Creating Modelling Plans</p> <ul style="list-style-type: none"> • 2D (Circle, Ellipse etc.) • 3D Pictorial (1 Point Perspective, 2 Point Perspective, Isometric, Oblique) <p>CAD Modelling / Assembly – Door Knocker</p> <ul style="list-style-type: none"> • Modelling component parts of door knocker <ul style="list-style-type: none"> ○ Extrude with taper ○ Work planes ○ Revolve ○ Tangency • Create a complex assembly using 3D Constraints • Create Orthographic drawings of components and assembly <ul style="list-style-type: none"> ○ Ortho views ○ Dimensioning ○ Line Types ○ Section views ○ Detail views ○ Exploded views 	<p>H/W – Revision based on class test results</p>

11	CAD Modelling / Assembly – Soap Dispenser <ul style="list-style-type: none"> • Modelling component parts of soap dispenser • Create a complex assembly using 3D Constraints • Create Orthographic drawings of components and assembly <ul style="list-style-type: none"> ○ Ortho views ○ Dimensioning ○ Line Types ○ Section views ○ Detail views ○ Exploded views 	H/W – PP Question – Internal and External Screw Threads
12	Drawing Standards and Conventions <ul style="list-style-type: none"> • Sectioning and hatching <ul style="list-style-type: none"> ○ Through ○ Stepped ○ Part ○ Half ○ Revolved ○ Removed • Building Drawings and Symbols 	
13 Full Report	DTP – Soap Dispenser <ul style="list-style-type: none"> • Research advertisements for cosmetic products • Create a Graphic Specification • Create thumbnail sketches of DTP poster • Create final promotional document to advertise soap dispenser <ul style="list-style-type: none"> ○ Render and apply light sources, materials and textures 	H/W – Drawing Standards and Conventions
14		
15 Parents' Evening		H/W – Manual Rendering
16	Geometric Shapes and Forms / Views and Techniques <ul style="list-style-type: none"> • True lengths and shapes • Surface Developments • Auxiliary Views File Types <ul style="list-style-type: none"> • CAD (dxf, 3ds, step/iges) • DTP (raster & vector) 	
17	Course Assignment Preparation	H/W – File Types
18		
Christmas		
19	Course Assignment Preparation – Lamp Project	
20		H/W – Course assignment preparation
21		H/W – Course assignment preparation
	Lamp Project contd.	

22	Prelim Revision	H/W – Prelim Revision
23	Prelim exam	
24	Course Assignment: (8 Hours)	H/W – Course assignment preparation
25 Interim Report 1		
26		
27	Exam preparation	H/W – Exam Revision
28		
29		
30		
31 Interim Report 2		
Easter		
32	Exam preparation	