Higher Graphics Detailed Couse plan

Higher	Plan						Overall	
	Mon 3	Mon 7	Tue 2	Thursday 5	Friday 1	Friday 3		
7/1	Practice assignment back - Area 1 Orthographic drawings how to get full marks	Practice orthographic work, peer check	Assembled Orthographic and exploded marks guide	Theory 1 Graphic Types	Theory 2 Manual Techniques	Theory3 Computer-aided techniques		74
14/1	Exploded + British Standards	Practice BS standards	Rendered Pictorial and scene	Theory 4 Drawing Standards protocols and conventions	Theory 5 Geometric shapes and forms	Theory 6 Views and techniques		68
21/1	Thumbnails Final DTP	Practice thumbnails	Sketching	Theory 7 Illustration techniques	Theory 8 Techniques used for producing effective promotional documents and publications	Theory 9 Using Technology in graphic Communication		62
28/1	Theory 10 Computer-aided design (CAD)	Theory 11 Recap lesson	Theory 12 Desktop Publishing (DTP)	Theory 13 Graphic Communication technology and society	Theory 14 Any identified areas	Theory 15		56
4/2	Graphics Prelim 9 - 11.30	Self-evaluation based on prelim Next steps topics	Assignment Prep - Manual graphics	Assignment Prep -	Assignment Prep - 3D modelling	Assignment Prep -3D modelling		50
11/2	Assignment Prep - DTP thumbnails	Assignment Prep - DTP thumbnails	Assignment Prep - DTP final	Assignment Prep -General preparations				44
18/2								40
25/2	Assignment Start 1	2	3	4	5	6		37
4/3	7	8	9	10	Get Everything labelled up	Revision Targeted on prelim 1		31
11/3	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Folio Deadline to Office	25
18/3	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1		19
25/3	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Revision Targeted on prelim 1	Prelim 2	Prelim 2		13
15/4	Revision Targeted on prelim 2	Revision Targeted on prelim 2	Revision Targeted on prelim 2	Revision Targeted on prelim 2				7
22/4	Make personal Study plan for Exam leave Targeted Revision based on Prelim 2	Targeted Revision based on Prelim 2	Targeted Revision based on Prelim 2	Exam Leave Begins today				3
			Exam - Tuesday 21st May at 1pm to 3.30pm					

Drawing standards, protocols and conventions	Recognised drawing standards, protocols and conventions, demonstrated through application, identification and recognition in given contexts, views and items. ¨ line types: — dimension lines, centre line, hidden detail, cutting planes, fold lines ¨ dimensioning: — linear, radial, angular, diameter, tolerance ¨ symbols for sections ¨ hatching ¨ building construction ¨ third-angle projection system
Geometric shapes and forms	Spatial awareness when interpreting geometric shapes and forms, and/or those used in the communication of products, components, assemblies and other items. ¨ interpenetration ¨ intersections of right prisms and cylinders ¨ true shapes ¨ ellipses ¨ common geometric forms and partial cuts of those forms ¨ components built from various simple combinations of forms
Views and techniques	The role, benefits and use of a variety of views and techniques in 2D and 3D formats: ¨ communicating geometric shapes, objects and forms ¨ components ¨ assemblies ¨ third-angle orthographic projection ¨ tangency (internal and external radii location) ¨ true lengths and true shapes ¨ surface developments ¨ a range of sectional views (full, part, revolved, and stepped) and cut-aways ¨ assembly drawings (minimum three parts) ¨ auxiliary views ¨ exploded views (full and sectioned) ¨ oblique, isometric and planometric views ¨ use of appropriate scales
Illustration techniques	The use of illustration techniques used to support effective graphic communications. The use and role of, and common techniques for representing: ¨ light ¨ shadow ¨ reflection ¨ tone ¨ layout ¨ material ¨ texture 3D-rendering techniques: ¨ light source ¨ materials ¨ reflections ¨ shade ¨ sited environment
Techniques used for producing effective promotional documents and publications	Techniques used in producing promotional documents and publications: ¨ colour theory: — warm, cool, contrast, harmony, accent, advancing and receding ¨ design elements and principles: — line, shape, texture, value, mass/weight, alignment, balance, contrast, depth, dominance, emphasis, proportion, rhythm, unity/proximity, white space, grid structure
Using technology in graphic communication	Ranges, features and use of graphic hardware and software computer systems and networks: ¨ file management ¨ cloud computing ¨ cloud storage ¨ digital rights management ¨ digital input and output devices ¨ advantages and limitations of CAD
Computer-aided design (CAD)	Generic techniques, customs and practices used across a range of packages: ¨ 2D-drawing tools: — line, circle, rectangle, ellipse, trim, array (linear, box and radial), offset, mirror, project edge, extend, fillet, chamfer ¨ modelling features: — extrude, revolve, loft, helix, extrude/sweep along a path ¨ modelling edits: — shell, fillet (regular/irregular), chamfer (regular/irregular), mirror, array (linear, box and radial), add, subtract, intersect ¨ 2D constraints: — linear, radius, diameter, perpendicular, parallel, fixed, tangent, concentric ¨ terminology: — component, assembly, subassembly, work-plane/plane, axis, feature, profile, sketch, face, edge, datum, suppress ¨ assembly: — 3D constraints (mate, align, centre axis, orientate, offset, tangent), stock/library components ¨ modelling concepts: — top-down modelling, bottom-up modelling, vertices, edges and faces, modelling tree/hierarchy, modelling plan ¨ file types: — dxf, 3ds, step/iges ¨ CAD libraries: — use and function of CAD libraries and stock models
Desktop publishing (DTP)	Generic DTP terms and techniques including: ¨ planning strategies: — thumbnails, visuals and annotation ¨ generic DTP terms and techniques: — copy/paste, import/export — single- and multi-page format — page size, orientation, grid, guides, snap, master page layers, document sizing — cropping (square and full cropping), rotate, text box, handles, text wrap, flow text along a path, extended text — colour fill, colour picking, textured fills, gradient fill, transparency, drop shadow — serif, sans serif and script fonts, font styles, placeholder text (lorem ipsum), reverse, drop caps — column, margin, gutter, caption, header, running headline, heading, title, footer, folio, column rule/rule, indent, hanging indent, line spacing, pull quote, justification — proofs (pre-press), registration marks, crop marks, bleed ¨ file types: — raster (tiff, jpg, png, bmp), vector (svg, dxf) and their features
Graphic communication technology and society	The impact and influence of CAD systems and graphic communication technologies on industry and society: ¨ the paperless office ¨ use of recycled materials ¨ CAD, as it supports manufacturing and other industries ¨ DTP in marketing and promotional activities ¨ remote working ¨ communication crossing international boundaries

Graphic Types	Producing effective preliminary, production and promotional graphics.
Manual techniques and/or computer-aided techniques	Selecting and applying manual and/or computer-aided and desktop-publishing (DTP) graphic techniques and processes. Using graphic communication applications and a range of common graphic media, equipment and/or devices to produce effective and informative graphic communications.
Drawing standards, protocols and conventions	Applying recognised drawing standards, protocols and conventions in engineering and construction, including symbols and standards. ¨ line types: — dimension lines, centre line, hidden detail, cutting planes, fold lines ¨ dimensioning: — linear, radial, angular, diameter, tolerance ¨ symbols for sections ¨ hatching ¨ building construction ¨ third-angle projection system
Geometric shapes and forms	Producing graphics representing products, components, assembly and other items. ¨ interpenetration ¨ intersections of right prisms and cylinders ¨ true shapes ¨ ellipses ¨ common geometric forms and partial cuts of those forms ¨ components built from various simple combinations of forms
Views and techniques	Appropriate selection and use of 2D, and 3D and pictorial views and techniques, when producing graphic communications: ¨ third-angle orthographic projection ¨ tangency (internal and external radii location) ¨ true lengths and true shapes ¨ surface developments ¨ a range of sectional views (full, part, revolved, and stepped) and cut-aways ¨ assembly drawings (minimum three parts) ¨ auxiliary views ¨ exploded views (full and sectioned) ¨ oblique, isometric and planometric views ¨ use of appropriate scales
Techniques in sketching (paperbased and/or using electronic tablets or similar devices)	Applying electronic and/or manual sketching techniques: ¨ proportion ¨ line quality ¨ vanishing points ¨ line sketching using related orthographic views ¨ single- and two-point perspective ¨ oblique and isometric forms
Illustration techniques using manual and/or computer-aided formats	Using illustration techniques to create effective and informative graphic communications for representing: ¨ light ¨ shadow ¨ reflection ¨ tone ¨ layout ¨ material ¨ texture Visual enhancement techniques Creating scenes that place 3D models in relevant contexts.
Producing effective promotional documents	Applying and using: ¨ colour theory: — warm, cool, contrast, harmony, accent, advancing and receding ¨ design elements and principles: — line, shape, texture, value, mass/weight, alignment, balance, contrast, depth, dominance, emphasis, proportion, rhythm, unity/proximity, white space, grid structure Techniques used to create promotional documents and graphic displays. Presenting research/investigation and generating ideas for work to support/justify a graphic communication proposal.
Computer-aided design (CAD)	Applying generic techniques, customs and practices used across a range of 2D and 3D CAD packages: ¨ 2D-drawing tools: — line, circle, rectangle, ellipse, trim, array (linear, box and radial), offset, mirror, project edge, extend, fillet, chamfer ¨ modelling features: — extrude, revolve, loft, helix, extrude/sweep along a path ¨ modelling edits: — shell, fillet (regular/irregular), chamfer (regular/irregular), mirror, array (linear, box and radial), add, subtract, intersect ¨ 2D constraints: — linear, radius, diameter, perpendicular, parallel, fixed, tangent, concentric ¨ terminology: — component, assembly, subassembly, work-plane/plane, axis, feature, profile, sketch, face, edge, datum, suppress ¨ assembly: — 3D constraints (mate, align, centre axis, orientate, offset, tangent), stock/library components ¨ modelling concepts: — top-down modelling, bottom-up modelling, vertices, edges and faces, modelling tree/hierarchy, modelling plan ¨ file types: — dxf, 3ds, step/iges ¨ CAD libraries: — use and function of CAD libraries and stock models
Desktop Publishing (DTP)	Applying and using generic DTP terms and techniques including: ¨ planning strategies: — thumbnails, visuals and annotation ¨ generic DTP terms and techniques: — copy/paste, import/export — single- and multi-page format — page size, orientation, grid, guides, snap, master page layers, document sizing — cropping (square and full cropping), rotate, text box, handles, text wrap, flow text along a path, extended text — colour fill, colour picking, textured fills, gradient fill, transparency, drop shadow — serif, sans serif and script fonts, font styles, placeholder text (lorem ipsum), reverse, drop caps — column, margin, gutter, caption, header, running headline, heading, title, footer, folio, column rule/rule, indent, hanging indent, line spacing, pull quote, justification — proofs (pre-press), registration marks, crop marks, bleed ¨ file types: — raster (tiff, jpg, png, bmp), vector (svg, dxf) and their features
Safe working	The safe working practices and systems that support graphic communication activities in studios and other working environments.