Cirencester Kingshill School

BTEC First Extended Certificate in Art and Design (NQF)

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| Assignment title | | | | Final Major Project | | | | | | | | |
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| Assessor | | | | A Jelf | | IV | | C.Simkiss | | | | |
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| Date issued | | | Term 4 | | Final deadline | | Friday 17th December 2021 | | | | | |
| Week 1 Task Analysis and Design Movement research  Week 2 Design Movement research  Week 3 Design Movement research  Week 4 Design Movement research and Product Analysis  Week 5 Manufacturing Processes, Materials and Finishes  Week 6 Project Proposal – Research Summary and Specification  Week 7 Design Ideas  Week 8 Design Development  Week 9 Prototype modelling  Week 10 Exploded drawing and cutting list  Week 11 Manufacture Week  Week 12 Manufacture Week  Week 13 Manufacture Week  Week 14 Manufacture Week  Week 15 Manufacture Week  Week 16 Manufacture Week  Week 17 Manufacture Week  Week 18 Manufacture Week  Week 19 Testing and Evaluation  Week 20 Testing and Evaluation) | | | | | | | | | | | | |
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| Qualification suite covered | | BTEC Level 1/Level 2 First Award in Art and Design | | | | | | | | | | |
| Units covered | | A- Unit 16- Applying Contextual References in Art and Design  B- Unit 22- Designing Products | | | | | | | | | | |
| Learning aims covered | | A- Learning aim A: show how others’ ideas influence your own work.  Learning aim B: present research findings in an appropriate format.  B- Learning aim A: investigate product designs and identify user needs  Learning aim B: explore materials, techniques, processes, tools and  technology in response to product design briefs  Learning aim C: develop ideas in response to product design briefs  Learning aim D: produce and present an outcome in response to a  product design brief. | | | | | | | | | | |
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| Scenario | **Assignment outline: Final Major Project**  **Aims:** This is your opportunity to demonstrate the range of skills that you have learnt and developed to design and make a product from the research stages, through to design, development, modelling and manufacture.    **Introduction:** You are to choose between making a butchers block, a light, container or a showpiece product choice of your own that must be agreed first!. You are to research what your customer requires, investigating what materials to use and what construction methods would be most suitable for your product. You must include within your design and development references to a particular designer and their own design style like Ron Arad, Karim Rashid, Ettore Sottsass, Charles Rennie Mackintosh, and a design movement like Bauhaus or Art Nouveau / Biomorphic design.    *Choose 1 of these design briefs for your project:*  **Design Brief A:**  Design and make a butchers block an learn carpentry skills like marking and cutting different wood joints, routing, and use different hand and hand power tools.  Design Brief - As part of New Designers 2021 you have been asked to design and make a new butchers block that takes inspiration from a design style, for example Pop Art, Memphis, Art Deco, Art Nouveau / Biomorphic, Shaker, Arts and Crafts or the Bauhaus that would complement an area in your home. The design is to be developed from a standard shape considering your own specifications for where it would be used, who will use it and where in the home it would go.    **Design Brief B:**  Design and make a light and use some of the design work that you have completed this term taking inspiration from organic forms.  Design Brief – ‘As part of New Designers 2021 you have been asked to design and make a light. This can be a desk light, wall light, or light that is a design feature to a room giving atmospheric lighting. Take inspiration from a design style, for example Pop Art, Memphis, Art Deco, Art Nouveau / Biomorphic, Shaker, Arts and Crafts or the Bauhaus that would complement an area in your home.  **Design Brief C:**  Design and make a container. Don’t think of a box necessarily as containers can be something to store, hang on, display, better organise. Think wine rack, spice rack, coat rack, knife block, stationary block, keep safe, desk tidy. Design Brief - As part of New Designers 2021 you have been asked to design and make a container that takes inspiration from a design style, for example Pop Art, Memphis, Art Deco, Art Nouveau / Biomorphic, Shaker, Arts and Crafts or the Bauhaus that would complement an area in your home. Think carefully about how it will work, who will use it, where it will go, can it be for a hobby or sporting activity you enjoy – remember it cannot be too big!  **Design Brief D:**  Design and make a showpiece product of your own. If you have an amazing idea of your own for you or someone else then tell me about it. I can advise you as to whether it is suitable project idea considering the length of the unit, the materials and manufacturing processes in school and assessment criteria.  Design Brief – ‘As part of New Designers 2021 you have been asked to design and make a ??? that takes inspiration from a design style, for example Pop Art, Memphis, Art Deco, Art Nouveau / Biomorphic, Shaker, Arts and Crafts or the Bauhaus that would complement an area in your home. | | | | | | | | | | | |
| Week 1-4  Week 4  Week 5  Week 6  Week 7  Week 8  Week 9  Week 10  Week 11  Week 20  Suggested websites and reading | 1. **Task Analysis and Design Movement research** 2. On an A3 page, create a mind map of all the possibilities available to you in your final product using the heading given to you. 3. Complete a timeline for the key design movements over the past 100 years.   Investigate and analyse the influence on you work of different movements. (1A and 2A)  You need at least four examples of historical and contemporary movements to meet L2 pass criteria and a diverse range for above.  Step 1. Choose from this list   * Pop Art * Art Deco * Memphis * Art Nouveau and examine the links to Louise Parry. * Biomorphic / Biomimicry (Organics) * Bauhaus and examine the links to IKEA. * Shaker * Arts and Crafts * De Stijl * High Tech – Matt Black   Step 2. Think about your method of presenting your work (1B and 2B)   * Research page * PowerPoint presentation * Story board * Hand out poster * Booklet * Spoken and video recorded * Blogs   Step 3. Consider the following in your work investigating different historical and contemporary movements.  1. Introduction about the design movement  2. What were the dates?  3. Who was / is involved?  4. What are the design characteristics of the design style?  5. What do you like / don’t like about the design Style?  6. Give some examples of products in the style  7. Draw 3 different design concepts for your light / chair / storage unit in each design style. You need to think carefully about the characteristics of the style that you have researched and how you can include these in your own design ideas.  A-In part 2A.P1, 2A.M1, 2A.D1  A-2B.P2, 2B.M2, 2B.D2  **Product Analysis**   1. On 2 A3 pages carry out some product analysis on your chosen design brief. Collect 6 different images of the product you intend to make (4 you like and 2 you don’t) and analyse them using the headings given to you. Think about which design brief that you have chosen and Include examples of chairs by IKEA and use photographs of existing chairs / stools used in school or examples of storage units and jewellery by Louise Parry as well as your own jewellery.   A-In part 2A.P1, 2A.M1, 2A.D1  B- 2A.P1, 2A.M1, 2A.D1  **Materials, Finishes and Manufacturing methods**   1. Complete 1 A3 page of materials and finishes that can be used in the workshop. 2. Using the photos given to you, identify the manufacturing method used and explain how this technique is done. 3. Examine laminating, turning using the wood lathe/metal lathe, using the jigsaw and biscuit cutter safely through the demonstrations given. Explain the techniques shown and H&S precaution required. Incorporate each method into a design concept of your own.   B- In part-2A.P2, 2A.M2,2A.D2  **Client and project specific research**   1. Primary research – complete the questionnaire given to you, identifying your needs and wants from the product that you are going to design and make. 2. Secondary research - Make your ergonome and complete research on what anthropometrics and ergonomics is and how you are going to use it in your own work.   B- In part-2A.P2, 2A.M2,2A.D2  Extended work- Environment of use: Photograph where your product will be used. Measure how much space is available for the product and explain how it will compliment the environment through the colours and finishes used.  **Project Proposal – Research Summary and Specification**   1. Complete your project proposal form. 2. On an A3 page, create a Specification using the headings given to you. Write a list of things using your research findings to help you of what you must do to make your product successful.   B- In part-2A.P2, 2A.M2,2A.D2  **Design Ideas**   1. On 3 A3 pages, draw 6 different design ideas for the design brief that you have chosen. Draw in 3D, use some colour to help identify key areas and use a fine liner to go over your pencil lines. 2. Write analysis around each of your design ideas using the headings given to you. 3. Next to each design include a “Specification Check” table and evaluate each of your designs to your evaluation points. Include a total in your Spec Check tables and write what is needed to improve your design if it doesn’t score highly.   B-In part – 2C.P4, 2C.M4, 2C.D4  **Design Development**   1. On 2 A3 pages, take your best 2 designs and develop them 3-4 times of changing the shape, scale, proportions, combining the best features from other designs. Include within your design how you expect to make them with constructional details. Draw in 3D, use some colour to help identify key areas and use a fine liner to go over your pencil lines. Model your design in card as your draw it – using ergonome to get correct scale. 2. Write analysis around each of your design ideas using the headings given to you. 3. Next to each design include a “Specification Check” table and evaluate each of your design developments to your evaluation points. Under your Spec Check tables write what you have changed in your development to make them fulfil the specification better.   NOTE you need a scale model of your final best design to get the sizes and be able to write an accurate cutting list.  Using the cutting list template page given to you, complete it with details of all the materials and sizes you need to begin making your product.  B-In part – 2C.P4, 2C.M4, 2C.D4  **Prototype modelling- It’s time to prototype your best idea to get a better view of what it looks like in 3D**   1. Using card, wood, plastic create a scale model of your final design. 2. Photograph it and on an A3 page attach to photos and explain what you did and how it will help you in this project.   B-In part – 2C.P4, 2C.M4, 2C.D4  **Exploded drawing and cutting list**   1. On an A3 page draw a final exploded construction drawing of your chosen final idea. Your draw should be drawn in pencil and should show 3 detailed views of how your product will be made. Label the features of your drawing with explanations of some of the decisions that you have made about how to make your product.   B-In part – 2C.P4, 2C.M4, 2C.D4  **Manufacture Weeks 11-19**   1. When you have received your materials you will be able to begin manufacture   Diary writing. Record each stage with photos.  B-2B.P3, 2B.M3, 2B.D3  **Testing and Evaluation**   1. Finalise your photo diary using the photos that you have taken throughout manufacture. 2. Print off and mount your work. Ensure that you have analysed an explained all aspects of your work throughout. 3. On an A3 page put the title “Testing” page. Your testing page needs to include the following and you should look at the examples shown to you for ideas of how to present it. 4. You need 5 questions that you can ask a friend / relative what they think about what you have made. 5. You need to write about the problems you encountered and what changes you made. 6. You need to test the product that you have made to test stability, reliability and functionality. 7. You need some testing photos 8. On an A3 page put the title “Evaluation” page. Your evaluation page needs to include the following and you should look at the examples shown to you for ideas of how to present it. 9. You need to compare what you have made to your original specification and score how well it meets each of your points giving a reason both positive and negative if required. 10. You need to space where to write what people who have seen and used your product have said about it and what they think. 11. You need a personal evaluation where you write about the whole project, what went well and what didn’t go so well, what you changed and how you overcame problems encountered.   B-2D.P5, 2D.M5, 2D.D5  <http://www.ronarad.co.uk/>  <http://www.karimrashid.com/>  <http://designmuseum.org/design/ettore-sottsass>  <http://www.charlesrenniemac.co.uk/>  Designing the 21st Century, Charlotte & Peter Fiell , TASCHEN  DESIGN, 21st Century, Charlotte & Peter Fiell, TASCHEN  CHAIRS, Charlotte & Peter Fiell, TASCHEN | | | | | | | | | | | |
| Evidence you must produce for this task | A sketch book folder containing:   * 2D and 3D investigations to include: mood boards, research, product analysis, design sheets, annotated images of exploratory work, 3D practical work * research from a number of sources in sketchbooks, files, notes, annotated worksheets. | | | | | | | | | | | |
| Criteria covered by this task: | | | | | | | | | | | | |
| To achieve the criteria you must show that you are able to: | | | | | | | | | Unit | | Criterion reference | |
| Identify and annotate the influence on your work of at least four  examples of work from historical and contemporary movements. | | | | | | | | | 16 | | 2A.P1 | |
| Investigate the influence on your work of a diverse range of  historical and contemporary practice from different movements, recording findings and annotating sources. | | | | | | | | | 16 | | 2A.M1 | |
| Analyse the influence on your work of a diverse range of historical and contemporary practice from different movements, recording  findings and annotating sources. | | | | | | | | | 16 | | 2A.D1 | |
| Present information about research findings and studies of others’  work in an appropriate format, describing your working process. | | | | | | | | | 16 | | 2B.P2 | |
| Coherently present information about research findings and  studies of others’ work using a range of effective presentation techniques, reviewing your working process. | | | | | | | | | 16 | | 2B.M2 | |
| Imaginatively present information about research findings and  studies of others’ work, using a range of creative presentation techniques, analysing your working process. | | | | | | | | | 16 | | 2B.D2 | |
| If you have not achieved the Level 2 criteria, your work will be assessed to determine if the following Level 1 criteria have been met. | | | | | | | | | | | | |
| To achieve the criteria you must show that you are able to: | | | | | | | | | Unit | | Criterion reference | |
| Identify the influence of one historical and one contemporary art and design practitioner on your own work. | | | | | | | | | 16 | | 1A.1 | |
| Present information about studies of others’ work. | | | | | | | | | 16 | | 1B.2 | |
| Criteria covered by this task: | | | | | | | | | | | | |
| To achieve the criteria you must show that you are able to: | | | | | | | | | Unit | | Criterion reference | |
| Investigate and describe at least four examples of product designs. | | | | | | | | | 22 | | 2A.P1 | |
| Select, investigate and review a diverse range of product designs. | | | | | | | | | 22 | | 2A.M1 | |
| Select, investigate and analyse a diverse range of product designs. | | | | | | | | | 22 | | 2A.D1 | |
| Describe potential consumer needs for a product design. | | | | | | | | | 22 | | 2A.P2 | |
| Explain potential consumer needs for a product design. | | | | | | | | | 22 | | 2A.M2 | |
| Analyse potential consumers needs for a product design. | | | | | | | | | 22 | | 2A.D2 | |
| Select and use materials, techniques, processes, tools and technology to produce work that meets the requirements of  product design briefs. | | | | | | | | | 22 | | 2B.P3 | |
| Select and combine a diverse range of materials, techniques,  processes, tools and technology to produce work that effectively  meets the requirements of product design briefs. | | | | | | | | | 22 | | 2B.M3 | |
| Select and imaginatively combine a diverse range of materials, techniques, processes, tools and technology to produce  work that creatively meets the requirements of product design briefs. | | | | | | | | | 22 | | 2B.D3 | |
| Develop ideas that meet the requirements of product design briefs. | | | | | | | | | 22 | | 2C.P4 | |
| Develop a diverse range of ideas that effectively meet the requirements of product design briefs. | | | | | | | | | 22 | | 2C.M4 | |
| Develop a diverse range of creative ideas that imaginatively meet the requirements of product design briefs. | | | | | | | | | 22 | | 2C.D4 | |
| Produce and present an outcome that meets the requirements of a product design brief, describing your working process. | | | | | | | | | 22 | | 2D.P5 | |
| Produce and present an outcome that effectively meets the requirements of a product design brief, reviewing your working  process. | | | | | | | | | 22 | | 2D.M5 | |
| Produce and present an imaginative outcome that meets the  requirements of a product design brief, analysing your working  process. | | | | | | | | | 22 | | 2D.D5 | |
| If you have not achieved the Level 2 criteria, your work will be assessed to determine if the following Level 1 criteria have been met. | | | | | | | | | | | | |
| To achieve the criteria you must show that you are able to: | | | | | | | | | | Unit | | Criterion reference |
| Identify at least two examples of product designs. | | | | | | | | | | 22 | | 1A.1 |
| Identify potential consumer needs for a product design. | | | | | | | | | | 22 | | 1A.2 |
| Explore materials, techniques, processes, tools and technology in  response to product design briefs. | | | | | | | | | | 22 | | 1B.3 |
| Develop an idea in response to product design briefs. | | | | | | | | | | 22 | | 1C.4 |
| Produce and present an outcome in response to a product design brief. | | | | | | | | | | 22 | | 1D.5 |