

ASSIGNMENT SPECIFICATION

Student name:		Student P number:	
Programme:	MDes[Hons] BA[Hons] Product Design MDes[Hons] BSc[Hons] Product Design & Technology	Faculty/School:	FAD/SD&AA
Module:	Materials & Manufacturing	Module Level (4, 5, 6, 7):	4
Module code:	ADDA4001	Contribution to Overall Module Assessment (%):	A1: 50% A2: 50%
Lecturer:	I Williams M Bellis M Archer	Internal Verifier:	SDJ
Assignment Title:	A1: Material and manufacture research A2: Component analysis	Assignment No (x of x):	2/2 of 2

Hand Out Date:	A1: 25.09.17 A2: 27.02.18	Submission Date:	A1: 08.01.18 A2: 04.05.18	Feedback Date:	A1: 22.01.17 A2: 29.05.18
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Referencing:	Written coursework submissions: In the main body of your submission you must give credit to authors on whose research your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have read or quoted in order to complete this assignment (e.g. for books: surname of author and initials, year of publication, title of book, edition, publisher: place of publication). Harvard or APA referencing systems is accepted. Practical coursework submissions: You must give credit to designers or artists whose work you have used to inspire your own. Where specific designs or images have been used in your development work you must indicate the name of the 'author' and details of the source of the work (e.g. book, journal, website etc.).			
Disclosure:	I declare that this assignment is all my own work and that I have acknowledged all materials used from the published or unpublished works of other people. All references have been duly cited.			
Student's Signature:	Assignments will not be accepted without a signature here and date >		Date of submission:	
Turnitin: Lecturer to tick to indicate if an electronic version of the assignment must be submitted to Turnitin. If both electronic and hard copy submissions are required then both versions MUST be submitted by the same deadline. No marks will be released until both submissions are received. Note: the Turnitin version is the primary submission and acts as a proof of receipt for the student. A paper receipt must be completed for hard copy submissions, including portfolios and other design work.			YES	✓
			NO	

**Penalties for late submission: Up to ONE week late, maximum mark of 40% for first attempt.
Work cannot be accepted after ONE week and will be recorded as a non-submission, 0%.**

- The Assignment Specification Form **MUST** be at the front of all assignment submission. Assignments will not be accepted without this form, as it is a requirement that you sign the disclosure regarding referencing conventions.
- DO NOT** include this form in your Turnitin submission or it will match many similarities with other students' submissions.

This form must be signed and submitted with your assignment

ASSIGNMENT DESCRIPTION

Learning Outcomes

Module Learning Outcomes being Assessed:

1. Demonstrate a basic knowledge and understanding of material properties and their selection, application, advantages and limitations;
2. Demonstrate a basic knowledge and understanding of manufacturing processes and their selection, application, advantages and limitations;
3. Effectively integrate this knowledge within a design project.

Task

Lectures will introduce students to fundamental manufacturing processes and material selection and understanding. Demonstrations, product break downs and 'how to' exercises will be used to develop practical skills to enable students to implement their knowledge, understanding and skills.

Assignment 2 (A2) Component Analysis– 50%

You are to analyse a given component in regard to its materials and manufacturing specification, identifying the design features that have necessitated the choice of production and recommend new alternative solutions. This data will be presented in an illustrated report evidencing your research outcomes and conclusions

Please choose one component from below as part of the assignment:

1. Aluminium Bicycle Frame



2. Wooden Skateboard Deck



3. Polymer Kettle handle



4. Metal Computer casing



5. Wooden Guitar neck



Assessment Criteria:

The assignment outcome will be assessed in relation to the specified deliverables as follows:

- LO1, 2 & 3 using the common assessment & marking criteria 1,2,4: Written assignment (1500 words)
(All criteria are weighted equally).

Submission: 5.00pm A1 - 08.01.18; A2- 04.05.18

Feedback: During the week beginning: A1 - 22.01.17; A2 – 22.05.18

BIBLIOGRAPHY**Essential**

Thompson, R. & Kim, YY. (2011) Product and Furniture Design (The Manufacturing Guides). Thames & Hudson.

Thompson, R. (2011) Prototyping and Low-volume Production (The Manufacturing Guides). Thames & Hudson.

Thompson, R. & Thompson, M. (2011) Sustainable Materials, Processes and Production (The Manufacturing Guides). Thames & Hudson.

Recommended

Lefteri, C. (2011) Making It: Manufacturing Techniques for Product Design (2nd edition). Laurence King Publishing Ltd.

Thompson, R. (2007) Manufacturing Processes for Design Professionals. Thames & Hudson.

Callister, W. (2002) Materials and Design: The Art and Science of Materials Selection in Product Design. Butterworth-Heinemann.

Background

Hudson, J. (2011) Process: 50 Product Designs from Concept to Manufacture. (2nd edition). Laurence King Publishing Ltd.

Bramston, D. (2009) Basics Product Design 02: Material Thoughts. AVA Publishing.