Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Swansea College *of* Art
Founded 1853

ASSIGNMENT SPECIFICATION

Student name:		**Student P number:**	
Programme:	**MDes[Hons]|BA [Hons] Transport Design**	**Faculty/School:**	**FAD/SD&AA**
Module:	**Advanced 3D CAD**	**Module Level (4, 5, 6, 7):**	**5**
Module code:	**M5X01237**	**Contribution to Overall Module Assessment (%):**	**AC1: 50** **AC2: 50**
Lecturer:	**P Morrow**	**Internal Verifier:**	**S Fontanarosa**
Assignment Title:	**AC1: RP Ready – Wheel Design.** **AC2: Vehicle Concept.**	**Assignment No (x of x):**	**AC1: 1 of 2** **AC2: 2 of 2**

Hand Out Date:	**AC1: 23.01.18** **AC2: 27.02.18**	**Submission Date:**	**AC1: 27.02.18** **AC2: 08.05.18**	**Feedback Date:**	**AC1: 26.03.18** **AC2: 01.06.18**

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I declare that this assignment is all my own work and that I have acknowledged all materials used from the published or unpublished works of other people.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.	**YES**	
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.**	**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 <u>MUST</u> 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.**
- **<u>DO NOT</u> 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. Use advanced 3D solid modelling tools to create realistic design solutions within a structured modelling workflow;
2. Use advanced 3D surface modelling tools to create realistic design solutions within a structured modelling workflow;
3. Understand CNC and Rapid Prototyping data protocols;

Task

Note: This module runs through the year. Semester one will be based on lectures and tutorials only. The Assignments will start in Semester two and will be supported by tutorials.

Task 1 - Produce a wheel and tyre design using surface & solid modelling software respecting the protocols for 3D printing.

Assignment 1 (AC1) – 50% - RP Ready Wheel
Create a whole wheel using Fusion 360, to produce a Solid model and a copy of the same design as a surface model in Alias.

Academic Deliverables: File of your rendered Alias wheel in VRED, Final Wheel and tyre file in Alias and JPEG Screenshot of your Stitched wireframe. Plus Final Wheel and tyre file in Fusion 360 and Jpeg Screenshot of your design

Assessment Criteria:
The Wheel Design will be assessed in relation to the specified deliverables as follows:
- LO1 & L02 using the common assessment & marking criteria 3, 5.
- L03 using the common assessment & marking criteria 3, 4.
  (All criteria are weighted equally).

Submission: 12:30 - 27.02.18
Feedback: During the week Beginning 26.03.18

Task 2 - Produce a quality 3D model and visualisation of one of your design proposals for the either Professional Practice or Group Design Practice module.

Assignment 2 (AC2) – 50% - Vehicle Concept
Import views of your design and build a 3D model in Alias – use your own wheel design and position mannequins in the seating positions.

Academic Deliverables: VRED File of your rendered concept & Final Wireframe file in Alias.

Assessment Criteria:
The Vehicle Concept will be assessed in relation to the specified deliverables as follows:
- LO2 using the common assessment & marking criteria 3, 4, 5.
  (All criteria are weighted equally).

Submission: 12:30 - 08.05.18
Feedback: Feedback: By 01.06.18