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

MARKING CRITERIA AND STUDENT FEEDBACK

MODULE: Race Engineering	**ASSIGNMENT**: Aerodynamic Vehicle Testing and analysis (F3 Car)
STUDENT: Oliver Beck	**DATE: 25/4/19**

This section details the assessment criteria. The extent to which these are demonstrated by you determines your mark. The marks available for each criterion are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Common Assessment Criteria Applied	Marks available	Marks awarded	Percent Awarded
1. Research-informed Literature Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions. (e.g. Research of testing procedures, vehicle specifics, aerodynamic principles, testing methods etc)			%
60-69%: Inclusion of a wide range of research-informed literature, including sources retrieved independently. Selection of relevant and credible sources. Very good use of referencing conventions, consistently applied. *You have conducted some good background reading, but you could have referenced a wider range of literature to support your knowledge of aerodynamics and vehicle handling* *You have only conducted minimal research into testing techniques* *Some good sources cited, but a wider range could have been reviewed including more journal articles / papers. An attempt to embed citations from these throughout, but more of your statements and conclusions could have been supported by citations.*	10	6	60
2. Knowledge and Understanding of Subject Extent of knowledge and understanding of concepts and underlying principles associated with the discipline. (e.g. Choice of tests and explanation of underlying principles)			
50-59%: Knowledge is accurate with a good understanding of the field of study. *You show a good level on understanding of aerodynamics fundamentals and how these may effect vehicle performance in general.* *You have not presented the theory of the techniques, equations of methods employed.* *You did not run the MCR car model - you ran the F3 car model - this demonstrates you haven't fully appreciated the brief. You do however demonstrate a very good understanding of aerodynamic funadementals.Good justification of Pembrey for circuit choice. Calculations such as drag from coast down and understeer should have been outlined and explained.*	20	11	55
3. Analysis Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence (e.g. Analysis of data, findings and use of MATH channels)			
50-59%: Evidence of some logical, analytical thinking and synthesis. Can analyse new and/or abstract data and situations without guidance. An emerging awareness of different stances and the ability to use evidence to support the argument. Valid conclusions and recommendations where relevant. *Some basic analysis of the data obtained, but you could have looked in more detail at secondary interactions between variables* *Fundamental math channels present and correct. These could be explained in further detail* *Some trends in results not discussed critically - linearity in places not in others - why? Aerodynamic drag results do not appear to be correct based on trends obtained - these should have been commented on to show you appreciate the results appear to be erroneous. You haven't produced all the graphs requested by the assignment (speed v aero, lat accel v speed). Limited analysis of vehicle handling balance conducted.*	40	23	58
4. Practical Application and Deployment Deployment of methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problems. (e.g. Test Plan, Use of Motec I2, conclusions drawn from analysis)			
50-59%: A good and appropriate application of standard methods, materials, tools and/or techniques. Good appreciation of the context of the application, with some use of examples, where relevant. *Basic test plan evident, but could be more detailed. Math channels illegible - they are too small so can't be verified.* *Results presented well with a good use of the MOTEC analysis software evident*	20	11	55
5. Skills for Professional Practice Attributes in professional practice: individual and collaborative working; deployment of appropriate media; presentation and organisation. (e.g. Technical report writing and presentation.)			
50-59%: Can communicate effectively in a suitable format, but may have minor errors. Can work effectively as part of a team, with clear contribution to group activities. Mostly coherent work and is in a suitable structure. *A good account of the work conducted. Structure shows some room for improvement to portray your ideas in a more succinct manner.* *Technical report guidelines only generally followed. You need to refer to the guidelines and make sure you present accordingly in future.* *Graphs presented without axes labels and units. Equations should be presented as equations not text strings. Figures should be captioned and labelled below,. Tables should be numbered and captioned.*	10	5.25	53

Assignment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	**Late Submission Penalties (tick if appropriate)**			
	Up to one-week late		**56**	%
	Over one week late			