**18DSB201 - Experimental Design Research**

**Assessment:**

By Coursework – 100%

* Coursework to be given out on week 8;
* **To be submitted via Turnitin (on LEARN) by 4:00 pm Friday week 12;**
* To be returned by end of week 16;

**Aim of the assessment:**

For the student to produce an original 1000-word report on a micro-project of choice. The format of the report will be a Microsoft Word document.

**Objectives of the coursework:**

1. To elaborate a meaningful academic or industrial research question within a design context and with applications in the area of thermosensation
2. To design a micro-project aimed at answering that question
3. To collect data on a representative sample of choice
4. To analyse collected data
5. To explore and present complex meaningful patterns and trends in data relevant to the research question chosen (this includes graphs)
6. To summarize and report research findings effectively and fluently

**Structure of the report:**

The report will include the following sections and will cover the following information:

Introduction and background (~100 words) – topics to cover are:

*What is the question? Why is it relevant? How are you going to answer it?*

Methods (~300 words) – topics to cover are:

*How are you going to answer the research question? What are the characteristics of your sample and why? Are you going to use independent or paired groups? What are you going to measure and why? How are you going to measure and compare your data (e.g. using a 95% confidence interval of the mean difference)?*

Results (~300 words) – topics to cover are:

*Summarise the data collected in numerical form as appropriate (i.e. calculate and present means, standard deviation, standard error, 95% confidence intervals of the mean and of the mean difference);*

*Produce graphs of the data/results that are of interest to your question (USE EXCEL/ESCI and copy and paste graphs);*

Discussion (~300 words) – topics to cover are:

*Discuss your results: what do they tell you about your research question? What is the most important finding? What are the limitations of your observation (e.g. sample size; can we generalise the findings to the population; do we need better measures of the parameter investigated)? How could you improve the current project to have a better answer to the initial question? What have we learnt from this project and what would be the next step to follow up on the initial research question?*

**Marking guidance – How to succeed!**

Please read the Marking Guidance file!

Read and refer to the table in the file to have an idea about what I will be looking for and what will constitute an Excellent, Very Good, Good, Fair, Passable, Weak, Very Weak Report.