

## **Description**

This unit was the introductory unit of the Research Methods and Professional Practice module. The goals of this unit were to be able to answer the following 6 questions; What is the purpose of research? What are the differences between deductive and inductive reasoning? What is the scientific method? What are research ethics? What are AI ethics? What topic are you going to choose for the literature review?

For this unit of the module, we were required to read chapter 2 in the book 'Projects in Computing and Information Systems: A Student's Guide' (Dawson, 2015), the AI Robotics Ethics Society's article on Worldwide AI Ethics (Correa et al, 2023), the article by Megan Finn and Katie Shilton critiquing the Menlo report (Finn & Shilton, 2023), the SSRN electronic journal article on Principled Artificial Intelligence (Fjeld et al, 2020), the article from the British Computer Society on AI Ethics (Deckard, 2023), the Code of Conduct for BCS Members (BCS, 2021), the blog post by Daniel Miessler on the differences between deductive and inductive reasoning (Miessler, 2018), the case studies on ethics from ACM (ACM, 2018) and the blog post by Dan Fleetwood on what research actually is (Question Pro, 2021).

There were three formative activities for this unit. The first formative activity was a 1000-word reflective activity on how the different countries all over the world mitigate the social, legal and ethical issues related to generative AI. The second formative activity was a collaborative discussion on the codes of ethics from ACM (ACM 2018) and BCS (BCS, 2021). We had to write an initial 200-word post on the relevant legal and social issues for one of the case studies from ACM (ACM, 2018). The third formative activity was a multiple-choice quiz on examples of inductive and deductive reasoning.

There was a seminar for this unit of the module where Dr Outram introduced us to the module and went through the work, we would be expected to complete by the end of unit two.

## **Feelings**

I was confused as to why the recording of the first lecture was placed in the collaborative discussion section instead of the modules announcements section as has been the case with all my previous modules. Normally this wouldn't be much of an issue as I have attended the majority of the lectures to this point in my studies, however I missed the lecture for this unit as my phone didn't go off so I had to rewatch the recording of the lecture. Due to it not being where I expected it took me a couple days to see it.

I didn't receive the lecture slides in advance of this lecture as stated in my reasonable adjustment plan. While this is understandable to an extent as the lecture took place one day after I was enrolled on the course, I hope this won't be a regular occurrence as has been the case with most modules as receiving the lecture slides early allows me to attend lectures being more prepared. I did receive an email from the Dr Outram notifying me that she is aware of my reasonable adjustment plan which is something I had never received before which seems to suggest my reasonable adjustment plan will be followed in this module which would be a refreshing change of pace since most lectures tend to just ignore it.

While the introductory lecture was certainly a lot more detailed than previous modules it did raise a couple of potential concerns for me firstly it seemed like Dr Outram was just reading off the slides and the slides were very wordy whilst this is not a major issue I would have expected Dr Outram to add some of her own insights as I fear if this continues the attendance in the lectures will continue to fall as they may view them as pointless if the lecturer is just going to read off the slides as they can do that in their own time. Additionally, there were some minor grammatical errors on one of the slides again whilst this may not be a big issue it could suggest the course may have been rushed when put together. Another key takeaway from the lecture was the Dr Outram is a relatively slow talker which may take some getting used to.

When I was reading through the learning platform, I noticed some more issues where the images on the learning platform pointed to a broken link and the year on some of the references wasn't correct. This is not something I would have expected from postgraduate studies as I would have expected the learning platform would have been regularly reviewed to prevent this issue. I am not sure whether this would have been done by IT, Dr Outram or a research assistant but it is a huge oversight not to review the course content before students enrol in the module. I noticed a lot of mistakes in a previous module where the learning platform was out of date or contained duplicate entries and it caused a great deal of confusion to both me and the other students so I hope this does not happen again in this module.

I was rather disappointed by the fact the questions from the reasoning quiz were copied verbatim off the internet as this could be a rather worrying sign of little effort on the lecture's behalf. I experienced this a lot during my undergraduate degree where it seemed like the lecturers didn't want to teach as they were primarily researchers and during lectures would just read off the slides. I would hope this isn't the case for a postgraduate degree.

I felt as if the amount of work we were expected to do in this module was excessive as there was a significant amount of required reading in addition to the 1000-word reflective activity, the collaborative discussion and the multiple-choice quiz. This seems like a lot to do in a week for part time students who typically have to balance their studies with other commitments.

## **Evaluation**

The aspects of the unit that I feel went well were; all module objectives were achieved, my ability to read and understand technical documents improved as a result of the significant amount of required reading and research I had to do in this unit of the module.

I found the introductory lecture to be very informative which is more than I could say for previous modules where the introductory lecture would typically be around 30 minutes. Due to the length of this lecture Dr Outram was able to go into a lot more detail.

The main area where I could have improved during this unit of the module was with my time management as during the first week of the module, I was still working on the portfolio assignment from the previous module so didn't have as much time to work on the formative activities this week as I would have liked and as I missed the first lecture I had to spend time rewatching the lecture that could have been spent working on the formative activities.

The only other negatives I really had for this unit of the module were I would have liked to have received the lecture slides early even if it was only a day early as it would have allowed me to be more prepared for the module and the reading required for this unit of the module felt tedious after a while due to the sheer amount of reading I did during this unit of the module.

## **Analysis**

As someone who would struggle to determine social and ethical considerations due to my mental deficiencies this unit provided me with an opportunity for significant personal growth as by understanding relevant legal, ethical and social issues I can make better decisions.

As I am planning on applying for PHD's I believe this unit will be extremely beneficial as for part of the application process you have to write research proposals. Additionally, I believe this unit will prepare me for the dissertation as it will require a significant amount of research.

## **Conclusion**

Over the course of the unit, I learnt a lot about research, ethics, the scientific method and the different types of reasoning as I had never previously done any modules on research so there was a lot of stuff to learn. As I am planning on doing a PHD and am actively thinking about working in research knowing as much about research and ethics as possible is key.

For my choice of topic for the literature review, I was unable to choose between the machine learning tools or techniques used in predicting sports results and the AI-based assistive technology for the disabled as both these topics are of particular interest to me as I watch a lot of sports and I am disabled. My plan is to research both topics before deciding which one to do the literature review on.

## **Action plan**

If I was to redo this unit of the module, I would have made sure not to miss the lecture and I would have managed my time better in the previous module and planned for being ill so I wouldn't need to manage the workload of two modules for the first week as due to this I fell behind in this module.

## **References**

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