**BL1013 – Biosciences in Practice**

**Case study assignment 25/03/2021**

**Case study hand-in 22/04/2021**

**Description – Essay: The interdisciplinary nature of bioscience**

You are requested to write a 1500-word report, where you should explore multiple aspects of bioscience, relating it to specific areas of knowledge.

You are presented with a challenge related to biosciences and are given 5 potential professions/expertises that are involved in finding a solution. Out of these 5, you will have to choose 3, and address the following questions to each one of the chosen professionals/expert.

1. The main focus (background) of that profession and why it is important on the given problem;

2. The potential approach the professional can take in that situation. Please include an example;

3. Techniques that may be used and why;

4. What are the conclusions/answers/support/help/service the professional/expert can provide in this situation? Please contextualise it with the previous items.

We suggest you to use approximately 400-450 words per profession/expertise, sharing them approximately equally between the requested questions. You would have approximately 150-300 words remaining for the final conclusion.

**Case 1 (Dr David Wareing): Coughs an sneezes - spread diseases!**

The Royal Preston Hospital has been inundated with cases of acute respiratory infection. The pathogen causing the infection is not known but appears to be spreading rapidly in the community. The government and the World Health Authority are on high alert and anxiously await the finding of the local outbreak control team. Biomedical scientist at the hospital diagnostic lab and a research team at UCLan are working around the clock to determine the cause and develop a plan to control the spread of infection.

This project will require a multidisciplinary team with expertise in the following areas:

* Microbiology
* Immunology
* Epidemiology
* Infection control
* Vaccine development

Out of the suggested team, please, select 3 (three) of the professions/expertises, and answer the following 4 (four) questions for each one of them.

1. The main focus (background) of that profession and why it is important on the given problem;

2. The potential approach the professional can take in that situation. Please include an example;

3. Techniques that may be used and why;

4. What are the conclusions/answers/support/help/service the professional/expert can provide in this situation? Please contextualise it with the previous items.