#### **ELEN3007: Probabilistic Systems Analysis**

#### **Assignment 1**

Write a reading response on the following paper:

Linda J. S. Allen, Sophia R. Jang & Lih-Ing Roeger (2017) Predicting population extinction or disease outbreaks with stochastic models, Letters in Biomathematics, 4:1, 1-22, DOI: 10.1080/23737867.2016.1264870

You are welcome to write a reading response on any paper that you find interesting however, the paper should have an application to stochastic processes.

I have included a guide on how to write a reading response.

# Reading responses

A reading response is a short paper written as a response to a journal article or book chapter. The writer of the reading response expresses his/her thoughts, ideas, questions and particular points of interest which arise from the journal article/ book chapter. A reading response provides an opportunity for students to make their thinking-in-process- in relation to new concepts, ideas and issues- visible to themselves. In other words, a reaction paper encourages engagement with the readings. It is a way of recording students' responses, interests, difficulties- a way of 'forming meaning and attaining understanding'.

What the reading response is **not** is simply a summary of the main ideas of the reading (although it can contain a brief summary of the main ideas as a starting point).

## Guidelines for reading responses

Note that these are *guidelines*, not rules. Students do not have to follow this format or sequence, or address every single question. However, they should aim to a) grasp the basics of the text, b) reflect on the issues, concepts, the author's position, and so on, c) offer examples to illustrate ideas or concepts, and d) integrate the reading across texts and lecturers.

Students should present the reading response in paragraph form. Drawing a diagram or mindmap may be a useful starting point for clarifying ideas and the relationships between them.

## Grasping the basics of the text

- 1. What issues are explored in the reading?
- 2. What questions/ dilemmas do you think the author of the paper is trying to address?
- 3. What position is the author arguing for or against?
- 4. Summarise the author's argument in a few sentences.
- 5. What are some of the key concepts introduced in the paper? Explain them briefly.

- 6. How does the author link the concepts together to make his/ her claims?
- 7. What issues and concepts are new to you, and how do they connect with issues and concepts you have already explored?
- 8. If you have read more than one reading, what are the links between the readings? (For example, look for similarities and differences; are they discussing different issues?).
- 9. How do these ideas link to themes and issues we are exploring in the course as a whole?

# Thinking about the author's argument, the issues and their implications for learning and teaching

- 10. Which concepts/ arguments do you find particularly interesting or illuminating? Why?
- 11. Are there any ideas you disagree with? Why?
- 12. If you could speak to the author of this paper, what would you tell them or ask in order to prompt deeper reflection on these issues (for you or the author).
- 13. Has the reading provoked new questions, dilemmas or uncertainties?