PRESENTATION OF EDUCATIONAL LEADERSHIP CANDIDATE

Total time is up to 2 hours, including a 15-minute break.

You will give a presentation attended by UBC Statistics faculty and possibly several UBC students. There are three components to your presentation: teaching strategy, teaching practice, and your vision for education in statistics and data science.

TEACHING STRATEGY [about 30 minutes]

You will consider teaching the following topic in the following course.

Topic: sampling distribution of the sample mean

Course level: The course is taken by second-year students from a range of programs within the Faculty of Science. This is their first statistics course. All students would have had first-year calculus, but the retention is highly variable, and math skills are not uniformly strong across students.

You will describe to us how you would teach the material. Please include the following:

- Prerequisite knowledge. Clarify the prerequisite knowledge that you expect the students to know before they engage with the topic.
- Learning outcomes. Describe some learning outcomes you would want your students to be able to attain on the topic by the end of the course.
- Difficulties students might have learning the topic. What difficulties would you expect students to have when they engage with this topic?
- Student engagement and learning. Describe how you would engage the students with the topic. How would you assist them in attaining your learning outcomes? Your discussion can involve activities both in and out of scheduled class time.
- Technology. What, if any, learning technologies can assist in the learning of the topic?
- Assessment. How would you assess students' attainment of your learning outcomes for this topic? Describe examples of both formative and summative assessment you may use.

Please allow time for questions.

TEACHING PRACTICE [about 30 minutes]

This is a simulated in-class learning experience where the people in the room will pretend to be students in the course. You will carry this out at a pace that you would use in the course with "real" students.

Choose one component from your ideas for student engagement and learning from your Teaching Strategy for the concept "sampling distribution of the sample mean". Tell us which component you have chosen, remind us of how it fits in with what students have already done, and then implement it with us.

You may find the following information helpful:

- Equipment available in the room: overhead projector, whiteboards
- Photo of room (attached)
- Size of the "class": 25–30 made up of faculty and a small number of selected students

Please allow time for "students to be students".

VISION [about 20 minutes]

How do the current changes in Data Science and/or Statistics education inform your vision of high-quality education and degree programs (minor and/or major) in these areas?

Please allow time for questions.