SOIL 500

Graduate Seminar

TERMS 1 & 2

Instructor: Dr. Sandra Brown, office – 229 MCML
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Seminars: Friday 15:00 – 16:00 room 154, MCML Building

COURSE DESCRIPTION

Weekly seminar series on current and emerging topics in soil science including soil chemistry, below ground ecology, biometeorology, land-water interactions, soil physics, agriculture and eco-system services, and land-use impacts on soil quality. 3 credits.

COURSE FORMAT

Weekly seminars by students, faculty and guest speakers. Seminars are open to the public, and advertised within the faculty and across campus.

Students enrolled in SOIL 500 are required to complete 2 seminars over the course of their degree (not necessarily in the same academic year), to regularly participate in the weekly seminars, and to prepare written critiques of 2 seminars per year. Students introduce guest speakers (and student seminars) each week and run the question period.

Student seminars are based on their research results, typically 1 seminar mid-way through their program (preliminary results) and 1 seminar near the end of their thesis research (final results). Alternatively, the 1st seminar could be on student's experience prior to enrolling into the graduate program, assuming that the experience in question is related to soil science.

Seminars are 45 minutes followed by 15 minutes for questions, and are geared toward a "general" science audience. Seminar sign-up and scheduling will be coordinated with the instructor via UBC's Course Management System.

The graduate seminar is an important component of graduate training and SOIL500 is a required course by the Soil Science Graduate Program. All graduate students in Soil Science Graduate Program are expected to regularly attend SOIL 500 seminars since this provides them with opportunities to become informed about a variety of topics in soil science, many of which are not addressed in other course work.

COURSE LEARNING OBJECTIVES

The objectives of this graduate seminar course are:

1) to provide students with a broad overview of research in Soil Science at UBC and within the region; and
2) to provide students with strong science communication skills.

Preparing, presenting, and attending seminars will help students to develop a range of skills such as:

- Researching, critically analyzing and summarizing scholarly literature
- Presenting research methods, analyses and research data and interpretations to a diverse audience
- Communicating findings and views clearly and concisely
- Learning how to respond to audience questions
- Constructively evaluating their own presentation as well as presentation of others
- Asking relevant, thoughtful questions

The skills students gain from participating in the SOIL 500 semianrs will be valuable to their future interactions with their colleagues and peers in formal settings.

COURSE REQUIREMENTS

For each degree (M.Sc. and Ph.D.) requirements for completion are:

- a minimum of two 40 to 45 minute seminars, followed by 10 to 15 minutes for questions
- regular seminar attendance and participation (minimum 80%)
- chairing a minimum of 2 seminar sessions
- weekly meetings with the seminar instructor and other students registered in the course to discuss and evaluate presentation / communication style(s)
- 2 written critques of seminars per year
- participation in dry runs prior to class with other students is strongly encouraged.

COURSE EVALAUTION

Grading: Pass/Fail, based on completion of all the course requirements (seminar presentations, critiques and attendance).

Following each seminar presentation, students enrolled in SOIL 500 meet with the course instructor to provide feedback on the presentation. Student presentors are asked to reflect on their own presentations, considering what worked, what did not work, what improvements could be made, and whether his/her goals were met. Each student is required to prepare a written critique (500 words) of two seminars per year in which they are registered, the critique is based on the students evaluation of the seminar as outlined in the “Structure and Delivery” in the syllabus. This critique is assessed by the Instructor and discussed with the registered students.

Guidance for Presentations

Content:

1. Content was presented in a clear and concise manner.
2. Purpose or objective for presentation was clearly articulated.
3. Explains theory and potentially complex material clearly (e.g., no jargon or jargon is explained).
4. There was sufficient detail for an out-of-field observer to follow the presentation.
5. Purpose or objective stated was achieved.

Structure:

1. The presentation started in a manner that captured the audience's interest and was relevant to the body of the presentation.
2. The points were presented in a logical manner.
3. The presentation closed in a manner that linked to the purpose (e.g., summary of main points, suggestions for future research/directions, thought-provoking comments/questions where do we go from here?).
4. The presentation was of an appropriate length (kept within allotted time).

Delivery:

1. The student's presentation kept the audience interested and engaged.
2. Audio-visual aides were used in a manner that supported the presentation.
3. Speech: projected well (everyone could hear), presenter did not speak too quickly.
4. Presenter was well organized.
5. Handled questions well (paraphrased back to the questioner if required, demonstrated critical thinking if answer is not immediately obvious, clearly separates knowledge from speculation, shows confidence in ability to answer questions).