



UNIVERSITY OF CALGARY
FACULTY OF SCIENCE

COURSE OUTLINE

1. Course: SCIE 603 – STEM Teaching Development

WINTER 2018

Course coordinators:	Dr. I. Barrette-Ng	BI 430A	403-220-6240	mibarret@ucalgary.ca
	Dr. Y. Carpenter	EEEL 237B	403-220-6908	yyscarpe@ucalgary.ca
Instructors:	Dr. I. Barrette-Ng	BI 430A	403-220-6240	mibarret@ucalgary.ca
	Dr. Y. Carpenter	EEEL 237B	403-220-6908	yyscarpe@ucalgary.ca
	Dr. Sean Stotyn	SA 101C	403-210-7594	sean.stotyn@ucalgary.ca
	Dr. Michael Wieser	SB 131	403-220-3641	mwieser@ucalgary.ca

D2L Site – SCIE 603 L01 - (Winter 2018) – STEM Teaching Development

USC Specialized Programs Office EEEL 426 (403)220-8600 sciemail@ucalgary.ca

2. Prerequisites: SCIE 603 and consent of the Program Director.

3. Grading: The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. This is a PASS/FAIL course. In determining whether or not a student has successfully passed the course, the following criteria will be used:

Lesson plan	15%
Teaching self-reflection	25%
Peer observation and self-reflection	25%
Poster	35%

Regular attendance and a passing grade is required in each component of the course for credit.

4. Missed Components of Term Work: The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in [Section 3.6](#). It is the student's responsibility to familiarize himself/herself with these regulations. See also [Section E.6](#) of the University Calendar.

5. Scheduled out-of-class activities: There are no scheduled out-of-class activities.

6. Required course readings: Any required course readings will be made available through D2L either as a downloadable file or as a link accessible via the university Library.

7. Examination Policy: There are no examinations scheduled in this course.

8. Writing across the curriculum statement: In this course, the quality of the student's writing in assigned work will be a factor in the evaluation of that work. See also [Section E.2](#) of the University Calendar.

9. Human studies statement: If you agree, your course work may be used for research purposes. Your responses will remain anonymous and confidential. Grouped data (no individual responses) may be used in academic presentations and publications. Participation in such research is voluntary and will not influence grades in this course. Students' signed consent forms will be withheld from instructors until after final grades are submitted. More information will be provided at the time student participation is requested. See also [Section E.5](#) of the University Calendar.

10. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties.
- (b) **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- (c) **Student Accommodations:** Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available at http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf. Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Program Director, Dr. W. Benoit by email wbenoit@ucalgary.ca.
- (d) **Safewalk:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call **403-220-5333** for assistance. Use any campus phone, emergency phone or the yellow phones located at the entrance to most parking lots.
- (e) **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **Student Union Information:** VP Academic Phone: 403 220-3911 Email: suvpaca@ucalgary.ca
SU Faculty Rep. Phone: 403-220-3913 Email: science1@su.ucalgary.ca, science2@su.ucalgary.ca, science3@su.ucalgary.ca
Student Ombuds Office: 403-220-6420 Email: ombuds@ucalgary.ca; <http://ucalgary.ca/provost/students/ombuds>
- (g) **Internet and Electronic Communication Device Information:** You can assume that in all classes that you attend, ***your cell phone should be turned off*** unless instructed otherwise. Moreover, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.

UNIVERSITY OF CALGARY
SCIE 603 – STEM Teaching Development
COURSE SYLLABUS WINTER 2018

OVERVIEW OF THE COURSE:

In this course, you will be asked to select an undergraduate course in your discipline and work with a faculty mentor to redesign, teach and assess one unit in that course. A “unit” is defined as the equivalent of three 50-minute lectures, or one 3-hour laboratory session or tutorial. Through your practicum, you will explore course and curriculum design elements by producing a detailed lesson plan, and a strategy for assessment and evaluation of the success of teaching the unit. You will be asked to critically reflect on your experience in this course by submitting reflective essays and participating in group discussions. Final experiences will be shared through a symposium poster presentation.

COURSE OUTCOMES:

After completing this course, you should be able to:

1. Produce a detailed lesson plan informed by current educational approaches for a course in your discipline, with clearly articulated learning outcomes and learning activities that are aligned with the learning outcomes.
2. Articulate a SoTL question that you could pursue related to your teaching unit.
3. Provide constructive peer feedback on teaching and learning practices, both in written and oral formats.
4. Incorporate constructive peer feedback on teaching and learning practices, both in written and oral formats.
5. Prepare and present a poster that describes your practicum and the experiences you gained by completing it.

COURSE COMPONENTS:

A. LESSON PLAN and TEACHING EXPERIENCE

The primary course component is a 1-unit teaching practicum in a course of your choice (three 50-minute lectures, or one 3-hour laboratory session or tutorial). In consultation with your faculty mentor, the instructor of record for that course, you will use what you learned in SCIE 601 about lesson planning to create a complete lesson plan for your teaching practicum. This plan, due 2 weeks prior to your practicum dates, will include:

- A complete list of learning goals, learning activities aligned with the learning goals, and a timeline for your teaching practicum.
- An outline of *formative* assessments used during your teaching practicum.
- A proposed *summative assessment item* that could be used to evaluate the level of student mastery of your learning goal(s). This assessment task will be annotated with notes on what you expect mastery to look like.
- A prompt for observer feedback, to solicit targeted feedback from peer and instructors observing your practicum
- A draft SoTL question that you could pursue related to your lesson(s). Describe what you might be interested in investigating about these students during this experience. How might you propose to assess your teaching during your practicum?

B. TEACHING SELF-REFLECTION

Following the completion of your in-class teaching session(s), you will organize and facilitate a debriefing meeting with the observers in your classroom, including a member of the SAGES team, your host/mentor instructor, and one of your peers in the SAGES cohort. Based on their observations and your own reflections, you will write a reflection on your teaching experience, the observations that led you to your perceptions, and the impact of this experience on your teaching practice.

C. PEER OBSERVATION and SELF-REFLECTION

You will sit-in as an observer in one of your peers teaching sessions, and write a reflection on observations and experiences you had as an observer and how these impacted your own teaching practice and philosophy.

D. POSTER

At the SAGES celebration of teaching and learning in June, you will present a digital poster describing the unit you redesigned, taught and assessed. Your poster will highlight both the practical and scholarly results of your practicum experience, including:

- What course did you teach, and what learning outcomes were you targeting?
- Who were your students (i.e., majors, non-majors, year, etc.)?
- What question were you seeking to answer?
- What did you discover?
- What type of data did you collect?

Associate Dean's Approval for alternate
final exam arrangements:

Approved by the Associate Dean (N. Chibry)

Date: _____
February 23, 2018