

COURSE TITLE: STEM Teaching Development	
Course Number (*)	SCIE 8001
Pre/Co-Requisites (*)	Admission to a Master's or PhD program in the Faculty of Science and consent of the instructor.

Welcome to SCIE 8001 in the SAGES Program!

We are excited to work with you! This semester, you will be asked to complete a practicum, where you will work in a teaching partnership with a faculty mentor in your field of study, providing you with an authentic opportunity to foster your evidence-based teaching practice. Within this partnership, you and your faculty mentor will develop and teach a course or course component together, valuing one another's experience. You will be coached and supported as you work with your mentor to develop, implement and assess a new component of an undergraduate course normally taught by your mentor. At the end of the practicum, you will prepare and present a poster at the annual SAGES Program Celebration of Teaching and Learning in Spring 2022.

SCIE 8001 Teaching Team	
Course coordinator and instructor	Isabelle Barrette-Ng, PhD Isabelle.barrette-ng@uwindsor.ca
Instructors' office hours and office locations	Please refer to Blackboard site for details.

OVERVIEW OF THE COURSE
In this course, you will be asked to select an undergraduate or graduate 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.

LEARNING RESOURCES
There are no required textbooks for this course.
All required readings will be made available through the learning management system for this course (Blackboard).

Technology Requirements:

- **Blackboard:** We will use the same shell in blackboard as for SCIE 8000. A laptop, desktop, or mobile device is required for Blackboard access.

COURSE LEARNING OUTCOMES

At the end of this course, you will 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. describe how assessment tasks can support and improve student learning;
3. reflect on the design and application of a lesson plan to formulate strategies for improvement;
4. articulate a SoTL question that you could pursue related to your teaching unit;
5. incorporate constructive feedback on teaching and learning practices, both in written and oral formats; and
6. prepare and present a poster that describes your practicum and the experiences you gained by completing it.

METHOD OF INSTRUCTION

Since this is a practicum, we will not be meeting regularly as a group during the semester. However, the course coordinator will be in touch regularly with you over the course of the semester to provide help and feedback. Please feel free to reach out to the course coordinator and your faculty mentor at any point for guidance, questions and feedback.

ASSESSMENT COMPONENTS

In determining your overall grade in the course, the following weights will be used:

Component	Description/dates	Weight	Aligned Course Learning Outcome
Lesson plan, and teaching and learning materials	<p>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).</p> <p>In consultation with your faculty mentor, the instructor of record for that course, you will use what you learned in SCIE 8000 about lesson planning to create a complete lesson plan for your teaching practicum. This plan, due 2 weeks after your last practicum date, will include:</p>	40%	1, 2, 3, 4

	<ul style="list-style-type: none"> • 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; and • 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? <p>The teaching and learning materials consist of all materials you prepare and use during your practicum (i.e., PPT slides, handouts, problem sets, podcasts, etc.).</p>		
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 your host/mentor instructor and Dr. Barrette-Ng. 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 practicum. This is due 3 weeks after your debrief session. Further details on format and length are available from our Blackboard site.	25%	3, 5
Poster	<p>At the SAGES Celebration of Teaching and Learning in Spring 2022, 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:</p> <ul style="list-style-type: none"> • 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? 	35%	1, 2, 3, 4, 5, 6

ASSESSMENT AND EVALUATION INFORMATION**CALCULATION OF YOUR FINAL GRADE AND CONVERSION TO LETTER GRADE:**

The calculation of final grades will follow Senate Bylaw 55, 1.1.1, 1.2, 1.1.6, and the Senate Policy on Grading and Calculation of Averages.

HUMAN STUDIES:

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.

MISSED COMPONENTS OF TERM WORK:

In the event that you must miss any course work due to illness, the Faculty of Science policies that are consistent with bylaw 55, 1.1.1, and 1.11 will be followed. Alternate evaluations will be of the same format and difficulty as the original course component.

INTERNET AND ELECTRONIC COMMUNICATION DEVICE INFORMATION

The use of laptop and mobile devices is acceptable when used in a manner appropriate to the course and classroom activities. Please refrain from accessing websites that may be distracting for fellow learners (e.g., personal emails, Facebook, YouTube).

UNIVERSITY OF WINDSOR POLICIES AND SUPPORTS**FINANCIAL DROP DATE**

The full tuition refund drop date is [could not find this date online].

ACADEMIC ACCOMMODATION

Students with disabilities who require academic accommodations in this course must contact an Advisor in Student Disability Services (SDS) to complete SDS Registration and receive the necessary Letters of Accommodation. After registering with Student Disability Services, you must present your Letter of Accommodation and discuss your needs with me as early in the term as possible. Please note that deadlines for the submission of documentation and completed forms to Student Disability Services are available on their website: /disability.

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. Plagiarism is defined in the Student Code of Conduct as:

“the act of copying, reproducing or paraphrasing significant portions of one’s own work, or someone else’s published or unpublished material (from any source, including the internet), without proper acknowledgment, representing these as new or as one’s own. Plagiarism applies to all intellectual endeavours: creation and presentation of music, drawings, designs, dance, photography and other artistic and technical works. (Students have the responsibility to learn and use the conventions of documentation as accepted in their area of study and instructors have the responsibility of informing students in writing of any significant individual interpretations of plagiarism).”

INSTRUCTOR INTELLECTUAL PROPERTY

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Please identify yourself on all written work by placing your name on the front page and your ID number on each subsequent page. For more information, see Legal Services website.

MENTAL HEALTH

Feeling overwhelmed?

From time to time, students face obstacles that can affect academic performance. If you experience difficulties and need help, it is important to reach out to someone.

For help addressing mental or physical health concerns on campus, contact (519) 253-3000:

- Student Health Services at ext. 7002 (<http://www.uwindsor.ca/studenthealthservices/>)
- Student Counselling Centre at ext. 4616 (<http://www.uwindsor.ca/studentcounselling/>)
- Peer Support Centre at ext. 4551

24-hour support is available

My Student Support Program (MySSP) is an immediate and fully confidential 24/7 mental health support that can be accessed for free through chat, online, and telephone. This service is available to all University of Windsor students and offered in over 30 languages. Call: 1-844-451-9700, visit <https://keepmesafe.myissp.com/> or download the My SSP app: Apple App Store/Google Play.

A full list of on- and off-campus resources is available at <http://www.uwindsor.ca/wellness>.

Should you need to request alternative accommodation contact your instructor, head or associate dean.

SURVEYS

At the University of Windsor, feedback through the Student Evaluation of Teaching (SET) forms provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys. It will be administered within the last two weeks of the course.