



School of Education

EDST6957
Chemistry/Biology Method 2

Term 2 2020

Contents

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1. LOCATION

Faculty of Arts and Social Sciences
School of Education
EDST6957 Chemistry/Biology Method 2 (6 units of credit)
Term 2 2020

2. STAFF CONTACT DETAILS

Course Coordinator: Oriana Miano
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Availability: By appointment
Tutor: Jennifer Ming
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Availability: By appointment

3. COURSE DETAILS

Course Name	Chemistry/Biology Method 2
Credit Points	6 units of credit (uoc)
Workload	Includes 150 hours including class contact hours, readings, class preparation, assessment, follow up activities, etc.
Schedule	http://classutil.unsw.edu.au/EDST_T2.html

SUMMARY OF THE COURSE

This course is designed to develop in Initial Teacher Education students the appropriate pedagogies for teaching the Stage 6 *Chemistry syllabus*, as well as offering an insight into the nature and practice of Chemistry. Initial Teacher Education students will develop skills in planning, teaching and assessing, contextualising Chemistry, managing practical work in science classrooms and integrating ICT resources into lessons. Important issues such as student prior learning, student differences and safety are also considered. Students will critically evaluate the features of effective classroom practice. The course focuses on the requirements and philosophy of the NSW Science syllabuses, with emphasis on *Stage 6 Chemistry Syllabus*.

THE MAIN WAYS IN WHICH THE COURSE HAS CHANGED AS A RESULT OF STUDENT FEEDBACK

- ◁ The hurdle requirement is now held as a component of Week 7, rather than earlier in the course. This change allows students more time to complete and submit the online assessment course and common e-portfolio. NB: The same portfolio covers both methods for which the student is enrolled.

6.3.1	Seek and apply constructive feedback from supervisors and teachers to improve teaching practices.
7.1.1	Understand and apply the key principles described in codes of ethics and conduct for the teaching profession

NATIONAL PRIORITY AREA ELABORATIONS

Priority area	
A. Aboriginal and Torres Strait Islander Education	5, 8
B. Classroom Management	
C. Information and Communication Technologies	4, 5, 8, 12
D. Literacy and Numeracy	1, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
E. Students with Special Educational Needs	6, 7
F. Teaching Students from Non-English Speaking Backgrounds	2, 6, 9

4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH

Lectures, tutorials and assignments will cover a variety of approaches to teaching, learning and assessing in the Chemistry/Biology classroom. Emphasis will be placed on the relationship between the nature and practice of Science, the role and value of science in society and science pedagogy. A particular focus will be on strategies that can promote student engagement and achievement with Chemistry and Biology.

Student-centred activities will form the basis of the course. These activities will draw on the prior discipline knowledge of the students and will allow them to engage in relevant and challenging experiences that mirror those they will be expected to design for the range of secondary students they will later teach.

5. TEACHING STRATEGIES

- < approaches to learning and the use of a range of teaching strategies to foster interest and support learning
- < Small group cooperative learning to understand the importance of teamwork in an educational context and to demonstrate the use of group structures as appropriate to address teaching and learning goals
- < Structured occasions for reflection on learning to allow students to reflect critically on and improve teaching practice
- < Extensive opportunities for whole group and small group dialogue and discussion, allowing students the opportunity to demonstrate their capacity to communicate and liaise with the diverse members of an education community, and to demonstrate their knowledge and understanding of method content.
- < Online learning from readings on the Moodle website and online discussions
- < In tutorials, students will be expected to work in small groups to develop diverse products such as narratives, contexts, sections of units of work, lesson plans, teaching resources, and assessment tasks. Each group will be expected to upload and share their work in progress to Moodle. This work will be monitored by the tutors. Students who are absent on the day, but who still wish to submit their tutorial work can email it to their tutor the next day only. A debriefing session will be conducted 15 minutes prior to the end of each tutorial.

These activities will occur in a classroom climate that is supportive and inclusive of all learners.

Assessment Details

Assessment 1 (2000 wd eq, 40%)

PART 1: Create a scope and sequence, including learning outcomes, covering 10 weeks for a Year 12 HSC class.

PART 2: Prepare an assessment task (not just an essay) that directly links to the teaching and

occur and how the feedback from the summative task can also be used for formative assessment. Make sure your instructions for the task are grammatically correct and communicate effectively for students.

Design a marking rubric, which also includes space for a holistic comment.

Provide an exemplar student answer for the assessment task. Write a feedback comment for this response outlining its strengths and indicating one aspect which could be further improved.

Assessment 2 (3000 wd eq, 60%)

Prepare a unit of work for Year 12 which covers approximately half the term. You need to ensure the unit demonstrates you are ready to plan and teach Stage 6 effectively. Make sure you have reflected on the feedback you received for the scope and sequence you prepared for Assessment 1.

The unit of work should indicate a variety of formative assessment strategies which will provide students with feedback about:

- a. what they can already do well
- b. what they still need to improve
- c. how they can effectively close the gap between a and b.

Include all activities and resources to support student learning. There must be at least one literacy activity/resource and one numeracy/ICT resource.

HURDLE REQUIREMENT FEEDBACK AND REPORTING

Assessment is the process of gathering evidence from a variety of sources about learning outcomes and being able to use that information to improve learning and teaching. Evidence includes not only individual student work samples and test results, but also more global data derived from standardized tests (eg NSPLAN, ICAS, HSC etc) as well as more qualitative information generated from student self and peer evaluations, and student-parent conferences.

Feedback is a structured interaction with the student about their current learning: where they are, where they want and /or need to be and how to get there. It may be in oral or written form and may be given

< provide written feedback for the student which indicates strengths and areas for improvement

UNSW SCHOOL OF EDUCATION

Assessment, Feedback and Reporting

STUDENT TEACHER

Name: _____ zID: _____ Date: _____

Details

Method

Topic/level

AITSL Standard 5 Assess, provide feedback and report on student learning

Comments

A. Demonstrate understanding of assessment strategies, including informal and formal, diagnostic, formative and summative approaches to assess student learning (5.1.1)

- < Has the purpose of the assessment task been described appropriately?
- < Has the task been annotated appropriately to indicate what changes in layout, language or requirement could be improved?
- < Does the marking rubric/style provide diagnostic information for the student?

B. Demonstrate an understanding of the purpose of providing timely and appropriate feedback to students about their learning (5.2.1)

- < Does the feedback allow the assessment to be used for formative purposes?
- < Is feedback expressed in appropriate language for the age/stage of the students?
- < Does the feedback