School of Education

EDST6955
Chemistry Method 2

Term 2 2021

Contents

IMPORTANT:
For student policies and procedures relating to assessment, attendance and student support, please see website, https://education.arts.unsw.edu.au/students/courses/course-outlines/

The School of Education acknowledges the Bedegal people as the traditional custodians of the lands upon which we learn and teach.

1. LOCATION

Faculty of Arts, Design & Architecture
School of Education
EDST6955 Chemistry Method 2 (6 units of credit)
Term 2 2021

2. STAFF CONTACT DETAILS

Course Coordinator:	Oriana Miano
Email:	o.miano@unsw.edu.au
Availability:	By appointment
Tutor:	Jennifer Ming
Email:	j.ming@unsw.edu.au
Availability:	By appointment

3. COURSE DETAILS

Course Name	Chemistry 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#EDST6955T2C

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 6, 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.

STUDENT LEARNING OUTCOMES

Outcome	
1	Identify essential elements of the NESA Chemistry Syllabus, and strategies to support students as they transition between stages
2	Use strong knowledge of subject content to plan and evaluate coherent, goal-oriented and challenging lessons, lesson sequences and teaching programs which will engage all students
3	Set achievable learning outcomes to match content, teaching strategies, resources and different types of assessment for a unit of work in Chemistry
4	Provide clear directions to organise and support prepared activities and use resources
5	Assess and report on student learning in Chemistry to all key stakeholders
6	Identify the characteristics of an effective Chemistry teacher and the standards of professional practice in teaching, especially the attributes of Graduate teachers

AUSTRALIAN PROFESSIONAL STANDARDS FOR TEACHERS

Standard	
1.1.1	Demonstrate knowledge and understanding of physical, social and intellectual

6.3.1	Seek and apply constructive feedback from supervisors and teachers to improve teaching practices.
7.1.1	

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 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.

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

- Explicit teaching, including lectures, to foster an understanding of students' different 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

6. COURSE CONTENT AND STRUCTURE

Module	Lecture	Tutorial
1 (24 hours eq. lecture/ / tutorial time)	On-line assessment module x Introduction to the concept and principles of effective assessment practices and their applications to learning and teaching x Focus is on building assessment knowledge and the skills required to plan, develop and implement a range of assessment strategies, to engage in moderation activities to ensure fair and consistent judgment of student learning, to analyse assessment data to inform future learning and teaching, and to develop reports for various stakeholders.	x Critically describe the role of assessment in ensuring effective learning and teaching x evaluate the appropriateness of various assessment strategies in ensuring effective learning and teaching x apply assessment knowledge and skills in developing effective learning, teaching and assessment plans. Content of this module will be assessed during 1 (o)-12.3 (f.2

7. RESOURCES

Required Readings
Each student is required to obtain from the NESA website the following documents: NSW Stage 6 Chemistry Syllabus and Stage 6 Support Materials https://syllabus.nesa.nsw.edu.au/Chemistry-stage6/ .

It is not necessary to purchase Chemistry textbooks for this course. Textbooks will not usually be used during tutorials.

Optional Senior Textbook
Smith, D, Disney, A & Davis A (2018

8. ASSESSMENT

Assessment Task	Length	Weight	Student Learning Outcomes Assessed	Program Learning Outcomes Assessed	National Priority Area Elaborations Assessed	Due Date
Assessment 1 Scope and sequence and one assessment task: HSC	aTm 05					

- provide written feedback for the student which indicates strengths and areas for improvement in relation to this work sample as well as their past performance and overall expectations/standards. Suggest a strategy that will guide the student in his/her learning. (If

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FEEDBACK SHEET
EDST6955 CHEMISTRY METHOD 2

Student Name: Student No.:
Assessment Task 1: Scope and s equence for a year with an assessment task (HSC)

SPECIFIC CRITERIA	(-) ——— h (+)				
Understanding of the question or issue and the key concepts involved x Understands the task and its relationship to relevant areas of theory, research and practice x Uses syllabus documents and terminology clearly and accurately x Sequences tasks and activities to suit logical learning progression x Integrates assessment task logically with learning intentions and learning sequence x Provides effective formative feedback for student sample					
Depth of analysis in response to the task x Includes key syllabus content to allow demonstration of appropriate selection of outcomes for HSC x Demonstrates					

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FEEDBACK SHEET
EDST6955 CHEMISTRY METHOD 2

Student Name: Student No.:
Assessment Task 2: Planning a unit of work including formative assessment strategies

SPECIFIC CRITERIA	(-) ——————— h (+)

Understanding of the question or issue and the key concepts involved

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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) x Has the purpose of the assessment task been described appropriately? x Has the task been annotated appropriately to indicate what changes in layout, language or requirement could be improved? x 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) x Does the feedback allow the assessment to be used for formative purposes? x Is feedback expressed in appropriate language for the age/stage of the students? x Does the feedback -acknowledge the student's areas of strength? -identify areas where the student needs to do more work? -indicate strategies to help the student improve?	
C. Demonstrate understanding of assessment moderation and its application to support consistent and comparable judgements of student learning (5.3.1) x Is the difference between ranking and moderation understood? x Does the student recognise the importance of following marking guides/rubrics? x Can the student listen professionally to the opinions of others? x Does the student express his/her point of view respectfully, and provide appropriate evidence to support his viewpoint?	
D. Demonstrate the capacity to interpret student assessment data to evaluate student learning and modify teaching practice (5.4.1) x Has the student analysed and evaluated the schools' global assessment data? x Has the student collected a range of the students' past performance data? x Is the student able to interpret that data accurately to make generalizations about the specific work samples they have collected? x Is the student able to triangulate different forms of student assessment data so that they can propose appropriate modifications to learning and teaching?	
E. Demonstrate understanding of a range of strategies for reporting to students and parents/caregivers and the purpose of keeping accurate and reliable records of student achievement (5.5.1) x Are feedback and reporting understood as separate tasks? x Do the report comments provide succinct and helpful written information to pinpoint where the student is at in his/her learning? x	