



School of Education

EDST6957
Chemistry/Biology Method 2

Term 2, 2019

STUDENT LEARNING OUTCOMES

Outcome	
1	Identify essential elements of the NSW <i>Chemistry Stage 6</i> Syllabus and NSW <i>Biology Stage 6</i> 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 or Biology
4	Provide clear directions to organise and support prepared activities and use resources
5	Assess and report on student learning in Chemistry and Biology to all key stakeholders
6	Identify the characteristics of an effective Chemistry and Biology teacher and the standards of professional practice in teaching, especially the attributes of Graduate teachers

AITSL PROFESSIONAL GRADUATE TEACHING STANDARDS

Standard	
1.1.1	Demonstrate knowledge and understanding of physical, social and intellectual development and characteristics of students and how these may affect learning
1.2.1	Demonstrate knowledge and understanding of research into how students learn and the implications for teaching
1.3.1	Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistics, cultural, religious and socioeconomic backgrounds
1.5.1	Demonstrate knowledge and understanding of strategies for differentiating teaching to meet the specific learning needs of students across the full range of abilities
2.1.1	Demonstrate knowledge and understanding of the concepts, substance and structure of the content and teaching strategies of the teaching area
2.2.1	Organise content into an effective learning and teaching sequence
2.3.1	Use curriculum, assessment and reporting knowledge to design learning sequences and lesson plans
2.5.1	Know and understand literacy and numeracy teaching strategies and their application in teaching areas
2.6.1	

6.3.1 Seek and apply constructive feedback from supervisors and d-165(8(db)d)-17n03Aea62nd c

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6. COURSE CONTENT AND STRUCTURE

Module	Lecture	Tutorial
1 (24 hours eq. lecture/ tutorial time)	<p>On-line assessment module</p> <ul style="list-style-type: none"> Introduction to the concept and principles of effective assessment practices and their applications to learning and teaching 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. 	<ul style="list-style-type: none"> Critically describe the role of assessment in ensuring effective learning and teaching; evaluate the appropriateness of various assessment strategies in ensuring effective learning and teaching apply assessment knowledge and skills in developing effective learning, teaching and assessment plans. Content of this module will be assessed during the Hurdle Requirement in Module 7
2	<ul style="list-style-type: none"> The <i>Chemistry and Biology Stage 6 Syllabuses</i> (Year 12) Outcomes for Skills, Knowledge and Understanding Building on Stage 6 Preliminary 	<ul style="list-style-type: none"> Planning across Preliminary and HSC courses: continuity and logical skill development How students demonstrate understanding of knowledge and skills
3	<ul style="list-style-type: none"> Using templates to develop an effective scope and sequence and unit of work Importance of backward mapping 	<ul style="list-style-type: none"> Analysing and evaluating sequenced lesson plans for continuity of learning Grouping outcomes to enhance learning
4	<ul style="list-style-type: none"> Teaching the maths and numeracy skills for success in Chemistry and Biology Descriptions of band standards in Chemistry and Biology 	<ul style="list-style-type: none"> Designing flipped lessons to support the mathematics for Chemistry and Biology Analysis of student samples of work to plan future lessons
5	<ul style="list-style-type: none"> Inquiry Learning: Student Research Projects and Depth Studies for Chemistry and Biology Organising field-work for Stage 6 Chemistry and Biology 	<ul style="list-style-type: none"> Marking projects, depth studies and assessment tasks for Stage 6
6	<ul style="list-style-type: none"> Preparing students for HSC Science examinations Unpacking, modelling and workshop Physics specific questions 	<ul style="list-style-type: none"> Developing resources to address Chemistry and Biology specific exam techniques
7	<ul style="list-style-type: none"> What makes an effective Chemistry and Biology teacher? Goals for PE2 Planning for the unexpected Where to next? Job readiness, accreditation, school expectations Analysing school expectations using advertisements Professional associations 	<p>Hurdle Requirement as class activity</p> <ul style="list-style-type: none"> Assessment and learning. Self and peer assessment. Moderation. Feedback. Reporting to parents and other key stakeholders. <p>Goals for PE2</p> <p>Completing on-line course evaluation</p>

Assessment Details

Assessment 1 (2 000 wd eq, 40%)

PART 1: Create a scope and sequence, including learning outcomes, covering 10 weeks for a Year 11 preliminary 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 (3 000 wd eq, 60%)

Prepare a unit of work for Year 12 which covers approximately half the term. You need to ensure the

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.

where this student work is in relation to those overall expectations/standards as well in relation to their previous performance
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 the task was used summatively you can still use it for formative purposes.)
indicate what the implications of your evaluation might be for the teacher in terms of future teaching.

2. Write a few lines that could be included in a mid-year report comment to parents. Provide commenting on. Add A, B, C, D or E to align with the advice and work samples provided by BOSTES and ACARA.

UNSW SCHOOL OF EDUCATION
 FEEDBACK SHEET
 EDST6957 CHEMISTRY/BIOLOGY METHOD 2

Student Name:

Student No.:

Assessment Task 1: Scope and Sequence with Assessment Task for one term (preliminary)

SPECIFIC CRITERIA	(-) (+)				
Understanding of the question or issue and the key concepts involved <ul style="list-style-type: none"> • Understands the task and its relationship to relevant areas of theory, research and practice • Uses syllabus documents and terminology clearly and accurately • Sequences tasks and activities to suit logical learning progression • Integrates assessment task logically with learning intentions and learning sequence • Provides effective formative feedback for student sample 					
Depth of analysis in response to the task <ul style="list-style-type: none"> • Includes key syllabus content to allow demonstration of appropriate selection of outcomes for Preliminary • Demonstrates understanding of the NSW Quality Teaching framework, the School Excellence Framework and NESA Assessment Guidelines 					
Familiarity with and relevance of professional and/or research literature used to support response <ul style="list-style-type: none"> • Demonstrates understanding of the need to differentiate lessons to cater for diverse learners including Aboriginal and Torres Strait Islander and EAL/D students • Understands effective assessment practices 					
Structure and organisation or response <ul style="list-style-type: none"> • Organises and structures scope and sequence according to NESA guidelines and requirements • Follows NESA assessment guidelines 					
Presentation of response according to appropriate academic and linguistic conventions <ul style="list-style-type: none"> • 					

