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**IMPORTANT:** 

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

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

1.

Outcome

1

Identify foundational aspects and structure of the NSW Chemistry/Biology Stage 6 Syllabus

Assessment/s

- 3.4.1 Demonstrate knowledge of a range of resources including ICT that engage students 1, 2, 3 in their learning.
- 3.5 .1 Demonstrate a range of verbal and non-

4.

## 6. COURSE CONTENT AND STRUCTURE

Module	Lecture	Tutorial			
1	Introduction to course structure and requirements Developing contexts: (1) the value of Biology; (2) making Chemistry/Biology relevant in the broader school curriculum; and (3) incorporating the nature of scientific thinking, problem-solving techniques, planning, conducting and communicating results of investigations What makes a good lesson?	<ul> <li>Place of Chemistry/Biology across the continuum of learning in Science K-12</li> <li>Addressing stereotypes in relation to studying Biology</li> <li>Research on how students learn</li> <li>Chemistry/Biology</li> <li>Developing a teacher network and resource bank</li> <li>Note- the focus of content in lectures, tutorials and assessment in Term is the Year 11 course (Modules 1-4).</li> </ul>			
2	How Stage 6 students learn Chemistry/Biology Deconstructing the Stage 6 Chemistry/Biology Syllabus: structure, requirements and associated documents	Using curriculum documents and syllabi Eliciting prior knowledge. Selecting and sequencing content. Long & short- term planning. Planning for student-centred learning Strategies for teaching Chemistry/Biology in Stage 6			
3	Planning for the mixed ability Stage 6 classroom, including selection of appropriate digital resources, and differentiation Demonstration of microteaching for Stage 6	Developing a repertoire of teaching strategies for Biology teaching; catering for diverse learners Teaching strategies to respond to individual needs and backgrounds Importance of matching teaching strategies to individual needs			
4	Addressing the Working Scientifically Skills in Stage 6 to encourage scientific thinking and problem-solving Incorporation of literacy, digital				

		Microteaching
7	Planning Units of Work: using the Stage 6 Chemistry/Biology Syllabus Using NESA support materials	Content selection and scope of content for effective lesson sequences for the Year 11 Chemistry/Biology course Microteaching
	Week 8	Method Break

Depth Studies: individual versus collaborative projects; presenting

9 (Online, F2F, Asynchronous)

### 7. RESOURCES

Each student is required to obtain from the NESA website the following documents: Stage 6 Chemistry/Biology Syllabus and the Support Materials. <u>https://syllabus.nesa.nsw.edu.au/Chemistry/-stage6/</u> and <u>https://syllabus.nesa.nsw.edu.au/biology-stage6/</u>

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

#### The Flipped Classroom,

http://www.teacherstandards.aitsl.edu.au/Illustrations/ViewIOP/IOP00173/index.html

**TPACK** (created by Dr. Matthew Koehler and Dr. Punya Mishra <u>http://www.tpack.org/</u>), Technological Pedagogical Content Knowledge (TPACK) is a framework that identifies the knowledge teachers need to teach effectively with technology.

**S A M R** (created by Dr. Ruben R. Puentedura); provides a framework to answer the question of what types of technology use

#### **Recommended websites**

NESA http://syllabus.nesa.nsw.edu.au/science/

Science Teachers Association of NSW <u>http://www.stansw.asn.au</u>

## 8. ASSESSMENT

Assessment Task	Length	Weight	Student Learning Outcomes Assessed	Australian Professional Standards Assessed	National Priority Area Elaborationsg
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**Assessment Details** 

UNSW SCHOOL OF EDUCATION FEEDBACK SHEET EDST6927 CHEMISTRY/BIOLOGY METHOD 1

#### UNSW SCHOOL OF EDUCATION FEEDBACK SHEET EDST6927 CHEMISTRY/BIOLOGY METHOD 1

Student No.:

### Assessment Task 2: Unit of work, Year 11 Chemistry/Biology

SPECIFIC CRITERIA	(-)		► (+)
Understanding of the question or issue and the key concepts involved			
understanding of the task, including both a rationale and a unit of work			

#### Depth of analysis and/or critique in response to the task

ability to plan and assess for effective learning by designing lesson sequences using knowledge of the NSW syllabus documents or other curriculum requirements of the Education Act, including a rational that includes:

- a brief outline of the school and class context
- a statement of what students should learn students learn and why it is important
- a description and justification of choice of context
- justification of teaching strategies by referring to readings, research and material presented in lectures and the Quality Teaching framework
- demonstration of

Student Name: