

# Unit Outline (Higher Education)

<b>Institute / School:</b>	Institute of Innovation, Science & Sustainability
<b>Unit Title:</b>	Advanced Scientific Communication
<b>Unit ID:</b>	SCCOR2200
<b>Credit Points:</b>	15.00
<b>Prerequisite(s):</b>	(At least 60 credit points from ANY subject-area at 1000-1999 level)
<b>Co-requisite(s):</b>	Nil
<b>Exclusion(s):</b>	(SCCOR1200)
<b>ASCED:</b>	019999

## Description of the Unit:

Advanced Scientific Communication provides students with high quality skills in science communication. Students will learn to identify and evaluate sources of scientific information, create scientific databases and present scientific information effectively in oral and written formats. Students will be linked to an active research group, where they will explore the fundamental role of effective communication in science. Students will undertake a mix of directed tasks and project activities, working individually and in small groups, so will develop skills in time management and an understanding of the attributes required for effective teamwork. As students will be working within a research group, unit coordinators approval is required by all students prior to enrolment to ensure a suitable placement is available.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

## Work Experience:

No work experience: Student is not undertaking work experience in industry.

**Placement Component:** No

**Supplementary Assessment:** Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment

**Course Level:**

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Introductory	■	■	■	■	■	■
Intermediate	■	■	✓	■	■	■
Advanced	■	■	■	■	■	■

### Learning Outcomes:

#### Knowledge:

- K1.** Recognise the grammatical conventions used in scientific and technical reports.
- K2.** Identify the need for appropriate attribution of the work of others
- K3.** Recognise that scientific knowledge is both contestable and testable by further inquiry

#### Skills:

- S1.** Locate relevant, credible sources of scientific information; cite and reference these sources appropriately
- S2.** Design and deliver formal and informal scientific communications suitable to different audiences
- S3.** Operate with a significant degree of independence, whilst working collaboratively with peers

#### Application of knowledge and skills:

- A1.** Use scientific literature to locate key information
- A2.** Communicate scientific concepts effectively in traditional written and oral formats as well as in innovative ways
- A3.** Apply effective time management skills to meet project deadlines

#### Unit Content:

Advanced Scientific Communication explores the fundamental role that effective communication has in science, with a key focus on students developing quality communication skills. Students gain experience in identifying and evaluating sources of scientific information; creating scientific databases; citing and referencing; effective writing; delivering oral presentations; time management; working in groups and working independently. Students will undertake a communication project task, individually or in small groups, which enables them to demonstrate their communication skills. This project will be undertaken in conjunction with an active research group; typical outputs include a literature review; evaluation and synthesis of scientific data; preparation of a poster; or an oral presentation. Students will observe the modes and methods of communication used in research settings.

#### Graduate Attributes

The Federation University Federation graduate attributes (GA) are entrenched in the [Higher Education Graduate Attributes Policy](#) (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni Courses. Graduate attribute attainment typically follows an incremental development process mapped through Course progression.

**One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all attributes must be directly assessed in each Course**

Graduate attribute and descriptor		Development and acquisition of GAs in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K2, K3, S2, A2	AT2, AT3
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	S2, A2	AT3
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	Not applicable	Not applicable
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	K1-K3, S1-S2, A1-A2	AT1, AT2, AT3
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	Not applicable	Not applicable

### Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1-K3, S1, S2, A1, A2	Academic research and writing tasks	Academic research and writing tasks	20-30
K1-K3, S1-S3, A1-A2	Formal scientific communication tasks aligned to research area	Written and / or oral presentation(s)	20-40
K1, K2, S1-S3, A1-A3	Contemporary scientific communication task aligned to research area	Scientific communication	30-50

### Adopted Reference Style:

Australian Harvard

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)