



# Unit Outline (Higher Education)

| Institute / School: | Institute of Innovation, Science & Sustainability     |
|---------------------|---|
| Unit Title:         | SCIENCE COMMUNICATION PROJECT                         |
| Unit ID:            | SCCOR3002   |
| Credit Points:      | 15.00   |
| Prerequisite(s):    | (Completion of 240 credit points of a science degree) |
| Co-requisite(s):    | Nil   |
| Exclusion(s):       | Nil   |
| ASCED:              | 019999  |

# **Description of the Unit:**

Each student enrolled in this unit will undertake an individual science communication task, in a discipline related to a major area of study. Project topics must be approved at the time of enrolment by the unit coordinator. Requirements within the project include submission of a detailed project plan, seminar presentation and participation, and delivery of the final communication task, which could take the form of a comprehensive literature review, a scientific evaluation and report, a series of lessons for school students, a community information session, writing information booklets, etc. Students are required to maintain regular contact with the unit coordinator. Attendance at relevant workshops may be specified.

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: No

Supplementary assessment is not available to students who gain a fail in this Unit.

#### **Course Level:**

| Level of Unit in Course | AQF Level of Course |   |   |   |   |    |
|-------------------------|---------------------|---|---|---|---|----|
|                         | 5                   | 6 | 7 | 8 | 9 | 10 |
| Introductory            |                     |   |   |   |   |    |
| Intermediate            |                     |   |   |   |   |    |
| Advanced                |                     |   | ~ |   |   |    |



#### **Learning Outcomes:**

Students undertaking this unit are expected to be able to demonstrate the following knowledge and skills.

#### Knowledge:

- **K1.** Demonstrate a sound knowledge of the selected project topic.
- **K2.** Evalute the efficacy of different styles of scientific communication for their intended audience.

#### Skills:

- **S1.** Examine and critique literature relevant to the needs and scope of the communication project.
- **S2.** Operate with a significant degree of independence, whilst maintaining efficient and meaningful dialogue with a project supervisor.
- **S3.** Act as a constructive member of a seminar audience.
- **S4.** Interact with others as part of a team in a work environment.

#### Application of knowledge and skills:

- **A1.** Review scientific literature, with particular reference to the identification of key information.
- A2. Communicate effectively, to diverse audiences, in both written and oral formats.
- **A3.** Plan and undertake an assigned scientific communication task.

#### **Unit Content:**

This unit provides an opportunity for students to develop effective communication skills, while applying the knowledge and skills gained throughout their studies. It is anticipated that many students will be engaged with community groups (eg. local schools, Landcare groups) government organisations or local industries. The work will involve defining the task and developing a clear understanding of the underpinning science to produce a written project proposal and present regular oral reports on the progress of the work, culminating in the delivery of the final communication task. The format of the final communication task will be subject to approval by the unit coordinator but may take various forms such as a comprehensive literature review, a scientific evaluation and report, a series of lessons for school students, a community information session or preparation of an information brochure or pamplet.

# FEDTASKS

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**ttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are be embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Co-operative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly assessed in each Course.* 

|                                  |                               | Development and acquisition of<br>FEDTASKS in the Unit |  |  |
|----------------------------------|-------------------------------|--|--|--|
| FEDTASK attribute and descriptor | Learning<br>Outcomes<br>(KSA) | Assessment task<br>(AT#)                               |  |  |



| FEDTASK attribute and descriptor                 |  | Development and acquisition of<br>FEDTASKS in the Unit |                          |  |
|--|--|--|--------------------------|--|
|  |  | Learning<br>Outcomes<br>(KSA)                          | Assessment task<br>(AT#) |  |
| FEDTASK 1<br>Interpersonal                       | <ul> <li>Students will demonstrate the ability to effectively<br/>communicate, interact and work with others both individually<br/>and in groups. Students will be required to display skills in-<br/>person and/or online in:</li> <li>Using effective verbal and non-verbal communication</li> <li>Listening for meaning and influencing via active listening</li> <li>Showing empathy for others</li> <li>Negotiating and demonstrating conflict resolution skills</li> <li>Working respectfully in cross-cultural and diverse teams.</li> </ul>  | S3, S4, A2   | АТ2, АТ5                 |  |
| FEDTASK 2<br>Leadership                          | <ul> <li>Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in:</li> <li>Creating a collegial environment</li> <li>Showing self -awareness and the ability to self-reflect</li> <li>Inspiring and convincing others</li> <li>Making informed decisions</li> <li>Displaying initiative</li> </ul>   | S2, A3   | АТЗ, АТ4                 |  |
| FEDTASK 3<br>Critical Thinking<br>and Creativity | <ul> <li>Students will demonstrate an ability to work in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in:</li> <li>Reflecting critically</li> <li>Evaluating ideas, concepts and information</li> <li>Considering alternative perspectives to refine ideas</li> <li>Challenging conventional thinking to clarify concepts</li> <li>Forming creative solutions in problem solving</li> </ul>   | K1, K2, S1, A1   | AT1, AT3, AT5            |  |
| FEDTASK 4<br>Digital Literacy                    | <ul> <li>Students will demonstrate the ability to work fluently across a range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in:</li> <li>Finding, evaluating, managing, curating, organising and sharing digital information</li> <li>Collating, managing, accessing and using digital data securely</li> <li>Receiving and responding to messages in a range of digital media</li> <li>Contributing actively to digital teams and working groups</li> <li>Participating in and benefiting from digital learning opportunities</li> </ul>   | Not applicable   | Not applicable           |  |
| FEDTASK 5<br>Sustainable and<br>Ethical Mindset  | <ul> <li>Students will demonstrate the ability to consider and assess the consequences and impact of ideas and actions in enacting ethical and sustainable decisions. Students will be required to display skills in:</li> <li>Making informed judgments that consider the impact of devising solutions in global economic environmental and societal contexts</li> <li>Committing to social responsibility as a professional and a citizen</li> <li>Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses</li> <li>Embracing lifelong, life-wide and life-deep learning to be open to diverse others</li> <li>Implementing required actions to foster sustainability in their professional and personal life.</li> </ul> | Not applicable   | Not applicable           |  |

# Learning Task and Assessment:



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| Learning Outcomes<br>Assessed | Assessment Tasks   | Assessment Type                               | Weighting |
|-------------------------------|--|---|-----------|
| K2, S1, A2                    | Critical analysis of communication product   | Written or oral report                        | 5 - 15%   |
| K1, S3, S4, A2                | Delivering and attending seminars where students present and discuss project proposals | Oral presentation (includes peer assessment)  | 10-20%    |
| K1, S1, A1, A3                | Project proposal and clear exposition of<br>underpinning science concepts              | Written report                                | 10-20%    |
| S2, S4, A3                    | Planning, conduct and development of project   | Continuous assessment throughout the semester | 10-20%    |
| K1, A2                        | Delivery of the final communication task   | Various, depending on the nature of the task  | 30-40%    |

# **Adopted Reference Style:**

Australian Harvard

Refer to the library website for more information

Fed Cite - referencing tool