## Overview of UNSW Research Integrity 2.0 – Online Training Package

Module	Topic	Description	Learning Outcomes	Module Outline	Duration
Module 1 Module 2	The Responsible Conduct of Research  When Things Go Wrong: Breaches of the Code	This module introduces the key principles and responsibilities that researchers are expected to follow, with an emphasis on the Australian Code for the Responsible Conduct of Research.  This module explains how irresponsible research practices are defined in Australia, as well as exploring the impact they have and reporting procedures.	<ul> <li>Define the basic terms used to discuss the responsible conduct of research</li> <li>Distinguish between research integrity and research ethics</li> <li>Understand the principles set out in the Australian Code for the Responsible Conduct of Research and provide practical examples</li> <li>Explain the responsibilities of researchers</li> <li>Identify the additional sources of guidance available to advise researchers on their responsibilities</li> <li>Explain the responsibilities of institutions</li> <li>Identify the key legislation, codes and guidelines that apply to research in Australia</li> <li>Explain how the principles and responsibilities defined in the Code are interconnected.</li> <li>Understand and explain how irresponsible research practices are characterised globally</li> <li>Identify the behaviours that constitute breaches of the Code</li> <li>Appreciate the differences between more minor breaches/irresponsible research practices and more serious breaches/research misconduct, as well as how the seriousness of a breach is determined by the Code</li> <li>Discuss the impact of irresponsible practices on research</li> </ul>	<ul> <li>Introduction</li> <li>Definitions and concepts</li> <li>Principles of the responsible conduct of research</li> <li>Responsibilities of researchers</li> <li>Additional sources of guidance on researchers' responsibilities</li> <li>Institutional responsibilities</li> <li>Responsibilities arising from legislation, codes and guidelines</li> <li>Bringing it all together</li> <li>Application</li> <li>Introduction</li> <li>Characterising irresponsible research practices</li> <li>Research misconduct vs less serious breaches of the Code</li> <li>The impact of irresponsible research practice</li> <li>Reporting breaches of the Code</li> </ul>	30mins
			Identify the steps to be taken to report irresponsible research practices.	Application	
Module 3	Planning Your Research	This module explores how research plans can be developed and used responsibly, covering approvals, agreements and the potential consequences of poor planning.	<ul> <li>Describe the common elements of a research plan</li> <li>Discuss the importance of research plans and identify how others might use your research plan</li> <li>List the types of institutional approval that could be required before beginning a research project, and describe the implications of not having approvals in place</li> <li>Explain the reasons for and types of agreements that should be in place before beginning a research project</li> <li>Illustrate some of the problems that could arise if a research project is not properly planned.</li> </ul>	<ul> <li>Introduction</li> <li>Research plans</li> <li>The use and misuse of research plans</li> <li>Institutional approval</li> <li>Agreements</li> <li>Potential consequences of poor planning</li> <li>Application</li> </ul>	30mins

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Module 4	Managing and Recording Your Research	This module introduces the fundamentals of responsible project management, also covering the research record, validation procedures and data protection.	<ul> <li>Be able to create a project management checklist to summarise the main responsibilities in your research project and identify potential problems</li> <li>Understand the purpose of a research record, as well as the obstacles that prevent some researchers from keeping a proper research record</li> <li>Describe the different ways to keep a record of your research Explain what is required to keep a record that will validate your findings and allow others to replicate your work</li> <li>Know and apply the basic standards for storing, protecting and sharing research data.</li> </ul>	<ul> <li>Introduction</li> <li>Project management</li> <li>The importance of a research record</li> <li>The format and content of research records</li> <li>Validation</li> <li>Data storage and retention</li> <li>Data ownership, protection and sharing</li> <li>Application</li> </ul>	40mins
Module 5	Data Selection, Analysis and Presentation	This module explains best practices, as well as practices to avoid, when selecting, analysing and presenting data, exploring how to responsibly present text, figures and images.	<ul> <li>Explain the basic best practices that should be followed when selecting data to use for analysing your results</li> <li>Describe the role of analysis in the research process</li> <li>Illustrate the different ways in which research data/results can be presented</li> <li>Provide examples of irresponsible practices that researchers have used when selecting, analysing and presenting research findings.</li> </ul>	<ul> <li>Introduction</li> <li>Data selection</li> <li>Data analysis</li> <li>Best practices in data presentation</li> <li>Improper practices: Writing</li> <li>Improper practices: Tables, charts and graphs</li> <li>Improper practices: Images</li> <li>Application</li> </ul>	30mins
Module 6	Scholarly Publication	This module explores the various stages of publishing a scholarly paper, explaining how to act responsibly when selecting a journal, drafting a manuscript and assigning authorship.	<ul> <li>Discuss the factors that should be considered when making decisions on when and how to publish</li> <li>Identify key factors that should be considered when selecting a journal</li> <li>Summarise the key elements that need to be considered when drafting a scholarly publication</li> <li>Summarise the basic principles for assigning authorship and acknowledging the contributions of others</li> <li>Illustrate the different types of plagiarism and how to avoid plagiarism</li> <li>Explain how scholarly publications are submitted and reviewed</li> <li>Identify and explain the key post-publication responsibilities authors have.</li> </ul>	<ul> <li>Introduction</li> <li>Preparing to publish</li> <li>Journal selection</li> <li>Drafting your manuscript</li> <li>Assigning authorship</li> <li>Avoiding plagiarism</li> <li>Submission and review</li> <li>Post-publication responsibilities</li> <li>Application</li> </ul>	40mins

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Module 7	Professional Responsibilities	This module explores the responsibilities that researchers have to their colleagues, covering best practices in mentoring, collaboration and peer review.	<ul> <li>Set out the responsibilities mentors and mentees have when they enter into a mentoring relationship</li> <li>Identify some of the challenges that can impede the mentoring relationship and how these can be dealt with</li> <li>Explain the responsibilities of individual researchers engaged in teamwork/collaborations</li> <li>Explain the additional responsibilities that can emerge when researchers are involved in larger scale teams/collaborations</li> <li>Discuss the primary responsibilities of peer reviewers and provide examples of the ways in which these responsibilities can be compromised.</li> </ul>	<ul> <li>Introduction</li> <li>Mentors and mentees</li> <li>Individual responsibilities in teams and collaborations</li> <li>Considerations for larger collaborations</li> <li>Best practices in peer review</li> <li>Irresponsible practices in peer review</li> <li>Application</li> </ul>	20mins
Module 8	Communication and Social Responsibility	This module covers the wider responsibilities that researchers assume as they develop their careers, from taking on different roles to communicating their findings to the public.	<ul> <li>Identify the broader roles that researchers can assume over the course of a career and the special responsibilities that come with these roles</li> <li>Illustrate the ways in which professionals engaged in broader service can best avoid behaving in an irresponsible way</li> <li>Discuss the challenges researchers face when identifying their audience and developing strategies for research communications</li> <li>Explain how researchers can separate their personal positions from their professional views when communicating their research</li> <li>Explain what is meant by 'impact' and the different positions taken on the question of the harms and benefits of research.</li> </ul>	<ul> <li>Introduction</li> <li>Broader responsibilities</li> <li>Working with colleagues</li> <li>Responsible communication</li> <li>Engaging with the public</li> <li>Impact: Weighing costs and benefits</li> <li>Setting high standards</li> <li>Application</li> </ul>	30mins