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| 1      | The Responsible Conduct of Research | 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. | ➢ Define the basic terms used to discuss the responsible conduct of research  
➢ Distinguish between research integrity and research ethics  
➢ Understand the principles set out in the Australian Code for the Responsible Conduct of Research and provide practical examples  
➢ Explain the responsibilities of researchers  
➢ Identify the additional sources of guidance available to advise researchers on their responsibilities  
➢ Explain the responsibilities of institutions  
➢ Identify the key legislation, codes and guidelines that apply to research in Australia  
➢ Explain how the principles and responsibilities defined in the Code are interconnected. | • Introduction  
• Definitions and concepts  
• Principles of the responsible conduct of research  
• Responsibilities of researchers  
• Additional sources of guidance on researchers' responsibilities  
• Institutional responsibilities  
• Responsibilities arising from legislation, codes and guidelines  
• Bringing it all together  
• Application | 30mins |
| 2      | When Things Go Wrong: Breaches of the Code | This module explains how irresponsible research practices are defined in Australia, as well as exploring the impact they have and reporting procedures. | ➢ Understand and explain how irresponsible research practices are characterised globally  
➢ Identify the behaviours that constitute breaches of the Code  
➢ 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  
➢ Discuss the impact of irresponsible practices on research  
➢ Identify the steps to be taken to report irresponsible research practices. | • Introduction  
• Characterising irresponsible research practices  
• Research misconduct vs less serious breaches of the Code  
• The impact of irresponsible research practice  
• Reporting breaches of the Code  
• Application | 30mins |
| 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. | ➢ Describe the common elements of a research plan  
➢ Discuss the importance of research plans and identify how others might use your research plan  
➢ 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  
➢ Explain the reasons for and types of agreements that should be in place before beginning a research project  
➢ Illustrate some of the problems that could arise if a research project is not properly planned. | • Introduction  
• Research plans  
• The use and misuse of research plans  
• Institutional approval  
• Agreements  
• Potential consequences of poor planning  
• Application | 30mins |
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| 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. | ➢ Be able to create a project management checklist to summarise the main responsibilities in your research project and identify potential problems  
➢ Understand the purpose of a research record, as well as the obstacles that prevent some researchers from keeping a proper research record  
➢ 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  
➢ Know and apply the basic standards for storing, protecting and sharing research data. | • Introduction  
• Project management  
• The importance of a research record  
• The format and content of research records  
• Validation  
• Data storage and retention  
• Data ownership, protection and sharing  
• Application |
| 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. | ➢ Explain the basic best practices that should be followed when selecting data to use for analysing your results  
➢ Describe the role of analysis in the research process  
➢ Illustrate the different ways in which research data/results can be presented  
➢ Provide examples of irresponsible practices that researchers have used when selecting, analysing and presenting research findings. | • Introduction  
• Data selection  
• Data analysis  
• Best practices in data presentation  
• Improper practices: Writing  
• Improper practices: Tables, charts and graphs  
• Improper practices: Images  
• Application |
| 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. | ➢ Discuss the factors that should be considered when making decisions on when and how to publish  
➢ Identify key factors that should be considered when selecting a journal  
➢ Summarise the key elements that need to be considered when drafting a scholarly publication  
➢ Summarise the basic principles for assigning authorship and acknowledging the contributions of others  
➢ Illustrate the different types of plagiarism and how to avoid plagiarism  
➢ Explain how scholarly publications are submitted and reviewed  
➢ Identify and explain the key post-publication responsibilities authors have. | • Introduction  
• Preparing to publish  
• Journal selection  
• Drafting your manuscript  
• Assigning authorship  
• Avoiding plagiarism  
• Submission and review  
• Post-publication responsibilities  
• Application |
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| 7      | Professional Responsibilities        | This module explores the responsibilities that researchers have to their colleagues, covering best practices in mentoring, collaboration and peer review. | ➢ Set out the responsibilities mentors and mentees have when they enter into a mentoring relationship  
➢ Identify some of the challenges that can impede the mentoring relationship and how these can be dealt with  
➢ Explain the responsibilities of individual researchers engaged in teamwork/collaborations  
➢ Explain the additional responsibilities that can emerge when researchers are involved in larger scale teams/collaborations  
➢ Discuss the primary responsibilities of peer reviewers and provide examples of the ways in which these responsibilities can be compromised. | • Introduction  
• Mentors and mentees  
• Individual responsibilities in teams and collaborations  
• Considerations for larger collaborations  
• Best practices in peer review  
• Irresponsible practices in peer review  
• Application | 20mins    |
| 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. | ➢ Identify the broader roles that researchers can assume over the course of a career and the special responsibilities that come with these roles  
➢ Illustrate the ways in which professionals engaged in broader service can best avoid behaving in an irresponsible way  
➢ Discuss the challenges researchers face when identifying their audience and developing strategies for research communications  
➢ Explain how researchers can separate their personal positions from their professional views when communicating their research  
➢ Explain what is meant by ‘impact’ and the different positions taken on the question of the harms and benefits of research. | • Introduction  
• Broader responsibilities  
• Working with colleagues  
• Responsible communication  
• Engaging with the public  
• Impact: Weighing costs and benefits  
• Setting high standards  
• Application | 30mins    |