

CURRENT ISSUES IN RESEARCH INTEGRITY

This module will introduce students to the main principles relating to research integrity (RI) and ethics. It will demonstrate how RI and ethics are necessary to produce quality and trustworthy research. The module will also provide a foundational understanding of Open Science and how Open Research practices support RI and research quality.

LEARNING OUTCOMES:

On successful completion of this module the learner will be able to:

- Recognise that research ethics and research integrity are crucial elements of conducting good research.
- Confidently apply good research practices at all stages of the research cycle.
- Describe Open Science and how its practice aligns with research integrity.
- Critically reflect on proven cases of research misconduct and questionable research practices (QRP) and recognise potential occurrences throughout the research cycle.
- Apply strategies, in line with university and national policies, on how to respond to instances of QRPs and research misconduct.

INDICATIVE CONTENT:

Research Integrity

Research integrity, local, national and international RI policy, researcher responsibility. Trust in science, reproducibility crisis, research misconduct, questionable research practices, conflict of interest, IP, research ethics, virtues, values.

Open Science

Open Science principles, local, national and international OS policy, transparency, scholarly communications, authorship, publication cycle, Open Research practices, registered reports, OSF, Open Citations, Open Peer Review, Open Lab Books, PIDs, funder mandates.

Research Data Management

Research data management planning, organisation, storage and preservation, Open Data practices. FAIR data principles, data repositories, metadata standards, funder mandates.

MODULE RESOURCES

Recommended Book Resources

- Committee on Toward an Open Science Enterprise Board on Research Data and Information Policy and Global Affairs 2018, Open Science by Design: Realizing a Vision for 21st Century Research, The Academies of Sciences Engineering Medicine <https://www.nap.edu/read/25116/chapter/1>
- Committee on Responsible Science Committee on Science, Engineering, Medicine, and Public Policy Policy and Global Affairs 2017, Fostering Integrity in Research, The Academies of Sciences Engineering Medicine <https://www.nap.edu/read/21896/chapter/1>

Other Resources

- Policy Statement: Research Integrity National Forum 2019, Policy Statement on Ensuring Research Integrity in Ireland, Research Integrity National Forum, Dublin https://www.iaa.ie/wp-content/uploads/2019/08/IAA_Research_Integrity_in_Ireland_Report_2019.pdf
- Policy Statement: 2020 Regulations for Postgraduate Research Study, Cork Institute of Technology, Cork, Ireland https://dev.cit.ie/contentfiles/academic-policies/CIT_Regulations_for_PG_Research_Study_-_Revised_-_September_2020.pdf
- Policy Statement: 2019 Code of Good Practice in Research, Cork Institute of Technology, Cork, Ireland <https://www.cit.ie/contentfiles/academic-policies/Code%20of%20Good%20Practice%20in%20Research%2007062019.pdf>
- Policy Statement: 2019 Open Access Policy, Cork Institute of Technology, Cork, Ireland <https://www.cit.ie/contentfiles/academic-policies/CIT%20Open%20Access%20Policy%20Official%20V1.pdf>
- Policy Statement: 2020 Open Access Policy Procedures, Cork Institute of Technology, Cork, Ireland <https://www.cit.ie/contentfiles/academic-policies/CIT%20OA%20Policy%20Procedures%20June%202020.pdf>
- Policy Statement: National Open Research Forum 2019, National Framework on the Transition to an Open Research Environment, National Open Research Forum, Dublin, Ireland https://repository.dri.ie/catalog/0287dj_04d
- Policy Statement: ALLEA 2017, The European Code of Conduct for Research Integrity <https://www.allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf>
- Policy Statement: OECD 2007, Best Practices for Ensuring Scientific Integrity and Preventing Misconduct http://www.oecd.org/science/inno/4018830_3.pdf
- Policy Statement: Science Europe 2019, Practical Guide to the International Alignment of Research Data Management https://www.scienceeurope.org/wp-content/uploads/2018/12/SE_RDM_Practical_Guide_Final.pdf

COURSE WORK

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	Students will complete a Research Ethics Application for a chosen project.	1, 2, 5	30.0	Week 8
Essay	Students will complete a reflective essay on the possible research ethics and research integrity issues associated with a chosen project and propose suggestions of how to address them.	1,2,3,4,5	70.0	Sem End