

Adam Mickiewicz University, Poznań

Faculty of Chemistry

HighChem – interdyscyplinarny i międzynarodowy program studiów doktoranckich z elementami wsparcia współpracy międzysektorowej

ABC of Research Integrity in the European Research Area

dr Iryna Degtyarova

Researcher's workshop

Field of science	Interdisciplinary
Teaching method	Lecture/presentation, workshop, interactive exercises for teaching research integrity (developed within EU-projects: Path2Integrity, VIRT2UE, PRINTEGER).
Language	English
ECTS credits	1
Numbers of hours	15 h
Aims of the course	<p>The course is aimed at raising awareness of UAM doctoral candidates about Open Science with specific focus on Research Integrity as its pre-condition and part. The course provides necessary knowledge on principles of research integrity and good practices in all contexts of research process, based on virtue ethics, as well as gives an understanding of misconduct and questionable research practices - from normal perspective (overview of the key documents and bylaws in EU and Poland, and UAM provisions) and values perspective, taking into account disciplinary specifics of doctoral candidates.</p> <p>The course will address to the issues related to research integrity, virtue ethics, responsible conduct of research, open science, research misconduct and questionable research practices and ethical dilemmas in the context of career development of early-stage researchers in ERA.</p>
Course contents	<ol style="list-style-type: none"> 1. An introduction to Research Integrity and Open Science (EU and Polish perspectives). 2. Virtue ethics in science. Role and responsibility of science and scientists in society, norms and values, integrity culture in research environment. 3. Six types of goodness in research. 4. Research integrity as a key priority of the research & innovation policy in the EU: overview of documents in Europe, Poland and UAM, conducting research in accordance with the principles of the codes of ethics. 5. Principles of research integrity and good research practices (based on the European Code of Conduct of Research Integrity and Polish documents) 6. FAIR data principles in research.

The course realized within the project number POWR.03.02.00-00-I020/17 co-financed under the Operational Program Knowledge Education Development of priority axis III: Higher education for economy and development, activities: 3.2 PhD studies

	<p>7. Research misconduct: falsification, fabrication and plagiarism (consequences, cases and scandals, pseudoscience)</p> <p>8. Questionable research practices and biases (grey zone, dilemmas and conflicts of values).</p> <p>9. Research integrity and publishing (COPE principles, avoiding predatory publishing, checking predatory or hijacked journals)</p> <p>10. Research integrity: from design to publishing - doctoral candidates essays presentation and discussion</p>
Prerequisites and co-requisites	Good knowledge of English, good internet connection
Learning outcomes	
On completion of the course PhD candidates will be able to:	Assessment mode
<ul style="list-style-type: none"> - develop general but comprehensive understanding of open science as a policy and development priority in the European Research Area - have general knowledge on FAIR principles - have a knowledge on the research integrity, ethical principles and virtues in science - be aware and understand key European and Polish documents on research integrity, in particular ALLEA Code, Polish Law on Higher Education and Science and Polish Code of Ethics of Scientific Workers (PAN) - identify values and norms in research and take part in discussions on research integrity in a dialogue mode - recognize research misconduct and seek for solutions in the situations of ethical dilemmas or questionable research practices - understand harmful effects of research misconduct and bias - realize science and researchers' responsibility in society - implement and cultivate good research practices and research ethics in their career development - develop critical thinking, problem solving and dialogue skills - develop a positive approach and understanding of continuous training in research integrity 	<p>1. Essay on research integrity (topics to be presented taking into account specifics of the research area) – presentation and discussion - 80 points</p> <p>2. Fulfilment of the class assignments – 20 points</p>
Literature	<p>[Publications]</p> <p>1. Burgelman J.-C., Pascu C., Szkuta K., Von Schomberg R., Karalopoulos A., Repanas K., Schoupe M., (2019), Open Science, Open Data, and Open Scholarship: European Policies to Make Science Fit for the Twenty-First Century, [w:] Frontiers in Big Data, Vol.2, https://www.frontiersin.org/article/10.3389/fdata.2019.00043</p> <p>2. Degtyarova I., Etyka i rzetelność badań naukowych, [w:] Woźnicki J. (red.) Identyfikacja i uzasadnienie kierunków regulacji o kluczowym znaczeniu w ustawie Prawo o szkolnictwie wyższym i nauce, Warszawa-Toruń, 2020 (Selected provisions from the Law on Higher Education and Science (selected in the publication))</p>



	<p>3. Horbach, S. P. J. M., & Halfman, W. (2017). Promoting Virtue or Punishing Fraud: Mapping Contrasts in the Language of ‘Scientific Integrity’. <i>Science and Engineering Ethics</i>, 23(6), 1461–1485. https://doi.org/10.1007/s11948-016-9858-y</p> <p>4. Lechner I., Blom F., Hastings R. (2020), Virtues in Research Integrity [in:] <i>Embassy of Good Science</i></p> <p>5. Path2Integrity (2020), Let’s preserve research integrity. What is research integrity</p> <p>6. von Wright, Georg H. (1963), <i>The Varieties of Goodness</i></p> <p>[Documents (will be selected and presented in the trainer’s presentation)]:</p> <ul style="list-style-type: none"> • The European Code of Conduct for Research Integrity, 2017 • The Code of Ethics for Research Workers of PAN, 2020 • FAIR Guiding Principles for scientific data management and stewardship’, 2016 • Open Science policies in EU (presented by the trainer) • Selected UAM provisions – Statut Uniwersytetu im. Adama Mickiewicza w Poznaniu (przepisy dotyczące etyki badań naukowych), Kodeks etyki doktorantów Uniwersytetu im. Adama Mickiewicza w Poznaniu • Dilemma Game (app from Rotterdam University) • Film Being a Scientist (Leiden University) <p>Other resources: additional materials provided by the trainer</p>
<p>Additional information</p>	<p>Schedule (suggested dates):</p> <p>8.06.2021: 17.00-19.30 11.06.2021: 17.00-19.30 16.06.2021: 14.30-17.00 21.06.2021: 17.00-19.30 28.06.2021: 16.00-18.30</p>
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