

Course Title: “Making Choices: Ethical Decisions in the Scientific Endeavor”

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Introduction and Objectives

Scholarly integrity is recognized as an important issue in research and training. Yet there are profound differences in the larger cultural context for ethical decision-making. As international collaborations become more common, new generations of scholars enter the field of research, and norms and consequences of research become more complicated, these differences need to be more fully confronted. Standard guidelines on responsible conduct of research or IPR / Copyright rules tend to ignore cross-cultural challenges of ethical decision-making in the scientific endeavor, and also ignore alternate perspectives and approaches to such issues. Moving away from norms that are largely proscriptive, field- and country-specific, and from guidelines and approaches to ethical issues that are universalizing, or based on fundamentally western notions of individual intellectual property rights rather than collaborative values, this course places emphasis upon cultural context and upon partnership with international scholars and diverse community groups in developing a new kind of training in scholarly integrity. Through discussing a range of topics from science and engineering especially related to issues of development and change, the course aims to develop skills related to decisions making in the scientific endeavour – from issues of methodology and development paradigms, to issues of responsibility, informed consent, intellectual property rights, commons, natural resources, livelihoods, sustainability, participation, and scientific and engineering ethics codes. Case studies from real life will be used as tools for class room based workshops on ethical decision making in different scientific arenas. Contentious issues from areas such as biotechnology, civil engineering, water resources management, IPRs/creative commons, and environmental risks will form the core of issues around which teaching will be organized.

The course is aimed at post-graduate students across different disciplines who are likely to face these issues in the course of their own research. Increasingly such skills are requirements in international research collaborations and R&D institutions, and the course seeks to equip students with adequate skills in making ethical choices in their future research careers.

Topics to be covered

1. Introduction: What is ethics? What is morality? What is responsibility?
2. Methodology, Epistemology and Ethics: Positivism and its critiques, nature of data, qualitative vs quantitative research
3. Thinking about Development: choices and paradigms
4. Intellectual Property and Property Rights; Open Access and Creative Commons
5. Cultural Competence, Cultural Humility and Participatory Research
6. National and International Science and Engineering Ethics Codes
7. Ethics and Natural resources (water, forestry, minerals)
8. Ethics of Planning and Policy Making
9. Ethics of Risk and Uncertainty

Two workshop sessions on Ethics in Agricultural Biotechnology and Water

Modes of Assessment

1. Mid-semester and End-semester examination (weightage: 70%)
2. Classroom participation, presentations, and discussion (10%)
3. Assignment: Development of Ethics Case Studies (10%)
4. Workshop participation and presentation (10%)

Instruction: There will be extensive use of case studies. Students are requested to come prepared and read the material to be uploaded on moodle before every class. All course material will be made available through moodle.

Texts / References

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- Frank N. Laird, *Participatory Analysis, Democracy, and Technological Decision Making*, *Science, Technology, & Human Values*, Vol. 18, No. 3. (Summer, 1993), pp. 341-361
- Mapping for change: practice, technologies and communication, *Participatory Learning and Action*, Np.54, 2006
- Gary E. Marchant, The precautionary principle: an 'unprincipled' approach to biotechnology regulation, *Journal of Risk Research* 4 (2), 143-157 (2001)
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- Paul S. Appelbaum, Charles W. Lidz and Robert Klitzman, "Voluntariness of Consent to Research: A Conceptual Model." *Hastings Center Report*, 39.1 (2009), 30-39.
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