

Social Science and International Content in Risk Analysis Courses

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Overview

- Interest in risk analysis
 - Domestic policy
 - International policy
 - Developing countries
- Educational opportunities
 - Courses
 - Programs
- Lack of standardization
 - Definition of risk
 - Contributory disciplines
 - Appropriate role of risk information

Central Question

What can we expect when we learn that someone has formal training in risk analysis?

Interest in Risk Analysis

- US Domestic Regulatory policy
- International / Transboundary
- Developing Countries
- Individual decision making
- Private sector choice
- Emerging Issues
 - Biotech / GM foods
 - Terrorism

Practice of Risk Analysis

■ SRA

- Committees and Specialty Groups
- Conferences (US, Europe, Asia)
- Members

■ Publications

- NAS 1983, 1994, 1996
- McDaniels and Small 2004 *Risk Analysis and Society: An Interdisciplinary Characterization of the Field.*

Teaching Risk Analysis

- No standard
 - Usage of “risk”
 - Appropriate role of risk information
- Range of possible topics
 - Technical Analysis
 - Analytical tools
 - Decision tools
 - Human agent
 - Group dynamics
 - Communication

Survey of Risk Syllabi

■ Content

- Technical
- Social
- International / development

■ Analysis

- Based on syllabus alone
- Missing are problem sets, lecture material, additional readings, etc

Social Science Content

- 21 syllabi with “risk” in title
 - Undergraduate and graduate
 - Accredited US and Canadian Institutions of Higher Learning
- Clear distinction
 - 7 exclusively social science
 - 6 mixed (integrated, not half and half)
 - 8 exclusively technical

International / Development Content

- Three total
- One European content
 - Mixed technical and social science
- Two with Developing Country Content
 - Exclusively social science
- Possible that these contexts arise in cases or problems

GMU Syllabus Finder

- <http://chnm.gmu.edu/tools/syllabi/>
- Search on “risk” plus
 - Quantitative (1082 hits)
 - Qualitative (552)
- Policy, decision, communication
 - All yielded substantial results
- Development, transboundary
 - Limited results
 - Unclear context of “development”

Next Steps

- More exhaustive collection of risk analysis syllabi
- Survey contents beyond the syllabi
- Survey risk analysis programs
- Debate among risk analysis practitioners and educators

Central Question

What can we expect when we learn that someone has formal training in risk analysis?

- Answer: it's not clear

Discussion

- Would it be useful and appropriate to standardize risk courses or accredit risk analysis programs?
- Should risk educators be encouraged to include international and development content?