Cost Benefit Analysis in Disaster Risk Reduction (CBA-DRR)  

Course Announcement

The Disaster Risk Reduction Program at Florida International University, with support from the U.S. Agency for International Development, Office of U.S. Foreign Disaster Assistance (USAID/OFDA) is pleased to announce the distance learning, online course entitled, “Cost Benefit Analysis in Disaster Risk Reduction (CBA-DRR)” for Fall of 2013. The course is intended for graduate level (M.A., M.S. or Ph.D.) students from a wide range of disciplines. The current offering for 2013 is a non-credit course.

The CBA-DRR course focuses on the basic principles of DRR and CBA and how these can be integrated to assess vulnerabilities and value risks and proactive investments for communities and countries. Without tools such as CBA, it is difficult to decide which hazards pose the greatest costs, and conversely, which proactive investments and policies provide the most benefits and probabilities of success. Application of such tools in the context of a broader DRR strategy increases the chances that the impacts of such hazards as earthquakes, tsunamis, hurricanes, landslides, and other extreme events will be less dangerous, less disruptive, and less debilitating. This course is intended to better equip participants to address DRR issues in their respective areas of influence, so that in the future, fewer people are affected by the adverse impacts of hazards.

The CBA-DRR course has three objectives:

(1) Describe the types of hazards that cause disasters and the factors that increase or decrease the risk that such hazards will trigger a disaster,

(2) Provide the foundations and practical skills required to produce and interpret basic cost benefit analysis in the disaster realm, and

(3) Apply the acquired skills to support policy and decision-makers, particularly in the context of disaster risk reduction and development planning.

Course Structure

The online course is divided into three modules:

Module 1: Introduction and Disaster Characterization

The first module introduces course objectives and approaches and defines disaster risk, hazards, vulnerability, resilience, and exposure.

Module 2: CBA Methods and Applications
The second module covers CBA principles, methods, and techniques for valuing tangible and non-tangible assets. Alternative CBA principles and techniques are compared for their usefulness in different circumstances, including physical infrastructure, DRR, health, environment, food and agriculture, and other social investments.

Module 3: Linking CBA to DRR – Factors to Consider

The third and final module focuses on the specific application of CBA principles to DRR and on the factors to consider when using CBA in the context of DRR, including geographic information systems (GIS), hazard modeling, remote sensing, and the constraints imposed by regulations and budgets, data limitations, and communication options.

Online Learning Program

The CBA-DRR course will be implemented through a web portal. Students will be able to download the learning materials, upload assignments, complete activities like quizzes and discussion forums, take exams, and communicate with the instructor by accessing the portal.

Hands-on Workshop

Upon successful completion of the three course modules, selected participants who have achieved higher grades will be invited to a one-week workshop hosted by the Disaster Risk Reduction Program at FIU, Miami. The hands-on workshop will include intensive exercise-based case studies on the application of the cost benefit methodology that will help students to apply the theoretical knowledge gained from the online course. The workshop will also include presentation of student projects.

Selection Process

The DRR Program at FIU will select candidates to participate in the CBA-DRR online course.

Admission Requirements for Applicants

Prerequisites:

1. Bachelor’s degree
2. Familiarity with project management
3. Proficiency in English language
4. Calculus I (limits, derivatives and their formulas, application of derivatives, antiderivatives, parametric curves)
5. Working knowledge of Excel

Desirable but not required: Microeconomics
Application for CBA-DRR Online Course

The candidates must include the following in their application:

1. A letter of intent explaining the reasons for applicant’s interest in the CBA-DRR online course.
2. A letter from the institution where the applicant works, indicating the importance of the CBA-DRR course for the individual and the organization.
3. A personal résumé including details of academic qualifications and work experience.

Applications must be electronically submitted to:

Professor Juan Pablo Sarmiento
jsarmien@fiu.edu
Co-Director, Disaster Risk Reduction Program
Latin American and Caribbean Center
Florida International University, Miami, Florida.

Please use “Application for CBA-DRR Fall 2013” as the subject line for the application email.

Dates of Significance

- Application deadline: September 2, 2013, 5 p.m. EST
- Selection notification: September 6, 2013
- CBA-DRR online course begins: September 9, 2013
- CBA-DRR online course ends: December 13, 2013
- Hands-on workshop: January 2014 (specific dates to be determined)