North South University

Department of Civil and Environmental Engineering (DCEE)

CEE 415: Socio-economic Aspects of Development Projects, Fall 2019

Course Outline

1 BASIC INFORMATION

1.1 COURSE DESCRIPTION

Paradigms of development and sustainable development. Society - development - environmental linkage. Socio–economic Indicators of development. Participatory planning of development Projects. Seeking societal feedback: rapid rural appraisal (RRA), participatory rural appraisal (PRA), focus group discussion (FGD), key person interview etc. Involving the community: community based operation and maintenance of projects. Gender and institutional issues.

1.2 COURSE CONTENTS

1. Paradigms of development and sustainable development.
2. Society - development – environmental linkage.
3. Socio–economic Indicators of development.
4. Participatory planning of development Projects.
5. Seeking societal feedback: rapid rural appraisal (RRA), participatory rural appraisal (PRA), focus group discussion (FGD), key person interview etc.
6. Involving the community: community based operation and maintenance of projects.
7. Gender and institutional issues.

1.3 COURSE INFORMATION

1. Senior level undergraduate course
2. Credit hours: 3 hours of classroom contact and 6 hours of self-study per week.
3. One lecture per week having three hours (or two classes per week having 1.5 hours) of duration

1.4 PREREQUISITE COURSE:

ENV 373: Environmental Impact Assessment

1.5 FACULTY

1. Name: Md Shoaib Chowdhury, Ph.D., P.E., F.ASCE; Professor, DCEE, Initial: SbC
2. Room No: SAC 732,
3. Phone: Office Ph: 8852000 ext. 6231
4. E-mail: shoaib.chowdhury@northsouth.edu
5. Office hours for Fall 2019:
   ST: 03:20 pm – 04:20 pm

1.6 CLASS HOURS:

Section 1: ST 04:20 pm –05:50 pm (Room # SAC 311)

1.7 SELECTED/RECOMMENDED READINGS:

1. Stuart R. Lynn, "Economic Development-theory and practice for a divided world", Prentice Hall, USA

2. Goodman and Hastak, "Infrastructure Planning Handbook", McGraw Hill, USA

3. "The critical role of infrastructure for the Sustainable Development Goals", The Economist - Intelligence Unit Limited, 2019

4. Sunyoung Hwang and Jiwon Kim, "UN and SDGs", United Nations and Sustainable Development Goals, A Handbook for Youth

5. Sustainable Development Goals: Bangladesh Progress Report 2018, Ministry of Planning, Government of the People's Republic of Bangladesh, December 2018

6. Vanclay (2015) Social Impact Assessment – Guidance for Assessing and Managing the impacts of Projects, International Association for Impact Assessment

7. Development Project Proforma/Proposal (DPP) Manual (Parts 1 and 2), General Economics Division (GED), Planning Commission, Ministry of Planning, Government of the People's Republic of Bangladesh, March 2014

8. Salim Momtaz, "Social Impact Assessment in Bangladesh: A Critical Review of the Recent Developments".

9. Draft Environmental Impact Assessment, Padma Multipurpose Bridge Project, the Bangladesh Bridge Authority (BBA), July 2010

10. Environmental Impact Assessment for the Dhaka Mass Rapid Transit Development Project, Dhaka Mass Transit Company (NKDM), November, 2015

11. Rio + 20: National Report on Sustainable Development, Ministry of Environment and Forests, Peoples' Republic of Bangladesh, May 2012

12. Integrating the three dimensions of sustainable development: A framework and tools, United Nations, 2015

2 COURSE OBJECTIVES AND OUTCOMES

2.1 COURSE OBJECTIVES:

1. To introduce students with the concepts of development, sustainable development (SD) and the socioeconomic and environmental dimensions of sustainable development
2. To provide students with an understanding of the purpose, principles and levels of public participation and different participatory decision-making tools and techniques employed in development projects
3. To prepare students for oral presentations and/or written reports on topics such as sustainable development, public participation, gender and institutional issues, and community based projects

2.2 COURSE OUTCOMES (COs):

2.2.1 CO1: Understand and explain the concepts of development

2.2.2 CO2: Understand the fundamental concepts of sustainable development and its socioeconomic and environmental dimensions

2.2.3 CO3: Understand the purpose, principles and levels of public participation and explain different participatory decision-making tools and techniques employed in development projects

2.2.4 CO4: Prepare oral presentation and/or written report on a topic such as sustainable development, public participation, gender and institutional issues, and community based projects

2.3 MAPPING OF COURSE OUTCOMES TO BSCEE PROGRAM OUTCOMES

L: Slightly maps (low); M: Moderately maps (medium); H: Substantially maps (high)

	PO - 1	PO - 2	PO - 3	PO - 4	PO - 5	PO - 6	PO - 7	PO - 8	PO - 9	PO - 10	PO - 11	PO - 12	PO - 13
CO1													M
CO2							M						
CO3			M										
CO4												M	

2.4 CO DELIVERY AND ASSESSMENT

Course outcomes	Bloom's taxonomy, domain/level *(C: Cognitive, P: Psychomotor A: Affective)*	Delivery methods and activities	Assessment tools
CO1	C3	Lecture and related videos	Assignment and/or Exam
CO2	C3	Lecture and related video	Assignment and/or Exam

CO3	C3	Lecture and related videos	Assignment and/or Exam
CO4	A3	Lecture, group discussions	Group Assignment/Project (Written report and/or oral presentation)

2.4.1 Cognitive domain (knowledge-based): C

1: Knowledge, 2: Comprehension, 3 Application, 4 Analysis, 5: Synthesis, 6: Evaluation

2.4.2 The affective domain (emotion-based): A

1: Receiving, .2: Responding, 3: Valuing, 4: Organizing, 5: Characterizing

2.4.3 The psychomotor domain (action-based): P

1: Perception, 2: Set, 3: Guided response, 4: Mechanism, 5: Complex overt response, 6: Adaptation, 7: Origination

3 BSCEE PROGRAM OUTCOMES (PO)

3.1.1 PO – 1: Engineering Knowledge

Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex civil engineering problems.

3.1.2 PO – 2: Problem analysis

Identify, formulate, research the literature and analyze complex civil engineering problems and reach substantiated conclusions using first principles of mathematics, the natural sciences and the engineering sciences.

3.1.3 PO – 3: Design/development of solutions

Design solutions for complex civil engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety as well as cultural, societal and environmental concerns.

3.1.4 PO – 4: Investigation

Conduct investigations of complex problems, considering design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions.

3.1.5 PO – 5: Modern tool usage

Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex civil engineering activities with an understanding of the limitations.

3.1.6 PO – 6: The engineer and society

Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional civil engineering practice.

3.1.7 PO – 7: Environment and sustainability

Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development.

3.1.8 PO – 8: Ethics

Apply ethical principles and commit to professional ethics, responsibilities and the norms of the civil engineering practice.

3.1.9 PO – 9: Individual work and teamwork

Function effectively as an individual and as a member or leader of diverse teams as well as in multidisciplinary settings.

3.1.10 PO – 10: Communication

Communicate effectively about complex engineering activities with the engineering community and with society at large. Be able to comprehend and write effective reports, design documentation, make effective presentations and give and receive clear instructions.

3.1.11 PO – 11: Project management and finance

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work as a member or a leader of a team to manage projects in multidisciplinary environments.

3.1.12 PO – 12: Life-long learning

Recognize the need for and have the preparation and ability to engage in independent, life-long learning in the broadest context of technological change.

3.1.13 PO – 13: Contemporary Issues

Demonstrate sound knowledge on global and local contemporary civil engineering issues.

4 COURSE ASSESSMENT

4.1 TEACHING/LEARNING STRATEGIES

4.1.1 Lectures

- Attend all classes punctually
- Discuss/work with group members/peers to prepare assignments

4.1.2 Private study

- Review lecture materials for the exams

4.2 ASSESSMENT

- Assignments will be given to test students ability in writing reports on the subject matters
- Midterm exam and final exam will contain questions related to the topics covered in class
- Project/group assignment will be given to test students ability in report preparation and/or oral presentation

4.3 EVALUATION:

Distribution of numerical scores		Remarks
Attendance	5%	Attendance score could be as low as zero if you attend less than 15 classes
Assignment-I	20%	Assignment (report) must be submitted on the due date; All group members must participate in the formal presentation;
Assignment-II	20%	
Midterm	30%	Duration: Approximately One hour
Final Exam	25%	Duration: Approximately One hour

4.4 GRADING POLICY:

Generally, NSU grading policy will be followed. However, minor deviation is still possible depending on the situation.

4.5 EXAM POLICY:

NO MAKE UP for MID-TERM OR FINAL EXAM WILL BE ARRANGED UNLESS AN ABSOLUTELY UNAVOIDABLE VALID REASON FOR ABSENCE IS FOUND. For such unavoidable circumstances, written explanation of the situation must be submitted before the exam. If the mid-term exam cannot be held on the due date, the exam will be automatically shifted to the very next available class, unless otherwise announced.

5 LECTURE SCHEDULE

* One Day = 3 lecture hours, Total 12 lectures = 36 lecture hours

Day*	Tentative Lecture Topic/ Material Covered	Assignment	
		Assigned	Due
1	Course Overview & Introduction		
2-9	Paradigms of development and sustainable development; Society - development - environmental linkage; Socio–economic Indicators of development;	Assignment-I	
10-11	Participatory planning of development Projects; Assignment-I (Presentation)		Assignment-I (Report)
12	**Midterm Exam**		
13-18	Seeking societal feedback: rapid rural appraisal (RRA), participatory rural appraisal (PRA), focus group discussion (FGD), key person interview etc;	Assignment-II	
19-22	Involving the community: community based operation and maintenance of projects; Gender and institutional issues;		Assignment-II (Report)
23-24	Assignment- II (Presentation) and Final Exam Review		
Final Exam (As per schedule declared by NSU)			

6 CODE OF CONDUCT

Students must comply with the code of conduct as stated in the NSU policies (http://www.northsouth.edu/academic/academic-information-and-policies.html)

- It is highly requested to maintain discipline in the class like not to be late, refrain from making noise during lecture time, not to leave the class early.
- Adopting unfair means in the exams will be considered as a serious crime and the student shall be placed to the university disciplinary committee.
- All materials should be neat and clear, and demonstrate professionalism
- Direct duplication of the work of another is a big offense
- Paraphrasing another person's work with very minor changes keeping the meaning is also plagiarism