

City University of Hong Kong

Information on a Course
offered by Department of Biology and Chemistry
with effect from Semester A 2016 / 2017

Part I

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| Course Title: | Environmental Impact Assessment |
| Course Code: | BCH6106 |
| Course Duration: | One Semester |
| No. of Credit Units: | Three |
| Level: | P6 |
| Prerequisites: | Nil |
| Precursors: | Nil |
| Equivalent Courses: | SEE6203 Environmental Impact Assessment: Principles and Practices |
| Exclusive Courses: | Nil |

Part II

Course Aims:

In this course, students will:

- develop an in-depth understanding of the concepts, processes and methodologies in Environmental Impact Assessment (EIA);
- identify the types of development proposals subject to EIA;
- contribute significantly in a team conducting EIA.

Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

| No. | CILOs | Weighting (if applicable) |
|-----|---|---------------------------|
| 1. | Examine and apply the general principles, processes and methodologies of environmental impact assessment (EIA) in development projects. | |
| 2. | Explain the approach in socio-economic impact and environmental risk assessments, and the interaction between EIA and landuse planning. | |
| 3. | Analyze cases, prepare and conduct EIA, and communicate effectively about the complex issues in EIA. | |
| 4. | Critically evaluate the problems and issues, limitations and future trends in implementation of EIA. | |

Teaching and learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

| ILO No | TLAs | Hours/week (if applicable) |
|--------|--|----------------------------|
| CILO 1 | In large and small group activities students will examine various principles, processes and methodologies of EIA and apply these processes to examples of development projects. | See below |
| CILO 2 | Students in large and small group sessions will investigate and explain the approach in socio-economic impact and environmental risk assessments, and the relationship between EIA and landuse planning. | See below |
| CILO 3 | Students will discover the elements and application of the EIA framework through critical analysis of EIA case studies and develop communication skills through role play exercises and presentations of individual and/or group work. | See below |
| CILO 4 | In large and small group critical evaluation tasks students will discover the application of the EIA framework to specific situations and discuss the problems and issues, limitations and future trends in implementation of EIA. | See below |

The TLAs provided above are indicative of the likely activities that students will undertake in this course. Final details of the individual course components, including large and small group teaching sessions, case studies, discussions, role play exercises and oral presentations, will be provided in the student course documents distributed at the commencement of the course.

Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

| ILO No | Type of assessment tasks/activities | Weighting (if applicable) | Remarks |
|--------|---|---------------------------|-----------|
| CILO 1 | In tutorial assignments (case studies and scenarios) and end-of-course examination students will apply the range of principles, applications, processes and methodologies to EIA examples. | See following table | See below |
| CILO 2 | Tutorial assignments (case studies and scenarios), discussion and end-of-course examination, will enable students to apply EIA concepts to evaluate the socio-economic impact, ecological impact and environmental risks and benefits. | See following table | |
| CILO 3 | In a role play report, oral presentation and end-of-course examination students will critically analyze cases, apply knowledge to conduct EIA and communicate effectively in writing and orally about the complex issues in EIA. | See following table | |
| CILO 4 | In-classroom and out-of-classroom discussion and end-of-course examination, using problem-based questions which require students to critically evaluate problems and issues, limitations and future trends in implementation related to EIA and environmental management. | See following table | |

The table below is indicative of the assessment weighting for each CILO.

| ILO No. | Discussion/Tutorial Assignments | Role Play Report & Oral Presentation | Examination | Total |
|---------|---------------------------------|--------------------------------------|-------------|-------|
| CILO 1 | 20% | | 60% | 20% |
| CILO 2 | | | | 20% |
| CILO 3 | | 20% | | 40% |
| CILO 4 | | | | 20% |

The Assessment Tasks and Activities provided above are indicative of those that students will undertake in this course. Final details of the individual assessment, including short quizzes, tutorial assignments, discussions, case reports, role play exercises, oral presentations and end-of-course examination, will be provided in the student course documents distributed at the commencement of the course.

Starting from Semester A, 2015-16, students must satisfy the following minimum passing requirement for BCH courses:

“A minimum of 40% in both coursework and examination components.”

Grading of Student Achievement: Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

Grading will be based on students' performance in assessment tasks/activities. Allocation of marks will be as follows: Coursework (including case studies, role play exercise, web-based discussions and oral presentations), 40%; Examination, 60% (see above table under Assessment Tasks/Activities).

Grade descriptions

The following description is indicative of the grading criteria adopted for assessment purposes:

- A. Student completes all assessment tasks/activities and can demonstrate excellent synthesis of the principles, processes, methodologies, problems and limitations related to various aspects of environmental impact assessment in detail. Provides a comprehensive analysis of real-life environmental problems in a complex situation in Hong Kong or elsewhere, with clarity of the explanations, logical and advanced justifications, and creative/personal interpretations and view points. Shows evidence of demonstrated use of a range of environmental impact assessment techniques appropriately and originality in thought, argument or application, with effective oral and written communication.
- B. Student completes all assessment tasks/activities and can describe and explain principles, processes, methodologies, problems and limitations related to various aspects of environmental impact assessment in a high degree of accuracy and thoroughness. Provides a detailed, critical analysis of real-life problems in the Hong Kong environment or elsewhere using appropriate environmental impact assessment techniques, with accurate, clear explanations and appropriate justifications. Shows ability in integration of concepts, analysis techniques and applications via clear oral and written communication.
- C. Student completes all assessment tasks/activities and can describe and explain some key principles, processes and methodologies related to various aspects of environmental impact assessment. Provides simple but accurate explanations and basic justifications for how environmental impact assessment techniques are applied in real-life environmental problems in Hong Kong or elsewhere. Shows evidence of use of oral and written communication clearly.
- D. Student completes all assessment tasks/activities but only can briefly describe isolated principles, processes, methodologies, problems and limitations related to various aspects of environmental impact assessment. Demonstrates limited ability in analysis and justification of real-life environmental problems in Hong Kong or elsewhere, with a lack of integrated understanding of applications of environmental impact assessment techniques as a whole. Can communicate simple ideas accurately in writing and orally.
- F. Student fails to complete all assessment tasks/activities and/or cannot accurately describe and explain relevant principles, processes, methodologies, problems and limitations related to various aspects of environmental impact assessment. Cannot provide appropriate analysis and satisfactory justifications to real-life environmental problems in Hong Kong or elsewhere, and may show evidence of plagiarism or inability to communicate ideas.

Part III

Keyword Syllabus:

- Principles, objectives and scope of EIA. Major issues of the EIA process. Administrative and organizational aspects.
- Defining the scope. Identification and evaluation of alternatives. Baseline studies.
- Methodologies in the identification, prediction and assessment of impact overlay, checklist, matrices, sequences flow diagram, network and other systems.
- Content, preparation and review of environmental impact assessment.
- Monitoring and auditing of impacts.

- Case studies from developed and developing countries. Specific socio-economic impacts and limitations of EIA in developing countries. Case studies from Hong Kong.
- Risk assessment and management. Problems and constraints of EIA.
- Interaction between EIA, land use planning and engineering designs. Identification and evaluation of mitigation measures.

Recommended Reading:

Text(s):

Introduction to environmental impact assessment: a guide to principles and practice. B.F. Noble. 2010. Oxford University Press.

Introduction to environmental impact assessment. J. Glasson, R. Therivel, A. Chadwick. 2012. Routledge, New York.

Online Resources:

To be provided, as required, in lectures and tutorials.