Western University - Faculty of Engineering
Department of Civil and Environmental Engineering

CEE 4404b –Advanced Topics for International Development for Engineers - Course Outline 2019

This course introduces students to the concepts of Leadership, Management and Project Planning in international development and gives insight into how to work effectively on a development project and/or in an international context. This course will assist students to achieve a deep and broad understanding of how international development cooperation works in order to effectively use their interpersonal and engineering abilities in developing countries. The general objectives are for the student to become able to:

- Continue to develop a deep and broad understanding of how international development cooperation works
- Acquire the tools to prepare to be an effective practitioner, leader and manager of international development projects
- Evaluate international development projects on the basis of desired results, methodologies, consequences, partnerships and collaboration
- Improve written and oral communication skills through thoughtful class contribution, presentations, debates and discussions
- Apply knowledge to case studies and effectively work through making management decisions in the context of an international development project
- Analyze, relate and explain key development issues, problems, solutions and consequences
- Recognize the need for life-long learning to keep abreast of new methods in international development. Also to enhance one's abilities as an effective leader and manager working collaboratively to bring the project to completion while continually enhancing one's engineering competency.

Calendar Copy:
The course will assist students to achieve a broad understanding of being a manager of an international development project and to enable the effective use of engineering in developing countries. The course covers what works and does not work in international development, the results targeted in development work, and effective approaches and methodologies to achieve those ends.

Class/Contact Hours:
4 **lecture** hours per week: **Tuesday 8:30-10:30 a.m. and Wednesday 9:30–11:30 a.m.** **(**recommended additional personal study: 4+ hours per week).

Attendance at the lectures is **mandatory.**

Prequisites: Admission to the Environmental Engineering with International Development Option or the Structural Engineering with International Development Option.

Corequisites: None

Antirequisite: None

Note: It is the **student's responsibility** to ensure that all Prerequisite and Corequisite conditions are met or that special permission to waive these requirements has been granted by the Faculty. It is also the **student's responsibility** to ensure that they have not taken a course listed as an Antirequisite. The student may be dropped from the course or not given credit for the course towards their degree if they violate the Prerequisite, Corequisite or Antirequisite conditions.

Instructor:

Christine Gilmore, Office#: SEB 3117, Email: cgilmor4@uwo.ca. *Administrative Support:* Sandra McKay-Room 3005

Textbook:

International Development: A Casebook for Effective Management [Paperback ($28) in the UWO bookstore now OR e-Book ($10)]
Frederick Keenan and Christine Gilmore (Authors)
Publisher: iUniverse Inc. (01/06/2011)

Other References:

The *Suggested Reading and Viewing in International Development Literature* list will be posted on OWL.

Additional Reading / viewing will be provided throughout the course.

Computing:

Written assignments must be submitted as word processed documents in Microsoft Word or PDF formats. All assignments must be submitted with properly cited references to course instructor via email and through course website using TURNITIN.

Units:

SI units will be used in lectures and examinations

Course Style / Specific Learning Objectives (adapted from J. Gerhard, CEE 3328 course, modified by C. Gilmore)

The pedagogical model is collaborative learning, and the classes will be based on discussions, planning, case studies, debates, guest speakers, as well as lectures. Students are expected to come to class prepared to discuss the weekly readings and videos with your classmates. The course instructor will provide mentorship and guidance for the students to undertake individual and collective learning processes focused on achieving the course objectives.

A substantial reading list will be employed that will provide material for digestion, synthesis, and reflection in an individual book report assignment, group discussions and group debate.

Students will research topics and present their findings to the class. Guest speakers will add to class information and applications of the topic material. Projects will explore pertinent areas of international development, Project Planning, Management and Leadership.

Where the students' schedule allows, there may be **'out of class'** visits.

By the end of the course, the student should be able to articulate her/his own learning with respect to these key points aligned with the course's specific learning objectives:

- Show their comprehensive knowledge of what is happening in the world
- Explain what works and what doesn't in international development cooperation
- Use effectively results based management to plan an international development project
- Use their critical faculty and knowledge to make good decisions in complex situations through use of decision matrices and be able to apply this to specific case studies
- Summarize key aspects of international development cooperation projects that have been successful and projects that have failed.
- Articulate lessons learned from guest lectures working on various aspects of international development cooperation
- Discribe major aspects learned from international development readings that will enhance one's effectiveness as an engineer working as a Project Manager and Leader
- Be able to provide advice on international development cooperation projects
- Identify potential benefits and challenges faced by developing countries in our global community

General Learning Objectives

E=Evaluate, T=Teach, I=Introduce (*Beginner or Intermediate or Advanced Level*)

Problem Analysis	T	Team Work	E	Ethics and Equity	T
Investigation	T	Communication	E	Economics and Project Management	
Design		Professionalism	E	Life-Long Learning	T
Engineering Tools		Impact on Society	T		

Evaluation:

The final course mark will be determined as follows:

Quiz ……15%
News Analysis ……... 15%
Book /Film / Documentary ……. 15%
Class Contribution …….. 10% (class group work, debates, discussions)
Final Exam ……. 45%
Total …… 100%

Note: **(a) Students must pass the final examination to pass this course**. Students who fail the final examination will be assigned the aggregate mark, as determined above, or 48%, whichever is less.

(b) Students must turn in all individual assignments and projects to pass this course. Students who do not satisfy this requirement will be assigned 48% or the aggregate mark, whichever is less.

(c) Students who have failed this course previously must repeat all components of the course. No special permissions will be granted enabling a student to retain laboratory, assignment or test marks from previous years. Previously completed assignments and laboratories cannot be resubmitted.

(d) Should any of the classes conflict with a religious holiday that a student wishes to observe, the student must inform the instructor of the conflict no later than two weeks before the scheduled class.
(For further information on Accommodations for Religious Holidays see http://www.uwo.ca/univsec/handbook/appeals/accommodation_religious.pdf)

1. Examinations:

The final examination will be CLOSED BOOK. Calculators are not required.
Part marks may be awarded for some of the questions on the final exam.

2. Assignments

a) Weekly Assignments and Case Studies

Assignments will be handed out weekly **Wednesday via email** afternoon to all students summarizing the work for the next week's Tuesday and Wednesday classes and will contain three parts:

i) Case study information on the case study to be read for the **following Tuesday or Wednesday class**
ii) Instructions for short written assignments due in the **following Tuesday or Wednesday's class, at the beginning of class,** unless otherwise stated in class.
iii) **Reminders** of upcoming speakers, student presentations etc.

The assignments are intended to broaden students' knowledge of international development topics and assist with class discussion.
Case studies must be read in advance of class and students should prepare adequate notes to guide them in class discussion and debate, and assist them in preparing for guest speakers.

Assignments must be handed in by the beginning of class on the day the assignments are due. Students are responsible for keeping a copy of their work until they have received a final grade for the assignment.

Please, note that late assignments will be penalized as follows:
Within 24 hrs. of deadline 10% will be deducted
Within 48 hrs. of deadline 20% will be deducted
Within 72 hrs. of deadline 30% will be deducted.
Assignments handed in after 72 hrs. have passed from the deadline will not be graded.

b) Projects

Two projects will be completed for this class: the News Article Project, and a Book/Film/Documentary Project which includes a Presentation on international development issues found in the Book/Film/Documentary Assignment.

1. The News Article Project will involve **2 news article summaries** submitted every 2 weeks for 5 weeks. Hard copy handed in at the **beginning of Tuesday's class. Students will also discuss "What's in the News" in class for 5-10 minutes** Tuesday or Wednesday.

2. In the Book/Film/Documentary Project, students will read/view an international development related book/film/documentary (suggested book list provided), hand in a written report and an annotated bibliography (4-5 pages for brief summary and analysis of issue(s)–not including annotated bibliography) on **Wednesday, March 13** and present the development issue(s) from the book/film/documentary in class for 10 minutes on an assigned date.

3. Class Contribution (excerpt taken from CEE 3328b outline by Dr. J. Gerhard with modifications by C. Gilmore)
As this is a seminar type course, you are expected to contribute to the collective learning of the class. In order to do so, you must prepare the readings/viewings carefully in advance of the class. During class, you must listen actively to the class conversation, build on classmate's information, ask questions to the guest speakers, offer insights, and contribute meaningfully. It also means that you are respectful of your classmates and their opinions, are punctual to class, and do not engage in negative or disruptive behaviours.

It is important to discriminate between class participation and contribution. Class participation focuses on you, whereas class contribution focuses on the benefits you accrue to the class. You must engage with the class process in order to contribute to the collective learning of the class.

You will be expected to self-evaluate your class contribution and participation (mark out of 10) on a random class basis and submit this mark to the course instructor. The instructor will also assign an evaluation mark out of 10.

4. Individual Presentations
Each student will give one short (10 minute) presentation in class on the book/film/documentary reviewed. Students must present on their designated date during either the **Tuesday or Wednesday lecture period.**
****Note: if a student comes across an interesting article/video etc. – you may be asked to present it to the whole class**… eg. new technology, mitigation of climate change, etc.

5. Use of English
In accordance with Senate and Faculty Policy, students may be penalised up to 10% of the marks on all assignments, tests, and examinations for the improper use of English. Additionally, poorly written work with the exception of the final examination may be returned without grading. If resubmission of the work is permitted, it may be graded with marks deducted for poor English and/or late submission.

Plagiarism Checking:
The University of Western Ontario uses software for plagiarism checking. Students are required to submit their Laboratory Reports in electronic form to Turnitin.com for plagiarism checking.

Cheating:
University policy states that cheating is a scholastic offence. The commission of a scholastic offence is attended by academic penalties that might include expulsion from the program. If you are caught cheating, there will be no second warning.

For more information on scholastic offenses, please see:
http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf

Attendance:
Any student who, in the opinion of the instructor, is absent too frequently from class, laboratory, or tutorial periods will be reported to the Dean (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean, the student will be debarred from taking the regular final examination in the course.

Accessibility:
Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

Conduct:
Students are expected to arrive at lectures on time, and to conduct themselves during class in a professional and respectful manner that is not disruptive to others. Late comers may be asked to wait outside the classroom until being invited in by the Instructor. Please turn off your cell phone before coming to a class, tutorial, quiz or exam.

On the premises of the University or at a University-sponsored program, students must abide by the Student Code of Conduct: http://www.uwo.ca/univsec/board/code.pdf

Sickness and Other Problems:
Students should immediately consult with the Instructor or Department Chair if they have any problems that could affect their performance in the course. Where appropriate, the problems should be documented (see attached). The student should seek advice from the Instructor or Department Chair regarding how best to deal with the problem. Failure to notify the Instructor or Department Chair immediately (or as soon as possible thereafter) will have a negative effect on any appeal.

For more information concerning medical accommodations, please see:
http://www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf

Notice:
Students are responsible for regularly checking their email, course website (https://owl.uwo.ca) and notices posted outside the Civil and Environmental Engineering Department Office

Consultation:
Students are encouraged to discuss problems with their teaching assistant and/or instructor in tutorial sessions. Office hours will be arranged for the students to see the instructor and teaching assistants. Other individual consultation can be arranged by appointment with the appropriate instructor.

Course breakdown:
Natural Science = ? ; Engineering Science = ? ; Engineering design = ? ; Complementary Studies = ?; Mathematics = ?.
Ms. Stephanie Laurence has the updated AU's for CEE courses

The document "INSTRUCTIONS FOR STUDENTS UNABLE TO WRITE TESTS OR EXAMINATIONS OR SUBMINT ASSIGNMENTS AS SCHEDULED" is available.