

2009 SYLLABUS
BUSSPP003X and ENGR002X – International Field Project

Note, syllabus of individual group overrides this general syllabus if they are different

Course Description

BUSSPP003X and ENGR002X are optional three-credit study abroad opportunities offered as a follow-up to Managing in Complex Environments (required of freshmen CBA students) or ENGR0011/0711 and ENGR0012/0715/0712 (required of freshmen engineering students) at the University of Pittsburgh. These courses involve teams of both business and engineering students who will work on a project involving travel to one of five international destinations.

Official registration information for each course is as follows:

Country	Engineering Students		Business Students	
	Course number	CRN	Course number	CRN
Valparaiso, Chile	ENGR0023	15546	BUSSPP0037	13918
Beijing, China	ENGR0024	15548	BUSSPP0038	13916
Augsburg, Germany	ENGR0026	15544	BUSSPP0036	13920
Santos, Brazil	ENGR0032	15576	BUSSPP0040	13922
Ho Chi Minh City, Vietnam	ENGR0033	25698	BUSSPP0041	25825

The course consists of three parts:

- A pre-departure component that will include a brief introduction to the historical, cultural, economic, and social environments of the country/region of the field study: (Brazil, Chile, China, Germany, or Vietnam), and will also introduce the companies that will be visited during the field study. The student will write a short individual report and a team oral presentation for this part.
- A field study component to either Valparaiso, Chile; Beijing, China; Santos, Brazil; Augsburg, Germany, or Saigon, Vietnam. The field study includes company visits, sightseeing, and lectures at the local universities of: Universidad de Santa María in Chile; Tsinghua University in China, UNISANTOS - Universidade Catolica de Santos and UNISANTA Santa Cecilia University in Brazil; Universität Augsburg in Germany, or University of Economics and Finance in Vietnam. Each student is required to keep a daily journal and participate in the local activities for this part.
- A post departure component that involves the writing and presentation of a research paper focused on one of the companies visited by the group and the culture of the country visited. Both business and engineering viewpoints related to the national and global industry in which it operates must be considered in the company visit component of the paper and in the presentation.

Faculty

Not sure if the word teacher is correct for this course. The Plus 3 program is a study abroad experience where the classroom is a real world experience of another culture. Thus, the instructors act more as guides, helping the student have a successful experience.

Faculty from the School of Business and the School of Engineering will travel with students, they have designed a number of academic activities for the trip, thus they will both guide the visit and provide an academic experience.

During any study abroad experience the faculty also have the role of chaperones. We are assuming all the students are adults and will act as such during the trip. The instructors are there to help, but we do not watch every step every student takes 24 hours a day. It is impossible to do this. Thus, it is assumed that the students have the level of maturity necessary to conduct themselves properly during this experience. Faculty participating in the courses in 2009 are:

Country	Professor	Office	Phone	Email
Valparaiso, Chile	Josephine E. Olson	308 Mervis Hall	8-1715	jolson@katz.pitt.edu
Beijing, China	Di Gao	1249 Benedum	4-8488	gaod@pitt.edu
Augsburg, Germany	Ray Jones	2503 Sennott Sq	3-7493	rayjones@pitt.edu
Santos, Brazil	Dan Budny	323 Benedum	4-6474	budny@pitt.edu
Ho Chi Minh City, Vietnam	David Berman	5104 Posvar	8-7311	dmberman@pitt.edu

Program Outline and Evaluation

The Program and evaluation of student performance is based on three components:

I) Pre-departure (20%)

Four mandatory evening seminars will be scheduled that include discussions of socio/political/historical context of your country; the analysis tools for your project; a crash course in language; information on the companies that will be visited, and advice on traveling to your country. There will be assigned reading materials. Dates/topics are:

Week of	Time	Topic
Feb 23 - March 1	Contact Faculty	History, economics, politics, & geography of the country
March 16 - 22	Contact Faculty	Language, culture, and history of the country, How to write a journal
March 29	2:30 – 5:30 PM	Study Abroad contracts, Traveling in your country, Project description,
April 5	Contact Faculty	Presentations on your country

Room assignments for these sessions are as follows:

Country	Week of Feb 23/March 1	March 16 - 22	March 29	April 5/12
Valparaiso, Chile	B75 Mervis	114 Mervis	1700 Posvar Hall	114 Mervis
Beijing, China	1221 Benedum	1221 Benedum	1700 Posvar Hall	1221 Benedum
Augsburg, Germany	209 Mervis	209 Mervis	1700 Posvar Hall	209 Mervis
Sao Paulo, Brazil	138 GSCC	138 GSCC	1700 Posvar Hall	138 GSCC
Ho Chi Minh City, Vietnam	xxxxx	xxxxx	1700 Posvar Hall	xxxxx

There are three components to the pre-departure portion of the course:

- a) **Mandatory attendance/Website (5%).** Attendance at each of the four sessions is required, including your active participation.
In addition, each Plus3 destination will have its own website, and there will be a general Plus3 website. The purpose of the individual websites is to provide family members access to the students while they prepare for the trip and while they are on their trip. Each group will assign one engineering student to act as the web master for the group and this student will be responsible for posting the files to the web site before the presentations of April 5.

- b) **An individual report (10%).** Each student should prepare an essay of approximately 1200 words on the following subjects.

I. *Introduction - My Current Attitudes and Beliefs toward Travel and Your Plus-3 Country*

Students should briefly describe their travel experience to date, particularly with respect to international travel and/or times when they traveled with a group of peers. What personal reasons (interest, family background, professional relevance) do you have for traveling to the Plus-3 country? How much did you know about its culture and professional background before you were selected for the trip?

II. *Individual/Personal Issues in Your Plus-3 Country*

Based on some reading and research, what cultural differences do you expect will affect your interactions with the citizens of your Plus-3 country? How do people in the country handle issues such as conflict, time management, encountering "foreigners", and drinking alcohol? What is their basic value system? What are the major differences in living, economic and political conditions for the average citizen in your Plus-3 country? More specifically, how are the people you meet on the streets every day likely to view someone who is an American citizen and/or who goes to school in the U.S.? And - if you are not an American citizen, how are people from your national background typically received among individuals in your Plus-3 country? Feel free to comment on any interesting cultural difference you expect will affect your daily interactions.

III. *Company/Professional Issues in Your Plus-3 Country*

Based on some reading and research, what cultural differences do you expect will affect your interactions with business people and engineers on the company visits? What is the "organizational culture" typically like for

companies/organizations in your Plus-3 country (are companies very formal and highly organized/mechanical, or do they tend to be more informal and open/creative?) Describe the current business environment in your Plus-3 country, particularly with respect to the companies you will be visiting on the trip. Feel free to comment on any interesting professional or industry trend that is likely to have an impact on the companies we visit.

IV. *National/Societal Issues in Your Plus-3 Country*

Based on some reading and research, what are the most important current political trends facing your Plus-3 country? How does your Plus-3 country fit into the global and political system with respect to issues such as major products and services, relative economic importance (Country GDP vs. Global GDP), role in innovation, environmental leadership, and human rights? Feel free to comment on any interesting national/societal issue or trend that is likely to be going on during your Plus-3 trip.

V. *Conclusion - My Personal Action Plan for My Plus-3 Trip*

After thinking about what you have learned about individuals in your Plus-3 country, company/professional issues in the country and its most important national/societal issues, how do you plan to use this knowledge when interacting with local citizens, when approaching the company visits, and when thinking about the society/culture during your two week trip?

VI *Sources:*

List at least two specific websites, books or articles you consulted for each section of your reflection paper (two each for Individual/Personal, Company/Professional and National/Societal - so at least six total). Do not just list "the internet" or "Wikipedia" - give us a sense of where you found information, and try to list a specific website and/or article title whenever possible. It is fine to use Wikipedia to help find information, but any good Wikipedia article has links to specific websites and articles that go into greater detail and are written/published by established organizations.

c) **A group presentation (5%) April 5.** Before we leave for each country and during the field trip, each student should be thinking about the following topics. Students should note that the suggested topics match the main sections of the post-trip report. As such, students should think of these concepts as preparation before we leave for the country as an initial opportunity to consider concerns that they will analyze in the final project.

- **Global/National Environment:** (Preparation) What interesting political, economic, social or technological factors affect the firm that you will visit? Why are these factors of interest to a professional in business or engineering?
- **Industry Analysis:** (Preparation) Describe the industry of the firm that you are going to visit. What are the major product categories in this industry and who are the firm's major competitors? What unique challenges or opportunities exist for firms in this industry? Why is this industry of interest to a professional in business or engineering?
- **Engineering Principles:** (Preparation) Research the basic engineering principles involved in the company process. How is the product or service produced, what raw materials are required, how do the raw materials get to the site, how is the product shipped to the customers, what variables must be considered, what are the safety concerns, what environmental factors must be considered, what skills must the workforce involved with the process have and must they be engineers? Do you see a connection between the engineering requirements and the need for a background in the sciences?
- **List of questions:** (Preparation) Read the requirements for the students journals listed below. From this, make at least 2 power point slides with a list of questions you would like to ask. One slide should be the questions you will ask the professionals you meet, and the other slide should be the questions you would like to ask the students you interact with.

The Power Point presentation should be 10 - 15 minutes long and should be an introduction to the company you will visit and a short description of the culture and business environment of your country. The presentation should include two components: 1) A short introduction to your company, 2) A short introduction to your country Brazil, Chile, China, Germany or Vietnam. When you prepare your presentation, assume you will be talking to a group who does not know anything about the company or country or about the advantages and challenges of doing business there. For resources, you should use the material presented in the pre-departure sessions, the assigned readings, and other reference work that you develop. The deliverables are the oral presentation and an electronic copy of your PowerPoint slides. Figure that you probably can cover about 10 -15 slides in 10 minutes. **PRACTICE SO THAT YOU DO NOT EXCEED THE TIME LIMIT!** The copy of the ppt file should be emailed to your professor a day before you are assigned to make the presentation and a copy will be posted to the trip web site.

II) Two weeks study abroad experience (50%)

The scheduled Departure date is Saturday, May 2, and the scheduled return date is Friday, May 15 for Chile, Saturday, May 16 for Germany, Brazil, China, and Vietnam. Note that the return dates are the days we are leaving the country, not necessary the day we return. Because of the different time zones related to all the trips, each trip has a different schedule.

There are two components evaluated as part of the Study Abroad Trip:

a) Individual Journal (35%). Due Monday, June 1

During the two week in-country component of the course, each student is responsible for keeping a daily professional journal of their reflections on various professional issues and concerns that are encountered during the trip. We expect the average daily entry to be at least 250 words in length. We expect that each entry will discuss the daily experiences, and describe what each student did and saw, however, this is also a professional journal. This means that each entry must include not only descriptive comments about what you saw or did and it should make connections between the daily experiences and how they help in your development as an engineering or business professional. The journal is intended to compel students to make direct connections between what they are observing and experiencing on the trip and the types of issues and concerns they will face as professionals. These observations can be comparative (how the country is the same or different from the U.S.) and can include comments on day-to-day life, anecdotes, language, politics, geography, stores, social life, the popular culture of the country, etc. As you write on these topics, try and frame your comments in such a manner that they explain how this helps you understand the people and the lifestyle of your country and how this impacts your professional development in the area of global issues. As part of this journal, you must also include a description of how the program of study and life of an engineering or business student (whichever you are) is the same as and different from that of a comparable student in the U.S.

In addition to writing on their daily activities, students must also submit a final summary journal entry that address topics on the following five (5) professional development topics. It is suggested that each student try and include something from the following list in each daily activity. At the end of the trip each student will then summarize their view on each on the following five topics by addressing each item in a separate paragraph (minimum of 200 words for each) and this will be the final journal entry. It should also be posted to the web site as the final summary journal entry.

1. Ethical Issues in My Profession:

Give an understanding of the professional and ethical responsibility you see as a result of the United States industries becoming global players. For example, do you see things in your country that would not be allowed or are not typical industry standards in the United States, such as safety issues, environmental issues, employee issues (wages, benefits, working conditions, etc.)? Does your country address diversity issues (gender, race, religion, lifestyle choices) differently than the United States. Because of these differences you see, could a company make more money, or do more business by doing the same thing in your country then in the United States? If so how does this affect life and business in the United States?

2. Educational Breadth as Professional Development:

Based on your experiences traveling in this country, describe the need for a broad education necessary to understand the impact of engineering/business solutions in a global and societal context. Is it important? Are there enough differences between your country and the United States that you believe students should expand their classroom experience to include learning about different cultures? If so, explain what future courses you should take to prepare you for a global economy.

3. Lifelong Learning, Continuing Education as Professional Development:

As you go to the company visits, ask yourself and the people you meet, what part of their job did they learn in school and what part did they learn on the job. Ask them if their education allowed them to do their job throughout their career or did they need to learn new things each year. Ask them how technology has changed their jobs and how did they learn how to use this technology. Then, give a recognition of the need for, and an ability to engage in life-long learning and explain how this is needed to compete in the future.

4. The Social Environment of Professional Life:

As you travel around the country try and discover the connection between peoples' social life and their professional life. Do you see any connection? Ask people in your country if they know anything about the social and political issues in the United States. Do you know the same about their country. Read the local newspaper, watch the local television shows, what are the topics addressed in what you see on TV, hear on the radio, read in the newspaper or

magazines. If you can not understand the material in their media, look at the pictures, and ask the local students to explain this to you. Explain why it is important to have knowledge of contemporary issues related to the global economy. What political, social, economic and diversity issues are involved within engineering/business that are involved within your industry on a global scale? How does this affect life and business in the United States?

5. Functioning on Multi-Disciplinary Teams:

It is important for professionals to be able to function and communicate effectively as a member of a team of individuals from diverse backgrounds. How do you work when you are a member of such a team (for example – you are either an engineering student who is traveling with business students, or vice-versa)? What are some of the challenges involved in establishing and maintaining effective communication on this type of cross-functional team?

Your journal should be updated daily and an edited electronic version submitted to the trip web site daily, or as web access is available. Bring digital or standard cameras to document your trip and include photos with your journal if possible. At the end of each day go back and reflect on what you wrote for each day of the trip and continue to update your journal.

We have found that the time goes by very fast during the trip, and students do not always have time to completely finish each days journal during the trip, thus, you have until **Monday, June 1** to reflect on each day and edit/modify/complete your journal. If you are not going to complete an entry for any given day and are going to wait until you return to complete your journal, then you must at least produce and post online an outline of your activities each day.

b) **Participation (15%).**

Professional activities. Each student is expected to attend each and every planned event, including the sightseeing trips, the company visits and the lectures at the local universities; be on or ahead of schedule for all events; participate in all work activities; and be actively engaged in asking questions of lecturers and speakers. The Professors from Engineering and/or the College of Business will maintain participation records. After each company visit each student should complete an individual reflection on what they saw and write down any observations and/or questions they have from the trip. Then each student should use these observations as starting points for the next company visit. Consider such questions as: What interesting strengths or weaknesses were discussed (or are apparent) in the firm that you visited today? Does this firm face any interesting opportunities or threats from the external environment? Why is this firm of interest to a professional in business or engineering? What engineering issues are involved in the process? What technology or lack of did you observe? What business practices did you observe? Student groups are encouraged to share their thoughts with others groups and with each other.

Personal activities. We understand that each student is an adult and as so has the right to spend their free time in the country as they wish. However, all students must also understand that while they are on the site visits and also while they are on their own time, they are representing the University of Pittsburgh. Thus, their actions directly reflect on the university’s image and the image of the United States. **Failure to maintain acceptable behavior will result in failure of the participation component and can be grounds for failing the course and being sent home.** Acceptable and unacceptable actions will be described in the pre-departure sessions.

The schedule for the trips is as follows:

Country	Depart US	Arrive X	Depart X	Arrive US
Valparaiso, Chile	Saturday May 2	Sunday May 3	Friday May 16	Saturday May 17
Beijing, China	Saturday May 2	Sunday May 3	Saturday May 16	Saturday May 16
Augsburg, Germany	Saturday May 2	Saturday May 2	Saturday May 17	Saturday May 17
Santos, Brazil	Saturday May 2	Sunday May 3	Saturday May 16	Sunday May 17
Ho Chi Minh City, Vietnam	Saturday May 2	Sunday May 3	Saturday May 16	Saturday May 16

DO NOT BUY ANY AIRLINE TICKETS TO THE HUB AIRPORT UNTIL YOUR INSTRUCTOR GIVES YOU A COPY OF THEIR FLIGHT INFORMATION.

Post-trip report (30%)

Teams: Each country trip will have approximately 20 - 40 students, some from business and some from engineering. There will be 4 - 7 company visits/country, thus the students will work in teams of about four - five students. Each team will be composed of both business and engineering students. Final team assignment will be made before the March 30 week meetings to enable students to prepare for the trip before they leave the United States.

The post-trip report will consist of two components:

- a) Group Project Report (20%). Each student group must prepare a written report on their company. The written report should be about 9000 words (13 - 15 pages), single spaced using the paper format guide supplied. The content of the project is described in the attachment to this course description. The final version of the paper and the power point presentation is due **Tuesday September 15**.
- b) Oral Presentation (10%) Student groups will make a 10-minute oral presentation, that is a summary of the written report on or before **Sunday, September 20**. The final version of the power point presentation is due **a day before the presentation**. A hard copy of the final version of the slides is due the day of the presentation at the time you present. Students will receive a group grade for the presentation.
- c) Each student will also evaluate their individual group members to determine what percentage of the group writing and power point assignments was done by each member. Final Group report grades will then be distributed based on these percentages.

Based on the various countries, a first draft of the paper may be required by your faculty member. If required, this will be emailed to your professor before **Monday September 7**.

Critical dates:

Tuesday September 15
TBA

Final written paper and PowerPoint slides due.
Oral presentations of project reports.

Project Description and Report Outline

Completion of the project will require the use of a variety of data sources. A few places to check for these data on the web include bigcharts.com, ceoexpress.com, the Global Edge section of Michigan State's CIBER website (<http://globaledge.msu.edu>), the CIA website.

For articles on companies, industries and countries use the University Library System's Electronic Databases (www.library.pitt.edu), particularly the Business and International ones. Some of these are Business Source Premier/EbscoHost; Business and Company Resource Center/InfoTrac; National Newspapers; Stat-USA (particularly good for country information); Market Research Monitor (Euromonitor, good for marketing studies). With the University's new Zoom! Search engine, many databases can be searched at the same time. Other sources: for competitiveness and economic freedom ratings - Economic Freedom of the World PCL (www.freetheworld.com/index.html); The Global Competitiveness Report of the World Economic Forum (www.weforum.org).

For industry information: Investext*; NetAdvantage* (Standard and Poor's). For company information, see Disclosure Global Access and www.Hoovers.com (though this source applies to US firms, at least primarily). The information provided by the Career Services and Engineering Library throughout the first year can also be used to find information on your company.

Project Content. The projects must consider both business and engineering points of view. The paper has six major sections. I) Introduction and Overview of the group's company, II) Description of the company you visited including an Industry Analysis, III) Description of how your company fits into the global economy, IV) Description of the engineering principles involved with the company, V) Summary and Evaluation of the impact the global industry has on business and engineering and how it is changing these professions in the United States today and in the future, and VI) Professional Development, which should be a summary of the final journal entries for your group.

I INTRODUCTION – OVERVIEW

This section should be approximately 1000 words and should discuss how and why does the company have a competitive edge, with respect to the following factors:

- Why is the company located here?
- What is the fit with its national environment?
- What is the fit within its industry?
- What is the appropriateness and success of its competitive strategy?

II THE FIRM AND ITS SOCIAL ENVIRONMENT

This section should be approximately 1500 words and discuss the conditions your firm faces in its broad social environment at the following levels:

- A) What national and global Political, Economic, Social and Technological factors affect your firm?
- B) Industry Analysis - Industry Overview: Describe the industry. In this description include information about the product categories produced, major world players and their market shares, major production locations and major market locations in the world. Describe the manufacturing process or industry operations.
- C) Firm Analysis - SWOT Analysis: What specific environmental factors does your company face, that are internal to the company (Strengths or Weaknesses)? What environmental factors does your company face that are external to the company (Opportunities and Threats)?

III THE FIRM'S COMPETITIVE STRATEGY

This section should be approximately 1500 words and discuss how your company is responsive to the various conditions that it faces? Specifically, what is the firm's competitive strategy, and how does it "fit" with the various environmental conditions it faces globally/nationally, in its industry, and with respect to the various strengths, weaknesses, opportunities and threats it faces?

Overview of the Company and Its Broad Competitive Strategy:

Who owns it? How long has it been in business? Where are its headquarters? What products does it produce? What geographic markets does it serve? How many employees does it have or appear to have? What percentage of the work force are professionals (engineers and/or business)? What type(s) of engineering and business is (are) used in the manufacturing? What differences do you see between your company and a similar one in the United States?

Company's Strategic Fit Within Its Global/National Environment:

Does your firm have any comparative advantages with respect to other global competitors because of its fit with the conditions of the country/region in which it operates?

Company's Strategic Fit Within Its Industry:

What is your firm's position within its industry with respect to cost leadership, differentiation or focus?

IV ENGINEERING PRINCIPLES

This section should be approximately 3000 words and discuss the basic engineering principles used in the company. Look at the company from the perspective of the different fields of engineering. What would a Civil, Mechanical, Electrical, Chemical, Industrial, or Bio Engineer see if they evaluated the company. What basic engineering applications did you see? How does the company fit into the environment? Describe the process, the raw materials involved, the supply chain and intra structure needed to support the company. Finally how does the system work, how do they make whatever they make, and/or what is the science principle behind the product.

V SUMMARY AND EVALUATION

This section should be approximately 500 words and should summarize and evaluate the firm's level of innovation, business practices, use of technology or other engineering practices.

Pros

What are the main things that your firm is doing well in order to be innovative and compete successfully?

Cons

Which areas are not fully developed in your firm, or, are not being addressed adequately?

VI PROFESSIONAL DEVELOPMENT

This section should be approximately 2500 words and should summarize the five professional development topics discussed by everyone in their journals. Thus, take the comments from each member of the team and summarize the groups view on:

1. Ethical Issues in My Profession:
2. Educational Breadth as Professional Development:
3. Lifelong Learning, Continuing Education as Professional Development:
4. The Social Environment of Professional Life:
5. Functioning on Multi-Disciplinary Teams:

Each topic area should be approximately 500 words.