

****DRAFT****

**International Study Abroad Course in Germany
Summer 2016**

GO GREEN:

**Green Organizations: Global Responsibility for Economic and Environmental Necessity
Course
OLS 42300 – 3credit hours**

Mannheim, Germany – May 27- June 4, 2016

The School of Engineering and Technology is offering a 3 credit hour course, titled, “Green Organizations: Global Responsibility for Economic and Environmental Necessity,” in Mannheim, Germany during the summer of 2016. A portion of the three credit hour course will be taught at IUPUI prior to the one-week spent in Mannheim, Germany. The group will meet at IUPUI in July for a final discussion. This course is open to all IUPUI students.

Course Description

This is an interdisciplinary course emphasizing sustainability, globalization and German culture. In this context, sustainability refers to design, engineering, manufacturing, technology and leadership processes implemented and maintained in industry and business for the purpose of being environmentally responsible, energy efficient, cost effective, and socially responsible. Students will visit industries, municipalities and universities; such as, Mercedes, Roche, MVV Energie, City of Mannheim, University of Kaiserslautern, etc. to see various innovative new methods of technology, manufacturing, engineering, as well as, imbedded sustainable practices. Germany is known for its innovative technology and engineering practices and their sustainable culture and business practices.

Sustainability or sustainable development is considered a social aspect or social competency of engineering, along with decreasing greenhouse gas emissions, increasing water and energy efficiency, developing renewable energy resources, and eliminating waste or resource recovery, just to name a few. These social aspects have been widely practiced in Europe for many years, especially in Germany. In the United States, engineers, business professionals, and others are just beginning to pay attention to these social aspects. The term “Sustainable Development” adopted by the Agenda 21 Program of the United Nations was first defined by the 1995 World Summit on Social Development as a “framework for our efforts to achieve a higher quality of life for all people, while still having economic development, social development and environmental protection all mutually interdependent and mutually reinforcing components” (Sustainability, 2006).

The United States Environmental Protection Agency defines “Sustainability” as the ability to achieve economic prosperity while protecting the natural systems of the planet and providing a higher quality of life for its people (Zieba, 1996). Sustainable Development is a contemporary issue for all societies to embrace. It does have the attention of engineering groups all over the world including American Society of Engineering Education (ASEE). The ASEE 1999 Board of Directors approved the following statement; “ASEE believes that engineering graduates must be prepared by their education to use sustainable engineering techniques in the practice of their profession and to take leadership roles in facilitating sustainable development in their communities” (ASEE, 2006).

The GO GREEN course includes several one-day classes at IUPUI prior to leaving for Germany and a day of class at IUPUI after returning from Germany. The one-week in Germany includes discussions, guest lecturers, visits and tours of industries in Germany such as; Mercedes, Roche, MVV Energie, City of Mannheim, University of Kaiserslautern, etc. to see various innovative new methods of technology, manufacturing, engineering, as well as, imbedded sustainable practices. Germany is known for its innovative technology and engineering practices and their sustainable culture and business practices.

References

Sustainability. (2006). <http://en.wikipedia.org/wiki/Sustainability>.

Zieba, K (June, 2006). What is sustainable development? United States Environmental Protection Agency Report. ASEE. (2006). <http://www.asee.org/about/statementSustain.cfm>.

General Course Learning Objectives:

Upon completion of this class students will be able to:

1. Acquire knowledge of issues in sustainability (interdisciplinary area) as it relate to business and industry internationally and nationally;
2. Acquire some knowledge and appreciation of German culture and some language skills;
3. Utilize, analyze and synthesize sustainable knowledge from course to apply in life upon return to U.S.
4. Understand and analyze the interconnectivity of global concerns.

Dates of the Program *

IUPUI – **April 23 & 30, 2016*** (Saturdays)* and **May 7, 2016** (Saturday)*
Mannheim, Germany – **May 27- June 4, 2016** (Friday through Friday) Mandatory
IUPUI – **July 9, 2016** (Saturday)*

*These dates are tentative; however, all class days are mandatory attendance.

Academic Requirements to Take the Course

Minimum 2.75 GPA
Sophomore standing
Good Standing with University

Pre-departure Orientation, On-Site Orientation

Pre-departure orientation for enrolled students will be provided in late spring 2016. This will include preliminary information on airline and hotel. Additional pre-departure information and orientation will be provided during pre-departure classes. The class will include several hours of German history, culture, and language as well as to some online course work.

Students will be responsible for purchasing their own airline tickets and making their own reservations at a hotel of their choice in Mannheim (Instructor must approve hotel). Directions, maps, procedures for going through customs, hotel information, airline information, and train information will be given to students. All transportation in Mannheim and surrounding areas for the week will be provided as part of the course.

On-site orientation will be held on at the Leonardo Hotel City Center. The weeklong itinerary, orientation of places in Mannheim, and transportation will be reviewed during this time.

Additional 3 credit Research or Independent Study Option –

Students will be given an option to add an additional 3 credit hours, OLS 39900 GO GREEN Research, by enrolling in an Independent Study Course during 2016 in summer. The Independent Study Course will be designed to focus on a student's area of interest in a topic related to the GO GREEN course and to study this area further in depth. This option will give students the ability to take 6 full credit hours needed for financial aid purposes for summer enrollment awards.

Course Numbers and Faculty

The course number for this class is **OLS 42300**.

Several IUPUI faculty members teach the course from the Purdue School of Engineering and Technology, IUPUI.

- **Patricia Fox**, Clinical Assistant Professor of Organizational Leadership and Supervision and Adjunct Clinical Assistant Professor of Engineering Technology, School of Engineering and Technology, IUPUI.
- **Charles McIntyre**, Visiting Clinical Professor, Engineering Technology, School of Engineering and Technology, IUPUI

Supplementary Activities in Germany

Students will have evenings, some late afternoons, and the weekend to explore Mannheim, Heidelberg, Ladenburg, and/or other close cities or towns. Heidelberg and Ladenburg can be reached via a short tram ride from Mannheim. An important part of this class is learning about the German culture. This time should be used for students to observe and mingle with German people.

Additional Fee

In addition to the three credit hour tuition fee for the course, there will be a charge of a **flat fee of \$500**. This fee will be used for class materials, weekly tram pass, and train fare for the week, and a welcoming dinner and other refreshments. In addition, IUPUI International Programs office charges an **\$80.00 fee** (estimated) for all study abroad course.

Estimated cost of room and transportation

The estimated cost of the roundtrip airfare from Indianapolis, Indiana to Frankfurt, Germany or another comparable German city is less than \$ 1000.00. We have used a German travel agent in the past, which has been able to purchase Germany tickets at a very good rate.) The estimated cost of a round trip train ticket to Mannheim from Frankfurt is \$60.00. Sharing a room with another student is the cheapest way for accommodations; the cost would be approximately \$50 per night if shared or can be cheaper. Meals while in Mannheim are estimated to cost a total of \$250.00 to \$300.00. In the past, some meals have been provided by our industry partners, however this is not guaranteed in the future. A student would need at least approximately \$2,300 or more for the trip in addition to the tuition. See estimates below. Some of the cost of the trip can be offset by scholarships (see scholarship below).

Estimated Student Costs for trip excluding tuition

Cost	Fees	Fee Notes
\$500.00	Course Fee	Includes insurance, local travel, train travel during the week, materials, and welcome dinner.
\$80.00	Program Fee	International Program Fee (estimated)
\$700.00 to \$1200.00	Air Fair	Airfares fluctuate greatly from year to year. This range covers the maximum and minimum amounts we have seen.
\$450.00 to \$1000.00	Hotel	Hotel accommodations range as they do in the US. The estimates here are for 3 and 4 star hotels. For a lower accommodation cost you may stay at 1 or 2 star hotels or even a hostel. You can split the cost and share rooms with other students traveling with the GO GREEN class.

\$120.00	Train	This expense covers transportation to and from the airport to Mannheim.
\$250.00 to \$300.00	Meals	This fee can range as well depending on your dining preferences.
\$200.00	Personal Expense	This is another expense that depends on how much shopping you plan to do for personal items. We suggest this as a minimum amount.
\$2,300.00	Total at Minimum Costs	
\$2,850.00	Total at Average Cost	
\$3,400.00	Total and Maximum Cost	

IUPUI Scholarships

IUPUI has scholarships for students who want to study abroad, especially for students who have never studied abroad. Go to the following website and apply early <http://abroad.iupui.edu/scholarships/>.

Engineering and Technology Scholarships

The school of Engineering and Technology has scholarships for ET students, to find out more information contact Assistant Dean Terri Talbert-Hatch or Professor Fox.

Course open to Undergraduates, Graduates and Non-degree students

This course is open to undergraduate students (OLS 42300) and graduate students (TECH 58100- Sustainable Practices in Business and Industry in Germany and France) and it is open to individuals who might not want credit.

German Language is NOT a requirement for this class

The German language is not required for this class; however, we will teach you enough German language to be polite.

For more information about this course contact Professor Pat Fox, phone (317) 274-0807 or (317) 730-3200 or email psfox@iupui.edu

Updated 8/25/15