CIS 3100: The Business of Smart Cities

Faculty-led International Course

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Program term, May intensive 2019 (tentative dates May 11-22, 2019) - 3 credits

Department: Information Process Management and Computer Information Systems. Business credit.

Program: Undergrad

Course Goals and Objectives.

This course will look at one model of a smart city (Barcelona, Spain) and the array of components that make up a smart cities ecosystem. Smart cities typically refer to an urban development plan that includes the use and integration of information and communication technology to improve life within the target city. Often times it encompasses the use of sensor data, Internet of things technologies and big data analytics to tackle that many problems of urban life.

Our focus will be on the companies that provide the technologies used in smart cities and to look at how municipalities can leverage these new technologies.

Organization

Prior to departing to Barcelona we will meet 2-3 times to prepare for the course. These classes will give the students a foundation in smart cities through a set of culled articles. This course will rely on a range of learning methods to inspire and pique students' interest and knowledge of how technology can be used to lead to better urban living.

The following teaching methods will be used:

- Conceptual presentations by the professors
- Application of the concepts by using specific company examples that we will visit
- Individual reflection journals
- Group papers and presentations that are focused on a selected type of technology used in a smart city

Assignments

Reflection Blog: 25%

Each student will keep a reflection blog that they post in at least 50% of the days they are traveling. Their posts should include reflection on course-related activities and on their overall international experience. They should not be used as personal diaries but rather as professional blogs. They may and should include images, factual data, and personal reflections and thoughts. On some activities, we will provide you a prompt to focus your reflection.

Calls Participation: 25%

Expectations about Participation and Professional Etiquette

Each student will the responsible for reading all assigned reading and be active participants in class discussions and on-site visit discussions

As an international travel field course, your participation and attitude are essential to the success of the class and the positive experience of your classmates. You are expected to be prepared and **on-time** for each day's activities and comply with all instructor requests and course rules throughout the trip. We expect respectful conduct toward your fellow students, instructors, and the people we encounter and places we visit. You will be expected to represent yourself and Bentley University in a positive, professional manner throughout the trip.

Since almost all of this class takes place abroad, your participation and personal conduct are crucial to the overall success of the class. Our group dynamic and your individual behavior matter more in this course than in those that take place within the walls of a classroom. Your class participation grade will be determined by your attitude, your ability to protect the personal health and safety of yourself and your fellow classmates, your respect for the local culture and people, and the attention you invest in our class activities (this includes the readings you are assignment prior to the trip).

Group paper: 50%

Each student will be part of a group of 3-4 students. These groups will pick one type of technology and one or two ways it can be used to improve urban life. The technology type and application must be reflected in at least one company or government visit we participate aboard.

Each group will submit a research paper (7-10 pages typed) on the topic you will be studying throughout the course. Your paper will compare and contrast evidence you find in academic scholarship with evidence you found while visiting the various companies in Barcelona. Your paper will be judged on technical competence, business insights, and clarity of presentation.

Probable areas of group projects (and company visits)

1.   City service design and delivery
2.   The business of city governments

3.   Urban healthcare systems
4.   Urban housing systems
5.   Urban mobility systems
6.   Urban education systems
7.   Urban energy systems
8.   Urban food production and distribution systems

This syllabus is a contract, stating that we expect professional and respectful conduct from one another. A specific list of course rules and code of conduct will be provided at one of the pre-travel meetings.

Grading

Reflection blog 25%

Class participation 25%

Smart city paper and presentation 50%