Bentley Doctoral Program

PBU 1603: Information Systems

SYLLABUS

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COURSE INFORMATION
MEETING DAYS: 
TIME: 
MEETING LOCATION: 

COURSE OVERVIEW AND CONTEXT
This course is designed to give you a sense of the range of topics associated with the field of Information Systems, of how the scope of the field has expanded over the past half century or so, and of the range of research approaches used to study information systems and related phenomena. The scope of the field now encompasses aspects of globalization in addition to the development of information systems, and the use made of information and communication technologies within and between organizations. The research approaches adopted range from focused, laboratory experimentation to field studies, and the philosophical underpinnings of this research range from the positivist, to the interpretivist and the critical. Material covered in this course thus draws from and impacts on learning from other doctoral courses dealing with the philosophy of the social sciences, global perspectives, and research methods. The course is central to an understanding and appreciation of the overarching business, technology and society theme of the Bentley doctoral programs.
COURSE TEXTS
*As this book is still in press, electronic copies of draft chapters will be made available to class members.

PREPARATION
Some basic understanding of how information and communication technologies have developed and impacted the world of work and society over the past 50 years or so would be helpful, as would an understanding of some of the debates in the field and the management issues associated with the topic. In this regard, background reading prior to the beginning of the semester could usefully include, for example:


Other background reading that you might find useful at various stages of the course, or afterwards, includes, in no particular order:

Dip into these books. Don’t try to read them cover to cover!

Take a note of things that are of interest and may be valuable at a later stage in your studies. These books may not only be of interest in their own right, but may also provide some useful references for future use. Indeed, we will refer to some of them during the course of our discussions as the semester unfolds. Also, you may wish to consider some of the recent debates concerning the focus of the Information Systems domain. The book by King and Lyytinen listed above provides a good summary of opposing schools of thought on this point. Dip into this and those articles that compare and contrast the North American and European traditions in Information Systems (see, for example, the recent articles in the European Journal of Information Systems and related references such as Galliers & Meadows, 2003; Galliers, 2008). These debates will be the focus of the second session of the course, on January 26.

http://info.palgrave-journals.com/cgi-bin24/DM/y/ecyh0Swajf0Hqp0BOQF0EF
http://cais.aisnet.org/articles/11-5/default.asp?View=Journal&amp;x=67&amp;y=10

COURSE DESCRIPTION
In this course, we will examine both epistemological and ontological aspects of the field of Information Systems – a field that some have argued has:

- its roots in, for example, computer science, organization science and management science – while others see it as a meta-discipline, encompassing and informing aspects of such fields as these;
- evolved from the design and development of computer-based information systems, to encompass transformational change in organizations, markets and society – while others claim it has become so diffuse as to lose its relevance and identity.
Information Systems is thus a field of study not without controversy. Notwithstanding, few would argue that the impacts of information and communication technology have been rapid, broad and deep. An understanding of these impacts is thus crucial for a doctoral student, irrespective of their particular business domain of interest.

The content of the course will be organized into modules to achieve our goals and learning objectives. The first three classes after the initial examination will provide students with an appreciative setting on which to build deep understanding of the field in all its breadth. They will include methodological considerations, developments in the technology itself, and reflections on how different traditions have emerged on either side of the Atlantic. In later modules, we will move away from these considerations to consider the technology’s impacts:

- within and between organizations
- on business processes
- on society at large, including global and ethical issues,
while at the same time reflecting on appropriate research approaches in these different contexts. We will conclude with reflections on the current debates about the field, thus providing some perspective on future developments and impacts. During the last two class periods, students will present on their final research papers.

So much for course content – what of the teaching and learning approach adopted in the course? The course will rely – *heavily* – on student participation, discussion and debate. **Thorough preparation is a must for each and every session.** Students will be called on to express their views on discussion topics without prior warning. In addition, and as the semester progresses, planned student presentations will become increasingly commonplace. The idea is for students to develop critical skills in identifying gaps and controversies in the literature, and new developments and phenomena in practice that require our attention as researchers. The ability to identify research questions and appropriate research approaches from these course activities will be the benchmark for success.

**COURSE LEARNING OBJECTIVES**

- **Knowledge**
  - An appreciation of the field of Information Systems, including developing trends, themes, controversies and perspectives.
  - An appreciation of the range of research approaches adopted, and their utility, in relation to key themes.
  - An appreciation of the North American and European traditions in Information Systems research.
□ **Skills**
- The ability to analyze critically research articles in the field, both in terms of content and the research approach adopted.
- The ability to identify key trends, themes and controversies as they relate to particular themes with the literature.
- The ability to identify key research questions that build on past research and direct future research in respect of particular themes.

□ **Perspectives**
- Technological; organizational; societal; global
- Positivist; interpretivist; critical.

**ADDITIONAL READINGS AND LEARNING MATERIALS**
The underlying philosophy of academic work in the field of Information Systems needs to be taken into account when reviewing the literature. Hence, the following text may prove useful:
In addition, the ability to write a thorough literature review and produce a synthesis that opens up new research directions is a *sine qua non* for Doctoral students, hence the following article will also be extremely useful:

**HOW THE COURSE WILL BE TAUGHT**
Following the initial examination, the first couple of sessions of this course will have an emphasis on scene setting, particularly in relation to developments in the technology itself and on the expanding field that is Information Systems – and the internal debates and alternative perspectives that exist within the IS academy. Student participation will be expected from the outset. As the course progresses, expectations as regards active student involvement will increase so that, by the end of the semester, classes will effectively be student–led.

**GRADING/PERFORMANCE EVALUATION**

*Initial Examination: 10 per cent (optional)*
The morning of the first session of the course will comprise an examination that is designed to assess individuals’ knowledge of the field of Information Systems and their particular interest in aspects of the field. Given that prior knowledge will vary from individual to individual, while everyone’s performance will be assessed, the grade achieved may or may not count towards the final course mark. In other
words, those who do well may wish to have their mark count, and those who do less well will presumably not wish it to count.

_Class Participation: 20 percent_

Class participation consists of in-class preparedness, which includes having read assigned materials prior to class, actively participating in class discussions, and answering questions posed. In addition, students will periodically complete reviews and critiques of papers and present their findings to the class. When not actually presenting, students will be expected to ask pertinent questions of the presenters and enter into debate with them, having also prepared for each session.

_Examination: 30 percent_

This examination will take place at the end of the first four full-day sessions and will comprise a critical review of a recently published article in the academic literature on Information Systems.

_Final Paper: 50 percent_

The final project will consist of an original research paper that addresses a relevant issue and results in a paper of the style of a published journal article. Papers will likely be approximately 5000 words in length. All paper topics must be approved by the instructor. The paper layout will be as follows: 1) Abstract: statement of the underlying rationale, research question, approach used, key conclusions; 2) Background: literature review and theoretical foundations; 3) Methodological considerations; 4) Discussion and conclusions, including a reasonably detailed research proposal; 5) References. To ensure sufficient progress is made on the paper you will be required to meet certain milestones throughout the semester. You will present your research paper to the class in a 20 minute presentation towards the end of the semester.

**ACADEMIC HONESTY STATEMENT**

In pursuit of the stated course goals and learning outcomes, I expect that all students abide by Bentley’s Honor Code. Violations of the Honor Code will not be tolerated and will be dealt with as outlined in the Bentley University Student Handbook. The Honor Code is accessible online at http://www.bentley.edu/grhandbook/integrity/integrity_index.cfm. If you have questions about the Honor Code, please contact me. Continued enrollment in this course constitutes a formal agreement to abide by the Bentley University Honor Code.
SESSION TOPICS (specific class preparation will be assigned in advance)

**Morning session**
Examination; Course introduction and overview

**Afternoon session**
Developments in Information & Communication Technology:
Applications in and impacts on business (Bill Schiano)
Alternative perspectives on IS

**Morning session**
The North American and European research traditions

**Afternoon session**
The centrality – or otherwise – of the IT artifact

**Morning session**
The impact of IT in and on organizations

**Afternoon session**
The impact of IT between organizations and on organizational processes

**Morning session**
Global, ethical and societal issues

**Afternoon session**
Examination

Final paper preparation (informal discussion sessions may be arranged with the course instructor during the interim period)

Final paper presentations and course overview