Enterprise Systems (IS 540)

Syllabus

Course Description
Enterprise systems are a category of information systems which have been heavily adopted in practice since the 1990s. Enterprise systems are usually based on packaged software products, they drive for cross-functional integration and require organization-wide resources for their implementation. The lifecycle of enterprise systems including the development, the implementation, use and evaluation involves company external entities (e.g. software vendors or consulting companies) as well as company internal entities (e.g. IT departments or end-users). Enterprise systems impact multiple levels of a company, ranging from the individual employee, to groups, the entire organization and even its associated business network. Given these boundary conditions, introducing Enterprise Systems to companies is a challenge.

Course Objectives
This course is designed to provide a comprehensive insight into theoretical foundations, concepts, tools and current practice of enterprise systems. The course is organized in six major sessions: Session I will introduce basic concepts and definitions with regards to enterprise systems. Session II will introduce the most important enterprise application software product (e.g. Enterprise Resource Planning, Customer Relationship Management, Business Intelligence or Enterprise Portals) on which Enterprise systems are build on. The sessions III-VI will cover the lifecycle of enterprise systems from development, implementation, use and evaluation. As part of a case study the students will be asked to analyze and propose solutions for a given enterprise system challenge.

Course Requirements
The course is offered to MMM and M.Sc. Business Informatics students.

Grading
The course has the following grading components:
1. Exam (60%)
2. Literature Summary (12%)
3. Case Study (28%)

Students are expected to read the literature associated with each session in advance. For each of the sessions III – VI a literature summary (max. 2 pages per session) has to be delivered in advance of the sessions. In addition, students are requested to build teams of three and participate in a enterprise systems case study. Further details will be provided in the kick-off lecture.

Course Material
For each course session a dedicated slide deck is provided. Additionally, a list of reference publications (book sections, conference papers, journal articles) is made available for download on the learning platform.
## Course Outline

<table>
<thead>
<tr>
<th>Session</th>
<th>Duration</th>
<th>Topics</th>
<th>References</th>
</tr>
</thead>
</table>
| I - Introduction | 90 mins | - Definition  
- Key characteristics of Enterprise Systems | Optional reading, see below |
| II – Packaged Enterprise Application Software | 270 mins | - Introduction of basic definitions and capabilities of major application software packages | Optional reading, see references in slides |
| III - Development | 90 mins | - Basics  
- Product Software vs. Tailor-Made Software  
- The Basics of Software Product Development  
- Selected Trends | Mandatory reading: Literature Package for Session III, see below |
| IV - Implementation | 90 mins | - Introduction  
- Implementation Drivers  
- Critical Success Factors  
- Implementation Models  
- Selection Process | Mandatory reading: Literature Package for Session IV, see below |
| V - Use | 180 mins | - User Satisfaction  
- Acceptance  
- Task Technology Fit  
- Organization – ES Fit  
- IS Success | Mandatory reading: Literature Package for Session V, see below |
| VI - Evaluation | 90 mins | - Basics  
- Benefits Framework  
- Organizational Benefits Model  
- Corporate Performance Impact | Mandatory reading: Literature Package for Session VI, see below |

### Session 1 - Introduction


### Session II – Packaged Enterprise Application Software

- see references in slides
Session III - Development


Session IV - Implementation

Session V – Use


Session VI - Evaluation