Overview
This course will provide a comprehensive overview of various types of information systems used by today’s organizations in order to operate effectively and efficiently. Information systems that are used by all the major functional departments within organizations are examined and evaluated to see how applications are integrated to implement "business processes" that flow across department and organizational boundaries. Various types of contemporary information systems will be covered, including: Accounting Information, Financial Reporting Management, Enterprise Resource Planning, Customer Relationship, Supply Chain Management, Electronic Commerce, Business Intelligence and Analytics, Controls and Auditing.

Prerequisite
IS 265 (or Department permission).

Course Goals
The course will emphasize an understanding of information systems that enable the business processes of order entry / management, customer relationship management (CRM), procurement, supply chain management (SCM), product life cycle management (PLM), and enterprise resource planning (ERP). The course is taught from the standpoint of an Enterprise Resource Planning system.

The students will be able to:

- Understand how applications are integrated to implement "business processes" that flow across department boundaries, and from suppliers to customers
- Gain experience in using an enterprise management system and related computing applications to support key business functions
- Apply knowledge of computing to define the appropriate computing applications required to support an organization’s business functions
- Analyze the organizations’ processes in order to define the computing application requirements appropriate to its needs
- Participate in teams and work collaboratively to successfully complete team assignments
- Effectively communicate and present assignments to the whole class and the instructor

Student outcome addressed by the course:

- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to function effectively on teams to accomplish a common goal
- An ability to communicate effectively with a range of audiences
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
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Topics to be covered

- Business Functions & Processes
- Development of Enterprise Resource Planning Systems
- Marketing Information Systems and the Sales Order Process
- Customer Information Systems and Customer Relationship Management
- Production and Supply Chain Management
- Accounting in ERP Systems
- Human Resources Processes in ERP
- Process Modeling, Process Improvements in ERP systems
- Enterprise Architecture
- Implementing an ERP system
- Business Intelligence
- Mobile Computing
- Social Media
- Cloud Computing
- IT Security, Controls, Governance

Textbook

On-Line Computer Conferences and Participation
We shall be using the Moodle learning management system for on-line discussions and participation.

Honor Code
Any evidence of cheating in any form, including plagiarism, will be dealt with according to the honor code of NJIT (course failure and suspension or expulsion). Any discovered case of cheating will be immediately passed to the Dean of Students for further investigation. The full text of the NJIT Honor Code is available for your review at http://www.njit.edu/academics/honorcode.php

Grading

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation and discussions</td>
<td>30%</td>
<td>As assigned</td>
</tr>
<tr>
<td>Team Case Studies Reports and Presentations</td>
<td>15%</td>
<td>2/9, 3/2, 4/6</td>
</tr>
<tr>
<td>Exam</td>
<td>25%</td>
<td>3/27</td>
</tr>
<tr>
<td>Quiz</td>
<td>5%</td>
<td>4/20</td>
</tr>
<tr>
<td>Team Final Project Presentation and Report</td>
<td>25%</td>
<td>4/27 and 5/4</td>
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Assignments Details
There will be several major activities/assignments over the semester. Peer evaluations are required on the Team Case reports and presentations and Team Final Project.

Participation and discussions (30%)
In addition to class discussions and participation, Discussion Questions designed to explore topics and concepts will be posted in Moodle. Generally, your responses to each discussion question should be at least 250 words in length, but no more than a full page. In addition some discussions may require that you submit an analysis in Excel. You should post your initial response to discussion questions not later than Thursday of the due week. You are expected to comment on responses posted by others when you have additional thoughts on the subject matter or if you have any questions or feedback.

Papers and Articles will also be posted to foster discussions and introduce important topics.

Team Case Studies (15%, 3 @ 5% each)
We will do four case studies for which I will provide you with a series of questions. Groups will be formed and you will work collaboratively on the answers. The result of your work will be a written case study report and PowerPoint presentation that you will present to the class, with the following content:

- Introduction: Basic description of the case
- Analysis: What is the problem or problems and why.
- Solutions: What are the possible solutions and their Pros and Cons
- Recommendation: What would you propose as a solution to the problem?
- Answers to the case study questions.

It’s very important to integrate the relevant course materials in to your analysis.

Exam (25%)
Quiz (5%)
Final Project presentation and report (25%)
Select a company you are or have worked for or are familiar with and write an IT strategic plan covering the topics discussed in the course
**IS-344: Computing Applications in Business**

**Course Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignment Due</th>
</tr>
</thead>
</table>
| #1 – Jan 26| Course Introduction  
Business Functions & Processes | Chapter 1 |                                      |
| #2 – Feb 2 | Development of Enterprise Resource Planning Systems                 | Chapter 2 | Discussion Questions                |
|            | (on line class)                                                      |           |                                     |
| #3 – Feb 9 | Marketing Information Systems and the Sales Order Process             | Chapter 3 | Discussion Questions                |
|            | Team Case Study                                                      |           |                                     |
| #4 – Feb 16| Customer Information Systems  
Cust Relationship Management  | Chapter 3 | Discussion Questions                |
| #5 – Feb 23| Production and Supply Chain Management                              | Chapter 4 | Discussion Questions                |
| #6 – Mar 2 | Accounting in ERP Systems                                           | Chapter 5 | Discussion Questions                |
|            | Team Case Study                                                      |           |                                     |
| #7 – Mar 9 | Human Resources Processes in ERP                                     | Chapter 6 | Discussion Questions                |
|            | Team Case Study                                                      |           |                                     |
| #8 – Mar 16| SPRING BREAK  
No Class                                                |           |                                     |
| #9 – Mar 23| Process Modeling, Process Improvements in ERP systems                | Chapter 7 | Discussion Questions                |
| #10 – Mar 30| Enterprise Architecture  
Implementing an ERP system                                        | Chapter 7 | Discussion Questions                |
| #11 – Apr 6| Business Intelligence                                               | Chapter 8 | Discussion Questions                |
| #12 – Apr 13| Mobile Computing  
Social Media                                                 | Chapter 8 | Discussion Questions                |
| #13 – Apr 20| Cloud Computing                                                    | Chapter 8 | Quiz                                |
| #14 – Apr 27| IT Security, Controls, Governance                                   |           | Final Project Presentations         |
| #15 – May 4| Course Summary                                                      |           | Final Project Presentations         |