COMP 5131: Introduction to Information Systems

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Lecture Schedule:
- Monday (PQ 305, 18:30-21:30 Hrs)

Course Website:
- Lecture materials
- Assignments, Solutions
- Online References, Articles, and Links

Teaching Assistance:
- TBA
- Email: TBA
Who is Am I?

- **Research**
  - Computer Vision, Pattern Recognition
  - Biometrics, Industrial Inspection

- **Department of Computing**

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- **Office hours:** by appointment via email
Course Outline

Objectives

- Role of information systems in business environment to achieve competitive advantage
- Fundamental Knowledge of information systems architecture and IT infrastructure
- State-of-the-art technologies that will contribute towards future development of IT systems and applications
- Issues contributing to security, integrity, ethics, successful planning, implementation and management of IT systems

Indicative Textbooks

Course Material

➢ Lecture Material
  ■ Copies of slides provided weekly on class website
  ■ Slides are only an aide memory, … …
  ■ Attend Lectures
    ▶ Lectures gives you detailed point-wise meaning
    ▶ Slides may change
  ■ Roughly follow recommended textbook
  ■ Only selected subset of chapters
  ■ Enriched with material from further sources (Journals/Articles)

➢ Course Format
  ■ Lectures
  ■ Discussions
  ■ Case Analyses
  ■ Presentations on specific topics
What do I learn in this course?

- Become better informed users, customers and/or professionals in the application and use of information systems
- Develop a thorough knowledge of how information technology is transforming all facets of business, management and society
- How to use Information Systems to
  - Improve operations
  - Create New products & services
  - Improve decision making
  - Increase customer intimacy
  - Promote competitive advantage
- Deepen critical-thinking and problem-solving skills
Why Should I learn these??

- Role of Information Systems
  - 2007 → One trillion US$ Investment in Information Systems
  - 2007 → 40 million businesses had .com sites registered
  - 6/19 million American purchase/research product everyday on internet
  - 60 million bank online everyday
  - 55 million read blogs everyday
  - E-commerce and Internet advertising – Google 18 billion US$, growing annually about 15%

Must understand and benefit from new realities
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Why Should I learn these??

- Global Challenges
  - 2007 → More than 33% US economy from foreign trade, more than 50% in Asia and Europe
  - More than 50% Intel revenues from overseas sales, More than 80% toys sold in US are made in China while 90% of PCs sold in China use Intel’s or AMD’s chips
  - US looses several millions jobs offshore → Low wage producers

  *Information Systems* → *Operating and Transaction costs* ↓

- Improved Decision Making

- Competitive Advantage, Survival
Course Contents

- Information Systems and the Organization (~ 2 weeks)
  - Strategic Use of Information Systems, Organization and Role

- Foundation of Information Systems (~ 3 weeks)
  - Computer System Components, Systems Software, applications, trends in hardware and software technology, managing data resources, database manage systems and data modeling, data warehousing and future data management

- Communication and Networks (~ 2 weeks)
  - Components of telecommunication system, telecommunication networks, enterprise networking, internet and electronic commerce

- Information System Development (~ 2 weeks)
  - Overview of system development process, system implementation

- Organizational Support Systems (~ 2 weeks)
  - Knowledge management and the organization, application of intelligent technologies, decision support systems, cooperative work support systems, executive support systems

- Managing Information Systems (~ 2 weeks)
  - Computer Security and Integrity, Ethical and Social Issues, Assuring data quality
Lecture Format

- Slides and transparencies
- Illustrative examples
  - Supplement the slides and transparencies

- Lectures
  - Come regularly
  - It is your responsibility to catch up your missed lectures with your friends

- Assignments
  - Tutorials
  - Important exercises to supplement the lectures
  - More rigorous problems to consolidate your knowledge
Assessment

- **Continuous Assessment**
  - 45%
  - Quizzes
  - Assignments {details will be announced later}

- **Examination**
  - 55%
  - No make up examination will be given
  - Will cover material in assigned readings from Laudon & Laudon
  - Material included in the lecture, closed-note and closed-book
Thou Shall Not Cheat

- Do not cheat
- I encourage you to discuss your assignments with your friends
  - Put everything in your own words
- But no copying
  - It is NOT a shame of not knowing how to do
  - Copying causes damage to your integrity and respect
  - Copying is stealing intellectual property
  - TAs will catch cheaters
- What if you are caught copying?
  - Both the copier and the originator get 0
  - 2nd time: Both get 0 and one full downgrade
  - Caught 3rd time: FAIL
  - If it is minor or major, an automatic FAIL
Information Systems

**Why** should we learn?

**What** should we learn?

**How** should we learn?
More Information?

- More information is **not** profitable unless it is relevant information.
- Executives will need **better** information in the future if their companies are to be competitive.
Information ...

BAD information is WORSE than ...

NO information.
Objectives of the MIS

Deliver the right information to the right people, at the right time, with the right form.

Ultimately, MIS should improve the workers’ productivity.

who has what information about whom and when, where, and how will all be decided in the process of building an information system.
Information Vs Knowledge Management

- Information management can be described as “delivering the right information to the right people at the right time with the right form”

- Knowledge management can be illustrated as “getting the right people to have the right conversation at the right time”
What is this course about?

Therefore, this course is about the need, the value, and the means of acquiring, creating, and using the information in the information age.