# MIS (Management Information System) (21-972)

Department of Industrial Engineering Sharif University of Technology

Session #2



### Course Description

- Instructor
  - Dial Fatahi Valilai, Ph.D. Industrial Engineering Department, Sharif University of Technology
  - Email: <u>Fvalilai@sharif.edu</u>, Tel: 021-6616-5706
  - Website: http://sharif.edu/~fvalilai
- Class time
  - *Saturday-Monday 10:30~12:00*
- Course evaluation

<ul> <li>Mid-term</li> </ul>	(20%)
Final exam	(20%)
• Quiz	(10%)
Exercise-Projects	(30%)

### Course Description (Continued ...)

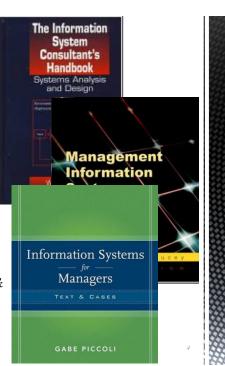
- Mid-term session:
  - Saturday, 7th, Azar 1394
- Final session:
  - Monday, 28<sup>th</sup>, Dey 1394
- Reference:
  - Rosenbalt, "System Analysis and Design", 10th edition, 2013, Course Technology
  - Dennis, Lan; "Systems Analysis and Design", 2012, Wiley; 5<sup>th</sup> edition
  - Johannes Govardus Maria van der Heijde; "Designing Management Information Systems", 2009, OXFORD university press

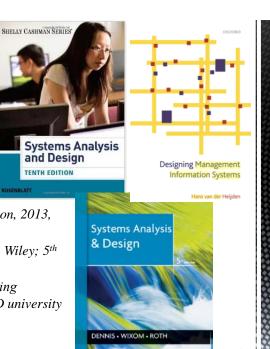
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### Course Description (Continued ...)

#### Reference:

- William S. Davis, David C. Yen, "The information system consultant's handbook: system analysis and design", 2010, Taylor and Francis
- Terence Lucey; "Management Information Systems", 2004, Cengage Learning EMEA
- Gabriele Piccoli; "Information systems for managers: texts & cases ", 2007, John Wiley & Sons Inc





### Course Description (Continued..)

#### Contents:

- Introduction to Systems Analysis and Design
- Analyzing the Business Case
- Managing Systems Projects
- Requirements Modeling
- Data and Process Modeling
- Object Modeling
- Development Strategies
- User Interface Design
- Data Design
- System Architecture
- Managing Systems Implementation

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### Course Description (Continued..)

- Contents:
  - Introduction to Systems Analysis and Design
    - What Is Information Technology?
    - Information System Components
    - Business in the 21<sup>st</sup> Century
    - Modeling Business Operations
    - Business Information Systems
    - Systems Development Tools
    - Systems Development Methods
    - The Information Technology Department
    - The system analyst

#### • Contents:

- Introduction to Systems Analysis and Design
  - Companies use information as a weapon in the battle to
    - increase productivity,
    - deliver quality products and services,
    - maintain customer loyalty, and
    - make sound decisions.
  - In a global economy with intense competition, information technology can mean the difference between success and failure

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### System Analysis & Design

- Contents:
  - Introduction to Systems Analysis and Design
    - What is Information Technology?
      - Information technology (IT) refers to the combination of hardware, software, and services that people use to manage, communicate, and share information.

- Contents:
  - Introduction to Systems Analysis and Design
    - Systems Analysis and Design
      - Systems analysis and design is a step-by-step process for developing high-quality information systems.
      - An information system combines technology, people, and data to provide support for business functions such as
        - Order processing,
        - Inventory control,
        - Human resources,
        - Accounting, and ....
      - Some information systems handle routine day to day tasks, while others can help managers make better decisions.

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# System Analysis & Design

- Contents:
  - Introduction to Systems Analysis and Design
    - Systems Analysis and Design
      - Information systems typically are developed by talented people, including a mix of
        - Managers,
        - Users,
        - Network administrators,
        - Web designers,
        - Programmers, and
        - Systems analysts.



- Contents:
  - Introduction to Systems Analysis and Design
    - Systems Analyst
      - A systems analyst is a valued member of team who helps
        - Plan,
        - Develop, and
        - Maintain information systems.
      - Analysts must be excellent communicators with strong analytical and critical thinking skills.
      - Systems analysts transform business requirements into IT projects, they must be business-savvy as well as technically competent, and be equally comfortable with managers and programmers, who sometimes have different points of view.

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### System Analysis & Design

- Contents:
  - Introduction to Systems Analysis and Design
    - Systems Analyst
      - An analyst might be asked to
        - Document business processes,
        - Test hardware and software packages,
        - Design input screens,
        - Train users, and
        - Plan e-commerce Web sites.
      - A systems analyst also manages IT projects, including tasks, resources, schedules, and costs.
      - To keep managers and users informed, the analyst conducts meetings, delivers presentations, and writes memos, reports, and documentation.

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