MGT 3410: Management Information System

2023 Summer Session	
Total Class Sessions: 25 **Class Sessions Per Week: 5** **Total Weeks: 5** **Class Session Length (Minutes): 145** **Credit Hours: 4**	**Instructor: Staff** **Classroom: TBA** **Office Hours: TBA** **Language: English**

Course Description:

This course provides the background necessary for understanding the role of information systems in organizations and for using computer tools and technology in solving business problems. Topics include organizational and technical foundations of information systems, theory of information systems design, fundamental database principles, network systems, e-commerce and supply chain systems, information network security management, and meeting global challenges. Microsoft Excel, Access, PowerPoint and Project are used to demonstrate selected topical concepts.

Learning objectives:

Upon successful completion of this course, the student will be able to do the following:

- describe the principles of a management information system
- explain how computers process data into useful information and knowledge
- identify and describe the major types of computer hardware, software, data storage, and input/output technology used in business today
- demonstrate the use of common application software including Word, PowerPoint, Access, Excel, and Project to support business processes
- identify and describe the principles of a relational database management system
- identify and describe the principal technologies and standards for networking
- communication and Internet access and how they support communication and e-business
- demonstrate an understanding of the foundations of e-commerce and supply chain systems
- evaluate the role of information systems in helping people working individually and in
- groups make decisions more effectively
- demonstrate an understanding of current global information system issues
- analyze the relationship among ethical, social, and political issues that are raised by
- information systems and how they affect everyday life
- evaluate the tools and technologies for safeguarding information resource

Course Materials:

Introduction to Information Systems (8th Edition) Authors: Rainer, Prince and Cegielski S. Shajahan and R. Priyadharshni， New Age International Ltd

Course Assignments:

Quizzes:

There will be 5 quizzes administered through the whole semester and the LOWEST two scores will be dropped. Quizzes will always be completed in the first ten minutes of class. The quiz problems will be similar to problem sets and examples on slides. There will be no make-up quizzes.

Projects

A project will focus attention on MIS. Because much of the IST (Information systems and technology) work done in the business world is performed in teams, student teams will be formed by the third day of class. These teams will be responsible for both class projects; Student teams will review and critique information resource management (IRM) at a small- to medium-sized local firm and will prepare written reports as the output for the IRM project (see separate instructions). Student teams will prepare a proposal for a new strategic information system (SIS) for a small- to medium-sized local firm (see separate instructions) and will present their proposals to the class. Students will also individually participate in class discussions.

Exams:

Midterm Exam

There will be one midterm exam in this course. The midterm exam will be based on concepts covered in class. They will be in-class, close-book and non-cumulative.

Final Exam

The final will be cumulative and close-book. Note that the final will not be taken during the normal class times. Exact time and location for final will be announced later.

Computer lab

A **significant laboratory component** will be integrated and will complement the classroom by focusing on: creating Entity Relationship Diagrams using ***PowerPoint***, building a database using ***Microsoft Access***, building a database-enabled web-site using ***Microsoft SharePoint Designer*** and creating structured project plans using ***Microsoft Project***.

Assignments

Assignment A (Entity Relationship Diagramming)

Assignment B (Building a database using Access)

Assignment C (Web-site construction)

These assignments are all individual works that would be randomly assigned to certain week's topics. Pay attention that the skills and knowledge would enhance students understanding about the topic and would serve as a part of the exams. **ALL assignments (A, B, C and D) require skills learned during the labs.**
Attendance Although attendance is not an explicit part of the grading scheme, failure to attend lectures and labs often results in poorer grades due to students missing lecture-specific and lab-specific materials and misunderstanding of materials and/or requirements.

Course Assessment:

Quizzes 5	15%
Attendance	5%
Midterm Exams	15%
Project	20%
Computer lab	25%
Final Exam	20%
Total	**100%**

Grading Scale (percentage):

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
98-100	**93-97**	**90-92**	**88-89**	**83-87**	**80-82**	**78-79**	**73-77**	**70-72**	**68-69**	**63-67**	**60-62**	**<60**

Academic Integrity:

Students are encouraged to study together, and to discuss lecture topics with one another, but all other work should be completed independently.

Students are expected to adhere to the standards of academic honesty and integrity that are described in the Chengdu University of Technology's *Academic Conduct Code.* Any work suspected of violating the standards of the *Academic Conduct Code* will be reported to the Dean's Office. Penalties for violating the *Academic Conduct Code* may include dismissal from the program. All students have an individual responsibility to know and understand the provisions of the *Academic Conduct Code*.

Special Needs or Assistance:

Please contact the Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material. Our goal is to help you learn, not to penalize you for issues which mask your learning.

Course Schedule:

Week	Topics	Assignments
Week One (Class 1~5)	• Overview of Management Information Systems and Practices in the New Millennium. • The organization ➢ Information needs ➢ MIS and use of Computers ➢ MIS conceptual design ➢ Data capturing ➢ Data storage and retrieval ➢ Data processing ➢ Information reporting ➢ Decision support ➢ Control support ➢ Modelling and simulation modules ➢ Limitations of MIS • Systems concept ➢ Decomposition ➢ Decoupling ➢ Tools and methods of software engineering systems ➢ Transaction processing systems ➢ Process control systems ➢ Office automation systems and its components ➢ Types of management information systems ➢ Comparative analysist of various systems ➢ Type of strategic information systems ➢ Artificial intelligence ➢ End user computing • Business information systems • Computer Lab 1&2&3: Systems concept	• Quiz 1 • Textbook review
Week Two (Class 6~10)	• System analysis and design ➢ Career graph of a system analyst ➢ Data flow diagram ➢ Entity relationship model	• Quiz 2 • Textbook review • Assignment A

	➢ System life cycle ➢ Prototyping ➢ Stages of systems development life cycle ➢ Feasibility study ➢ Data collection methods and techniques • User inter-face design ➢ Data design ➢ Process design • Functional management information systems • Marketing information system • Strategic, tactical and operation information systems ➢ Sales information subsystems ➢ Space selling information systems ➢ Competitor information subsystems ➢ Marketing research and intelligence information subsystems ➢ Despatch information subsystems ➢ Personnel information subsystems • Accounting and financial supervision system • Interrelationship of functional management information systems • Business information systems • Computer Lab 4&5&6: Strategic, tactical and operation information systems and Accounting and financial supervision system	
Week Three (Class 11~15)	• Fundamentals of computer systems ➢ Portable computer devices in the application ➢ Input devices ➢ Storage devices ➢ Primary and secondary memory ➢ General purpose application software packages ➢ Programming languages ➢ Ready-made packages and their operating systems ➢ Computer communication and networking	• Quiz 3 • Midterm • Textbook review • Assignment B

	• Data base systems ➢ Objectives ➢ Functions ➢ Advantages ➢ Features ➢ Cardinal principles ➢ Major components ➢ Database administration ➢ Types of database ➢ Security ➢ Relationship with MIS ➢ Business information systems • Computer Lab 7&8&9: Programming (VBA) and database systems	
Week Four (Class 16~20)	• Computer power ➢ Selection factors and process ➢ Comparative analysis ➢ Vendor selection ➢ Criteria table ➢ Methods of acquiring computer power ➢ Purchase ➢ Leasing ➢ Rental ➢ Criteria for investment • Knowledge management • Managing techtonic transformation of global business Driving forces • Knowledge management • Computer Lab 10&11&12: Programming (VBA) and database systems	• Quiz 4 • Textbook review • Assignment C
Week Five (class 21~25)	• Internet and value chain • Impact on management systems • Impact on market structures • New corporate governing law • Law of digital assets • Economies of scope	• Quiz 5 • Assignment C • Project • Final exam (cumulative) TBA

	• Transaction cost compression • Digital age organization • E-commerce business models • Online service quality • Value addition efficiency • Emerging technologies in the millennium • Synergy between email and mobile phone • Cellular networks • Mobile switching centers • Principles-space based digital embrace • Computer Lab 13&14&15: E-commerce business models and online service quality and cellular networks	