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JUNIOR COLLEGE

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Wilco Area Career Center 2026-2027

Syllabus Computer Technology
Online and Onsite

Computer Information Systems Fundamentals- **CIS 122**

Instructor: Faye Jackson

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Office Hours: By Appointment

Office Location: 500 Wilco Blvd. Romeoville, IL Room C-136

Grade level: 11-12

Suggested Prerequisites: None

Supplies needed: Flash drive, Earbuds, Notebook

COURSE DESCRIPTION

Computer Information Systems Fundamentals- CIS 122

A first course for business or computer information systems majors planning to transfer to a four-year institution. A complete introductory study of information systems, computer programming and application software is presented. Course topics include the elements of a business computer system, system analysis and design, computer-to mainframe systems, program design and implementation. Also included will be an introduction to the internet and its uses, computer application software. This course also introduces basic concepts regarding MS 365, i.e. word processing (Microsoft Word), (Excel Spreadsheet), (PowerPoint) and database management systems (Access). At the end of the course, you will achieve a reasonable proficiency in the above areas. Syllabus subject to change.

Lab Simulations:

CompTIA A+ and AI Essentials

As part of the Computer Technology program, students have the opportunity to gain valuable hands-on experience through **CompTIA A+ Core 1 and Core 2 lab simulations and CompTIA AI Essentials**. The A+ lab simulations allow students to practice real-world Information Technology skills, including computer hardware, operating systems, networking, cybersecurity, software, and technical troubleshooting in a safe, simulated environment. These activities help students develop the problem-solving and technical skills needed for college, industry certifications, and entry-level IT careers. **CompTIA AI Essentials** introduces students to artificial intelligence, effective prompting, responsible and ethical AI use, cybersecurity considerations, and ways AI is being used in today's workplace. Together, these learning experiences provide students with practical exposure to current technologies while strengthening **critical thinking, technical proficiency, cybersecurity awareness, AI literacy, and career readiness**.

Methods of Instruction:

- Other
- Blended
- Online
- Lecture

Other Methods

- Computer Lab work

Student Learning Outcomes:*Course Content Outcomes*

1. Discuss the meaning and function of hardware, software, data, procedures, and personnel, as related to the successful implementation and use of business computer systems.
2. Discuss the concepts of Systems analysis and design and their applications in developing computer systems.
3. Use current file processing techniques and database concepts.
4. Produce programming assignments in a structured language to support common business applications. Through these exercises, the student will develop skills in programming, which may be used for personal gain or may be used as tools in other academic classes.
5. Use business application software currently available. Topics will include database management, spreadsheets, graphics, word-processing, and data communications with electronic mail.
6. Tell the origin and nature of the Internet, including electronic mail.
7. Discuss management information systems, decision support systems, expert systems, and information resource management systems, as they are used to meet the evolving information requirements of business.
8. Analyze the societal impact of business computer systems and future trends in the field of information processing.

General Education Student learning outcomes:

Students will demonstrate competence in using academic technology including finding, evaluating and utilizing appropriate information sources.

Students will demonstrate an ability to think critically and analytically.

Graded assignments and policies:**Graded Assignments**

- Chapter essay/shore answer assignments. Discussion assignments with postings. Matching assignments, Office - general assignments, Word assignments, 4 Excel assignments Access assignments and PowerPoint assignments. Possible programming project consisting of general programming concepts.

Grading policy

- A = 90 - 100% B = 80 - 89% C = 70 - 79% D = 60 - 69% F < 60%

Major Tests and Quizzes

- Chapter quizzes, Mid-term, and Final exam

Classroom Policies and Procedures

A. General Information

B. Attendance Policy: per Wilco handbook

C. Make-up Policy

D. Extra-credit Policy

E. Final Exam Information

F. Academic Honor Code

The objective of the academic honor code is to sustain a learning-centered environment in which all students are expected to demonstrate integrity, honor, and responsibility, and recognize the importance of being accountable for one's academic behavior.

G. College Statement about grades of 'F' and withdrawal from class

- o Students must maintain a 70% or higher to remain in the dual credit class. If a student drops below the 70% mark, the instructor may drop the student from the dual credit portion of the class before the mid-term date.
- o After the mid-term date, students may withdraw from a course by processing an add/drop form during regular office hours through the Registration and Records Office at Main Campus or Romeoville Campus, or by phone at 815-744-2200. Please note the withdrawal dates listed on your bill or student schedule. Every course has its own withdrawal date. Failure to withdraw properly may result in a failing grade of 'F' in the course.
- o In addition, at any time prior to the deadline dates established, an instructor may withdraw a student from class because of poor attendance, poor academic performance or inappropriate academic behavior, such as, but not limited to: cheating or plagiarism.

H. Intellectual Property

Students own and hold the copyright to the original work they produce in class. It is a widely accepted practice to use student work as part of the college's internal self-evaluation, assessment procedures, or other efforts to improve teaching and learning and in promoting programs and recruiting new students. If you do not wish your work to be used in this manner, please inform the instructor.

I. Student Code of Conduct

Each student is responsible for reading and adhering to the Student Code of Conduct as stated in the Wilco Handbook.

J. Sexual Harassment - Wilco Area Career Center seeks to foster a community environment in which all members respect and trust each other. In a community in which persons respect and trust each other, there is no place for sexual harassment. Wilco has a strong policy prohibiting the sexual harassment of one member of the college community by another. See Catalog or Student Handbook.

K. Student Support - Available through student services at Wilco and coordinated with high school:
a. Disability Services, b. Tutoring, c. Counseling and Advising, d. Academic Resources, e. Support Program, f. Technology Support

L. Safety

M. College Documentation Styles

Illinois Articulation Initiative (IAI) number

Credit and Contact Hours: 4 Credit Hours

Lecture/Demonstration: 4 Lecture/Demonstration/Discussion

Lab/Studio/Clinical: 0

No Prerequisites

Books, Supplies, and Supplementary Materials:

Required Textbooks: (2)

(1) Technology in Action (16th edition). By Evans, Martin and Poatsy: ISBN: 978-0135435199

(2) Title: GO! With Microsoft Office 365, 2019 Edition Getting Started Author: Gaskin, Vargas, Geoghan & Graviett 2020 Publisher: Pearson ISBN 9780135672792

Course Outline

Week Unit, Topic, Class Activity

Laboratory projects Word Processing, Database, Spreadsheet are to be conducted on a weekly basis throughout the semester, with frequent excursions to the internet.

Book: Technology in Action	Chapter Lessons	Chapters/Technology Covered
Chapters 1	Impact of Technology in a Changing World	a. Technology in a Global Society b. Technology Connects us with Others c. The Importance of Computer Literacy
Chapter 2	Looking at Computers: Understanding the Parts	a. Understanding your computer b. Input Devices & Output Devices c. Processing & Memory on Motherboard d. Storing Data and Information e. Connecting Peripherals to the Computer f. Power Management & Ergonomics
Chapter 3	Using The Internet Making the Most of the Web's Resources	a. The Internet and How it Works b. Collaborating & Communicating on the Web c. Conducting Business on Web d. Assessing and Moving Around the Web e. Searching the Web Effectively f. Using the Web Ethically
Chapter 4	Application Software: Programs That Let You Work and Play	a. Software Basics b. Managing Your Software c. Productivity and Business Software d. Multimedia and Educational Software
Chapter 5	System Software: Operating System, Utility Programs, File Management	a. Operating System Fundamentals b. What the Operating System Does c. Stalling Your Computer e. The Windows Interface f. File Management g. Utility Programs

Chapter 6	Understanding and Accessing Hardware: Evaluating Your System	a. Your Ideal Computing Devices b. Evaluating the CPU Subsystem c. Evaluating the Memory Subsystem d. Evaluating Storage Subsystem e. Evaluating Media Subsystem f. Evaluating System Reliability and Moving on
Chapter 7	Networking: Connecting Computing Devices	a. Networking Fundamentals b. Network Architectures c. Network Components d. Connecting to the Internet e. Installing and Configuring Home Networks f. Managing and Securing Wireless Networks
Chapter 8	Managing Your Digital Lifestyle	a. Digital Basics b. Digital Publishing c. Digital Music d. Digital Media e. Managing Your Digital Lifestyle f. Protection of Digital Property g. Living Ethically In the Digital Era
Chapter 9	Securing Your System: Protecting Digital Data	a. Identity Theft and Hackers b. Computer Viruses c. Online Annoyances and Social Engineering d. Restricting Access to Your Digital Assets e. Keeping Your Data Safe f. Protecting Your Physical Computer Assets
Chapter 10	Behind the Scenes: Software Programming	a. Life Cycle of an Information System b. Life Cycle of a Program c. Many Programming Languages d. Exploring Programming Languages
Chapter 11	Behind the Scenes: Databases and Information Systems	a. The Need for Databases b. Database Types c. Using Databases d. Data Warehousing and Storage

Chapter 12	Behind the Scenes: Networking and Security in the Business World	e. Using Databases to Make Business Decisions a. Client/Server Network Basics b. Servers & Network Topologies c. Transmission Media d. Network Adapters & Navigation Devices e. Network Operating Systems and Network Security
Chapter 13	Behind the Scenes: How the Internet Works • <i>Appendix: History of Personal Computers and Careers in IT</i>	a. Internet Management & Networking b. Internet Identity c. Web Technologies d. Communications over the Internet
Book: GO! Microsoft Office 365	Microsoft Office and Windows	A. Microsoft Word Creating Documents B. Microsoft Excel Creating a Worksheet and Charting Data C. Microsoft Access Creating Tables and Templates D. Microsoft PowerPoint Creating New Presentations