



CPT 104 - Introduction to Information Technology

Information Systems Technology Department

Semester:

Catalog Course Description: This is the introductory course for all IST students. It covers computer architecture, basic networking, operating system concepts, Internet concepts, PC selection issues, e-mail usage, information security issues, and relevant contemporary topics. This course also provides an introduction to computer programming.

Prerequisite(s): RDG 100 and MAT 100 or MAT 039

Credit Hours: 3.0

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Textbook(s): *Technology in Action, Complete*, 4th edition. by: Evans, Martin, & Poatsy. 2007. Pearson/Prentice Hall Publisher. ISBN#: 0-13-513720-9.

Programming With Alice & Java. by: Lewis. 2009. Thompson/Course Technology. ISBN#: 0-321-51209-X.

Equipment: A flash drive to save programs is recommended.

General Education Core Competency Statement:

This course is designed to meet the college's general education core competency for:

Computer Literacy - Graduates should possess the computer skills to locate, retrieve, and synthesize data to create a document or presentation appropriate to the area of study.

Course Objectives: Upon completion of this course the student will be able to:

1. Identify the major components of a microcomputer, demonstrate data input and output operations, install and uninstall applications.
2. Use system utility programs to identify running processes and their memory use and for routine maintenance operations.
3. Explain how system software and application software differ. Describe some categories of application software and explain the benefits of using such software.
4. Demonstrate an understanding how computers store and manipulate information. Identify the storage media appropriate for specific tasks.

5. Use system utilities to perform file management functions such as creating, copying, deleting, and moving files and folders. Also be able to perform these tasks at the command prompt.
6. Be able to understand and modify environment variables such as the PATH variable.
7. Explain measures of computer system effectiveness and the relationship of these measures to computer pricing.
8. Convert between base 10, binary, and hexadecimal representations of numbers, including 2's complement representation for signed integers. Add, subtract and perform bit-wise AND and OR operations on binary numbers.
9. Carry out routine e-mail tasks, to include creating new mail, using reply and forward, creating and using mail folders, using address lists, sending attachments.
10. Be able to explain what an operating system does, and give some examples of operating systems.
11. Be able to discuss advantages and limitations of mobile computing devices.
12. Discuss basic networking concepts, identify by use and description network cables and devices, setup a peer to peer network or shared Internet connection, and explain the layers of the OSI model and their functions.
13. Discuss IT security and privacy issues and know how to utilize security features built into at least one microcomputer operating system.
14. Explain daily tasks for a variety of Information Technology careers.
15. Explain how search engines work and demonstrate the use of a search engine for complex searches.
16. Explain what the Internet and the WWW are, how documents and devices on the Internet are identified, and the difference between a dynamic and a static webpage. Build a simple webpage using a text editor and upload the page to a web server. Be familiar with several browsers.
17. Explain what an algorithm is and how information systems are developed. Write a simple program that accepts input from a user, processes that output, and displays the result.
18. Be able to instantiate objects, call and define methods with and without parameters, respond to events and use selection and iteration in a programmable system.

Course Outcomes and Competencies:

Intended Course Outcome:

Be able to instantiate objects, call and define methods with and without parameters, respond to events and use selection and iteration in a programmable system.

Course Competency:

Demonstrate ability to instantiate objects, call and define methods with and without parameters, respond to events and use selection and iteration in a programmable system by creating a hands-on project. The project should require the creation of a program which demonstrates how to

1. create objects given an existing class model;
2. define new methods, with and without parameters, for an existing class;
3. use the objects that are created to call the methods created;
4. add an event to a program and create an event handler which responds to that event;
5. use selection and iteration.

Performance Measurement Instrument:

Students will create a hands-on project which will be evaluated on a standardized assessment rubric developed by CPT faculty.

Course Attendance:

Students may not miss more than 15% of scheduled classes, regardless of the reason for the absence. After exceeding this limit, a student will be withdrawn from the class by the instructor. Attendance will be taken at the beginning of the class period. Students not answering to the roll call at that time will be marked absent. Students arriving late may check-in with the instructor after class in order to be marked tardy. Three marks of tardy will count as one absence. Students are required to remain in class until class is dismissed, and will otherwise be marked absent, unless prior arrangements are made in advance with the instructor. Attendance records will not be changed retroactively after the scheduled class meeting.

Please note the following: You are responsible for all material and announcements presented, whether you are present or absent.

Withdrawal: Should the maximum allowable absences be exceeded prior to midterm, a "W" will be submitted to the registrar to be recorded on the student's transcript. Should the maximum allowable absences be exceeded after midterm, a "W" will be submitted to the registrar if the student was passing the course at the time of withdrawal OR a "WF" will be submitted if the student was failing the course at the time of withdrawal.

Course Grading: To be announced by instructor.

Grading Scale:	94-100	A	Superior Work
	87-93	B	Good Work
	78-86	C	Average Work
	0-77	F	Unsatisfactory Work

Note: Students must earn a grade of "C" or better in all the courses offered within the Information Systems Technology Department for the grade to be counted toward graduation.

Course Topic Outline/Course Calendar with Assignments: Will be provided by instructor.

PLEASE NOTE: Should change become necessary, the instructor reserves the right to adjust the requirements, pace, or scheduling of this course. Any change will be announced in class before it becomes effective.



College Policies

Students are expected to read the student handbook and abide by its policies. Copies of the handbook may be obtained at various locations on campus and is located on the web:

<http://www.midlandstech.edu/planner/>

Academic Dishonesty: The Student Code addresses what constitutes academic dishonesty. All forms of dishonesty including, but not limited to, cheating on tests, plagiarism, collusion and falsification, will call for discipline.

CHEATING ON TESTS includes:

- Copying from another student's paper.
- Using materials during a test not authorized by the person giving the test.
- Collaborating with any other person during a test without permission.
- Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or part the contents of any un-administered test.
- Bribing any other person to obtain information about tests.
- Substituting for another student, or permitting another student to substitute for oneself.

PLAGIARISM is the appropriation of any other person's work and unacknowledged incorporation of that work in one's own work offered for credit.

Campus Emergency Protocol: Students and employees are asked to report safety concerns or suspicious activities to Campus Security at 7199 (on campus) or 738-7199 (cell phone or off campus). In the event of an emergency, employees and/or students should immediately call Campus Security or local 911. If an emergency occurs, the college will use a variety of methods to communicate additional information and instructions including the MTC Information Centers, campus loud speakers, MTC Alerts! (http://www.midlandstech.edu/Phone_Alert.htm), voice mail, email, college Intranet, and the MTC website homepage.

Inclement Weather Policy: In the event weather conditions or other emergencies cause the closing or a delayed start of Midlands Technical College, announcements will be made over local radio and TV stations, on the MTC Web site, and on the college's information line (803-738-8234). Notices will be sent to students via Campus Cruiser Mail when applicable. Separate announcements may be made for day and evening classes as weather conditions change during the day.

If the college closing or reopening means that there is at least 30 minutes of a class remaining, plan to attend that class. For example, if the college opens at 10:00 a.m. in TTH, classes that normally meet at 8:00 a.m. will not meet, but classes beginning at 9:30 a.m. will meet. If the college closes at 8:00 p.m., 6:00 p.m. classes will meet for their regular time, but 7:35 p.m. classes will not meet since there are fewer than 30 minutes remaining in class.

Student E-Mail Accounts: All MTC students are assigned a college e-mail account upon admission to the college. This account is called "Campus Cruiser Mail." Campus Cruiser Mail is the primary mode by which the college communicates with students. Students are responsible for checking their college e-mail on a regular basis for important information and announcements about registration, financial aid, cancelled classes, emergency announcements and other notices. Students can use their college e-mail accounts to communicate with faculty, staff, fellow students, and others, in support of their educational pursuits. In addition to e-mail, students will also have access to maintaining personal calendars and "tasks lists" through their Campus Cruiser e-mail account.

Student Evaluation of Instruction: Students have the opportunity to evaluate this course. The confidential evaluation process is conducted through MTC Online using the individual student's username and password. Announcements will be made during the term concerning how and when to complete the online evaluation. Students are encouraged to participate in this process.

Students Requiring Special Accommodations: If special accommodations are needed for a student with a disability, the student should go to Counseling Services on Beltline or Airport Campus for assistance. Documentation regarding a specific disability is required in order for special arrangements to be made. Confidentiality of information received will be maintained.