

Curriculum Committee – September 2023 CSCI 2246 – IT Fundamentals Page 1 of 4

- 1. **COURSE TITLE*: IT Fundamentals**
- 2. CATALOG PREFIX/COURSE NUMBER/COURSE SECTION*: CSCI 2246
- 3. PREREQUISITE(S)*: None COREQUISITE(S)*: None
- 4. COURSE TIME/LOCATION/MODALITY: (<u>Course Syllabus Individual</u> Instructor Specific)
- 5. CREDIT HOURS*: 3 LECTURE HOURS*: 2 LABORATORY HOURS*: 1 (2 contact hours) OBSERVATION HOURS*:
- 6. FACULTY CONTACT INFORMATION: (Course Syllabus Individual Instructor Specific)
- 7. COURSE DESCRIPTION*:

This course is designed to cover all the basic fundamental skills required to be an IT professional. This course will cover diagnostics, repair and upgrade of computers and peripherals. The course will provide hands-on experience. It will familiarize the student with hardware and troubleshooting concepts.

8. LEARNING OUTCOMES*:

This course maps fully to the CompTIA's Core 1 A+ Exam objectives (220-1102). The course is designed to be a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer software.

- 1. Understand the requirements for the CompTIA Exams
- 2. Develop IT maintenance and troubleshooting strategies
- 3. Install and support I/O devices
- 4. Understand how to support and troubleshoot Motherboards
- 5. Describe how a processor works and how to support it
- 6. Describe how a printer works and how to support it
- 7. Describe how a power supply works and how to support it
- 8. Understand how memory works and how to support it
- 9. Understand how hard drives work and how to troubleshoot them
- 10. Understand networking essentials
- 11. Understand how to support mobile devices
- 12. Understand the basic needs of a Linux and Mac Operating Systems
- 13. Understand the basic needs of Cloud Computing and Virtualization

9. **ADOPTED TEXT(S)*:**

CompTIA A+ Guide to IT Technical Support, 11th edition

Publisher: Cengage

Author: Jean Andrews, Joy Dark Shelton, & Nicholas Pierce

ISBN for Follett Inclusive Access: 978-0-357-67417-8

ISBN for students who do not want Inclusive Access: 978-0-357-67416-1

9a: SUPPLEMENTAL TEXTS APPROVED BY FULL TIME DEPARTMENTAL FACULTY (INSTRUCTOR MUST NOTIFY THE BOOKSTORE BEFORE THE TEXTBOOK ORDERING DEADLINE DATE PRIOR TO ADOPTION) ***.

10. OTHER REQUIRED MATERIALS: (SEE APPENDIX C FOR TECHNOLOGY REOUEST FORM.)**

11. GRADING SCALE***:

Grading will follow the policy in the catalog. The scale is as follows:

A: 90 - 100

B: 80 - 89

C: 70 - 79

D: 60 – 69

F: 0 - 59

12. GRADING PROCEDURES OR ASSESSMENTS:

Category	EXAMPLE ONLY Total Points	% of Grade
Chapter Assignments (10x30)	300	30%
Quizzes (10x20)	200	20%
Unit Exams (3x100)	300	30%
Assignments (5x10)	50	5%

Annual Report Project (100)	100	10%
Attendance	50	5%
Total	1000	100%

13. COURSE METHODOLOGY: (Course Syllabus – Individual Instructor Specific)

May include but not limited to: Lectures, independent and group projects, in-class and home assignments, tests, quizzes and lab exercises. This course must be offered on campus. Attendance is required.

14. COURSE OUTLINE: (Course Syllabus – Individual Instructor Specific) (Insert sample course outline with learning outcomes tied to assignments / topics.)

Week	Topics	Chapters	Learning Objectives
1	Introduction	Chapter 1	1
2	Motherboards	Chapter 2	4
3	Processors and Memory	Chapter 3	5, 8
4 & 5	Troubleshooting Computer Problems	Chapter 4	2
6	Hard Drives and Other Storage Devices	Chapter 5	7, 9
7	I/O Devices	Chapter 6	3
8	Mid Term Exam		
9	Setting up a LAN	Chapter 7	10
10 & 11	Network Infrastructure and Troubleshooting	Chapter 8	10
12	Supporting Mobile Devices	Chapter 9	11
13 & 14	Cloud Computing, Virtualization and Printers	Chapter 10	6, 12
15	Final Exam Review		
16	Final Exam		1,2,3,4,5,6,7,8,9, 10,11,12

15. SPECIFIC MANAGEMENT REQUIREMENTS***:

16. FERPA: *

Students need to understand that your work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for

demonstration purposes. Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

17. ACCOMMODATIONS: *

Students requesting accommodations may contact the Academic Affairs office administrative assistant, Barb Fleming, at bfleming@sscc.edu or 937-393-3431 X-2620.

Students seeking a religious accommodation for absences permitted under Ohio's Testing Your Faith Act must provide the instructor and the Academic Affairs office with written notice of the specific dates for which the student requires an accommodation and must do so no later than fourteen (14) days after the first day of instruction or fourteen (14) days before the dates of absence, whichever comes first. For more information about Religious Accommodations, see the full policy at https://www.sscc.edu/services/accessibility-services.shtml#religious-accommodations or contact the Academic Affairs office administrative assistant, Barb Fleming, at bfleming@sscc.edu or 937-393-3431 X-2620.

18. OTHER INFORMATION***:

SYLLABUS TEMPLATE KEY

- * Item <u>cannot</u> be altered from that which is included in the master syllabus approved by the Curriculum Committee.
- ** Any alteration or addition <u>must be approved by the Curriculum Committee</u>
- *** Item should begin with language as approved in the master syllabus but may be added to at the discretion of the faculty member.