

ACADEMIC AFFAIRS
Mission Statement, Program Outcomes, and Assessment
For Associate Degree in Computer Technology (Electives in PC Support)

Mission Statement:

To fulfill the community's need for a competent workforce and economic growth by providing instruction in programming, information technology and pc support.

Program Outcomes:

Computer Technology (Electives in PC Support)

Graduates with a degree in Computer Technology (Electives in PC Support) should be able to demonstrate knowledge and skills in the following areas:

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| A. | Hardware Support | |
| | 1. Identify the major components, and their purpose, in a computer system. | CPT 101, CPT 170, CPT 209 |
| | 2. Identify and troubleshoot hardware—motherboard components; hard drives, floppy drives, keyboard, monitor, mouse, video cards, power supply, modem, memory | CPT 101, CPT 209, IST 245 |
| | 3. Identify common-sense guidelines to solving computer problems. | CPT 209, CPT 210 |
| | 4. Develop a computer preventative maintenance system. | CPT 209, CPT 210 |
| | 5. Describe Windows XP architecture and be able to install, maintain and troubleshoot Windows XP | CPT 210 |

B. Network Support

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| 1. Describe Windows XP architecture and be able to install, maintain and troubleshoot Windows XP | CPT 210 |
| 2. Understand the use of WANS, configure and troubleshoot routers. | IST 202 |
| 3. Understand TCP/IP and use it to troubleshoot network problems. | IST 202 |
| 4. Plan, install and troubleshoot a LAN | IST 245, IST 201 |

C. Operation Functions - General

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| 1. Distinguish between hardware and software problems | CPT 101, CPT 170, CPT 209, CPT 210 |
| 2. Determine when to ask for assistance (and from whom) | CPT 101, CPT 170, CPT 111, CPT 211, CPT 209, CPT 210 |
| 3. Explain hardware system components including methodology of troubleshooting | CPT 101, CPT 176, CPT 209, IST 245 |

D. Operation Functions - Hardware

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| 1. Read/Interpret technical manuals | CPT 111, CPT 211, CPT 209, CPT 210 |
| 2. Explain the principles of system start-up and shut-down | CPT 101, CPT 176, CPT 210 |
| 3. Explain the system backup (different media: tape, disk, etc.) | CPT 101, CPT 176 |
| 4. Manage peripheral devices | CPT 176, CPT 209 |
| 5. Make verbal explanation of operation problems to maintenance personnel | CPT 209, CPT 210, CPT 176 |
| 6. Follow company security policies and procedures | CPT 176, CPT 210, IST 245 |

E. Operation Functions - Software

1. Perform data entry OST 105, CPT 170, CPT 172, CPT 174, CPT 272, CPT 111, CPT 211, CPT 270
2. Use software operating system utilities CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, IST 225, IST 226, IST 290, IST 201, IST 202
3. Recognize/describe setup procedures being used to run job CPT 176, CPT 209, CPT 210
4. Use reference manuals to clarify error messages CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, IST 225, IST 226, CPT 270, IST 201, IST 202
5. Use operation manuals to execute and solve problems with jobs CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, IST 225, IST 226, CPT 270, IST 201, IST 202
7. Develop proficiency in Microsoft Office Suite CPT 170, CPT 172, CPT 174, CPT 270, CPT 272, OST 250

F. Communications

1. Read and interpret documentation CPT 170, CPT 172, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, IST 226
2. Acquire assistance from vendors/other experts (via phone) CPT 209, CPT 210
3. Prepare technical/user documentation IST 290, ENG 165
4. Demonstrate functions of programs to user CPT 270
5. Help users clarify needs and/or problems CPT 209, CPT 210, CPT 270
6. Assist others with software packages CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, IST 225, IST 226, CPT 209, CPT 210, CPT 270
7. Prepare justification to support projects IST 290, ENG 165, IST 226,
8. Make presentations (demos, lectures) to individuals and groups (management, users, etc.) IST 225, IST 226, CPT 270, IST 290, ENG 165
9. Prepare correspondence and reports IST 290, ENG 165

G. Job Market Skills

1. Think logically
CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, CPT 270, IST 201, IST 202, IST 225, IST 226, IST 237, BUS 140, MAT 101, ENG 101, ENG 165, ECO 201
2. Exercise patience
CPT 111, CPT 174, CPT 209, CPT 210, CPT 211, IST 226, IST 290
3. Express creativity
IST 225, IST 226, CPT 270, IST 290
4. Be adaptable
CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, IST 225, IST 226, CPT 209, CPT 210, CPT 270
5. Demonstrate perseverance
CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, IST 225, IST 226, CPT 209, CPT 210, CPT 270
6. Accept criticism
ENG 101, ENG 165, IST 225, IST 226, IST 237, IST 290
7. Take initiative
CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, IST 225, IST 226, CPT 209, CPT 210, CPT 270, ENG 165
8. Demonstrate active listening skills
CPT 101, CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, CPT 70, IST 201, IST 202, IST 225, IST 226, , IST 245, IST 290, BUS 140, MAT 101, ENG 101, ENG 165, ECO 201, HUMANITIES, OST 105, OST 250
9. Work independently
CPT 170, CPT 172, CPT 174, CPT 270, IST 290
10. Be goal oriented (meet deadlines)
CPT 101, CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, CPT 70, IST 201, IST 202, IST 225, IST 226, , IST 245, IST 290, BUS 140, MAT 101, ENG 101, ENG 165, ECO 201, HUMANITIES, OST 105, OST 250

Program Mission, Outcomes, and Assessment
Orangeburg-Calhoun Technical College

11. Work in teams CPT 209, CPT 210, CPT 176, IST 245, IST 290
12. Work under pressure CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 2009, CPT 210, CPT 211, CPT 270, IST 201, IST 202, IST 225, IST 226, IST 237, IST 245, IST 290, OST 105, OST 250
13. Practice time management and multiple projects management CPT 101, CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, CPT 70, IST 201, IST 202, IST 225, IST 226, , IST 245, IST 290, BUS 140, MAT 101, ENG 101, ENG 165, ECO 201, HUMANITIES, OST 105, OST 250
14. Discernable communication skills IST 225, IST 226, IST 290, ENG 101, ENG 165, CPT 270
15. Observe housekeeping and safety procedures CPT 209, IST 201, IST 202
16. Develop open communication with peers and supervisors CPT 101, CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, CPT 70, IST 201, IST 202, IST 225, IST 226, , IST 245, IST 290, BUS 140, MAT 101, ENG 101, ENG 165, ECO 201, HUMANITIES, OST 105, OST 250
17. Develop problem solving skills CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, IST 225, IST 226, BUS 140, MAT 101
18. Practice work ethics CPT 101, CPT 170, CPT 172, CPT 174, CPT 176, CPT 272, CPT 111, CPT 211, CPT 209, CPT 210, CPT 70, IST 201, IST 202, IST 225, IST 226, , IST 245, IST 290, BUS 140, MAT 101, ENG 101, ENG 165, ECO 201, HUMANITIES, OST 105, OST 250

Assessment Methods:

Direct Student Learning Outcomes

This program has a capstone course, CPT 270 – Advanced Microcomputer Applications. It includes direct assessment of student performance, including independent mock interviews. Students graduating in PC Support will certify their academic knowledge and skills through a WorkKeys Career Readiness Certification, which includes the following subtests: Reading for Information, Locating Information, and Applied Mathematics. Students may also opt to take the Microsoft Office Specialist and A+ certification exams.

Indirect Student Learning Outcomes

The Degree Program faculty review the following indirect measures of student and program success yearly or as needed ensure program viability: student portfolios comprised of their completed rigorous and relevant scenario-based assessments; grade distribution and failure rates; student evaluations; job placement results; employer satisfaction survey; enrollment statistics; retention rates, and graduation rates.

Retention

OCtech Benchmark #1 – The program will have retained in the following Fall semester not less than 60% of the new students who enrolled in the prior Fall semester.

- Over the last three years, program retention has been: 2002 (69%), 2003 (52%), and 2004 (54%).

Job Placement

OCtech benchmark #2 – Using the State Technical College System definitions for employment, not less than 80% of the graduates of the program will have secured employment in the field.

- Over the part three years, job placement has been: 2001 (76%), 2002 (70%), and 2003 (74%)

Graduation Rates

OCtech benchmark #3 – The number of graduates will average 25% of the average annual fall enrollment for the program.

Over the past three years, graduation rates have been: 2001-2002 (9%), 2002-2003 (9%), and 2003-2004 (12%).

Internal Measures of Success

Direct measures of soft skills and academic/program foundation skills:

- ACT Work Keys: Students will score a 4 or better on all areas of Work Keys.

- 90% of Capstone course students will achieve “hiring” status on the independent mock interviews during the first attempt.

Indirect measures of program success

- Maintain or exceed an 80% or better level of job placement.
- Reinstigate an Employer Satisfaction Survey to be implemented at the end of the Spring semester 2005.
- Maintain or improve retention over the FY03-04 Benchmark.
- Incorporate 100% of validated DACUM competencies into Computer Technology course outlines with demonstrated student performances.

Review Process and Use of Results:

PC Support is a competency-driven curriculum. Its competencies are determined through qualified DACUM panels and are validated by industry professionals and the curriculum’s own advisory committee. DACUMS are usually conducted every four years to ensure currency; however, our last DACUM was held in 1999. A new DACUM will be held in Spring 2004 and based on the result of that DACUM, the Computer Technology faculty will perform the following internal processes yearly as part of the strategic planning and review process.

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- Ensure that program outcomes are appropriate and current.
- Ensure that program outcomes are addressed in the exit competencies of at least one required course.
- Ensure that within those required courses that students demonstrate the desired program outcome either through written or performance-based tests and/or graded assignment.
- Ensure that equipment inventory, facilities, and budget support program outcomes and the strategic plan.
- Ensure that successful completion of prerequisite courses is a satisfactory predictor of student success in subsequent courses.
- Monitor student portfolios from capstone performances against DACUM competencies.
- Review grade distribution and failure rates; student evaluations; job placement results; employer satisfaction survey; enrollment statistics; retention rates, and graduation rates.
- Ensure that the College Library can assure access to appropriate and current research materials.
- Provide feedback to the general education faculty on observed general education competencies and make recommendations as needed.
- Make a report to the advisory committee on assessment findings and solicit feedback.
- Work with Division Dean and the Academic Leadership Team (???) to revise syllabi and/or course/department offerings as needed.

- Conduct program self study as required by accrediting agencies.

The Computer Technology Program is accredited by The Association of Collegiate Business Schools and Programs (ACBSP).

What action(s) did the Program take this past academic year that improved and expanded student-learning outcomes?

Changes have been made within the Computer Technology program to improve student success based on recommendations from our advisory committee, instructors, and DACUM panel. The DACUM panel consists of members of local industry who would be in the positions to hire our graduates or hold the same types of jobs as our graduates. The Panel meets separately from the Advisory Committee to discuss the competency requirements of the program and make recommendations for changes.

Computer Technology Actions

Data Source: Grade distribution data for three-year period, and course failure rates
Increased prerequisites for classes. After studying the course failure rates, we found that a high percentage of students were failing CPT 101 and CPT 111. Therefore, additional prerequisites or increased entrance test scores were added to these courses. CPT 101 or CPT 170 was added as an additional prerequisite for CPT 111. Also, an elementary algebra entrance test score was added for CPT 111. The reading entrance test score for CPT 101 was increased to 40 (Asset) or 80 (Compass). In addition, ENG 101 was included as the required English course instead of ENG 155. This was done to better prepare students for IST 290.

Measurement: Results pending based on data collected from grade distribution and failure rates.

Data Source: DACUM panel, Advisory Committee, and instructor anecdotal records

Increased emphasis on soft skills. The DACUM panel and the advisory board stressed the importance of emphasizing soft skills in the classroom. All of the major business courses now have a soft skills component.

Measurements: Results are pending based on data collected from the selected assessment tools, including ACT Work Keys and independent rubric-based assessments for mock interviews and job shadowing.

Benchmark #1 Plan of Action: See 1st Computer Technology Action

Benchmark #2 Plan of Action: Information gathered through interviews with students show that students are not eager to leave the areas in which they live for full time work, rather they work part time as web designers or computer technicians. Unfortunately, the workforce in Orangeburg County does not have a huge market for computer technicians and thus, the job placement rate is low. Emphasis will be placed on developing partnerships with business outside of the County to increase job placement.

Benchmark #3 Plan of Action: Students in the CPT curriculum can get employment without the associate degree. When employers hire candidates in the CPT field, they look for certification(s) (e.g. MOUS, MCSE, CISCO). Typically, students will enroll in the courses necessary for employment without having completed the degree.