Class Hours: 3.0
Laboratory Hours: 3.0
Credit Hours: 4.0
Date Revised: Spring 2000

Catalog Course Description:
A hands-on study of IBM AS/400 minicomputer system and associated products. Lab activities include set-up, printer use, terminal and PC client access operations, console commands, security, on-line tutorials, resource allocation, file handling, system activities, management and control. An overview of the impact of the midrange computing environment will be explored.

Entry Level Standards:
The entering student must have familiarity with the PC operating system environment, word processing and VAX terminal operation. Problem solving and analytical skills are deemed important.

Prerequisite:
CST 1110

Textbook(s) and Other Reference Materials Basic to the Course:

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction, Topic Overview, Schedule</td>
</tr>
<tr>
<td>2</td>
<td>AS/400 Architecture</td>
</tr>
<tr>
<td>3</td>
<td>Operation of the terminal/PC/Network</td>
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<tr>
<td>4</td>
<td>Internet Resources</td>
</tr>
<tr>
<td>4-5</td>
<td>Security</td>
</tr>
<tr>
<td>6-7</td>
<td>User Interface</td>
</tr>
<tr>
<td>8-9</td>
<td>Jobs, Message; Mid-Term</td>
</tr>
<tr>
<td>10-11</td>
<td>Printer Functions</td>
</tr>
</tbody>
</table>
II. Course Objectives*:

A. Demonstrate efficient use of PC and/or terminal commands. II,III

B. Demonstrate efficient use of the PC microcomputer, software and attached peripherals as a connection point to the IBM AS/400 System. II

C. Demonstrate efficient set-up, log-on and use of the console and CPU unit, including all attached peripheral devices. II

D. Demonstrate knowledge of hardware, operating system, networking connectivity, terminology, operation commands and on-line tutorials. II,III,IV

E. Demonstrate knowledge and use of specific products and procedures associated with this environment. II,IV

F. Demonstrate a working knowledge of all operational procedures associated with start-up, shut-down, emergency procedures, backups, client service, scheduling, repair procedures, documentation and resource manual(s) use. II,IV,V

*Roman numerals after course objectives reference goals of the Computer Science Technology program.

III. Instructional Processes*:

Students will:

1. Recognize and use terminology unique to the AS/400 environment. *Technological Literacy Outcome, Information Literacy Outcome, Communication Outcome*

2. Use resource materials, documents, on-line tools, internet, tutorials and/or textbooks to discover procedures, error codes and system indicators. *Technological Literacy Outcome, Information Literacy Outcome, Problem Solving and Decision Making Outcome, Active Learning Strategy*

3. Use the features and hardware/software associated with a typical AS/400 environment. *Technological Literacy Outcome, Active Learning Strategy*

4. Practice elements of the work ethic such as punctuality, professionalism, dependability, cooperation, teamwork, coordination and contribution. *Personal Development Outcome*

5. Perform procedures associated with user, operator and system administrator duties as assigned. *Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Communication Outcome, Transitional Strategy, Active Learning Strategy*

6. Create a operator’s notebook of materials, notes and resources. *Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy*
Outcome, Communication Outcome, Transitional Strategy

*Strategies and outcomes listed after instructional processes reference Pellissippi State’s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1. Boot the systems, select drives, transfer data, copy, delete, format, connect peripherals, route printing, create backups, rename files, set-up disk environments and use utilities available in the operating system. A,B,C,D,F
2. Perform activities to check and use various software products on the workstation and at the console unit. B,C,D,E,F
3. Demonstrate effective use and knowledge of the IBM AS/400 system and specific utilities associated with that product. C,D,E
4. Demonstrate effective use and knowledge of available software tools. C,D,E,F
5. Demonstrate knowledge of terminology and commands associated with the IBM AS/400, disk operating system, peripheral devices, workstations, networks and connection of the PC to all associated equipment. A,B,C,D,E,F

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures:

Two tests, consisting of true and false, multiple choice, essay and short answer questions will be given. Each test will follow the major topic coverage section. A final comprehensive test will also be given. The two tests will count 50 points each. The final will count 100 points: 50 points written test, 50 points final project.

B. Laboratory Expectations:

Laboratory exercises will be given which will count 200 points in total. Students MUST earn at least 150 points in lab to pass this course.

C. Field Work:

None

D. Other Evaluation Methods:

Reading assignments, quizzes, homework, attendance and non-lab assignments will be given which will total 100 points.

E. Grading Scale:

<table>
<thead>
<tr>
<th>Points Range</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>430-500 points w/150 lab points</td>
<td>A</td>
</tr>
<tr>
<td>380-429 points w/150 lab points</td>
<td>B</td>
</tr>
<tr>
<td>340-379 points w/150 lab points</td>
<td>C</td>
</tr>
<tr>
<td>290-339 points w/150 lab points</td>
<td>D</td>
</tr>
</tbody>
</table>
VI. Policies:

Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.