Class Hours: 3.0  Credit Hours: 1.0-4.0
Laboratory Hours: 0.0-6.0  Date Revised: Spring 03

NOTE: This course is not designed for transfer credit.

Catalog Course Description:

This course provides an avenue to present state-of-the-art technology courses in a timely manner. These topics allow an array of High Performance Computing courses to be delivered while those technical innovations are moving toward the mainstream thus providing cutting-edge technology today. May be repeated for credit up to 8 hours when a different topic is taught.

Entry Level Standards:

College level reading and math skills; keyboarding skills of at least 20 wpm; knowledge and experience working in the Windows and Linux operating system environment, including the use of the Microsoft Office software components.

Prerequisites:

Consent of instructor

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

TBA per topic taught

I. Week/Unit/Topic Basis:

TBA per topic taught

II. Course Objectives*:

A. Provide opportunities for students to have unique experiences in learning about HPC applications. I, II, III, IV

B. Understand relationships between HPC training received and applications by others. I, II, III, IV

C. Understand new opportunities in HPC or related technology. I, II, III, IV

*Roman numerals after course objectives reference goals of the HPC program.

III. Instructional Processes*:

Students will:
1. Use HPC hardware and software to deal with data modeling problems and produce solutions. *Numerical Literacy Outcome, Transitional Strategy*

2. Be familiar with the basic procedures in basic and intermediate level HPC setups. *Numerical Literacy Outcome, Problem Solving and Decision Making Outcome*

3. Participate in open discussions regarding the strengths and weaknesses of HPC procedures and what improvements might be made in future products. *Active Learning Strategies, Communication Outcome, Transitional Strategy*

4. Use the Internet and electronic mail to communicate effectively between the instructor, other students, and for information gathering. *Technological Literacy Outcome, Information Literacy Outcome*

5. Internalize the work ethic by demonstrating regular attendance, punctuality, dependability, cooperation with teachers and peers, and professionalism. *Personal Development Outcome*

*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. Discuss basic and advanced facts associated with the selected topic. A, B, C

2. Discuss implications for society and for the future based on information regarding the selected topic. A, B, C

3. Understand the manner in which the special topic fits into the overall picture of internetworking. A, B, C

4. Demonstrate the ability to integrate the course information into HPC projects. A, B, C

5. Discuss and use (depending on the course) appropriate technologies. A, B, C

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

V. Evaluation:

A. Testing Procedures: 65% of grade

Four tests will be administered (three tests plus the final) counting for approximately 65% of the final grade.

B. Laboratory Expectations: 35% of grade

Students will be assigned group and/or individual projects. The ability to work with others, the ability to make efficient use of equipment, and the level at which students perform will contribute to the grade.

C. Field Work:

N/A
D. Other Evaluation Methods:

N/A

VI. Policies:

A. 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.

B. Academic Dishonesty:

Plagiarism, cheating and other forms of academic dishonesty are prohibited. A student guilty of academic misconduct, either directly or indirectly through participation or assistance, is immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions that may be imposed through the regular Pellissippi State procedures as a result of academic misconduct, the instructor has the authority to assign an F for the exercise or examination or to assign an F in the course.

C. Other Policies:

Any act of misuse, vandalism, malicious or unwarranted damage or destruction, defacing, disfiguring, or unauthorized use of property/equipment belonging to Pellissippi State is subject to disciplinary sanction.