Section
PHL-50019; 12/01/2003– 01/12/2004

Meeting Times
Mondays 6 – 10 pm, 12/1/2003 – 1/12/2004 : University of Phoenix Campus, Wayne, PA
If a class is canceled, you will be notified by e-mail as to how to proceed with workshops and assignments.

Course Description
This course provides the conceptual foundation to develop computer software programs. Topics include program structure and syntax, documentation, input/output, constants and variables, calculations, logic structures, control structures, arrays, and design considerations.

Required Texts
All materials can be found on rEsource, which can be accessed through the University of Phoenix eCampus Web site.

Facilitator
Sergio Carbone is a systems consultant. His specialty is in N-tier client server systems delivered most often to Internet or Windows based clients. He regularly designs and delivers cross-platform systems for most platforms OS/390, OS/400, UX/AIX, and Windows. Sergio has designed multi-million dollar infrastructures and directed large-scale development efforts. He is well versed in many hot issues such as computer security, legal aspects of software development, and electronic commerce. Routinely, Sergio is asked to be a key speaker on technology at private corporate conferences, public computer user groups, and trade associations. Well-known companies like General Motors, Merck & Co., Motorola, Penn Engineering, Penn Mutual, and TV Guide, request Sergio's assistance with their development efforts and architectural plans, as well as for his views on industry trends.

Contact Information
Phone: (610) 888-1650   Email: class@sccarbone.com

Availability
Email when possible, but appointments can be made if needed, and there will be a limited time after each class

Letter Grades

A	A-	B+	B	B-	C+	C	C-	D+	D	F
100-95	94-91	90-87	86-83	82-79	78-76	75-73	72-70	69-67	66-65	< 65

Please refer to the University Catalog for definition of Letter Grades and Quality Points.

ASSIGNMENTS	PERCENT
Individual (85%)	
Weeks 2-5 are worth 15 points each	60%
Final Exam	15%
Participation (All Workshops)	10%
Learning Team (15%)	
Study Group Assignments 1-3 are worth 2.5 points each and week 4 is worth 7.5 for work products and participation as determined from the study group log.	15%
Total	**100%**

Assignments

Unless stated otherwise, all assignments made in this course are to be turned in. Combine all of the assignments due on a given date into a single email that is sent no later than 11:59 pm the night they are due. Unless stated otherwise, all assignments are due the class meeting following the date they are assigned. Assignments that are late are subject to a 1 point per day penalty. Assignments will not be accepted more than one (1) week late, unless arranged with the instructor *prior* to their due date. Students are required to carbon copy (cc) their own email address when they submit assignments. In the event of an email delivery issue your carbon copy is proof of your timely submission.

All written assignments must be typed (double spaced), and prepared according to APA format. They must be proofread and corrected for grammatical, spelling and typographical errors. Written assignments will be evaluated on the basis of content and organization (70%), spelling and grammar (15%), and format and style (15%).

Oral presentations will be evaluated on the basis of content and organization (50%) and on the quality of the presentation, including clarity, style and the effective use of visual aids.

Students are encouraged to use appropriate software to prepare assignments.

In a case where there is a conflict or contradiction between an assignment on the Web Site and the assignment in this Syllabus, the assignment in this Syllabus will be considered the correct one

Course Standards

The University's teaching/learning model specifies that in preparation for each course, candidates must satisfy all prerequisites. During the course, the participants must achieve certain specified learning outcomes in order to meet the course objectives. Assignment grades depend on the accomplishment of those objectives. All assignments are evaluated on the basis of achievement, not on effort, although overall effort in the course may be considered in the final grading.

Individual participation is required of each participant for the successful completion of the course. Each participant must demonstrate familiarity with the assignments, and must be able to demonstrate the ability to transfer information into practice. Points
for classroom participation are dependent on your presence in the classroom, and your active participation in classroom activities.

The University expects each student to maintain high standards of honesty and ethical behavior. All assignments must reflect the individual's own original effort. It is assumed that students will perform professionally in preparing work for this class. All assignments must be complete, as outlined in the Learning Module. Partially completed assignments will not be accepted.

Participation

Classroom participation will be graded, for each weekly workshop, based on the instructor's evaluation of each participant's preparedness, *active participation*, and on the relevance and applicability to the University setting of each participant's contribution.

Attendance is the minimum requirement and will be graded as a "C." Active participation will be graded in the range of "B" to "A," depending on the quantity and quality of the participation. This means *asking* questions, *responding* to questions by the instructor and/or other students, *volunteering* for presentations and demonstrations, *contributing* examples and insights from past experience or other learning situations, and other such classroom contributions. This type of participation is critical for an adult learning situation, and benefits all class members.

Participation is also based on attendance at all LT meetings **and** a peer evaluation of each team member, done by all other team members.

Attendance

The University of Phoenix teaching model requires mandatory attendance for the entire session of all classes. One absence, with proper notification and valid reason, will be allowed. Students must notify the faculty member, in advance. NO SECOND ABSENCE IS ALLOWED. In the event of a second absence, you will not be allowed to continue with this course. This is University policy, and beyond the discretionary authority of the instructor.

Students are required to review the class assignments found in Student materials located on the University's Web Site for this course and group.

Writing Assistance

Written communication is used as a measure of intelligence in the work world. This is true because written words can be reexamined, reevaluated and carefully considered. For these reasons, the University of Phoenix places a high level of importance on student writing. Students can submit all written assignments to the University of Phoenix Writing Lab for evaluation and writing assistance. Email your work to WRITINGLAB@UOPHX.EDU, and your evaluation will be returned to you within forty-eight (48) hours. You may submit material to the lab twenty-four (24) hours a day.

Learning Teams

Teamwork is an essential part of the work world. Learning Teams are an essential part of the academic experience for students. In addition to providing a supplemental learning environment for the mastery of content, they provide an opportunity for the student to develop and refine teamwork skills.

Students are expected to determine the location for that week's learning team meeting during the class session. The instructor must approve the location as appropriate and conducive to learning.

During the first learning team meeting, the students should collaborate together to complete the Learning Team Charter Form. This exercise will help the team plan for the effective achievement of team task, establish ground rules, and minimize conflict in the team process. Team members should sign indicating that they assisted in the preparation of the form. Each team member should receive a copy of the Charter, and a copy should be submitted to the Instructor, the evening of the second class.

Each team must complete a weekly Learning Team Log that documents each member's attendance at the meeting. Non-attendance, or attendance for less than the required scheduled time, will be considered during the grading process. Non-attendance, or insufficient attendance, may result in a "directed" withdrawal from the course, with a grade of "W" resulting.

Teams must complete one unified Meeting Log, indicating the entire team's meeting activity for that week, and signed by all attending team members. Each member should sign the log at the learning team meeting, not the evening of the next workshop. One (1) copy is to be delivered to the instructor at beginning of the next class. A team member should maintain a copy.

INDIVIDUAL ASSIGNMENTS

Week One
1. Complete assignments posted on the rEsource course page.
2. Discussion Question(s):
    1. Why are most programs still in COBOL?
    2. Why is there not just one computer language?

Week Two
1. Write a 2-3-page (350 words per page) paper describing what programming languages are used at your place of employment (if your company is too large, describe a department). Why were those languages chosen? Were the programs developed in-house, outsourced, or bought off-the-shelf?

Week Three
1. Write a C program that displays a title, "Currency Conversion," and then write the names of five currencies and their equivalents to the US dollar. The conversions are hard coded equations. Insert comments in the program to document the program internally. Attach a design flow chart and a version control sheet to the email with the source code of the program.

Week Four
1. Expand the "Currency Conversion" program to accept one input currency, which is error checked as a valid entry, and then display its equivalency in US dollars. Insert comments in the program to document the program internally. Attach a design flow chart and a version control sheet to the email with the source code of the program.

Week Five
1. Expand the "Currency Conversion" program to have a menu that allows the user to choose which currency they wish to display in its equivalency to the US dollars. Insert comments in the program to document the program internally. Attach a design flow chart and a version control sheet to the email with the source code of the program.
2. Complete a Learning Team Evaluation.

LEARNING TEAM ASSIGNMENTS

In this course, starting with the program due in Week Three, the Learning Team's function is to serve as a quality control and design team for the programmers (which happen to be the team members). Each team member will complete the programming assignments individually. The team will serve to test members' programs and review members' documentation. Programs are to be well documented and constructed so they cannot be crashed. In Week Five, each student will also present a 5-page report on a plan for software maintenance and change control in an organization.

You are to maintain high standards of honesty and ethical behavior. All assignments designated as individual in nature should be completed by you individually. Programming cannot be learned by watching others complete assignments on your behalf, nor can it be learned by having someone "coach" you as you complete the assignments. The diligent student will understand that much individual effort, study, and frustration are a normal part of the process required to learn a programming language. Do not let others do your work for you.

You should also be aware that the purpose of this course is not to create C programmers. The purpose of this course is to present programming concepts and use C for examples. This course will give you an appreciation for the skills and time required to develop software. Once you learn the principles of programming, it is relatively easy to increase your skills in a language, and to learn others.

Objective: Apply quality control as a team.

Standards
Refer to "Standards for Written Work" and "Standards for Presentations" in your Program Handbook, which can be accessed through the University of Phoenix eCampus Web site.

Meeting One
1. Create a Learning Team Charter.
2. Using the course's C compiler, write a beginning C program that displays the words "Example Program." As a team be prepared to discuss the procedure to write and execute a C program.

Meeting Two
1. Design a program quality control sheet to check each Learning Team member's program. As a team be prepared to discuss your program quality control sheet.

Meeting Three:
1. Use the program quality control sheet to check each Learning Team member's program. As a team be prepared to discuss the results of your program quality control sheet.

Meeting Four:
1. Create a 5-page (350 words per page) plan for software maintenance and change control in an organization. Be prepared to submit your 5-page plan. Use the program quality sheet to check each Learning Team member's program. As a team be prepared to discuss the results of your program quality control sheet.

Study Group Evaluation Form

Group Number   PHL-50019   **Date**   01/12/2004
Course Number   POS 370   **Faculty Member**   Sergio Carbone

In completing this form, do not identify yourself in any way. In the space below, list the names of each member of your study group, ***including yourself***. Then use the following scale to rate how effectively each member of the group, including yourself, contributed to the project assigned in this course.

Using the following scale, circle a number between one and five beside each name.

1	*2*	*3*	*4*	*5*
No Contribution	*Slight Contribution*	*Moderate Contribution*	*Significant Contribution*	*Outstanding Contribution*

Name	Rating	Name	Rating
_____	1 2 3 4 5	_____	1 2 3 4 5
_____	1 2 3 4 5	_____	1 2 3 4 5
_____	1 2 3 4 5	_____	1 2 3 4 5

Now, objectively evaluate the group's performance on the following questions. Attempt to rate without regard to positive or negative feelings that you may have for individual members. Using the following scale, circle one number as your response to each question:

1- Not At All Effectively   2-Not Very Effectively 3-Somewhat Effectively   4-Effectively   5-Very Effectively

How effectively did members of the study group:

1. Make individual contributions that helped the group accomplish its goal?   1 2 3 4 5
2. Maintain an atmosphere in which each member could contribute to the group? 1 2 3 4 5
3. Remain focused on important issues during group discussions?   1 2 3 4 5
4. Search for alternative points of view or compromise within the group?   1 2 3 4 5
5. Deal with and resolve conflict within the group?   1 2 3 4 5
6. Contribute to the group's written outcomes?   1 2 3 4 5
7. Contribute to the group's oral presentation?   1 2 3 4 5

What changes, if any, would you like to see in your study group? (Write on back)