**CIT215 – Systems Analysis and Design**

3 Credits/3 Class Hours

Professor:         Nancy S. Grant, Ed.D. (Teaching at CCAC since 1981)

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Office:              G-407 - South Campus Location

Office Hours:   Office Hours will be announced at our course site: <https://courses.ccac.edu>

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Faculty Secretary:  Ms. Angela Ondrik - 412.469.6484

Course web address:   <https://courses.ccac.edu>  (We will also use this facility in the course.  It is

also referred to as Blackboard.)

**COURSE DESCRIPTION**

Students utilize a system development methodology through team-based projects that demonstrate their Information Technology skills. Topics include life cycle phases: determination of user system requirements, logical & physical design, test planning, implementation planning, performance evaluation, software package evaluation & acquisition, prototyping, structured & object-oriented methodologies, development and adherence to the system life cycle standards, and designing interfaces and dialogues. This course encourages interpersonal skill development with clients, users, team members and others associated with development, operation and maintenance of the system. This course also acts as a capstone for CIT programs, allowing students to achieve a better perspective of the academic, personal, and professional requirements of their chosen IT profession.

[**PREREQUISITE(S)**](file:///C:\CIT100%20Website\courseoutline.htm#Prerequisities)**:**

Last or next-to-last semester of a CIT certificate/degree program or permission of the instructor

**REQUIRED** **TEXTBOOK: MANDATORY FOR THE COURSE**

Essentials of Systems Analysis and Design, 5/E by Joseph Valacich, Joey George, and Jeff A. Hoffer. ISBN-10: 0137067119 • ISBN-13: 9780137067114 Publisher: Prentice Hall.

[**MATERIALS:**](file:///C:\CIT100%20Website\courseoutline.htm#Materials)

A flash drive will be required in order for you to save your work to secondary/permanent storage. You can also save your work to a folder on your hard drive as well.

We will be using Microsoft Windows, the Internet (including e-mail), Microsoft Office 2010 Professional Edition, as well as free software products available at the DreamSpark program.

**STUDENT NET ID'S, E-MAIL, WEBSITES**

All students should have received their netid to login to CCAC computer systems. Please contact the helpdesk at [help@servicedesk.ccac.edu](mailto:help@servicedesk.ccac.edu) if you have not received your netid. Your netid is used to access computers on the campus, as well as <https://courses.ccac.edu> (course materials/assignments), e-mail at <https://webmail.acd.ccac.edu>, as well as the library at <http://www.ccac.edu/library>  Please note that you may be required to change your password after 90 days.  In order to view grades, you need to use CCAC Central which you can access from the CCAC home page at [www.ccac.edu](http://www.ccac.edu).  Please note that CCAC Central uses a separate password than your Blackboard, e-mail, and library account. Additionally, the CCAC server to publishing webpages is available at <https://web.acd.ccac.edu>

**THE DREAMSPARK PROGRAM/MICROSOFT SOFTWARE**

CCAC's CIT department is a member of the Microsoft Developer Network Academic Alliance (MSDNAA), now called Dream Spark, which allows students enrolled in CIT classes to download certain Microsoft software and install it on their home computer **free of charge**. I will let you know which products we may need to download and install onto our home computers for usage in the course. The DreamSpark website can be found at <http://www.ccac.edu/default.aspx?id=138906>  In order to use the DreamSpark program, you need to go to the site and register using your CCAC e-mail account.

**LEARNING OUTCOMES**

1. Use the tools and techniques of analysis and design needed to meet the needs and goals of an organization.

2. Use a systems approach to solve business problems.

3. Analyze the requirements of a relatively simple system and participate in a project group involved with the design of a complex system.

4. Comprehend the Systems Development Life Cycle (SDLC) and its role in the development of information systems.

5. Participate in software package evaluation and acquisition, system testing, user training and support.

6. Demonstrate effective oral & written communications necessary to work with clients, users, team members and others associated with development, operation and maintenance of the system.

**LISTED TOPICS**

1. Systems development environment

2. Determining system requirements

3. Structuring system requirements: Process Modeling and Conceptual Data Modeling

4. Systems planning and selection, and determining alternative design strategies

5. Object-oriented analysis & design, Rapid Application Development, and Case tools

6. Designing effective human interfaces and databases

7. Managing the information systems project

8. Systems implementation and operation

**EXAMINATIONS**

There will be two examinations during the semester. The first examination will be given during the middle of the term; the final will be given during finals week. The tests will be available at our course site at <https://courses.ccac.edu>

**ASSIGNMENTS**

Students will also be working on individual assignments, as well as a major systems analysis team project throughout the course. The assignments in the course will be available at our course site at <https://courses.ccac.edu>

**METHODS OF EVALUATION:**

Examinations will be worth 40% of your grade.

The individual assignments will determine 35% of your grade.

The major team project will determine 25% of your grade.

A grade spreadsheet will be available at <https://courses.ccac.edu> and it help you keep track of your grade in the course.

**STUDENT RESPONSIBILITIES AND ASSIGNMENTS**

Students must complete the course requirements in order to successfully complete the course.  *No incompletes will be issued for the course.*   You must complete the required work to complete the course.  For medical reasons, however, the college does have procedures in place in order to allow students to withdraw from the course.  Please check with the registration office as to the procedures pertaining to a medical withdrawal from the college. The student is responsible for all reading and all lab assignments.  Students must also work each week in their assigned group on the case study as well. All students are expected to work each week with their assignment team or group. Due dates will be set and no late work will be accepted.

**ACADEMIC HONESTY**

Your education at CCAC begins with the instructor in the classroom.  Student-instructor relationships are built on trust.  Students must trust that instructors have made appropriate decisions about the structure and content of the courses they teach; teachers must trust that the assignments students turn in are theirs.  The CCAC Student Handbook defines various forms of academic dishonesty and the procedures for responding to them.  Please familiarize yourselves with this portion of the CCAC Student Handbook and take note of the penalties for plagiarism and other forms of cheating.  In this course, "cheating" consists of passing off the work of others as one's own work.

**COMPUTER CENTER**

All students must have a valid student identification card to use campus facilities. Check with your local campus to obtain a student identification card. Note:  Students who do not have the appropriate software at home can use the CCAC computer labs to do their computer lab work.

**TUTORING SERVICES**

Take advantage of free tutoring services located at the Learning Assistance Center of each CCAC campus. Visit the Learning Assistance Center to make an appointment or call for more information.

**OTHER IMPORTANT INFORMATION**

The instructor reserves the right to make changes in the course content.  If adjustments are made to the schedule, students will be notified of these adjustments in a timely manner.

For other important information, students should consult the student handbook, as well as the CCAC website at [www.ccac.edu](http://www.ccac.edu)

CCAC has a college-wide assessment program, the primary purpose of which is the improvement of instruction and student learning.  Course outcomes, program objectives, and the general education goals (Communication, Technological Competency, Information Literacy, Critical Thinking and Problem Solving, Quantitative and Scientific Reasoning, and Culture and Society) will be assessed.   As a student, you should focus on the goals, objectives and learning outcomes of your courses and program of study to help you analyze your performance and make your learning most effective.  It is always our goal to have students function at their fullest capacity.

The Community College of Allegheny County (CCAC) makes every effort to provide reasonable accommodations for students with disabilities.  Questions about services and procedures for students with disabilities should be directed to the Office of Supportive Services at your campus.

**CAMPUS CALENDER**

Go to <http://www.ccac.edu> and search by academic calendar to see important dates related to the current semester.

NOTE:  Keep in mind that distance learning courses are similar to regular courses.  Students are expected to complete course work by the end of the semester in which you are registered.  You are responsible for meeting any deadlines set by your instructor, as well as semester (academic calendar) deadlines set by the college.