

## Syllabus

**Code:** COMP 226    **Title:** System Analysis and Design    **Division:** Business and Computer Science    **Department:** Computer Science

**Course Description:** Students will acquire working knowledge of the principles, methods and procedures required to develop a computerized information system. They will be able to identify, describe and perform the manifold tasks associated with a computer system development, particularly in systems planning, management, analysis and design and implementation. There will be a class project requiring the students to

**Prerequisites:** COMP126-Computer Fundamentals    **Corequisites:**    **Credits:** 3    **Lecture Credits:** 3    **Lab Credits:** 0    **Lab Hours:** 0

**Required Materials:**

**Textbook:** System Analysis and Design in a Changing World 5th Edition, by Satzinger, Jackson and Burd, Thomson Course Technology Publishing ISBN 1-4188-3614-1

**Additional Time Requirements:**

The student should expect to spend at least 2 hours of time outside class for each hour in class. The Brookdale Computer Science lab is available for your use.

**Intended Course Learning Outcomes/Course Goals:**

The student will be able to perform system analysis, system design, design databases and design user interfaces. (Core Competencies: Critical Thinking and Technological Literacy) The student will be able to create various design documentation.

**Outline:**

<u>Week of Semester</u>	<u>Reading Material</u>	<u>Project Milestone Due</u>	<u>Course Content</u>
9/8	Chapter 1		Introduction to Course Material
9/15	Chapter 4		Investigating System Requirements
9/22	Chapter 5		Modeling System Requirements
9/29	Supplemental Material	Requirement Milestone 1	Traditional vs. Object Oriented Languages
10/6	Chapter 6 & 7		Traditional vs. OO approach to Requirements
10/13	Chapter 8		Evaluating Alternatives, Environment and Proposals
10/20			Midterm I
10/27	Chapter 9 & 10	Requirement Milestone 2	Intro to System Design and Traditional Approach to Design
11/3	Chapter 11		OO Design Part I
11/10	Chapter 12		OO Design Part II
11/17	Chapter 13	Software Design Milestone	Designing Databases
11/24	Chapter 14	DB Design Milestone	Designing the User Interface
12/1	Chapter 15	UI Design Milestone	Designing System Interfaces, Controls & Security
12/8			Midterm II
12/15	Chapters 2 & 3	Completed Rough Draft	System Development Methodologies and Project Management
12/22		Completed Final Project	Final Project Presentations

**Grading Policy:**

<u>Item</u>	<u>Weight</u>
Midterm I	25%
Midterm II	25%
Systems Analysis and Design Project	50%
Assignments	25%
Final Product	25%

<u>Grade</u>	<u>Requirements</u>

A	Test and design project average 94 or above and complete assignments
A-	Test and design project average 90 - 93 and complete assignments
B+	Test and design project average 87 – 89 and complete assignments
B	Test and design project average 84 – 86 and complete assignments
B-	Test and design project average 80 - 83 and complete assignments
C+	Test and design project average 75 or above and complete assignments
C	Test and design project average 70 or above and complete assignments
D	Test and design project average 60 through 69 and complete assignments
F	Test and design project average below 60

#### **Peer Evaluations:**

Within the student teams, each team member will have the opportunity to complete peer evaluations of his/her teammates. The peer evaluations will be used to adjust an individual team member's project grade from the team project grade. However, grade adjustments will only be made if:

- There were significant intra-team conflict/difficulties.
- The instructor was informed of the team difficulties prior to the completion of the evaluations.
- There is evidence that the team made meaningful attempts to resolve these difficulties.

All students must fully complete all peer evaluations. Students failing to fully complete these peer evaluations will receive a 5% reduction in the course grade. The objective of performing peer evaluations is twofold. First, these evaluations are designed to aid students in self-managing any conflict within their teams. Second, these will also encourage all team members to contribute to the project as well as to reward individuals who perform exceptionally on the team project. The instructor will notify teams in class when peer evaluations will be completed.

#### **Department Policies:**

**Testing:** Students will be allowed to take each test only **one** time. There are **no retests**. If a student has a valid excused absence on the day of the test, the test may be taken in the Testing Center with the permission of the instructor. The exam must be taken within 10 days and will be graded for full credit. Saturdays and Sundays count as days when calculating the 10 day limit. If not taken within the 10 days, a grade of zero will be assigned to the test. A valid Brookdale ID is required to take the test at the testing center. Only one in class test may be missed. Any other test taken in the testing center will receive a maximum grade of 70.

**Late assignments:** Labs are to be submitted on a timely basis. The instructor will assign due dates. 25% of the assignment grade will be taken off for every week late.

**Incomplete:** The course instructor may grant a grade of incomplete in cases of documented hardship or extenuating circumstances. The student must have completed a significant portion of the course work to qualify. The student must obtain a signed Incomplete Application form from the instructor on or before the last class meeting date. If the required work is not completed within 21 days after the semester, excluding official College breaks, the grade of INC is changed to an F.

**Addendums:** Individual Instructors may add additional requirements to this syllabus in written form (such as assignment due dates, cover sheets, class behavior, etc.).

**ACADEMIC VIOLATION:** The instructor of the course has the authority to give a course grade of **F** if the student submits the work of another person in a manner that represents the work as one's own, or knowingly permits one's work to be submitted by another person without the instructor's authorization. All computer work must be on your own portable storage device.

#### **College Policies:**

For information regarding:

- Brookdale's Academic Integrity Code
- Student Conduct Code
- Student Grade Appeal Process

Please refer to the **Student Handbook** and **BCC Catalog**.

#### **Notification for Students with Disabilities:**

**Brookdale Community College offers reasonable accommodations and/or services to persons with disabilities. Students with disabilities who wish to self-identify, must contact the Disabilities Services Office at 732-224-2730 or 732-842-4211 (TTY), provide appropriate documentation of the disability, and request specific accommodations or services. If a student qualifies, reasonable accommodations and/or services, which are appropriate for the college level and are recommended in the documentation, can be approved.**

#### **Additional Support/Labs:**

The Brookdale Computer Science lab is open Mon-Sat.

Hours are posted outside the door and on the Computer Science Department web site (<http://www2.brookdale.cc.nj.us/cos>).