Code: COMP 226

Title: System Analysis and Design

Institute: STEM

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 tasks associated with a computer system development, particularly in systems planning, management, analysis and design and implementation. This course is a rigorous introduction to computer science and computer applications.

Prerequisites: COMP 126

Corequisites: None

Prerequisites or Corequisites: None

Credits: 3   **Lecture Hours:** 3   **Lab/Studio Hours:** 0

REQUIRED TEXTBOOK MATERIALS
Textbook: System Analysis and Design in a Changing World, Satzinger, Jackson and Burd, 7th Edition, Thomson Course Technology Publishing, ISBN-10: 1305117204

ADDITIONAL TIME REQUIREMENTS: The student should expect to spend at least 2 hours of time outside class for each hour in class. The Computer Science open lab is in room LAH 103 on the Lincroft campus. Hours are posted on the outside door and on the Computer Science Website (http://sites.brookdalecc.edu/home/stem-institute/computer-science/computer-science-lab/).

COURSE LEARNING OUTCOMES:
Upon completion of this course, students will be able to:
Perform system analysis and design
Design databases
Design user interfaces
Provide system documentation using UML

GRADING STANDARD:

Grade Calculation

Item	Points
Presentation 1	100
Presentation 2	100
Presentation 3	100
Milestone 1 Team Project	100
Milestone 2 Team Project	100
Milestone 3 Team Project	100
Completed Team Project	100
Tests	300
Total	1000

Divide total points by 10 for final grade.

AVERAGE	FINAL COURSE GRADE
94 –100	A
90 - 93	A-
87 - 89	B+
84 - 86	B
80 - 83	B-
75 – 79	C+
70 - 74	C
60 – 69	D
BELOW 60	F

COURSE CONTENT:

Chapter 1	Information Systems Analyst
Chapter 2	System Development
Chapter 3	Project Management
Chapter 4	Investigating System Requirements
Chapter 5	Modeling System Requirements
Chapter 6	Traditional Approach
Chapter 7	Object-Oriented Approach
Chapter 8	Evaluating Alternatives, Environment and Implementation
Chapter 9	System Design
Chapter 10	Traditional Approach
Chapter 11	Object Orientated Design Principles
Chapter 12	Object Orientated Design: Use Case Realization
Chapter 13	Designing Databases
Chapter 14	Designing the User Interface
Chapter 15	Designing System Interfaces, Controls & Security

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.

All students must complete peer evaluations form after each milestone. The objective of performing peer evaluations is to encourage all team members to contribute to the project as well as to reward individuals who perform exceptionally on the team project. Five points will be deducted for each peer evaluation not submitted on time.

DEPARTMENT POLICIES:

Testing: Tests cannot be retaken. If a student has a valid excused absence on the day of a test, it may be taken with the permission of the instructor within 10 days of the original test administration date. A valid Brookdale ID and test pass may be required to take the test. Only one test may be missed. Any other missed tests will be issued a score of zero.

Attendance: Attendance is required every week.

Late assignments: Points will be deducted for late assignments.

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.

College Policies:

As an academic institution, Brookdale facilitates the free exchange of ideas, upholds the virtues of civil discourse, and honors diverse perspectives informed by credible sources. Our College values all students and strives for inclusion and safety regardless of a student's disability, age, sex, gender identity, sexual orientation, race, ethnicity, country of origin, immigration status, religious affiliation, political orientation, socioeconomic standing, and veteran status. For additional information, support services, and engagement opportunities, please visit www.brookdalecc.edu/support.

For information regarding:
- Brookdale's Academic Integrity Code
- Student Conduct Code
- Student Grade Appeal Process

Please refer to the BCC 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 (voice) or 732-842-4211 (TTY) to 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:

Academic Tutors are available in the Computer Science Open Lab located in LAH103.

MENTAL HEALTH:

- Mental Health Crisis Support: From a campus phone, dial 5555 or 732-224-2329 from an external line; off-hours calls will be forwarded to BCC police (2222 from a campus phone)
- Psychological Counseling Services: 732-224-2986 (to schedule an appointment during regular hours)

The syllabus is intended to give student guidance in what may be covered during the semester and will be followed as closely as possible. However, the faculty member reserves the right to modify, supplement, and make changes as the need arises.