

Bergen Community College
Division of Business, Math & Social Science

Information Technology
Course Syllabus

Course Title:

INF-108 PC Upgrade, Maintenance and Diagnosis

Credits/Hours:

3 credits/2 hours lecture, 2-hour lab.

Course Description:

This course provides instruction in the infrastructure, configuration, upgrade, troubleshooting and repair of PC systems. Students will partially assemble and upgrade a PC. Topics include diagnosing problems; preventative maintenance; safety and environmental issues; motherboards (components and architecture); computer memory; input/output (I/O) interfaces; printer classes; basic networking and data communications concepts and components. This course assists with preparation for the CompTIA A+ Certification.

Textbooks and Supplies:

See course outline

Student Learning Objectives	Assessment Measures
1. Identify the components that comprise various computer systems and state the functions and limitations of each system element.	Written exam
2. Disassemble; upgrade or maintenance; and re-assemble a computer using safe and proper techniques.	Lab exam
3. Select and use hardware and software needed for system upgrades, networking, data backup, power protection; virus detection; communications; and systems utility applications.	Written exam Lab exam
4. Analyze and correct system problems independently, or as a team member.	Lab exam
5. Assess upgrade and maintenance scenarios, recommending courses of action based on both economic and functional considerations.	Written exam

College Competencies:	Student Learning Objective:
1. COMMUNICATION—Students will read, write, speak, and listen effectively	1
2. CRITICAL THINKING—Students will actively reflect on, reason about, and form independent judgments on a variety of ideas and information, and use these skills to guide their beliefs and actions.	3,4,5
3. TECHNOLOGICAL AND INFORMATION LITERACY—Students will demonstrate computer literacy, and will be able to retrieve, organize, and analyze information using both technological and traditional means.	1,2,3,4,5

4. INTERPERSONAL SKILLS—Students will demonstrate an ability to maintain personal and professional relationships, engage in meaningful teamwork, and resolve conflicts.	1,2,3,4,5
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Course Content:

See course outline

Assessment:

An average of 60% from combined assessment measures is required to demonstrate a basic proficiency in course material.

Three written and laboratory exams.	75%
Lab assignments and class participation	25%

Quizzes:

There will be several quizzes, each worth 10 points, given at the beginning of random classes. The quiz material will be based upon the prior lectures and labs. At the end of the semester, the average quiz score will be used as bonus points towards your exam grade. A quiz cannot be made up if missed. A student entering class late, after a quiz has begun, will not be entitled to extra time to complete the quiz. Students entering class after a quiz is completed will not be permitted to take the quiz.

Testing:

Students *are required* to take examinations on the day and time they are scheduled. If special circumstances require a test schedule adjustment, this must be *worked out in advance* with the instructor. If a student misses an exam (except for prearranged circumstances with the instructor) a zero grade will be assigned.

The instructor can be reached by *telephone* (see course outline for appropriate phone number), *e-mail*, or *written note* left in the Divisional Office (during the day) A-306C or the Evening Office L-113. If there are extreme circumstances (documentation may be required) that prevent a student from taking a test according to the published schedule, use one of the above options to contact the instructor before the next class. An arrangement for a special testing schedule is solely at the *discretion of the instructor*. A student who waits for the next class session to speak with the instructor will not be accommodated with a special test schedule.

It is the student’s responsibility to finish an examination correctly and completely. Therefore, when computer Scantron forms are used as answer sheets, the student *must use* a Number 2 lead pencil and erase all stray marks completely. The burden of proper erasure *is at test taking time*. Once the examinations are returned to the students, there will be *no grade adjustments* made due to inappropriate completion of the response form.

The use of electronic devices during exams is prohibited. Any student using an electronic device during an exam (unless directed to do so by the instructor) will receive a 0 for the exam.

Laboratory Work:

Laboratory assignments involve hands-on procedures that show the instructor that the student can competently perform maintenance and upgrade procedures; and/or install specified software. It is important that the student attend all lab sessions. The student should read the scheduled assignment in the text prior to coming to lab class.

The lab assignments are required for grading. They must be completed on the assignment due date. All lab assignments will be given and completed during the same lab session.

Lab assignments cannot be done any time other than when they are scheduled. The student will not be permitted to pick up where he/she left off during the prior session when entering the next scheduled lab.

The College provides all the computer equipment, software, and tools needed to complete the lab assignments. The equipment may only be used to complete assigned work – it should not be used to personal or non-course related work. None of the materials provided are to be misused or removed from the lab. All the software being used is covered United States copyright law, and under no condition can the illegal copies be made of the software used in the lab.

A students' personal safety is a paramount consideration. When performing assigned lab work, all students are expected to adhere to the safety guidelines and instructions provided.

Homework:

In addition to any homework assignment given during class, it is a standing assignment that the student read each chapter of the book prior to its discussion. Following the class discussion, the student should reread the material and work with the exercises throughout the text. It is anticipated that students will spend at least 4-hours per week reading the text and working with the exercises and supplemental resources.

Policies:

- Attendance: You are expected to attend all classes. Frequent or numerous absences will have an adverse effect on your learning, and will have an adverse effect upon your grade. If you are absent, you should communicate with the instructor as soon as possible by telephone, by leaving a voice mail message, or by e-mail. The instructors' telephone number, with voice mail, and the instructors' e-mail address are provided on the course outline.
- Lateness: The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.
- Participation: All students are expected to participate in class discussions. The content expressed in a students' participation will not be graded, so all students are expected to be involved class discussions or question and answer periods. The degree of a students' participation is an aspect that will be considered in the overall grading.
- The student must adhere to all college polices. Due to the nature of this course, it is recommended that the student review the policy titled "*Acceptable Information Technology Use at Bergen Community College*".
- The use of portable electronic devices such as pagers and cell phones is not permitted while class is in session. Please be sure to silence electronic devices before entering class.
- The use of audio CD or tape players, radios, and college computers to play music during class is prohibited.
- Cell phones are to be off during class.
- Students are expected to demonstrate listening, reading, note taking, and writing skills. The student will need to take notes during class discussions and understand and follow verbal and written directions. All assignments and correspondence with the instructor (including e-mail) must be well written in full sentence format. Proper paragraph format must be used for all postings to the student bulletin board (if applicable).

- The subject line of all e-mail correspondence to the instructor must contain the course number and section and student's name. Any e-mail received without this information will not be opened.
- Plagiarism in any form will be treated as a failure to complete an assignment. All work submitted should reflect individual effort by the student.
- In borderline cases that arise in almost every class each semester a student's attendance, class participation, attitude, and observed effort will be considered in helping to determine the student's final grade.

If the instructor does not appear after 20 minutes following the scheduled starting time, students should prepare an attendance list. One volunteer member needs to deliver the list, containing the course title, date, and instructor's name, to the Divisional Office (A-306C) for classes scheduled during the day or the Evening Office, located in room L-113.

Individual instructors may distribute additional policy and assessment information.