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| **Bergen Community College** | | | | | |
| **School of Business, Social Sciences, & Public Service** | | | | | |
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| **Course Outline** | | | | | |
| **Information Technology Department** | | | | | |
| **Summer II - 2011**    **INF-108-701** | | | | | |
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| **I. Course / Section / Instructor Information:** | | | | | |
| **Instructor:** | Brian M. Fuschetto | | **Phone:** | 201-707-0330 (Voicemail - Text) | |
|  |  | |  |  | |
| **Office Hours:** | Upon Request | | **Office:** | Divisional Office (A-306C) | |
|  |  | |  | Evening Office (L-113) | |
| **E-mail:** | [bfuschetto@bergen.edu](mailto:bfuschetto@bergen.edu) | |  |  | |
|  | | | | | |
| **Meeting Date(s) & Time(s):** | | Monday, Tuesday, Thursday 7/5/2011 to 8/11/2011, 6:15 p.m. to 9:25 p.m. | | | |
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| **Website:** | |  | | | |
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| **Course Syllabus:** | | <http://www.bergen.edu/inf/syllabi/INF-108_Syllabus_Dec2004.htm> | | | |
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| **Department Website:** | | <http://www.bergen.edu/inf> | | | |
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| **II. General Course Information:** | | | | | |
| **A. Credits / Hours:** | | | | | |
| 3 credits/2 hours lecture, 2-hour lab | | | | | |
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| **B. 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. | | | | | |
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| **C. Textbooks and Supplies:** | | | | | |
| * LabSim Online Testout.com | | | | | |
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| **III. Additional Class Information:** | | | | | |
| **A. Credits / Hours:** | | | | | |
| *An average of 60% from combined assessment measures is required to demonstrate proficiency in course material.* | | | | | |
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| Textbook Material: | | | | |  |
| Exams (5 – based on LabSim Online material and class discussion) | | | | | 30% |
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| Lab Material: | | | | |  |
| In Class Lab Assignments / Projects | | | | | 30% |
| Lab Sim Online Labs and Simulations | | | | | 30% |
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| Final Exam / Project: | | | | | 10% |
|  | | | | |  |
| Total: | | | | | 100% + earned bonus |
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| **B. Exams:** | | | | | |
| Students are required to take exams on the day and time they are scheduled.  If special circumstances require an exam 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 above), email (preferred), or a written note can be left in the Divisional Office (during the day) A-306C or in the Evening Office L-113.  If there are extreme circumstances (documentation may be required) that prevent a student from taking an exam according to the published schedule, the student should 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 exam or test schedule.  It is the student’s responsibility to finish an exam correctly and completely and to submit it in form designated by the instructor whether it is in electronic and/or hard copy 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. | | | | | |
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| **C. In Class Labs and Projects:** | | | | | |
| 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 under United States copyright law, and under no condition can 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. | | | | | |
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| **D. Lab Sim Online Labs and Projects:** | | | | | |
| Throughout the course the instructor will assign a variety of research based activities and projects. These assignments are to be completed by their assigned date and submitted either in hard-copy or electronic format as described in the assignment / project.  Out of Class Labs and Projects also include weekly assignments in the LabSim environment. Students are expected to watch video segments, read fact sheets, and complete the simulation labs for each unit of study.  All out of class labs and projects must be completed in a timely manner. Submissions that are made after the due date will be subject to a deduction of 10 points per day late.  If a student is experiencing technical issues in completing or submitting assignments, the student is responsible to notify the instructor as soon as possible to make alternative arrangements for submission and to avoid being penalized for a late submission. | | | | | |
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| **E. Homework:** | | | | | |
| It is a **standing assignment** that the student view the materials and content in the Lab Sim environment in order to prepare for its discussion in class.  Following the class discussion, the student should review the material and work with the exercises throughout the simulator.  It is anticipated that students will spend at least four hours per week viewing the content and working with the exercises and supplemental resources. | | | | | |

| **Week-by-Week Outline** | | | | | |
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| **Week** | **Session**  **Date** | **Topic(s) *View Before Class*** | **In-Class Labs** | **Out of Class Labs (LabSim)** | **Exams** |
| **1** | 07/05/11 | 🢝  Course Orientation/Introduction  🢝 Certifications  🢝 PC Fundamentals | 🢝 Certification Roadmap  🢝 A+ Prep  🢝 Ports Tour | 🢝 1.1, 1.2, and 1.3 |  |
|  | 07/07/11 | 🢝 Protection and Safety  🢝 Professionalism  🢝 PC Maintenance  🢝 Troubleshooting Overview | 🢝 IT Code of Ethics  🢝 Provide Customer Service  🢝 PC Tech Toolkit  🢝 Examining the Power Supply | 🢝 2.1, 2.2, 2.3, and 2.4 |  |
| **2** | 07/11/11 | 🢝 Form Factors  🢝 Motherboards  🢝 Buses | 🢝 PC Form Factors  🢝 Labeling the Mobo  🢝 Expansion Buses | 🢝 3.1 and 3.2 | **Exam 1: Computing Overview** |
|  | 07/12/11 | 🢝 Processors  🢝 Memory | 🢝 Installing processors and memory  🢝 Computer Performance Benchmarking | 🢝 3.3 and 3.4 |  |
|  | 07/14/11 | 🢝 BIOS  🢝 Video  🢝 Cooling | 🢝 Restoring an overclocked PC  🢝 Researching High End Video Cards  🢝 Troubleshooting Video | 🢝 3.5, 3.6, and 3.7 |  |
| **3** | 07/18/11 | 🢝 Operating Systems Overview | 🢝 The DOS Lab | 🢝 1.4 and 2.5 | **Exam 2: System Components** |
|  | 07/19/11 | 🢝 System Management | 🢝 Windows System Tools  🢝 Working in Safe Mode | 🢝 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, and 10.7 |  |
|  | 07/21/11 | 🢝 Installing Windows | 🢝 Windows Installation  🢝 Linux Installation | 🢝 11.1, 11.2, and 11.3 |  |
| **4** | 07/25/11 | 🢝 Printing | 🢝 Maintain and Troubleshoot a Printer | 🢝 7.1, 7.2, 7.3, and 7.4 | **Exam 3: Operating Systems** |
|  | 07/26/11 | 🢝 Peripheral Devices | 🢝 Installing a Dual Display  🢝 Researching Digital Cameras | 🢝 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, and 4.7 |  |
|  | 07/28/11 | 🢝 Storage | 🢝 Examining Hard Drives  🢝 Comparing CD, DVD, and Blu-Ray Technologies | 🢝 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, and 5.7 |  |
| **5** | 08/01/11 | 🢝 Portable Devices | 🢝 Comparing Notebooks and Desktops | 🢝 8.1, 8.2, and 8.3 | **Exam 4: External Devices** |
|  | 08/02/11 | 🢝 Networking | 🢝 Comparing options for a Home LAN  🢝 Understanding the OSI Model | 🢝 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, and 6.11 |  |
|  | 08/04/11 | 🢝 Security | 🢝 Researching PC Security  🢝 Investigating Startup Processes | 🢝 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, and 9.7 |  |
| **6** | 08/08/11 | 🢝 Review | 🢝 The Ultimate Computer System  🢝 Fixing Malfunctioning Systems |  | **Exam 5: Connecting Computers** |
|  | 08/09/11 | 🢝 Final Exam Project |  |  | **Final Exam Project** |

***Topics and/or assignments might be modified at the discretion of the Instructor***