# Reedley College Spring 2014 3/18/2014 – 4/24/2014

Course: IS 62 Computer Troubleshooting and Maintenance

Class meets:Tuesday and Thursday, 2:00 pm - 8:50 pmInstructor:Sean K. StephensEmail:sean.stephens@reedleycollege.eduOffice Hours:TBDFinal Drop Date:Final Exam:4/24/2014

### Text Books and Study Material:

#### LabSim

#### 1. Course Description and Information:

This course provides an introduction to troubleshooting and maintenance techniques of personal and laptop computers. The course provides Information Systems student with applicable hands-on activities such as installing RAM, replacing motherboards, and replacing power supplies, as well as using specialized test equipment to assist in troubleshooting.

#### 2. Course Learning Objectives and Outcomes:

#### **Objectives:**

- locate and comprehend applicable users and installation manuals
  - Printed
  - o Online
- establish troubleshooting theory of a personal computer's and a laptop computer's problems
  - Identifying the problem
  - o Applying diagnostic procedures to find a solution
  - Testing the solution for the problem
- plan and implement solutions for personal computer's and laptop computer's problems
  - Creating a plan of action
  - o communicating the plan of action with the user
  - Implementing the plan of action
  - Validating the outcomes with the user
  - Documenting the outcomes
- create and document preventative-maintenance procedures

#### **Outcomes:**

- identify, analyze, interpret, and solve common problems of a computer system
- design and implement appropriate preventative maintenance procedures for a computer system
- properly use installation manuals, printed or online, for troubleshooting and maintenance tasks
- document the tasks performed in troubleshooting computer problems
- 3. <u>Attendance:</u> Attendance is required and the instructor reserves the right to take roll at any time during the duration of the class period. To achieve successful completion of the course, it is critical for the students taking this course to attend all classes. I will drop you if you have more than three consecutive unexcused, absences.
- 4. <u>Policies:</u> Campus code requires that shoes or sandals and appropriate attire be worn at all times on Eating, drinking, and smoking is not allowed in the classroom or computer labs. Cell phone must be turned off or in the silence mode while class is in session. A student will be subject to discipline if she or he:
  - Prevents other students from pursuing their authorized curricular or co-curricular interests.
  - Interferes with or disputes faculty and administrators who are fulfilling their professional responsibilities.
  - Prevents classified employees from fulfilling their prescribed duties.
  - Deliberately endangers the safety of persons or the security of college property.
  - Violates Reedley College computers and networks usage policy.
- 5. **Behavioral Standards:** Your classmates and I would greatly appreciate that students in the class take care of any personal needs (i.e., using the rest room, getting a drink, sharpening a pencil) before class begins. Please turn off you cell phones when entering the class. You may not use your phone as a calculator. I would appreciate that you not bring guests to class. I start class on time, please don't be late. If you are late, it is your responsibility to ensure you are counted for attendance after class. You may not surf the internet during lectures.
- 6. <u>Academic Dishonesty:</u> Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly obtained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.
  - **<u>Plagiarism</u>**: Plagiarism is the adoption or reproduction of the ideas or words or statements of another person without due acknowledgment. This can range from borrowing without attribution a particularly apt phrase, to paraphrasing someone else's original idea without citation, to wholesale contract cheating. When plagiarizing, students will often turn to the Internet, due the ease of copying and pasting from websites. Other more old fashioned forms of plagiarism such as paper mills and passing off obscure articles or chapters of books of others as original work also still occur. Plagiarized papers are often riddled with gross inconsistencies such as referencing non-existent sections of the essay, changes in spelling and grammar customs, or the argument changing in mid-paragraph.
  - Cheating: Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers in an attempt to gain an unearned academic advantage. Cheating can take the form of crib notes, looking over someone's shoulder during an exam, or any forbidden sharing of information between students regarding an exam or exercise. Also, the storing of information in graphing calculators, pagers, cell phones, and other electronic devices has cropped up since the information revolution began. Incidents of cheating and plagiarism may result in a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course at the discretion of the instructor and depending upon the severity and frequency of the incidents.

7. <u>Accommodations for students with disabilities</u>: If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act please contact me as soon as possible.

#### 8. Learning Methods:

- a. Lectures used to provide bring all students to a level playing field of learning
- b. Required reading
- c. Class projects and Blackboard assignments (lab work)
- d. Textbook assignments (lab work)
- 9. **<u>Reading and Lab Assignments:</u>** Assigned chapters MUST be read prior to attending class. Students are required to complete class/lab assignments in class. You may collaborate with fellow students on lab assignments. Late lab assignments will not be accepted.

#### 10. Outcomes assessment:

Exams (6 @ 20 points each) Labs (12 @ 10 points each)			120 points 120 points	
Participation			100 points	
Final Exam/demonstration			100 points	
Total			440 points	
Grading scale:				
90-100% = A	80-89% = B	70-79% = C	60-69% = D	<60% = F

## 11. Final Drop Date:

12. **Examinations and assignments:** All examinations must be completed individually. Students may make use of the help feature of any application provided in the classroom computers. Students may use their books and notes for all examinations. I will keep open the previous week, current week and one future week at all times for assignments and exams. Once a week is closed out it will be too late to make up.

# 13. Tentative Schedule:

Date	Lecture	Lab Assignments
March 18	Review Safety, Electricity and Multi-meters	Lab 1: Power audit of class system units
March 20	Overview of Desktops and laptops	Lab 2: LabSim: 9.0 (all) Exam
March 25	Review of hardware problems. Review and practice using appropriate tools, and testing equipment. Visual inspections.	Lab 3: LabSim Essentials 3.1, 3.2, and 3.4
March 27	Review of system software problems. Analysis of common hardware and system software problems	Lab 4: • Software removal • LabSim: Essentials 10.3, 10.4, 10.5, 10.6
April 1	System Components	Lab 5: LabSim Application: 2.0 (all) Exam
April 3	System Management	Lab 6: LabSim: 8.0 (all) Exam
April 8	File management	Lab 7 LabSim: 5.0 (all) Exam
April 10	Communication and Network devices	Lab 8: • LabSim: Practical 6.0 all • Exam
April 22	Upgrading existing computer systems Preventative Maintenance and 3 <sup>rd</sup> Party Utilities	<ul> <li>Lab 9</li> <li>Review procedures.</li> <li>Determine appropriate replacement hardware</li> <li>Administrative tools</li> </ul>
April 24	Security	<ul> <li>Lab 10</li> <li>LabSim Application: 7.0 all</li> <li>Exam</li> </ul>