

# CISC 250 – Spring 17

## Final Team Project

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### Overview

You are allowed to work in teams of maximum 4 people for this final team project. Each team will be given the following three **alternatives** (see details below; you only need to choose **ONE**) to choose from:

- 1) Create a training video to teach computer networking concepts
- 2) Write a market brief about an emerging networking technology
- 3) Create an iBook chapter about a computer networking concept
- 4) Upgrade and secure a residential wireless network in the greater Newark area

Although theoretically you can switch to a different alternative during the semester, I highly recommend you to stick with your initial choice to avoid wasting your effort.

### **Alternative 1 – Create a Training Video (Service Learning Project)**

As a community service project, you and your team will make a video to pass on your computer networking wisdom to the local community. The purpose of the assignment is for you to gain better understanding of computer networks while helping the local community to increase awareness of computer networking or security issues.

Your video can explain any computer networking concepts you learned from the class. It can also describe certain computer security problems and specific actions people can take to safeguard their computer networks or personal information. The content of your video should meet the following requirements:

- Must be generic (do not reference any specific college or university, applications, or vendors).
- Must be in good taste and appropriate for multicultural populations.
- Must address topics that will retain relevance for one to two years.
- Must be original and not infringe upon any copyright, trademark, or other proprietary right.

### **Final Deliverables:**

#### **A Short Training Video**

*Due Date: Thursday, May 18<sup>th</sup>*

Your video should be around **five** minutes, 640x480 pixel resolution, and uploaded **on Youtube or in any of the following formats:**

- QuickTime (.mov)

- Windows AVI (.avi)
- Windows Media (.wmv)
- MPEG-4 (.m4v/.mp4)

Your video will be judged in the following areas.

- Creativity
  - Was there unexpected but effective use of design elements?
  - Did the message provide a new perspective?
- Technical quality for videos
  - Image
  - Audio
  - Editing
- Content
  - Did the video cover the appropriate topic(s)?
  - Was the information conveyed of high quality?
  - Would this video have a practical use for awareness education?
- Overall effectiveness of delivery
  - Was there one key message, clearly stated?
  - How persuasive was the message?
  - Is the viewer compelled to keep watching?

### **Alternative 2 – Market Brief (Research Project)**

The purpose of this alternative is to have you research a leading edge or future technology related to telecomm and networks.

For this alternative, you will be asked to write a report on a topic you select from a specified list of subjects (or you identify by your own). The focus of this market brief report should \*not\* simply be a technical description of the topic. Possible issues that you might discuss in your report are the economic costs of the technology, or typical business motivations for selecting this technology, or technical factors that might limit where a business could use this technology. For example, if the topic of your report was "Voice and Data Wiring Standards", your paper should not be an extended discussion of the technical characteristics of copper wire. While it's important to know that CAT-5 wiring can be used up to 100Mbps and has a given db loss over 100 meters, the focus should also be on business issues, such as how upgrading office wiring systems to Cat-5 cabling might permit voice-over-IP applications.

### **Final Deliverables:**

#### **An Organized Report with Bibliography**

*Due Date: Thursday, May 18<sup>th</sup>*

- Your report should be **5-7 double-spaced pages** in length, excluding the cover sheet and bibliography. Your report must be typewritten (handwritten papers will not be accepted), must use a **12 point font, 1" margins**, and justify both margins. Each page (other than the cover sheet) should include a footer with your first initial and last name(s) left justified (e.g., J.

Cao), and the page number (e.g., "Page 1") right justified. Deductions will be made for reports that are not submitted in the required form, and reports missing the cover page will not be graded.

- Your report is required to reference at least four sources upon which you based your paper. Sources should not include marketing or advertising literature. Your sources must be organized in a bibliography, and all references must be cited in your paper. References in the bibliography must be prepared according to one of the standard style sheets (e.g., MLA, APA, Chicago, or Turabian). Below your last reference, you should include a statement indicating which style sheet you used (i.e., "Prepared according to the Chicago Book of Style.").

If you are unfamiliar with the format for standard bibliographic citations, please refer to the following references for additional information. Be sure to use complete references for online sources. Simply referencing a website is \*not\* acceptable. For information on the proper format for an online source, please review <http://www.bedfordstmartins.com/online/citex.html>.

Online References for Style Sheets

<http://www.liu.edu/cwis/cwp/library/workshop/citation.htm>

<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Style.html>

### **Alternative 3 – Create an iBook Chapter (Research/Service Learning Project)**

As a combination of research and community service project, you and your team will use iBooks Author to write an iBook chapter to disseminate your computer networking knowledge. The purpose of the assignment is for you to gain better understanding of computer networks while helping others to learn about computer networking.

Your iBook chapter can explain any computer networking concepts you learned from the class (e.g., concepts taught in one or two lectures). However, you are required to reference any sources upon which you based your chapter. Your sources must be organized in a bibliography, and all references must be cited in your chapter. References in the bibliography must be prepared according to one of the standard style sheets (e.g., MLA, APA, Chicago, or Turabian). Below your last reference, you should include a statement indicating which style sheet you used (i.e., "Prepared according to the Chicago Book of Style.").

If you are unfamiliar with the format for standard bibliographic citations, please refer to the following references for additional information. Be sure to use complete references for online sources. Simply referencing a website is \*not\* acceptable. For information on the proper format for an online source, please review <http://www.bedfordstmartins.com/online/citex.html>.

Online References for Style Sheets

<http://www.liu.edu/cwis/cwp/library/workshop/citation.htm>

<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Style.html>

**Final Deliverables:**

**An iBook chapter**

*Due Date: Thursday, May 18<sup>th</sup>*

Your iBook chapter should be **5-7 pages** in length, excluding the cover page and bibliography. You should have a cover page, a table of content, and a glossary. The chapter should also include at least two media (e.g., image, movie, animation, etc.)

Your iBook chapter will be judged based on its creativity, interactivity, and most importantly, the content quality.

**Alternative 4 – Upgrade and Secure Wireless Network (Service Learning Project)**

As a community service project, you and your team will upgrade and secure a residential wireless network in the greater Newark area. The purpose of the assignment is for you to gain information about wireless networks while assisting the Newark community.

You and your team will be responsible for finding a client who needs to upgrade their wireless network in the Newark area. I could also help you find potential clients.

Your job is to provide the following five services to one Newark residence:

- Provide professional suggestions on upgrading options and help with the upgrading process
- Add a password of the resident's choosing to secure the network
- Add encryption to ensure only authorized users access the network
- Set up and configure the client's laptops and desktops to use the network
- Test everything to ensure it works
- Explain to the resident how to use the network (e.g., what if they get a new laptop?)

You have until April 20th to find a resident who is willing to participate. Once you find a client to work with, you need to contact the client and get familiar with their network equipments and their concerns. You need to be well prepared before going to their home (e.g., you have researched about their specific equipment model, downloaded user manuals, and prepared a work plan).

**Final Deliverables: A Client Satisfaction Survey & A Self-reflective Report**

*Due Date: Thursday, May 18<sup>th</sup>*

Your client will be asked to fill out a survey about your services, using the network you set up. You will be rated in the following areas.

- **Project Organization and Scheduling**
- **Performance**
- **Professionalism.**

In addition, you will be asked to write a self-reflective report that includes a log of the activities completed during the service-learning project and a self-reflection on what you learned from your service-learning experience.

- Your report should be **2-5 double-spaced pages** in length, typewritten (handwritten papers will not be accepted), and must use a **12 point font, 1" margins**, and justify both margins. Each page (other than the cover sheet) should include a footer with your first initial and last name(s) left justified (e.g., J. Cao), and the page number (e.g., "Page 1") right justified.
- Here are some sample issues that you might want to include in your self-reflection:
  - Explain, using some specific examples, how the course work is helping you with your project.
  - Explain, using some specific examples, how the project is helping you with your course work.
  - Describe the most technically challenging problem you faced. How did you go about solving it?
  - Describe the kind of feedback that has been most helpful in your project.
  - Reflect on how this project is expanding your knowledge of community resources.
  - Discuss the ways this project ties into your class and readings.
  - List the people skills you are using in this project.
  - Discuss the ways this project helped you reconsider your career goals.
  - List changes/alterations you would make in the project if the project were to be offered again.
  - List skills/theories/techniques the course or readings should have covered.
  - Decide whether you would recommend this project to next semester's students. Explain.