

INFO/CSCE 315 CASE STUDY OR RESEARCH FINAL PROJECT ASSIGNMENT

(Distribution: 10 points for the paper and 5 points for the podcast video)

Description:

Research and write a case study or research paper on a networking related topic (see list at the end of this document). This final project assignment is a critical-thinking assignment that requires the student to focus on how networking concepts and networking technologies relate to and affect real-life business situations.

Like it or not, we live in a media hungry world where many people from kids to adults make a living doing on their [digital media skills](#). A week before the due date of the paper you will post a video podcast discussing your topic. In that presentation you will provide the following in whatever style you care:

1. Provide an overview your topic and what perspective you have on your topic (how do you interpret the subject of your paper)
2. Why did you choose your topic?
3. How far along are you on your paper (discuss the research and writing process, highs, lows, and/or issues, questions you might have)
4. Who will read your completed paper before you submit it and why did you choose them?
5. What have you found on your topic that surprises you and/or what have you learned in doing the paper?
6. Are there any cool graphics, videos, etc. that you plan on linking to in your paper and, if so, what are they? (feel free to show them or provide the links).
7. Which course objectives (found in the syllabus) do you think relate to your paper?
8. Anything else you may care to add.

You can use your webcam or shoot with a video camera. If you prepare ahead of time you may be able to do it in one take without editing. If you wish it to come off as a smooth entertaining podcast you may need to cut scenes, add music or sound effects, put in text or links, etc. It is up to you. A smooth and professional one-take presentation is as good as one that has a lot of post-production edits. Be creative and have fun. Points will be given based on student ratings and the how professional the presentation appears. A rubric appears at the end of this document but it is more of a suggestion than a strict guide.

Instructions:

Using [current and reliable information sources](#) such as academic databases, magazine articles, web-based content, documentaries, videos, etc. you will investigate the chosen topic thoroughly.

[For case studies](#), you will create a written account of a real business customer's experience with a product or service. Describe the customer's success thanks to a specific product or service. Include the problem the customer was facing before they used to implement the product or service, and how the product or service changed or helped overcome that problem. Conclude the paper with in-depth and well supported analysis.

[For research studies](#), you will write up a thoroughly researched document on the chosen topic being careful to remain focused and complete with in-depth and well supported analysis. Be sure to bring your readings and/or other course experiences into the mix.

The paper will be no less than 5 pages (not including title page, bibliography or appendices), double-spaced, 12-point, Times New Roman. All citations will be in [APA style \(6th ed\)](#). In support of your analyses or for purposes of clarification the assignment may include links to video clips, full video documentaries, news articles, and/or passages from your research as long as they are cited and in your bibliography.

Here are some other tips for this assignment:

- Use a professional tone. Write the assignment as if you're writing a report to your boss at a major

corporation; as if he/she asked you to research a subject for the organization.

- Everything should be written in your own words. Never copy definitions or information from the textbook or the internet unless it is done in APA format and cited.
- Always use proper spelling and punctuation. If there are errors, points will be deducted. These types of errors are not acceptable in the business world. And remember... do not use acronyms or jargon unless they are defined and/or explained. Your boss may have hired you for your expertise because s/he does not have it.
- It is always a good idea to have someone not familiar with your topic read your work over to make sure it is clear and understandable to the average person.
- Be aware that I am looking to see if you understand the concepts presented in this course. Make sure that your writing is business style, meaning concise, clear, and easily understood. Don't make me have to guess at your meanings in your work. Show-off your smarts and use the concepts, terms, and topics presented in your course readings and/or lectures.

Guidelines for Critical Thinking Assignments:

A submission

Justifies statements with specific examples from the text, articles, or film. May include additional examples from own life/work experiences.

Agrees or disagrees with statements with ample justification. Uses complete sentences, correct punctuation, and capitalization. No misspelled words.

B submission

Provides adequate answers but doesn't include specific examples. Agrees or disagrees with statements but doesn't provide justification.

Writes in complete sentences but may lack punctuation and capitalization. May have several misspelled words.

C submission

Answers are vague without any justification or examples. Agrees or disagrees with statements but didn't explain why. Incomplete sentences, lack of punctuation and capitalization. Several misspelled words.

D submission

Vague answers.

Did not contribute to the conversation.

Didn't share any ideas.

Short phrases rather than complete sentences.

Lack of spelling, punctuation, capitalization (to the point that the submission was difficult to read).

Topic Areas (you may also suggest your own but need instructor prior approval)

- A specific network implementation (process description, outcomes, and analysis).
- A specific network data breach incident (eg. Facebook, Target, etc.)
- A unique network design such as low carbon/green networks or global satellite network (i.e. SpaceX Starlink Internet).
- A specific and detailed network security plan or data recovery plan.
- Internet of Things (IOT) networks.
- A case analysis of physical layer security or cryptography (eg. Blockchain)

- A case analysis of a Peer to Peer and how advances in networking technology will change this method.
- Network-based subscription services: How does the cloud support them, what is the future, are they a good thing, etc.
- Advances in Overlay Networks (eg. Self-Organizing Overlay Networks (CAN, Chord, Viceroy, Pastry, Tapestry))
- Advances in Wireless Networks (eg. Mesh Networks for home or business; WiMax (802.16) and 802.20))
- Advances in Data Communications in Cellular Networks (i.e. 5G or mixed networks such as Googles Project Fi)
- Advances in network security options and designs or analysis of what is needed.
- How to “cut the cable”; an analysis of the cable entertainment industry and how it is reacting to internet-based competition.
- Advances in Transport layer protocols (TCP-SC, BIC-TCP, Congestion Control for UDP, or DCCP)
- Advances in Optical Networks (e.g. SONET)

Podcast Rubric

CATEGORY	Exemplary	Proficient	Partially Proficient	Unsatisfactory	POINTS
Introduction	1 points	0.5 points	0.4-0.3 points	0.1-0.0 points	___/1
	Catchy and clever introduction. Provides relevant information and establishes a clear purpose engaging the listener immediately.	Describes the topic and engages the audience as the introduction proceeds.	Somewhat engaging (covers well-known topic), and provides a vague purpose.	Irrelevant or inappropriate topic that minimally engages listener. Does not include an introduction or the purpose is vague and unclear.	
	Tells who is speaking, date the podcast was produced, and where the speaker is located.	Tells most of the following: who is speaking, date of the podcast, and location of speaker.	Alludes to who is speaking, date of the podcast, and location of speaker.	Speaker is not identified. No production date or location of the speaker is provided.	
Content	1 points	0.5 points	0.4-0.3 points	0.1-0.0 points	___/1
	Creativity and original content enhance the purpose of the podcast in an innovative way. Accurate information and succinct concepts are presented.	Accurate information is provided succinctly.	Some information is inaccurate or long-winded.	Information is inaccurate.	
	Vocabulary enhances content.	Vocabulary is appropriate.	Vocabulary is adequate.	Vocabulary is inappropriate for the audience.	
	Includes a wide variety of appropriate, well-researched and informative sources and has well-edited quotes from “expert” sources. Quotes and sources of information are credited appropriately.	Includes appropriate and informative quotes from “expert” sources. Source quotes are credited appropriately.	Includes some variety of informative quotes from some “expert” sources. Source quotes need some editing and some credits are missing.	Includes no source quotes.	
	Keeps focus on the topic.	Stays on the topic.	Occasionally strays from the topic.	Does not stay on topic.	
	Conclusion clearly summarizes key information.	Conclusion summarizes information.	Conclusion vaguely summarizes key information	No conclusion is provided.	
Delivery	1 points	0.5 points	0.4-0.3 points	0.1-0.0 points	___/1
	Well rehearsed, smooth delivery in a conversational style.	Rehearsed, smooth delivery.	Appears unrehearsed with uneven delivery.	Delivery is hesitant, and choppy and sounds like the presenter is reading.	
	Highly effective enunciation, expression, and rhythm keep the	Enunciation, expression, pacing are effective.	Enunciation, expression, rhythm are sometimes distracting.	Enunciation of spoken word is not clearly understandable or	

	audience listening.			expression, and rhythm are distracting throughout the podcast.	
	Correct grammar is used throughout the podcast.	Correct grammar is used during the podcast.	Occasionally incorrect grammar is used during the podcast.	Poor grammar is used throughout the podcast.	
Graphic and Music Enhancements	1 points	0.5 points	0.4-0.3 points	0.1-0.0 points	___/1
	The graphics/artwork used create a unique and effective presentation and enhance what is being said in the podcast and follow the rules for quality graphic design.	The graphics/artwork relate to the audio and reinforce content and demonstrate functionality.	The graphics/artwork sometimes enhance the quality and understanding of the presentation.	The graphics are unrelated to the podcast. Artwork is inappropriate to podcast.	
	Music enhances the mood, quality, and understanding of the presentation.	Music provides supportive background to the podcast.	Music provides somewhat distracting background to the podcast.	Music is distracting to presentation.	
	All graphic and music enhancements are owned by the creator of the podcast or copyright cleared with appropriate documentation.	Graphic and music enhancements are owned by the creator of the podcast or copyright cleared.	Use of copyrighted works is questionable.	Copyright infringement is obvious.	
Technical Production	1 points	0.5 points	0.4-0.3 points	0.1-0.0 points	___/1
	Transitions are smooth and spaced correctly without noisy, dead space.	Transitions are smooth with a minimal amount of ambient noise.	Transitions are uneven with inconsistent spacing; ambient noise is present.	Transitions are abrupt and background noise needs to be filtered.	
	Volume of voice, music, and effects enhance the presentation.	Volume is acceptable.	Volume is occasionally inconsistent.	Volume changes are highly distracting.	
	Podcast length keeps the audience interested and engaged.	Podcast length keeps audience listening.	Podcast length is somewhat long or somewhat short to keep audience engaged.	Podcast is either too long or too short to keep the audience engaged.	
	Podcast linked from a site that included descriptive subject tags.	Podcast contained subject tags.	Podcast contains limited subject tags.	Podcast has no subject tags and difficult to locate online.	
	Podcast occurs as part of a regularly scheduled series.	Podcast occurs as part of a series.	Podcast occurs randomly.	Podcast occurs as a one-time event.	
TOTAL POINTS					___/5