CSCI 3720 Research Paper Assignment Guidelines and Requirements

Project Overview
CSCI 3720 is writing intensive. ETSU policy requires writing intensive courses have a significant portion of the class grade be based on student writing. This writing must be evaluated not only on content, but also grammar, writing style, and overall presentation. Students also must engage in peer review of another student's written work.

The Research Paper assignment in this class is designed to provide students with experience in formal business/academic writing and the peer review process in the context of work similar to that done in the profession.

The Department of Computing maintains an industry Advisory Board. This Board provides feedback to the Department on industry practices. Many of those on the Board work for companies that hire large numbers of ETSU Computing graduates. This Board has consistently advised the Department that Computing graduates need to be better prepared to write effectively in the profession. This course is designed to require students to practice effective writing skills.

This assignment requires the completion of a research paper that is one page long. While the length of the paper is short, the process of crafting a strong submission is the same as if the paper were longer. A one page paper requires extensive editing and refinement to present a meaningful thesis and set of main points on a single page. In many ways it is harder to write than a paper of greater length as each sentence must make an important contribution.

To earn an above-average grade in this course, one must do superior work on this project. It is recommended that students budget a minimum of 15 hours of work towards crafting a strong submission. This is a purposely challenging assignment for a major upper level course! Allocate sufficient time in your semester planning for completing all of the necessary work.

Project Activities
- Topic selection
- Source article search, evaluation, and selection
- Development of thesis statement, outline, and title for the research paper
- Milestone 1: Submission of article, thesis statement, and paper outline to peer reviewer
- Receipt of feedback from peer reviewer
- Creation of a complete initial draft of the paper
- Milestone 2: Submission of complete initial draft of paper to peer reviewer
- Receipt of feedback from peer reviewer. Revision of work.
- Milestone 3: Submission of complete revised draft of paper to a different peer reviewer
- Receipt of feedback from peer reviewer. Revision of work.
- Final Milestone: Submission of the final draft of the paper with source article(s)

Topic Selection
Students will sign up for topics via email in first-come, first-served fashion. Visit this document to see the list of currently available topics. Email Dr. Pittarese (pittares@etsu.edu) with your topic request. (The email just needs to say something like "For the research paper project I would like topic ___.") Once a student request has been received, the selection will be confirmed by email and that student's name will be placed next to the selection.

Research paper topics are based on course content, but students have liberty to choose a particular focus to their paper that is consistent with their interests. (For example, if the general topic selected is “Business Intelligence,” students could complete papers on “Healthcare Business Intelligence” or “Designing Business Intelligence Software” or “Developing a Data Warehouse to Support Business Intelligence.”) Your paper topic must be consistent with the assigned topic, but you can take that topic in a myriad of directions.
Source Article Search, Evaluation, and Selection

Once a general topic has been selected, the first major task is locating a contemporary, peer-reviewed article to use as a source for the paper. It is strongly recommended that you use either the ACM or IEEE Digital Libraries (available online through the Sherrod Library) to find a substantive article on your topic that interests you. Only one strong, content-appropriate article is required for the assignment. Short articles, i.e. those containing 3 full pages or less of text, are not appropriate. Articles from trade publications or other non-peer-reviewed publications are not acceptable as a primary source, but may be used to supplement a primary source as desired. Be sure that your article is contemporary. While there is no specific date cutoff, consider the topic and the date of publication. An article discussing contemporary Business Intelligence systems that was published in 2009 is very likely out of date.

Article selection is an important component in the overall project. You will find your work in upcoming milestones easier if you have found a strong, interesting source article. In light of that, spend time conducting your search. For each of the topics designated for this assignment there are dozens of contemporary articles that would be suitable to use as sources. Find strong articles by trying a variety of search terms and phrases. Do not simply type the topic into a search engine and look at the first page that appears. Come up with relevant keywords and take time to do an iterative search. It is recommended that students budget at least two hours for the source article selection process.

It is recommended that students begin with a set of potential articles and then make the final article selection after reviewing each of the candidates. After selecting your primary source, read the article at least twice. As you read, highlight or write down on separate paper key points and important ideas that you see presented in the paper. Reflect on the content being presented. Consider the material in light of your experience and knowledge, topics discussed in this class, things learned in other classes, and other resources you can marshal.

Paper Content—IMPORTANT!
The paper written by the student is not to be a summary of the selected source article. The source article is to be used by the student to gain knowledge on the topic. The paper written is to be the student’s own thesis and main points on the selected topic. A paper that is a summary of the selected source article is not appropriate for the assignment and will not earn a passing grade. You are writing your own paper and using your selected source article for background.

Development of thesis statement, outline, and title for the research paper

Begin the paper writing process by deciding the title of your paper and writing the thesis statement of your presentation. The thesis sentence should focus your writing and make it clear what your paper will present. It condenses the main idea of your presentation into a single, salient sentence. For additional assistance in writing your thesis statement, see documents by the Purdue Owl Writing Lab, the UNC Writing Center, the Indiana University Writing Tutorial Services, or other resources of your own selection. Note that care should be put into crafting a well-written, strong thesis statement. Iteration, editing, and refinement will be needed.

Once you have developed your thesis statement, develop an outline of the points you plan to cover in your paper. Do this by listing the main points you wish to cover and then organizing these points into an appropriate order. Develop a set of main points and sub points. These main points will be reflected in the paragraphs that compose the body of your paper. A well-crafted outline serves as a template for the content in the final paper.

There is no required format for your outline, except that it must consist of a set of main points and subpoints. How you choose to organize or format this is at your discretion. See the sample outline in the document facsimile in the section that follows for one possible outline format.
Milestone 1: Submission of article, thesis statement, and paper outline to peer reviewer

On or before February 3, upload to the specified D2L dropbox and (2) submit via email to your peer reviewer the following resources:

1. The source article(s) selected as the primary source for your paper in PDF format. (Note that links to the source document are not acceptable. The actual document must be submitted.)

Your submission should be similar to the example shown below (the formatting of the outline is at your discretion, but it must show both main points and sub points).

Title: The Competitive Power of Strategic Information Technology

Thesis: While operational Information Technology (IT) is critical to the success of a contemporary organization, strategic IT is more challenging to achieve, a greater predictor of organizational success, and a source for competitive advantage.

Outline:

- Operational vs. Strategic Information Technology
  - Applications
  - Staffing Strategies
  - Tasks and Responsibilities
- Characteristics of Strategic IT
  - Agility
  - Real-time Analysis
- Achieving Strategic IT
  - Challenges and Potential Problems
  - Long-run Results and Benefits

The course instructor will verify the appropriate, on-time submission of this document to the peer reviewer, but will not evaluate the content of student work. That is done by the peer reviewer.

Peer Review of Milestone 1

Each student will team up with another student in the class for the peer review process. Students will find out who their assigned peer reviewer is via a list posted in D2L. Each student will review the work of their partner and provide feedback. The role of the peer reviewer is to provide feedback to the author, point out problems, note elements done well, and assist the author in successfully completing the project. The peer reviewer is not to rewrite the materials sent to him/her, but rather to point out areas in need of improvement or attention and provide feedback that will assist the author in making revisions. A peer reviewer provides another set of eyes on a document and can assist an author in seeing things he or she might otherwise miss. A successful writer/peer reviewer collaboration on this project can result in higher grades for both parties than they would earn individually.

The peer reviewer is to review the items provided by the author. The reviewer should assess the following elements:

1. Is the source article appropriate? Read the source article provided. Does it fulfill the assignment requirements? Is it from an appropriate peer-reviewed source? Is the information current? Is it of sufficient length?
2. **Is the thesis statement appropriate?** Is it a single sentence that makes a meaningful statement about the content of the paper to be written? Is it consistent with the guidelines of strong thesis statement construction as shared in the URLs cited previously?

3. **Is the outline provided appropriate?** Does it contain a strong set of main points and sub points that will lead to the creation of a strong paper? Is the material well organized? Does the structure of the outline make sense?

After making his/her assessment, the reviewer will convey feedback to the author by way of a memo. The reviewer should take care to note things which are well done and those things which seem problematic or are unclear. The memo should resemble the facsimile shown below.

```
To: Andy Author
From: Rodney Reviewer
Re: Preliminary Peer Review for Your Research Paper

I have conducted a peer review of the material that you have provided me for your research paper assignment. Please note the following feedback:

- You have selected a topic that is consistent with the general topic assignment.
- The source article you have cited as your primary source is from 2005. Given the contemporary nature of your topic, this source would seem to be out of date. It is recommended that you seek a more current supporting resource.
- The thesis statement you have written is not a strong statement that would seem to serve as the basis for a research paper. Additionally, the sentence is incorrectly punctuated. It is recommended that you revise the content and form of this sentence.
- The outline provided seems to be of appropriate length and detail for the assignment, however the subpoints listed under the main point “Computer Technology Supporting Machine Vision” do not seem to relate to machine vision at all. Further thought on these subpoint is recommended.
```

On or before February 10, the reviewer should (1) upload this memo to the specified D2L dropbox and (2) email the memo to the author.

**Milestone 2: Submission of complete initial draft of paper to peer reviewer**

The author will write a one page paper based on the thesis statement and outline. The paper must fill at least one page and **may not** in any circumstance be longer. The paper should be formatted exactly like the provided paper template. The paper must match the template document **in all respects** (font, font size, margins, etc.). Download the template document and use it to create your submission. The template contains additional information on the content and format of the document. Note that no title or other pages are used. The final submission is a single sheet. Papers that would be longer than one page should be edited to the specified maximum length. Papers shorter than one full page need to have additional content added.

The paper consists of an executive summary and a main body. **Write the main body of the presentation first. The executive summary should summarize the thesis and main points of the body of the presentation**, so it must be written after a final draft of the main body has been prepared.

It is important to note that the executive summary is **not** the paper introduction. It is a summary of the content of the body of the paper. It summarizes the thesis of the presentation and its main points. The executive summary is a 1-2 paragraph encapsulation of the body of the paper. It should not introduce any other content and should only contain content reflective of the thesis and main points of the presentation. Care should be exercised to ensure that the executive summary does not **describe** the contents of the body but instead summarizes it.
A typical error students make is having the executive summary be either (a) an introduction to the paper, (b) a summary of the source article that was read, or (c) a general description of the body of the paper. It should be none of these things. **The executive summary should summarize the thesis and main points that you make in your presentation.** The assumption is that if someone read only the executive summary they would know what your thesis and main points were.

Your instructor will grade your paper by reading the body of your paper first. He will then read your executive summary. This facilitates assessing whether the executive summary is truly just a summary of the paper’s body or includes other content.

- Since this is a formal academic paper, the paper should be written in an appropriate third-person style. Do not use "I", "me", "my", "you", "your", "our", etc. except in direct quotations.
- The source article should be cited in the presentation if it has provided supporting facts or quotations. Apart from that contribution, **the paper should clearly be a presentation based on the student author’s thesis and main points.** The paper should not summarize or repeatedly reference the source article. A common mistake students make is writing a paper that is a summary of the source document they have selected. That is not the purpose of this assignment. This is to be a one page research paper where you make your own set of main points and support them, where relevant, with content from your source document. The source plays a supporting role only; it is your ideas and analysis that should be at the forefront.
- The paper should demonstrate that the student has thought about the topic and how it relates to the entire scope of class content and his/her collegiate experience to this point. Papers should not contain a basic overview of common knowledge of surface facts on a topic. Students should demonstrate advanced knowledge of the selected topic in their presentation. Grading will be based on the student’s ability to present something meaningful on the topic. For example, a B paper may be of very high quality, but is not significant in its content and shows minimal insight into the subject by the student.
- Students should be careful to not plagiarize. All work presented should be your own work presented in your own words. In those instances where quotations or significant ideas are referenced from another source, that source must be appropriately cited. It is recommended that students review the source article several times in the early stages of the project and then set aside the article during the writing process so as to take care to not base their paper on things taken from the source.
- Review the [Grammar and Style Guidelines](#) prior to crafting the document and use it to assist in reviewing your work. Use the guidelines as a checklist while going through the paper.

On or before February 24, the author should (1) upload this document to the specified D2L dropbox and (2) email the paper to the designated peer reviewer.

**Peer Review of Paper**

The peer reviewer should review the document sent to him/her in detail. The reviewer should examine the paper in light of the guidelines provided below and the items on the Grammar and Style Guidelines. **The reviewer should not rewrite the paper,** correct grammar, correct punctuation, etc., but rather note problems and leave it up to the author to fix. That is, if the reviewer sees a poorly worded sentence, he/she should not rewrite the sentence, but rather call the author’s attention to the sentence so that it can be rewritten. If he/she sees punctuation errors, the correct punctuation should not be inserted, but rather the reviewer should call these errors to the author’s attention. The reviewer should also note positive items in the presentation and those items where improvement is needed.

If reviewers conscientiously review the work sent to them and provide detailed feedback, this will result in a higher score for the author. For that reason, a peer reviewer that tells the author “This looks good” is not doing the author any favors. A good reviewer is someone who takes that time to read and analyze in depth to provide meaningful feedback to drive improvement.
The reviewer should pay particular attention to the following items:

1. Is the paper appropriately formatted? Does it match the provided template exactly? Is it of appropriate length?
2. Is the body of the paper well crafted? Is the content easy to understand? Is it appropriately supported with citations?
3. Is it written in third person?
4. Is the executive summary written as described on the prior page?
5. Is the paper consistent with the Grammar and Style Guidelines? (Go through each item in the Grammar and Style Guidelines and check the paper for these items.)

After making his/her assessment, the reviewer will convey feedback to the author by way of a short memo. The reviewer should take care to note things which are well done and those things which seem problematic or are unclear. The memo should resemble the memo illustrated previously in the preliminary submission review. On or before March 5, the reviewer should (1) upload this memo to the specified D2L dropbox and (2) email the memo to the author.

Milestone 3: Submission of complete revised draft of paper to a different peer reviewer

After receiving feedback from the peer reviewer, the author will revise the paper. A second peer reviewer will be assigned in D2L. On or before March 17, the author should (1) upload this document to the specified D2L dropbox and (2) email the paper to the newly designated peer reviewer. The source document should also be emailed to the reviewer for his/her reference.

Peer Review of Paper

The reviewer will conduct the same review as described in the “Peer Review of Paper” instructions on the previous page. After making his/her assessment, the reviewer will convey feedback to the author by way of a short memo. The reviewer should take care to note things which are well done and those things which seem problematic or are unclear. The memo should resemble the memo illustrated previously in the preliminary submission review. On or before March 26, the reviewer should (1) upload this memo to the specified D2L dropbox and (2) email the memo to the author.

Final Milestone: Submission of Final Paper and Source Article

The author will revise the paper based on the feedback from the peer evaluation and submit (1) the final paper and (2) the source document in PDF format to the D2L dropbox on or before April 21. This final submission will be graded by the course instructor.

Keep in mind that this is an assignment you will want to commit appropriate time to completing. I suggest allotting a minimum of 2 hours per week to work on this paper, but that is just a general guideline. Especially as you are getting used to writing of this style, you may find it takes more time. The expectation is that by the time you read and analyze your source document, and then spend the time crafting the best possible presentation for your thoughts, you will wind up with a meaningful, retained understanding of the topic. This is not intended to be either a quick or easy assignment, as it is our most substantive writing activity of the term. The knowledge you gain should serve you well in future career activities.