[The running head should be derived from the paper title and be no longer than 50 characters, including spaces]

[Note: The bracketed, gray-highlighted text appearing in this template is informational only. It should not appear in the student's submitted proposal]

Assessing the Implications and Challenges Associated with the Development and Implementation of the NextGen Air Transportation System

by

John A. Smith

[The title should summarize the main idea of the paper simply and accurately, and be fully explanatory when standing alone]

A Research Project Proposal

Submitted to the Worldwide Campus

In Partial Fulfillment of the Requirements

of Course ASCI 490, The Aeronautical Science Capstone Course,

for the Bachelor of Science in Aeronautics Degree

Embry-Riddle Aeronautical University

July 2015

Abstract

[The abstract is NOT an introduction. It is a brief, comprehensive summary of the contents of the paper. The abstract:

- *Allows readers to quickly survey the content of the paper.*
- *Is accurate, non-evaluative, coherent, readable, and concise.*
- *Should contain key words that relate it to the paper contents.*
- *Should contain the four or five most important concepts or main points of the paper.*
- *Defines the final product to be produced.*
- *In the proposal is a preliminary statement of intention. It is written in the third person, future tense and is based on the student's existing information and knowledge of the field at the time it is written. It will have to be updated in the Capstone paper to reflect what the student actually did, where it will be revised to the third person, past and present tense (as appropriate).*
- *Is typically limited to between 150 to 250 words, but must be no more than 250 words]*

[Note: Page numbers can be any format/location permitted by the APA Publication Manual]

Assessing the Implications and Challenges Associated with the Development and Implementation of the NextGen Air Transportation System

[The title, exactly as written on the front page, should be repeated to open the body of the proposal]

Statement of the Project

[This section must briefly:

- *Explain the fundamental purpose of the paper (i.e. demonstrating skill at the 11 POs)*
- *Explain the type of project (in this case, and individual project)*
- *Describe the student's degree program]*

Introduction

[In the Introduction the student should:

- *Introduce the reader to the topic of the paper.*
- *Provide the reader with any historical or background information the student believes necessary to the aid the reader's understanding of the paper.*
- *Explain why the topic of the paper is important to the field.*
- *Define the scope and depth of the project.*
- *Summarize the procedures the student will use in developing the paper (i.e. information and data gathering; analysis, evaluation and synthesis; application of critical thought)]*

The introduction should be concise, and should be limited to no more than one page.

Program Outcomes to be Addressed

Critical Thinking

"The student will show evidence of knowledge at a synthesis level to define and solve problems within professional and personal environments" (ERAU, 20xx, pp. xx).

[The student will open each PO section with a direct quote of the PO]

[At a minimum the student must meet the following four objectives for this, and each, Program Outcome:

1. *Explain his or her understanding of the PO.* This should be as simple as one sentence in which the student explains his or her understanding of the PO.

2. *Explain how he or she will demonstrate his or his skill at the PO as specifically related to the student's project topic.*

3. *Describe what information and data he or she expects will be required to successfully accomplish Objective No. 2 (above) for the PO.*

4. *Describe from what sources the student expects he or she will be able to obtain the information in Objective No. 3 to successfully accomplish Objective No. 2 (above) for the PO.*

Quantitative Reasoning

"The student will show evidence of the use of digitally-enabled technology & analysis techniques to interpret data for the purpose of drawing valid conclusions and solving associated problems" (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for this Quantitative Reasoning PO]

Information Literacy

"*The student will show evidence of meaningful research, including gathering information from primary and secondary sources and incorporating and documenting source material in their writing"* (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Quantitative Reasoning PO]

Communication

"The student will show evidence of communicating concepts in written, digital, and oral forms to present technical and non-technical information" (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Communication PO]

Scientific Literacy

"*The student will show evidence of analyzing scientific evidence as it relates to the physical world and its interrelationship with human values and interests"* (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Scientific Literacy PO]

Cultural Literacy

"*The student will show evidence of the analysis of historic events, cultural artifacts and philosophical concepts"* (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Cultural Literacy PO]

Lifelong Personal Growth

"The student will show evidence of the skills needed to enrich the quality of life through activities which enhance and promote lifetime learning" (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Lifelong Personal Growth PO]

Aviation/Aerospace/Aeronautical Science

"*The student will show evidence of advanced concepts of aviation, aerospace, and aeronautics to solve problems commonly found in their respective industries"* (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Aeronautical Science PO]

Aviation Legislation and Law

"*The student will show evidence of the basic concepts in national and international legislation and law as they pertain to the aviation, aerospace and aeronautics industries"* (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Aviation Legislation and Law PO]

Aviation Safety

"*The student will show evidence of basic concepts in aviation safety as they pertain to the aviation, aerospace, aeronautics industry"* (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Lifelong Personal Growth PO]

Aviation Management and Operations

"*The student will show evidence of sound, ethical management principles within standard aviation, aerospace, and aeronautics operations"* (ERAU, 20xx, pp. xx).

[At a minimum the student must meet the same four objectives as explained above for the Critical Thinking PO for the Aviation Management and Operations PO]

References

Embry-Riddle Aeronautical University. (20xx). *College of aeronautics: Undergraduate capstone policy guide.* Retrieved from https://erau.instructure.com/courses/6179/pages/coa-undergraduate-capstone-policy-guide?module_item_id=17735

[In text citations and references must appear in the Capstone proposal when necessary in accordance with the rules established by the APA Publication Manual]