

Using a University-wide Program to Integrate Critical Thinking in the Psychology Curriculum

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USF Sarasota-Manatee created Incredi-Bull Critical Thinking (IBCT) as a university-wide endeavor to enhance undergraduate students' critical thinking skills. Critical thinking was the topic chosen for USFSM's Quality Enhancement Plan, since it has the greatest potential to support the institution's mission to prepare its students to be "successful leaders and responsible citizens."

For more information about the USFSM IBCT program, please visit:

<http://www.usfsm.edu/academics/institutional-research-and-effectiveness/incredibull-critical-thinking/index.aspx>

Five IBCT Commitments

Habits of a well-cultivated critical thinker:

1. Formulates vital questions and problems clearly
2. Gathers and assesses relevant information
3. Identifies relevant assumptions, alternatives, and implications
4. Develops well-reasoned conclusions and solutions
5. Communicates Reasoning Effectively

IBCT Intellectual Standards

Quality critical thinking is:

1. **Clear** – Understandable; meaning can be grasped
2. **Accurate** – Free from errors or distortions; true
3. **Precise** – Exact to the necessary level of detail
4. **Relevant** – Relates to the matter at hand
5. **Deep** – Explains complexities and provides insight
6. **Broad** – Encompasses multiple viewpoints and is comprehensive
7. **Logical** – Parts of thinking make sense; no contradictions
8. **Significant** – Focuses on the important; not trivial
9. **Fair** – Justifiable; not self-serving or one sided

Research Methods Final Proposal Instructions

Entire Revised Proposal due [date]. Use Canvas to submit BEFORE midnight.

The late clock starts ticking at 12:05am. I will not accept papers by email or in my mailbox.

Assignment Overview:

To write a scientific research paper (**200 pts**). Students will write a literature review on a psychological topic by paraphrasing and citing peer-reviewed research articles for evidence. The paper will also include a proposal of a unique/relevant hypothesis-based experiment. Students should not actually conduct a real experiment (no correlations or other non-experiments allowed). Students should propose analyses and interpret expected data.

The research paper will be written in several stages. Students will turn in the Introduction, Methods, and Results/Discussion sections in 3 separate stages. Each section will be graded and Dr. B will provide feedback on how to improve each section. Students will revise each section, add the remaining sections (title page, abstract, appendix), and resubmit as the final research paper. *It is in the best interest of students to fully complete the initial section submissions (Intro, Methods, Results/Discussion) because I will be very tough when grading these initial submissions.*

****Students are required to use scientific writing style.** This is different from essay/reflection writing style. **Students are expected to PARAPHRASE AND USE IN-TEXT CITATIONS.** Please avoid using direct quotes. Avoid giving summaries of each and every article you read. At this stage in your writing career, you should be paraphrasing concepts you read into your own original words and relating it to your OWN thoughts about the research. In the Introduction section, each paragraph should be an integration of cited results from several journal articles with the student's own thoughts in-between each cited fact (i.e., topic sentence, cite results from journal article #1, own thoughts, cite results from journal article #2, own thoughts, cite results from journal article #3, own thoughts, summary/transition sentence). **Students that write individual paragraphs on each article without synthesizing and integrating several related research articles with their own thoughts will automatically receive a C (70%) for their paper.**

Papers must be typed using Microsoft Word and correct APA format. Do not use Pages or any other word processing software.

Submit before the deadline:

Please name your electronic file using the following format "last name, first name – name of assignment). For example "**Badanich, Kim – final paper**". Then follow instructions for submitting assignments using Turn-it-in (see Canvas under Modules week 1). Use your name, not mine 😊

Completed papers must be submitted online using Canvas and must be submitted before the designated due date for both the initial sections and final paper submissions (see due dates in syllabus). Failing to submit any of the initial sections of the paper (Intro, Methods, Results/Discussion) will result in a zero for the entire paper assignment. One letter grade will be deducted from the final research paper grade for each day that the paper is late. **Papers that are 4+ days late will receive a zero. No exceptions. So submissions will no longer be accepted after [date] at midnight.**

Once papers are uploaded into Canvas, papers are automatically submitted to Turn-it-in, a plagiarism checking website. **Students are strongly encouraged to submit their papers to Turn-it-in before the final due date so that in the event they did plagiarize, they will have time to edit and re-submit.** Students are required to note their percentage of matched text AND look at the actual report in Turn-it-in to see what portions of their paper (if any) have been highlighted. You may need the Instructor's help in viewing the report. **In this class, a string of 4 words highlighted together in one sentence will be considered plagiarism.** See Module 1 for important instructions on using Turn-it-in.

What does an “A” paper look like?: “A” papers will complete all necessary requirements for the assignment as listed in the instructions and the below checklist AND will demonstrate a high level of professionalism, excellent writing style, exceptional critical thinking skills and perfect APA formatting. Specifically “A” papers will demonstrate flawless readability and clarity, no grammatical errors, and adherence to the standards for academic honesty. Basically when I assign grades, I am assessing 3 factors 1) content 2) writing style and 3) formatting. So if you make several errors in one of these categories, your grade will be dropped by 1 letter grade. For example, if you write a paper that has great content and great writing style but you make several formatting errors, your grade will be dropped to a B. However, if you write a paper that is poor in all three areas (content, writing style, and formatting), then your grade will drop to a D. **Warning: I am a fair but tough grader with high expectations.** I will need about 1-2 weeks to grade each section of your paper. Papers will be returned and students should revise ASAP (see next section). Please plan schedules accordingly.

Revising your Introduction, Methods, and Results/Discussion sections: First submissions will be graded and feedback will be provided by the Professor electronically in CANVAS. Students should reply “email received” to verify they are able to view Professor comments directly on their paper in Canvas. All students are required to revise their papers according to Professor’s feedback and turn in an **improved final** submission regardless of their grade on the first submission (i.e., if you get an A on the Introduction section, you still have to make changes and improve the Introduction for the final submission).

When final submissions are graded, each student’s initial and final submissions will be compared simultaneously on a computer screen to see if all Professor’s comments were effectively addressed. Additionally, one further read through of the final paper will be conducted to determine final letter grade. Sometimes final papers are so substantially revised that it is difficult to compare to the first submission because nothing looks the same. In these cases, the final paper will not be directly compared to first submission and instead will undergo a final read through. Failing to submit a final version of the paper will result in a zero for the entire paper assignment. While grading final papers, if I find that a paper was not revised (i.e., 4+ comments were not addressed), I will stop reading and automatically deduct 10% from your paper grade.

Specific information on writing this paper can be found in the following lecture/lab materials:

1. **Module 1 has multiple examples**
2. **Instructions for written paper assignment #1 (intro), #2 (methods), #3 (results/discussion)**
3. **APA style lecture**
4. **APA handbook**
5. **Results section template**
6. **Identifying Plagiarism activity**

Research Methods Final Paper IBCT Rubric

1. Abstract

<i>Exceeds Expectations</i>	<i>Meets Expectations</i>	<i>Below Expectations</i>	<i>Far Below Expectations</i>
<p>Concisely describes with clarity and focus:</p> <ul style="list-style-type: none"> • Study purpose • Hypothesis • Basic method • Main result • Main conclusion & why it's important <p>Is 100 to 150 words</p>	<p>Describes with some clarity, though one or more are too detailed (or vague):</p> <ul style="list-style-type: none"> • Study purpose • Hypothesis • Basic method • Main result • Main conclusion & why it's important <p>Is 100 to 150 words</p>	<p>One or more of the following are very vague or absent:</p> <ul style="list-style-type: none"> • Study purpose • Hypothesis • Basic method • Main result • Main conclusion & why it's important <p>Is 100 to 150 words</p>	<p>One or more of the following is absent altogether:</p> <ul style="list-style-type: none"> • Study purpose • Hypothesis • Basic method • Main result • Main conclusion & why it's important

2. Literature Review

<i>Exceeds Expectations</i>	<i>Meets Expectations</i>	<i>Below Expectations</i>	<i>Far Below Expectations</i>
<p>Clear and precise introduction to the topic and study purpose. Clear why it is relevant and/or important to society or basic research.</p> <p>Strong transition into the literature review.</p> <p>Sources are integrated with a focus on the core ideas from cited literature. Emphasis is on how the cited literature relates to the paper's main topic.</p> <p>Key ideas synthesized and lead up to a precise, parsimonious hypothesis</p> <p>At least 4 peer-reviewed journal articles are used in the review.</p>	<p>An introduction to the topic is evident with some emphasis on relevance. May be too broad or less organized.</p> <p>Some transition into the literature review.</p> <p>Sources are reasonably integrated. Some sources might be more summarized or extraneous detail provided (e.g. focus on methods). Organization may need some work for transitions and linking the ideas together.</p> <p>Key ideas are summarized in a way that leads up to a clear hypothesis.</p> <p>At least 4 peer-reviewed journal articles are used in the review.</p>	<p>An introduction to the topic is evident with some emphasis on relevance. May be too broad or less organized.</p> <p>Some transition into the literature review.</p> <p>Sources are mostly summarized and not well integrated. May be list ordered with less clarity about how the sources are important to the topic.</p> <p>Some summary is evident that leads up to a hypothesis; hypothesis may lack clarity or seem less related to the literature review.</p> <p>At least 4 peer-reviewed journal articles are used in the review.</p>	<p>Introduction is disorganized, does not fit with the literature, or may be absent.</p> <p>Significant issues with transitions throughout.</p> <p>Sources are mostly summarized with little clarity as to the literature review's key point.</p> <p>A hypothesis is evident but does not seem strongly related to the literature review.</p> <p>At least 4 peer-reviewed journal articles are used in the review.</p>

3. Method

<i>Exceeds Expectations</i>	<i>Meets Expectations</i>	<i>Below Expectations</i>	<i>Far Below Expectations</i>
<p>The method section is properly broken down into the following sub-sections:</p> <ul style="list-style-type: none"> - <i>participants</i> - <i>materials</i> - <i>procedures</i> <p>The study's methods are described in sufficient detail that someone who knows nothing about the project would be able to follow the steps to conduct the study.</p> <p>Materials such as lab equipment or surveys are described very clearly.</p> <p>The study is described well and is in clear prose (i.e., <i>not</i> just a bullet list).</p>	<p>The method section is properly broken down into:</p> <ul style="list-style-type: none"> - <i>participants</i> - <i>materials</i> - <i>procedures</i> <p>The study's methods are described in some detail that someone who knows nothing about the project would be able to mostly follow the steps. However, some lack of clarity is present. Minor procedural errors may be present.</p> <p>Materials are described, but less clear.</p> <p>The steps are described in clear prose but in a somewhat mechanical list form.</p>	<p>The method section is properly broken down into the following sub-sections:</p> <ul style="list-style-type: none"> - <i>participants</i> - <i>materials</i> - <i>procedures</i> <p>There is a good attempt to describe the study methods, but the description is largely incorrect, vague, or otherwise lacks clarity. It would be hard for someone to follow the described steps.</p> <p>The study may be presented in a mechanical list-like form, but is <i>not</i> an explicit bullet point list.</p>	<p>The method section is lacking due to:</p> <ol style="list-style-type: none"> 1) Not including the necessary sub-sections. 2) Method is extremely vague, imprecise, or has obvious significant errors. 3) No attempt to describe the method – it is just listed in bullet-point list form.

5. Expected Results

<i>Exceeds Expectations</i>	<i>Meets Expectations</i>	<i>Below Expectations</i>	<i>Far Below Expectations</i>
<p>Results section opens with a brief recap the study's main purpose and hypothesis.</p> <p>Clear, precise discussion of what will need to be analyzed or compared to test the hypothesis.</p> <p>Briefly discusses what the statistical test(s) is (are) expected to show and illustrates this with an APA formatted graph or table.</p>	<p>Section opens with a brief recap of the study's main purpose and hypothesis.</p> <p>Fairly clear discussion of what will need to be analyzed or compared to test the hypothesis.</p> <p>Discussion of expected findings is somewhat vague but sensible. Graph or table with mostly correct APA formats is present.</p>	<p>Section opens with a brief recap of the study's main purpose and hypothesis, but may be less clear.</p> <p>Discussion about what will need to be analyzed or compared to test the hypothesis is evident.</p> <p>Expected findings are mentioned. Graph or table is present, may have APA flaws or be unclear.</p> <p>Generally complete but has issues with clarity and precision.</p>	<p>Section opens with a recap of the study's main purpose and hypothesis.</p> <p>Discussion about what would be analyzed or compared is confused, illogical, or has significant inaccuracy suggesting lack of engagement in thinking about what the data and statistics might look like.</p> <p>Graph or table is present but has APA errors and/or cannot be easily understood.</p>

6. Discussion

<i>Exceeds Expectations</i>	<i>Meets Expectations</i>	<i>Below Expectations</i>	<i>Far Below Expectations</i>
<p>Opens with a clear summary of the study's purpose, hypothesis, and the main expected findings.</p> <p>Articulately relates the expected finding(s) to at least one academic source. Clearly discusses how the expected findings "fit" with the cited source.</p> <p>Critically discusses the implications of the expected results were not found; identifies how such unexpected findings might be explained by the literature or might be explained by study limitations.</p> <p>Provides a brief, but coherent conclusion to the paper emphasizing future directions and/or why the study is relevant to society or basic research.</p>	<p>Opens with a summary of the study's purpose, hypothesis, and the main expected findings.</p> <p>Relates the expected finding(s) to at least one academic source. Some discussion of how the expected findings "fit" with the cited source.</p> <p>Some discussion of implications if the expected results were not found. Identifies how the findings might be explained by the literature or study limitations, though less precise and insightful than a stronger paper.</p> <p>Provides a brief, but coherent conclusion to the paper emphasizing future directions and/or why the study is relevant to society or basic research.</p>	<p>Opens with a summary of the study's purpose, hypothesis, and the main expected findings.</p> <p>At least one academic source appears in the literature review, but it is not strongly related to the expected findings.</p> <p>Discussion of the implications if the expected results were not found present. May lack insight and be fairly brief or not identify strong, clear reasons that could well explain why the results might not work out as expected (<i>stronger papers will tap into ideas we cover in class</i>).</p> <p>Some conclusion is evident, but may be less organized or otherwise "disjointed" from the rest of the discussion.</p>	<p>Summary of the purpose and hypothesis is present, but unclear.</p> <p>At least one academic source appears in the literature review, but it is unclear how it relates to the expected findings.</p> <p>Discussion of implications if the expected results were not found is either not evident – or – fails to reflect the core scientific attitudes as discussed in class.</p> <p>Little conclusion is evident – or – the entire discussion itself is organized and presented as a "conclusion."</p>