

Requirements for the Statistics Final Project

General Notes: Do not use Wikipedia or similar sites as a final resource for information. They are good starting points, but that's about all they are. <http://www.eric.ed.gov> is an excellent resource.

Use APA or MLA formats for the paper (APA preferred). If you are unsure of what those requirements are, got to <https://owl.english.purdue.edu/>

Grading All elements must be included or the project will receive a grade of zero. No late submissions will be accepted for any reason once the final due date has been determined. This is non-negotiable.

You are also being evaluated for your ability/willingness to be a respectful, attentive audience. Any distractions or disruptions to anyone's presentation will result in a 10 point deduction from the offending individuals' final project grade for each incident.

Overall General Format:

TITLE PAGE Self-explanatory. See formatting guidelines for specifics.

TABLE OF CONTENTS

This is an overall look at what you have and where it is. See formatting guidelines for specifics

ABSTRACT This is a brief (the key word here is "brief") description of what you did and why you did it. Use the "Considerations for Starting a Statistics Final Project" sheet you completed earlier in the year to assist with this. Think of this as a 30 second advertisement that would make someone want to read the rest of the paper.

INTRODUCTION

This is a more detailed version of the abstract. Pretend the reader has limited or no knowledge of the subject when writing it. This is more of a 30 minute infomercial as compared to the "advertisement" found in the form of the abstract.

LITERATURE REVIEW

Four minimum are required. Combine the previous submissions in a logical, ordered manner that tie together as necessary to describe why they were important to your project. These must include the author, book title (with ISBN number if available). Magazine articles must have author, periodical name, edition number, volume number and page number; Internet sources must include URL, author, and article title.

METHODOLOGY

DESIGN Explain in painful detail what you did, what you used to do it, and how you did it. Include all software (include versions), equipment (model & serial numbers). List detailed instructions of what steps you took in the experiment so it could be repeated by anyone following your directions. Leave nothing to the imagination and assume nothing. Show and clearly label all applicable formulas and charts. The reader should be able to follow your directions explicitly to perform the same experiment.

Be certain to include how your data was obtained to determine if there is any bias. If you are using someone else's data (i.e. published data), you MUST still be able to determine the method of data acquisition or the entire project is null and void.

ANALYSIS List what types of analysis you chose to do on which portions of the data. If you put any applicable charts or data lists in the appendix, refer to them as needed.

PARTICIPANTS (if applicable) If there were any participants, list demographic information about them (no names) if it could possibly affect the outcomes. Remember to get Administrative AND Parent approval in writing before trying to obtain private information (i.e. grades/GPA) or involving persons not of legal majority in anything procedure remotely questionable (i.e. videos or games with potentially violent content).

ANYTHING ELSE THAT IS APPLICABLE HERE (optional)

Do not use “Anything Else that is Applicable Here” for the title. ;)

ANALYSIS OF FINDINGS

Detailed descriptions of the types of statistical analysis used and the numerical results of those comparisons.

CONCLUSIONS This is where it all comes together. What does the analysis prove or imply? Was there a statistical difference? This is where you state whether the initial question was answered and with what degree of confidence.

TABLES Graphs, data, tables, charts, etc. go here. Basically, any reference material or diagram that would be too large or detailed to use in the ANALYSIS section effectively would be included.

BIBLIOGRAPHY All references go here. See formatting guidelines for specifics.

NOTE FROM THE AUTHOR (optional)

Anything else you want to include or anyone you would like to thank for their assistance.

Presentation A PowerPoint presentation will be required for all final projects. The presentation is to include all elements of the paper and to allow time for questions at the end from peers and/or instructor(s). Be prepared to defend any questions or criticism.

Suggestions: Dress professionally. Your projects are already generating a deal of interest throughout the district. You have likely put a great deal of effort into this and do not want to be discredited by someone of consequence’s fashion bias. You cannot be too professional. Practice, practice, practice. Even though *you are the expert* on your project, it is easy to get flustered during a presentation. Have fun & be entertaining. Professional does not have to mean boring. The audience should enjoy this and so should you.

Late Components: Timeliness is critical. Late papers will receive a 10 point per calendar day deduction. Late presentations will receive a 20 point per presentation day deduction.

Considerations for Starting a Statistics Final Project

The general topic of your research is:

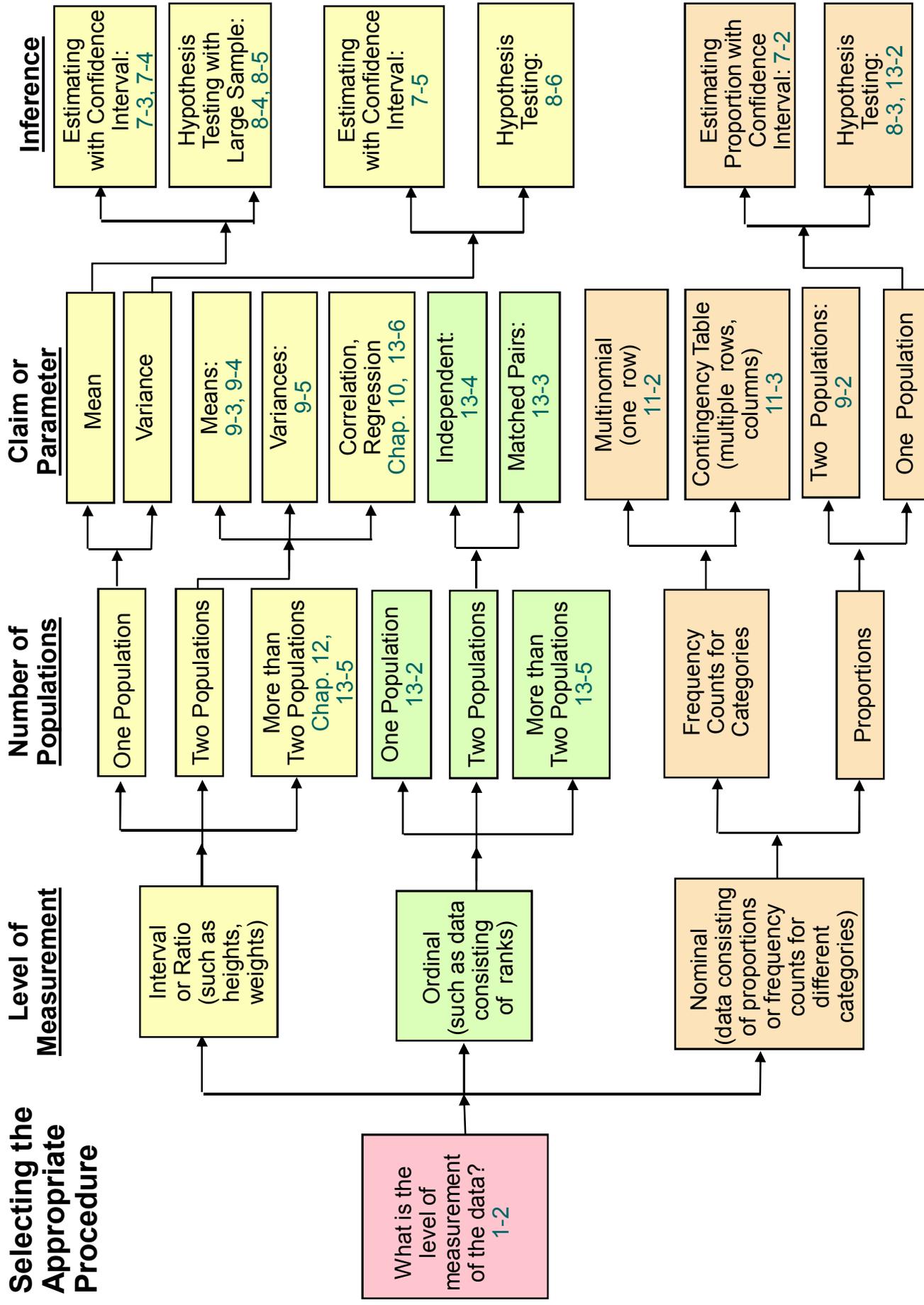
Your specific research question or hypothesis is:

The significance, value or usefulness of studying this topic is:

The research question is important to you because:

Four books, professional articles or academic papers on the topic/question are:

Selecting the Appropriate Procedure



Rubric: Final Research Project Paper (Content)

CRITERIA	(1) Weak/Unacceptable	(3) Adequate	(4) Outstanding	Score
Statement of Research Problem	The problem or issue being addressed is not articulated in a clear, convincing way, nor is its significance established. There is no clear research question.	The problem or issue is addressed with some degree of clarity, but without a fully compelling, convincing argument about <i>why</i> this research is worthy, timely, and significant. A research question is stated.	The problem or issue is addressed with both clarity and conviction. A convincing argument is made about why the research is worthy, timely, and significant. A focused research question is clearly articulated.	10%
Review of Relevant Literatures	The review of relevant theory and research literatures is weak and unconvincing. There is insufficient evidence of a knowledge base informed by contemporary literatures in the candidate's domain of study. Bibliographic references may be missing, outdated, or only weakly connected to the research issue addressed. The candidate's command and synthesis of theory may be unconvincing or even confusing. There is little evidence of an original, critical <i>synthesis</i> of research literatures nor is there an under girding framework informed by theory.	The review of relevant theory and research literatures is only moderately convincing. There is moderate evidence of a knowledge base informed by contemporary literatures in the candidate's chosen domain of study. Bibliographic references are in most cases appropriately provided and connected to the research issue(s) addressed. The candidate attempts a synthesis of relevant theoretical literatures, but with mixed or moderate success. There is an attempt made to articulate a theoretical framework, but the achievement of this synthesis is partial.	The review of relevant theory and research literatures is clear, critical, and convincing. The candidate's command of contemporary literatures in his/her chosen domain of study is obvious. Bibliographic references are appropriately provided; their links to the research issue(s) address are always clear. The paper evidences a creative, original synthesis of theoretical material and research literatures that leads to the articulation of a clear, under girding framework informed by theory.	10%
Methodology and Data Analysis	The connections between data, analyses, and the research issue addressed and arguments made are weakly articulated – if at all. There is little or no articulation of the rationale for the candidate's selection and use of particular research methodologies and forms of data analysis. Data may be presented without	The connections between data, analyses, and the research issue addressed and the arguments made are articulated with moderate success. A rationale for the candidate's use of particular research methods and forms of analysis may be provided, but the links between this	The connections between data, analyses, and the research issue address and the arguments made are clear and convincing. A rationale for the candidate's use of particular research methods and forms of analysis is provided; this rationale has clear links to	50%

Rubric: Final Research Project Paper (Content)

Cont.	<p>adequate framing information or explanation in terms of the wider goals of the paper.</p>	<p>rationale and the ensuing arguments made may be less than fully clear or convincing. Data are presented with some framing information and some description or explanation of their meaning.</p>	<p>the candidate's synthesis of theory and research literatures and to the ensuing argument(s) made across the paper. Data are presented with appropriate framing information and description or explanation of their meaning in terms of the wider goals of the paper.</p>	
Grounding of Evidence/ Significance of Results	<p>The conclusions drawn are weakly or inadequately supported by the evidence presented. There is little in the way of summation that includes discussion of the wider implications (for research, practice, policy, theory) of the work. The conclusion does not show evidence of a perspective that takes into account potential critiques and a potentially wide, diverse readership.</p>	<p>The conclusions drawn are supported moderately well by the evidence presented, though with partial rather than full success. There is a summation of the central points made and some discussion of the wider implications of the work. The conclusion provides some evidence of a perspective that at least considers potential critiques and attempts to reach beyond a narrowly construed readership.</p>	<p>The conclusions drawn are fully, richly supported by the evidence presented. There is a clear and convincing summation of the central arguments made as well as discussion of the wider implications of the work (for research, practice, policy, and/or theory). The concluding arguments show evidence of a critical perspective that takes into account potential critiques and that addresses a wide, diverse readership</p>	10%
Clarity and Style	<p>The writing reveals a lack of awareness of intended audience in terms of word choice and style, and a lack of command over the genre that is most suited to the wider goals as these are articulated in the candidate's paper. The sequencing of sections may be confusing and/or the transitions between them weakly achieved. The introductory and concluding sections of the paper may be weak or barely discernable to the reader.</p>	<p>The writing reveals some awareness of intended audience and some effort to match genre to both audience and the wider goals of the work. However, the writing may at times be unclear or inconsistent: the sequencing of sections may be confusing in some places, transitions may at times be weak, or word choice may be awkward or ill-matched to the genre most suited to the candidate's larger purposes for the work. The introductory and concluding sections of the paper provide only moderate support and clarification for the reader.</p>	<p>The writing reveals a thoughtful, discerning awareness of audience, style, and genre. The genre and stylistic choices made by the candidate are appropriate to the wider goals of the candidate, and they are consistent in terms of their use throughout the paper. The sequencing of sections and transitions are smoothly achieved; the argument built up across the paper is clear and accessible for the reader. The introductory and concluding sections of the paper provide ample support and further clarity vis-à-vis the paper's argument and its overall structure.</p>	20%

Rubric: Final Research Paper (Mechanics)

Name:

Course:

Date:

(The Psychology Department at San José State University is acknowledged for the basic structure of this form.)

CATEGORY	Unacceptable (Below Standards)	Acceptable (Meets Standards)	Good (Occasionally Exceeds)	Excellent (Exceeds Standards)	SCORE
Introduction	Does not adequately convey topic. Does not describe subtopics to be reviewed. Lacks adequate theses statement.	Conveys topic, but not key question(s). Describes subtopics to be reviewed. General theses statement.	Conveys topic and key question(s). Clearly delineates subtopics to be reviewed. General thesis statement.	Strong introduction of topic's key question(s), terms. Clearly delineates subtopics to be reviewed. Specific thesis statement.	5 points
Focus & Sequencing	Little evidence material is logically organized into topic, subtopics or related to topic. Many transitions are unclear or nonexistent.	Most material clearly related to subtopic, main topic. Material may not be organized within subtopics. Attempts to provide variety of transitions	All material clearly related to subtopic, main topic and logically organized within subtopics. Clear, varied transitions linking subtopics, and main topic.	All material clearly related to subtopic, main topic. Strong organization and integration of material within subtopics. Strong transitions linking subtopics, and main topic.	15 points
Support	Few sources supporting thesis. Sources insignificant or unsubstantiated.	Sources generally acceptable but not peer-reviewed research (evidence) based.	Sources well selected to support thesis with some research in support of thesis.	Strong peer-reviewed research based support for thesis.	15 points
Conclusion	Does not summarize evidence with respect to thesis statement. Does not discuss the impact of researched material on topic.	Review of key conclusions. Some integration with thesis statement. Discusses impact of researched material on topic.	Strong review of key conclusions. Strong integration with thesis statement. Discusses impact of researched material on topic.	Strong review of key conclusions. Strong integration with thesis statement. Insightful discussion of impact of the researched material on topic.	5 points
Grammar & Mechanics	Grammatical errors or spelling & punctuation substantially detract from the paper.	Very few grammatical, spelling or punctuation errors interfere with reading the paper.	Grammatical errors or spelling & punctuation are rare and do not detract from the paper.	The paper is free of grammatical errors and spelling & punctuation.	20 points
APA Style & Communication	Errors in APA style detract substantially from the paper. Word choice is informal in tone. Writing is choppy, with many awkward or unclear passages.	Errors in APA style are noticeable. Word choice occasionally informal in tone. Writing has a few awkward or unclear passages.	Rare errors in APA style that do not detract from the paper. Scholarly style. Writing has minimal awkward of unclear passages.	No errors in APA style. Scholarly style. Writing is flowing and easy to follow.	20 points
Citations & References	Reference and citation errors detract significantly from paper.	Two references or citations missing or incorrectly written.	One reference or citations missing or incorrectly written.	All references and citations are correctly written and present.	20 points

Total Points:

APA Errors

APA **MAJOR** errors:

- _____ APA Reference errors: (ABC order, 1:1 reference/citation)
- _____ APA Punctuation and Capitalization errors
- _____ APA Citation errors: (incorrect author order, incorrect *et al.* usage)
- _____ Title Page (Header, Spacing, Contents, etc.)
- _____ APA numbers
- _____ APA Verb problems: (verb tense, verb-subject-article agreement)
- _____ Pronoun errors: (which, that, who, whom)
- _____ Format errors: (incorrect line, letter, word spacing, pagination)
- _____ Use of Abbreviations or numerals to start sentences
- _____ Undefined abbreviations
- _____ Non professional writing/tone
- _____ Lack of empirical evidence for points made
- _____ Other: _____

APA Minor errors:

- _____ Wrong font/wrong size font/wrong color font
- _____ Inappropriate use of a secondary source (lack of “cited in...)
- _____ Inappropriate use of personal pronouns, excessive abbreviations
- _____ Occasional problems with hanging indents
- _____ Using ampersands in text
- _____ Other: _____

Student's Name:

PowerPoint Presentation Rubric					
Points	4	3	2	1	Total
Content	Student presents major points and fully supports them with convincing arguments, ideas and data.	Student presents major points and partially supports them with convincing arguments, ideas and data.	Student presents major points, but fails to support them with convincing arguments, ideas and data.	Student oversimplifies topic or fails to present major points.	
Organization	Student presents information in logical, interesting sequence which audience can follow.	Student presents information in logical sequence which audience can follow.	Audience has difficulty following presentation because student jumps around.	Audience cannot understand presentation because there is no sequence of information.	
Text	All slides present one idea and a few supporting facts.	Most slides present one idea and a few supporting facts.	Most slides present one idea but too many words.	Most slides present multiple ideas and too many words.	
Font	Font on all slides is large enough to be read at a distance.	Font on most slides is large enough to be read at a distance.	Font on most slides is too small to be read at a distance.	Font on all slides is too small to be read at a distance.	
Contrast	There is good contrast between the font and background on all slides.	There is good contrast between the font and background on most slides.	The lack of contrast between the font and background makes the text difficult to read.	The lack of contrast between the font and background makes the text impossible to read.	
Images and Layout	All slides contain one powerful, high-quality image per slide which helps audience understand the content. Layout is visually pleasing.	Most slides include one powerful, high-quality image which helps audience understand the content. Layout uses most space appropriately.	Most images are clipart. Images are too large/small in size, or of poor quality (fuzzy). Layout shows some structure.	Images are distracting decorations that create a busy feeling and detract from the content. Layout is cluttered and confusing.	
Citations	Bibliography/works cited list is properly formatted and complete (like a research paper).	Bibliography/works cited list is complete, but not properly formatted (e.g. bulleted list).	Bibliography/works cited list is incomplete (e.g. no citations for images) or improperly formatted (e.g. list of URLs).	Student does not list sources used for research.	
Presentation	Student uses text on slides as prompts for original narration.	Student reads text on slides and elaborates comfortably.	Student reads text on slides, adding a few comments.	Student just reads text on slides.	
Subject Knowledge	Student answers all questions clearly and completely.	Student answers most questions.	Student has difficulty answering many questions.	Student is unable to answer questions.	
				Total Points:	/36