

SOAN 325 Research Methods

Final Assessment (40% of total grade)

DELIVERABLES

This assignment requires three deliverables, summing up to 100%:

Critical Reflection Paper- 30%

This is a two-three-page document/ 5-7 minutes video critically and honestly reflecting on the student's personal experiences and learning process during the Research methods class. Students should note that this would in no way be expected to be positive feedback only but emphasis of grading is in the reflection of the learning done in this class.

Poster and Oral Examination- 50%

This is a ten-minute individual interaction, involving a poster presentation and a Question-and-Answer session based on the student's learning throughout the research methods class. This is a formal presentation, and you will be assessed in three ways: your professional outlook, presentation skills, your poster, ability to respond to questions, mastery and content.

Written Report - 20%

The *Research Prospectus Full Draft* is a written presentation of a potential capstone project the student is interested in pursuing. This short-form essay is divided into three chapters (Chapter 1: Introduction; Chapter 2: Literature Review; Chapter 3: Methodology) in alignment with the format of a senior capstone project.

Submission Deadline & Protocol:

All submissions should be made on Canvas.

Deliverable	Submission Deadline
Critical Reflection	4 th December, 2023, 11:59pm
Poster and Oral Examination	6 th & 7 th December, 2023 (based on the presentation schedule)
Written Report	8 th December, 2023, 11:59pm

DETAILS OF EACH DELIVERABLE

A. Critical reflection – (30 points- 30%)

Students are expected to think through personal experiences critically and honestly reflecting in the research methods class and be sure to touch on but not limited to the prompts described below in their write up:

- (1) Reflecting on your personal experiences as a student of the research methods class and the processes we have engaged in this class so far, as well as considering your personality, describe two successes and two areas for improvement in coping and meaningfully contributing to the process and outputs for the class.

- (2) Looking back on your period in this class, how did you view the faculty's role within the successful completion of this course? Use three adjectives (and justify each) to describe this experience.
- (3) Looking back on all these experiences, identify at least 2 lessons you have learnt, it can be related to yourself as a budding researcher.
- (4) Reflecting on the entire research methods class, identify and justify one adjective that closely summarizes your experiences so far and one adjective that closely describes what your initial expectations were.
- (5) Reflecting on the entire Research methods course, how do you think you have built your competencies and skills in each of these areas of leadership, communication, critical and quantitative thinking, professionalism, ethics, curiosity and skills, technological competence.
- (6) Reflecting on your research methods course experience, how would you describe your relationship with your faculty and faculty interns? And how did the nature of this relationship enhance or otherwise your experience.
7. Reflect on the discipline faculty interactions and how the feedback was helpful and inculcated in your final written report.
8. Reflect on the peer assessment process and how that helped you to learn and refine your own work.

Format: APA Style: single-spacing throughout, 12 pt. Times New Roman font, 1 margins, 2 pages

B. Grading criteria for the poster and oral examination (50 points- 50%)

Ratings Categories	Marks
Appearance <ul style="list-style-type: none"> Students are formally dressed and present content in a formal manner. 	5
Poster Appearance <ul style="list-style-type: none"> Excellent organization of the poster with proper referencing. Poster is clear and free from errors. Materials in the poster relay its purpose. 	10

Presentation Skills <ul style="list-style-type: none"> • Students engaged the audience. • Students do not read from the poster. • Students are clear and audible with smooth delivery and control. • Information was effectively communicated. 	10
Knowledge and Contents <ul style="list-style-type: none"> • Introduction that gives a strong motivation for the research: • Clearly describe what the “gap” in the current knowledge is, and particular contribution to fill that gap • Briefly described the significance of these results. • Clearly summarize theoretical, conceptual and empirical literature. • Briefly describe the methods to be employed and its justifications. 	15
Question and Answer Session <ul style="list-style-type: none"> • Ability of the student to respond to questions. 	10
Total	50

Find attached examples of presentations for your perusal:

1) Thesis Presentation: "Folate – getting the balance right for bowel cancer prevention"

<https://www.youtube.com/watch?v=B-B4VcaytOA>

This is a presentation by a PhD/research masters candidate (not an undergraduate), but it is an excellent example of how to convey the importance as well as technical details of a research project in a concise and compelling manner. This presentation is only 3 minutes long, so not a lot of detail can be conveyed, and slides are used minimally. However, this presentation has all the important elements of a *research* (thesis) talk. Notice the following:

- She starts with an introduction that gives a strong motivation for the research: the prevalence of cancer but the fact that folate might prevent bowel cancer. She leads into her research question: “Is folate related to methylation and hence bowel cancer?” At this point, the audience is convinced that this is important and relevant research!
- She goes on to describe what the “gap” in the current knowledge is, and her particular contribution to fill that gap — the method she developed, and the experiments she ran using that method. (In your cases, this might be the software you developed, and the experiments you ran using that software).
- She briefly described her results, and the significance of these results.

- She ends by describing the on-going and future work.

2. Poster Guidelines.

A. Criteria for Judging Poster Presentations

Given the number of posters, judges may only have 10 minutes or less to review, discuss, and evaluate a poster presentation.

Poster presentation will be evaluated based on the following criteria:

- Quality and relevance of the abstract.
- Content and lay out of the poster:

(a) The title, names of authors, and the institution(s) where the research was performed should be included at the top of the poster.

(b) Poster layout should be in a logical order, including text and graphics that explain the objectives of the research and why the research is important; hypothesis/statement of the problem; methods and controls; results; conclusions and future research; and references and acknowledgements.

- Presentation: Presenters should demonstrate a good understanding of the study and related areas and responds effectively and clearly to questions.

B. Poster Design Suggestions & Tips

1. All text material should be legible from about 4 feet away.
2. Text Font should be legible and text size should not be less than 14 points (Example).
3. Posters should include text and graphics and use color to add emphasis and clarity.
4. Illustrations should be simple and bold, and photos should clearly show pertinent details.
5. Displayed materials should be self-explanatory and should enhance the verbal presentation and discussion.
6. Speak clearly and loud enough for observers to hear you.
7. The standard format of a poster follows that of an oral scientific presentation and should include Introduction, Literature review and Research methods to be employed. A poster, like an oral presentation, cannot (and should not) contain all information you have on the topic. Scientific posters should stimulate interest rather than provide a detailed presentation. If all text is kept to a minimum (1000 words), a person should fully read your poster in less than 10 minutes. Since there will be many other posters, you must make sure your poster is interesting and visually slick if you hope to attract viewers.
8. Poster size should be A2 size - 16.5 x 23.4 inches.
9. Tables and graphs should stand on their own. – A minimal amount of text materials should supplement the graphic materials. – Use regions of empty space between poster elements to differentiate and accentuate these elements. – Graphic materials should be readable at a distance of 1.5-2.0 metres. The font size should be at least 1 cm high. Lines in illustrations should be larger than normal.
10. Use colours for emphasis, but do not overuse (2-3 colours are usually enough). Avoid using patterns or open bars in histograms.

11. Remove all non-essential information from graphs and tables (data curves not discussed by the poster; excess grid lines in tables). – Graphics and tables should have a complete title and legend.

The format should be:

12. **Title:** Title should be in large fonts (e.g. Arial >80 points) and attract potential viewers. If possible, institute logos or affiliations should be minimized in size and put in the lower corner of the poster, or, alternatively, next to the title.
13. **Introduction:** Get your viewer interested about the issue or question while using the absolute minimum of background information and definitions. Put the objectives of your study at the end of your introduction.
14. **Literature Review section-** Summary of the current state of empirical, conceptual and theoretical literature.
15. **Methods:** Be short, but precise. State what study design you used and define your study population. Provide a case definition, if applicable. Mention statistical, laboratory and other methods that were used.
16. **Acknowledgments/further information:** Thank individuals for specific contributions to project; mention who has provided funding. Provide your e-mail address for further information.

B. Written Report – (40 points- 20%)

For this Final Assessment, **write** a 16–20-page full draft of the Research Prospectus that includes a: Chapter 1: Introduction (4–5 pages), Chapter 2: Literature Review (8–10 pages), and Chapter 3: Methodology (4–5 pages).

NB: The format chosen is dependent on the student and choice may deviate from final chosen thesis capstone type. The student is required to state clearly which capstone style is being used, and use this format given as a guide for submission.

The three chapters should be structured in the following way:

Thesis	Entrepreneurship	Applied
Introduction: A. Background <ul style="list-style-type: none"> Context, Issue, Importance, Researcher's Position and Motivation, Objective B. Problem Statement <ul style="list-style-type: none"> Identify the Problem Under Investigation (Key Arguments of your research) Clearly describe the problem (current state of the problem, consequences, what is 	A. Introduction (Background) <ul style="list-style-type: none"> Overview of the problem/issue & target audience Purpose/objective B. Business Concept Brief (Problem Statement) <ul style="list-style-type: none"> Brief industry landscape and general context of the business &/or business profile Unmet/unknown need to be addressed Identify and describe the scope of the problem C. Significance of the Study	A. Introduction (Background) <ul style="list-style-type: none"> The purpose of the project General Context/overview of the industry B. Company profile & Internal analysis to identify the issue/subject of inquiry e.g SWOT (this should be brief) <ul style="list-style-type: none"> It should be clear how the organization fits/is positioned/situated within the industry C. Problem Statement <ul style="list-style-type: none"> Identify and describe the Problem/opportunity/issue

<p>unknown that needs to be known (Gap))</p> <p>C. Purpose or Objective(s) /Research question(s) / or Hypotheses</p> <p>D. Significance of the Study</p> <p>E. Brief Theoretical/Conceptual Framework</p> <p>F. Nature of the Study (Methodology Overview)</p>		<p>D. Significance of the project i.e. benefits that accrue to the organization, business community or industry</p>
<p>Literature Review: Introductory paragraph</p> <p>A. Review of Theoretical/Conceptual Literature</p> <p>B. Review of Empirical Literature</p> <p>C. Synthesis of Literature Findings (Includes the Research Gap/Unknown/Niche)</p> <p>D. Conclusion</p>	<p>Industry Analysis</p> <p>A. Describe the framework(s) used for the industry analysis and provide a justification for the framework</p> <p>B. Present the results of the Analysis/Assessments i.e. the industry landscape (this should be more detailed than what is provided in the Introduction Chapter</p> <p>C. Existing and Proposed intervention/solution(s) and/or product/service</p> <p>Justification for the proposed solution/product/service</p>	<p>Initial Situational Analysis and Needs Assessment</p> <ul style="list-style-type: none"> (relevant information, including consulting relevant documents, academic literature, and key informants/experts, site visits can be used) <p>A. Preliminary review of phenomenon in question. Specify what might be happening with the phenomenon using a conceptual framework or model</p> <p>B. Initial Situational Analysis of the industry/organisation/department (current/existing situation)</p> <p>C. Initial Needs assessment (This initial information should be based on secondary data)</p> <p>D. What information/data/intervention is required to achieve the purpose of the project</p>
<p>Methodology (<i>check below for the format on Quantitative and Qualitative Approaches</i>) and CSIS options</p>	<p>Methodology Method/Process and Tools employed/to be employed in the applied research for the different parts of the work e.g.:</p> <ul style="list-style-type: none"> Diagnose the need/problem Problem-solution fit Assessment Market Analysis Assessment Product/service feasibility 	<p>Methodology Present plan that details</p> <p>A. Methods, tool and processes used for collecting and analyzing data in the initial situational analysis and needs assessment</p> <p>B. Information missing/Gaps identified in the initial situational analysis and needs assessment</p>

		<p>C. Methods, tool and processes to be adopted and used for collecting and analyzing this missing data</p> <p>D. evidence of your ethical considerations</p>
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NOTE: Chapter 3: Methodology (Thesis)

Introductory Paragraph (No APA Style Level 2 Heading Required)

Level 2 APA Headings (Standard Quantitative)	Level 2 APA Headings (Standard Qualitative)
<ul style="list-style-type: none"> A. Purpose/Objective B. Research Questions/Hypotheses C. Research philosophy and reasoning approach D. Research Design E. Research Scope: Target Population, Sampling Method, Power Analysis, and Related Procedures F. Instrumentation G. Data Collection H. Data Analysis Procedures I. Limitations and Delimitations J. Validation: Internal/External Validity K. Ethical Considerations 	<ul style="list-style-type: none"> A. Purpose/Objective B. Research Questions/Sub questions C. Research philosophy and reasoning approach D. Research Design E. Research Scope: Research Population, Sampling Method, and Related Procedures F. Instrumentation G. Data Collection H. Data Analysis Procedures I. Limitations and Delimitations J. Validation: Credibility, Dependability, and Trustworthiness K. Ethical Considerations
	<p>(CSIS Outlines for Comparison)</p> <p>(Thesis Proposal Outline)</p> <ul style="list-style-type: none"> A. Methodology B. Experimental Setup and Computational Model C. Preliminary Results D. Explanation of the Rest of the Work to be Accomplished E. Methods for Validations of Expected Results and Exceptions F. Risk Management G. Schedule, Timeline, and Contributions of individual team members (if applicable) H. Summary of Proposal and Planned Additional Work to Complete <p>(Applied Project Proposal Outline)</p> <ul style="list-style-type: none"> A. Requirements Analysis B. Approach, Design, and Implementation C. Tools, Technologies, Experimental Setup and Computational Model D. Preliminary Results

	<p>E. Explanation of the Rest of the Work to be Accomplished</p> <p>F. Methods for Validations of Expected Results and Exceptions</p> <p>G. Risk Management</p> <p>H. Schedule, Timeline, and Contributions of Individual Team Members (if applicable)</p>
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FORMATTING

- APA Style: double-spacing throughout, 12 pt. Times New Roman font, 1” margins
- **Include** an APA/**ACM** Style cover page, abstract page (150 word maximum; (Note: This will be 250 words for a capstone project submission)), and formatted references page, which are not counted as part of the 10 pages.
- **Use** proper APA/**ACM** Style in-text citations and references.
- **Submit** in CANVAS to Turnitin by the required due date.

Final Assessment: Grading criteria for the Written Report (40points- 20%)			
CATEGORY	FAIL	PASS TO VERY GOOD	EXCELLENT TO EXCEPTIONAL
Scientific Writing & Style (5 points)	0 to 2.49 pts	2.5 to 3.99 pts	4 to 5 pts
Scientific/Technical Research Writing Style	Scientific/technical research and information is presented in a disjointed way, with inaccurate descriptions and/or unclear prose.	Scientific/technical research and information is presented using understandable language; concepts are for the most part accurately described using readable prose.	Scientific/technical research and information is presented using clear and precise language; concepts are accurately presented using logical, fluid prose.
Grammar, Mechanics, and APA Style Conventions	The writing has substantive grammatical, mechanical, and/or APA Style convention issues, which impair readability.	The writing utilizes mostly accurate grammatical, mechanical, and APA Style conventions, with only minor errors.	The writing uses accurate grammatical, mechanical, and APA Style conventions throughout; nearly error free.
Abstract	Abstract is not formatted to APA Style requirements and/or is missing required elements and/or keywords list is missing or not aligned to the topics presented	Abstract includes most APA Style elements in proper format; keywords list provided	Abstract is formatted in proper APA Style; all APA Style required elements are included (literature review overview, research problem, research questions/hypotheses); relevant keywords list included.
Chapter 1: Introduction (5 points)	0 to 2.49 pts	2.5 to 3.99 pts	4 to 5 pts
A. Background <ul style="list-style-type: none"> • Context, Issue, Importance, Researcher's Position and Motivation, Objective 	Background information is insufficient, under-sourced in the literature, and/or underdeveloped.	Background information is sufficient with good literature sourcing and is presented in a readable form; all or nearly all background areas are covered with good detail.	Background information is specific, robust, well-sourced in the literature, and presented logically; all background areas are covered with depth and detail.
B. Problem Statement <ul style="list-style-type: none"> • Identify the Problem Under Investigation 			
C. Purpose/Objective			
D. Brief Theoretical/Conceptual Framework	Substantive elements of the introduction are missing, unclear, not specific, and/or ill-defined.	Problem statement is mostly clear but lacks empirical precision; purpose/objective is stated generally with basic scientific descriptions; theoretical/conceptual framework and research questions are defined and connections are apparent; significance of the study is described.	Problem statement is scientifically clear and empirically precise; purpose/objective is scientifically relevant and specific; theoretical/conceptual framework and research questions are well-defined and aligned; significance of the study is justified and reasonable.
E. Hypotheses/Research Questions			
F. Significance of the Study			
Chapter 2: Literature Review (15 points)	0 to 7.49 pts	7.5 to 11.99 pts	12 to 15 pts
A. Review of Theoretical/Conceptual Literature	Review and analysis of theoretical/ conceptual literature and empirical literature is unclear and lacks focus; the literature review argument is underdeveloped or lacking.	Mostly clear and focused review and analysis of theoretical/conceptual literature and empirical literature; the discussion makes justified claims in a readable presentation.	Clear, focused, and logical review and analysis of theoretical/conceptual literature and empirical literature that presents a highly coherent literature argument.
B. Review of Empirical Literature			
C. Synthesis of Literature Findings			
D. Conclusion			

	<p>Literature review is missing current (1–5 years) and/or seminal literature on the topic and lacks scope and depth</p> <p>Review lacks good analysis of sources and fails to provide synthesis of literature.</p> <p>Limited conclusions are drawn from the literature and application to the research topic/problem is deficient.</p>	<p>Literature review includes current (1–5 years) and seminal literature on the topic with sufficient scope and depth (fewer than 15 sources utilized)</p> <p>Review provides good analysis of sources but has underdeveloped synthesis.</p> <p>Reasonable conclusions about the literature are drawn and applied to the research topic/problem.</p>	<p>Literature review includes current (1–5 years) and seminal literature on the topic with excellent scope and depth (15-20 sources minimum)</p> <p>Review moves from analysis of sources to synthesis (generation of novel/new position/ideas).</p> <p>Relevant and insightful conclusions about the literature are drawn and applied to the research topic/problem; ; Evidence provided for the need for the research topic/problem.</p>
Chapter 3: Methodology (15 Points)	0 to 7.49 pts	7.5 to 11.99 pts	12 to 15 pts
<p>A. Purpose/Objective</p> <p>B. Research Questions (Hypotheses/Sub questions)</p> <p>C. Research Design</p> <p>D. Research Scope</p> <p>E. Instrumentation</p> <p>F. Data Collection</p> <p>G. Data Analysis Procedures</p> <p>H. Limitations and Delimitations</p> <p>I. Validation</p> <p>J. Ethical Considerations</p>	<p>Purpose/Objective is not well-defined or clear and lacking in scientific relevance.</p> <p>Research questions are imprecise, unclear, or not readily measurable; Hypotheses are imprecise, unclear, or not readily testable.</p> <p>Research Design and Research Scope are poorly described, do not meet basic scientific standards, and/or have limited connections to the literature</p> <p>Instrumentation, Data Collection, and Data Analysis Procedures are poorly described and/or not aligned to the research purpose and research questions</p> <p>Limitations and Delimitations are poorly described and do not show an understanding of the boundaries for interpretation of the results</p> <p>Validation measures are poorly outlined and do not demonstrate how the study can achieve validity and reliability (quantitative) or credibility, dependability, and trustworthiness (qualitative)</p> <p>Ethical risks and benefits are not described well; risk mitigation strategies deficient or missing</p>	<p>Purpose/Objective is generally stated and readable with sufficient description of scientific relevance.</p> <p>Research questions are stated well but lack precision needed for strong measurement; Hypotheses are stated accurately but lack precision needed for strong measurement</p> <p>Research Design and Research Scope are outlined in a sufficient manner, meeting basic scientific standards, with sufficient connections to the literature</p> <p>Instrumentation, Data Collection, and Data Analysis Procedures are understandable with sufficient alignment to the research purpose and research questions</p> <p>Limitations and Delimitations are described with sufficient understanding of the boundaries for interpretation of the results</p> <p>Validation measures are outlined with basic understanding of how the study can achieve validity and reliability (quantitative) or credibility, dependability, and trustworthiness (qualitative)</p> <p>Ethical risks and benefits are described sufficiently; basic risk mitigation strategies are provided</p>	<p>Purpose/Objective is very clear, specific, and scientifically relevant.</p> <p>Research questions are clear, concise, empirically measurable, and aligned to the purpose; Hypotheses are empirically testable.</p> <p>Research Design and Research Scope are clearly explained, conform to scientific standards, and justified in terms of the literature</p> <p>Instrumentation, Data Collection, and Data Analysis Procedures are scientifically accurate and well-aligned to the research purpose and research questions</p> <p>Limitations and Delimitations are clearly stated and show an understanding of the boundaries for interpretation of the results</p> <p>Validation measures are clearly outlined showing how the study can achieve validity and reliability (quantitative) or credibility, dependability, and trustworthiness (qualitative)</p> <p>Ethical risks and benefits are clear and described in detail; clear and specific risk mitigation strategies are provided</p>