

# Course Syllabus for: Human Factors 769A09

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**Fall Term 2020**

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Version 1

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# 1 Kursplan (svenska)

**Huvudområde:** Kognitionsvetenskap

**Utbildningsnivå:** Avancerad nivå

**Fördjupningsnivå:** A1X

**Kursen ges för:** Kognitionsvetenskap, masterprogram

**Förkunskapskrav:** Kandidatexamen 180 hp i huvudområdet kognitionsvetenskap, eller Kandidatexamen 180 hp i huvudområdet datalogi eller motsvarande samt godkända kurser om 30hp i något eller några av ämnena: psykologi, lingvistik, filosofi, neurovetenskap, antropologi eller motsvarande, eller Kandidatexamen 180 hp i något av huvudområdena Psykologi eller Neurovetenskap samt godkända kurser om 30hp i datavetenskap eller motsvarande.

## Lärandemål

Efter avslutad kurs ska den studerande på en avancerad nivå kunna:

- redogöra för och kritiskt diskutera teorier och modeller inom områdena Human Factors och Resilience Engineering
- tillämpa metoder för att analysera komplexa system och människans roll i dessa
- identifiera, avgränsa och analysera ett människa-maskinsystem från ett Human Factors eller Resilience Engineering-perspektiv

## Kursinnehåll

Kursen behandlar följande områden:

- Centrala teorier och modeller inom fältet Human Factors och Resilience Engineering som kan användas för att beskriva, förstå och analysera komplexa system och människans roll i dessa.
- Centrala begrepp kopplade till området.
- Metoder för att analysera och beskriva komplexa system och människans roll i dessa.
- Aktuell forskning inom området Human Factors

## Undervisnings- och arbetsformer:

Undervisningen består av föreläsningar, praktiska övningar och seminarier. Den studerande förväntas arbeta med självstudier, enskilt eller i grupp.

## Examination:

Kursen examineras genom aktivt deltagande på seminarier, genomförande av praktiska övningar, samt ett individuellt projekt som redovisas såväl muntligt som skriftligt. Detaljerad information återfinns i studieanvisningen.

Studerande, vars examination underkänts två gånger på kursen eller del av kursen, har rätt att begära en annan examinator vid förnyat examinationstillfälle.

Den som godkänts i prov får ej delta i förnyat prov för högre betyg

**Betygsskala:** U, G, VG

**Övrig information:** Planering och genomförande av kurs ska utgå från kursplanens formuleringar. Den kursvärdering som ska ingå i varje kurs ska därför behandla frågan om hur kursen överensstämmer med kursplanen. Kursen bedrivs på ett sådant sätt att både mäns och kvinnors erfarenhet och kunskaper synliggörs och utvecklas.

**Ämnesområde:** Teknik i samhällsperspektiv

**Utbildningsområde:** Tekniska området

**Institution:** Institutionen för Datavetenskap

## 2 Course introduction

Welcome to 769A09, a course that centers on Human Factors theories, methods, and issues. This is an advanced, masters' level course with a student-centered learning perspective. The course offers a lot of freedom to choose topics of particular interest to you, and to focus in depth on one area of interest to you as a student. There are three main components to the course: weekly seminars, weekly team challenges, and a written individual work called a proposal. This document explains the course structure and format in detail.

### 2.1 Teachers and staff

Erik Prytz ([erik.prytz@liu.se](mailto:erik.prytz@liu.se)) at the Department of Computer and Information Science (IDA) is the course examiner.

Anna Grabska Eklund ([anna.grabska.eklund@liu.se](mailto:anna.grabska.eklund@liu.se)) is the course administrator.

## 3 Lectures

This is an advanced level course and will not rely on lectures to convey information. There is one lecture given to present the course structure and requirements, introduce content topics, and provide a fundament for the rest of the course content (including the seminars and proposal work). The remaining course will be a mix of primarily seminars and some hands-on lessons and advising sessions. However, at the start of each seminar there will also be a brief flipped classroom component to provide some additional insight into the readings and answer any questions you may have about the material.

## 4 Seminars

The course will feature six seminars. The topics of the seminars are selected by the students based on a list of suitable topics relevant to the overall course goals. The purpose of this is to allow some flexibility to pursue topics of particular interest to the students. The available topics will be provided in a separate document on Lisam.

### 4.1 Seminar structure

The structure of each seminar will be roughly as follows:

1. **Challenge review** (ca 5 minutes): The course examiner provides a review of the previous week's challenge and awards points to the teams.
2. **Flipped classroom** (ca 10 minutes): The course examiner answers questions about the reading material.
3. **Student-led discussion** (ca 70 minutes): The students discuss the material based on submitted questions.
4. **Class discussion and presentation of next week's challenge** (ca 5 minutes): The students and course examiner review the discussions

during the seminar. The course examiner also presents next week's challenge.

The **challenge review** part is explained further in section 5, Team Challenges.

The **flipped classroom** part is intended to cover fundamental or basic questions about the topic, as well as to clarify the literature. The students will either submit questions in advance (more on this in the next section) or come prepared with questions for the flipped classroom part.

The **student-led discussion** portion will be conducted either with the whole class together or divided into smaller groups, depending on the number of students in the course. For each seminar, one student per group will be responsible to act as *seminar leader*. This will be assigned during the first lecture.

There is a given set of "core" articles or chapters to read for each topic (see 4.2 seminar Literature). All students are responsible for reading the assigned material before the seminar and to submit 1) one to two discussion questions *per core article* and 2) two *overarching* questions spanning all assigned reading for that week. These questions must be submitted on Lisam by the assigned deadline. They shall be submitted in a .doc or .docx document, not as a submission comment. It is strongly encouraged to use the provided template document available on Lisam.

Students can also submit additional clarifying (non-discussion) questions to the course examiner prior to the seminar. These questions will be used during the flipped classroom part of the seminar.

The course examiner will anonymize and forward the discussion questions to the seminar leader(s). The seminar leader(s) will summarize the questions into a structured set of discussion topics that can be used as an aid during the discussion part of the seminar. This summary is intended to reduce the number of questions to a manageable and usable set that will be a helpful guide for the discussions during the seminars. The seminar leader(s) have full discretion in what questions they select, but should keep the following general recommendations in mind:

1. Redundant questions (i.e., questions that more or less ask the same thing as other questions) should be removed or merged into one, single question.
2. Irrelevant questions should be removed. Irrelevant questions are questions that are off-topic, do not mention or make use of the assigned reading, or are vague "standard questions" that could be applied to any reading ("What did you think of [insert article title here]?", "Did you find [insert article title here] useful?", "How can we as cognitive science students use this information?", etc).
3. The selected questions should be *meaningful* to discuss in a group of students. That is, questions should help you as a group to discuss the articles in a way that deepens your understanding of the topic.

4. Questions that other students cannot reasonably be expected to answer should be removed (e.g., “What impact did this article have?”, “Has the author written anything else on this topic?”, “Is this method commonly used in human factors today?”, “Is there any new research on this topic?”, etc). These questions are better asked to the course examiner during the flipped classroom part of the seminar.
5. You may keep some “clarifying” questions about the articles, if you think that it will lead to a meaningful discussion among the students. Most clarifying questions should, however, be asked to the course examiner during the flipped classroom part of the seminar.
6. The total number of questions should be small enough that the guide will be usable during the seminar – perhaps 5-8 questions per article and a few questions that concern the reading overall.

The main thing the seminar leader(s) should keep in mind when selecting the questions is essentially “will this question lead to an interesting and meaningful discussion among us students?”.

### **Summary: responsibilities of the seminar leader**

#### *Before the seminar*

- Summarize the submitted questions to a format that will support discussion during the seminar.

#### *During the seminar*

- Lead and facilitate the group discussion, supported by the submitted questions.

### **Summary: responsibilities of all students**

#### *Before the seminar*

- Read the assigned literature.
- Submit, using Lisam, 1-2 discussion questions per article and 2 overarching questions no later than one full weekday prior to the seminar.
  - See deadlines on Lisam.

#### *During the seminar*

- Actively participate in the discussions.

## **4.2 Seminar Literature**

This course does not have a specific textbook to cover the entire course. Rather, the required readings are based on the chosen topics. The list of literature per topic is provided in Appendix A. Please note that not all the following articles will be included during the course. Only the chosen topics will be covered.

Each topic contains a set of “Core” articles and a set of “Extra” articles. The core articles are mandatory, and it is those articles that will be discussed during the seminar. The extra articles are *not* mandatory but rather provided as additional reading for the interested student. They can serve as a useful fundament for the proposal and other future work.

### 4.3 Absence

If you are absent from a seminar you will instead complete a written reflection on the material. This reflection should summarize and review the core literature for the seminar and include an overall reflection connected to the topic of the seminar. The entire reflection should be about 2 pages in length. Some absences are excused (e.g., death in the family, hospitalization, and similar) if cleared by course examiner prior to the seminar.

## 5 Team Challenges

The purpose of the team challenges is to provide an engaging learning activity tied to the topic discussed in the course. All students will be assigned to teams of about 4-5 members each. These teams will complete weekly challenges based on the previous week's topic. The challenges will be presented at the end of each seminar.

Each individual challenge is unique and will have specific goals and requirements. The way the challenge should be presented or reported is specific to each challenge. Points from zero to N, where N is a positive number greater than 0, are awarded by the course examiner depending on well the team meets the challenge goals and requirements. To ‘pass’ the challenge the team must score greater than zero. A score of zero is typically given on a “did not attempt” basis.

The teams will accumulate points by completing challenges. A weekly scoreboard will be kept and updated. The team with the highest score at the end of the course will win a *special prize*.

## 6 Proposal

The course includes an individual, written assignment called a *research proposal*. A research proposal is a document that describes a specific research project – from the justification (why are you doing this?) to the research question(s), also known as a proposal statement (what will you investigate?), to the method (how are you doing this?) to limitations (what you are you not doing, and why?). You can think of it as a document containing the introductory, background, and methods chapter of a regular thesis, e.g. a bachelor’s or master’s thesis, with a few extra bits at the end for limitations, contributions, and, of course, references. Research proposals are often written by graduate students (master’s or doctorate) to describe their intended dissertation or thesis research (called a thesis proposal).

It is important to keep in mind that the actual empirical investigation(s) outlined in the proposals will *not* be conducted in this course! A proposal, in general, is a detailed plan that is typically reviewed by a committee of senior faculty before the student can proceed with implementing the research. The course examiner will serve this function in this particular course.

## 6.1 Proposal requirements

The overall topic of the proposal must be in line with the course syllabus and should preferably follow one of the seminar topics listed for this course. It must not be a topic that has been selected for this particular course iteration, and other topics are permissible. The course examiner has the final say in which topics are allowed. The important point is that the proposal is oriented towards human factors research.

The scope of the research outlined in the proposal should be reasonable to complete in a semester for one student. That is, the planned research should be reasonable to conduct either as a master's thesis project (30 hp) or a larger project (about 12 hp). The research should be feasible given the resources typically available to students conducting such project or thesis courses, although some creative liberties are allowed (e.g., assuming access to certain equipment, systems, environments, or study populations).

As for the research itself you have a lot of freedom in your choice. The research can be oriented towards a practical, domain-related problem or towards basic research. The methodology can be controlled experiments, field studies, ethnographic research, or any of the many other methods taught in the cognitive science program. The research may be quantitative or qualitative, hypothesis-testing or exploratory. You are free to, within reason, choose your own method based on the nature of the question you ask (keeping in mind the feasibility criterium described previously). The key point is that the research should be within the scope of *human factors research* – although that is a broad scope.

It is important to keep in mind that this is a *research* proposal, not a *project* proposal. You should in your work outline the academic value of conducting this particular research and try to position it within the broader literature on the topic. As such, you should *not* add project specifications such as number of work hours, budget or a time plan.

The general criteria for the proposal can thus be summarized as follows:

1. The topic of the proposal must be relevant to the course syllabus, i.e. the scientific field of human factors
2. The proposal must outline an explicit and clear likely contribution to the scientific body of knowledge about the particular topic or question
3. The proposed *empirical* investigation (e.g., study design) is suitable to answer the research question(s)
4. The proposal is feasible in that it could conceivably, with some assistance, be conducted by one master's student in one semester

## 6.2 Proposal structure

The written proposal should contain the following sections:

- Abstract
- Introduction and research statement
- Background
- Method
- Limitations
- Contributions
- References

There are strict formatting guidelines that must be followed. The formatting guidelines are provided in a separate PDF, along with a word template and an example file. The formatting guidelines and word template are, specifically, the same ones used by the Human Factors and Ergonomics Society Annual Meeting – one of the oldest and most prestigious human factors conferences.

There are also some additional requirements on the content of your proposal. You must include name, affiliation, and a title on the first page (as per the guidelines). The title must be informative of the proposed research and must not be longer than 25 words in length (including subtitle, if applicable).

The abstract should clearly and accurately summarize the research proposal in 250 words or less. The purpose, research question(s), method, and potential contributions should all be covered in the abstract.

The introduction section should introduce the general topic to the reader and provide a high-level justification for the proposed research. This justification can either be grounded in a practical or domain-specific problem, or a basic research-oriented problem. The research statement is where you explain what you propose to do. It should include the hypotheses or research questions derived from the reviewed literature in the background section. The statement should be specific and scientifically interesting.

The background section should review prior peer-reviewed literature on the specific topic of research. This background section should be specific and relevant to the research statement. For example, it is more relevant to describe the knowledge gaps left by current studies than the history of the field.

The method section should be written in future tense and be very specific and detailed. Explicit references to design choices that are yet to be made can be included as long as the method for making that choice is outlined. For example, if you are proposing a planned experiment where you will play an auditory stimulus and you do not know how loud this stimulus must be you can explicitly state that the specific loudness (dB) will be determined through pilot testing. This section should include the usual headings for participants, apparatus, procedure, etc (see the APA manual for additional headings typically used). The

section should also include a subheading for the planned analyses and describe how those will be conducted. Additional material (such as informed consent forms, questionnaires, balance sheets, software screenshots, manuscripts with instructions to read to participants, etc.) can be submitted along with your proposal manuscript as separate documents.

The limitations section should detail the various planned as well as unavoidable limitations on the proposed research. This includes both the theoretical background, scope of the research, and the methodological choices.

The contributions section should outline the (likely, or potential) contributions the proposed research will achieve. This can, for instance, be answering specific research questions, discovering new knowledge about some phenomenon, or settling a conflict in prior research. The contributions should be clearly outlined in relation to past research (as reviewed in the background section) and be generalized appropriately given the limitations. Essentially, this is your “conclusions” section, although it is conclusions about what answers you expect to have after having conducted the proposed research.

### 6.3 Technical requirements

The entire proposal should be *minimum of 4.5 pages and maximum 5 pages* in length. This is a strict page limit that must be followed. You will likely require the full 5 pages to completely answer the assignment. In fact, you will likely have to work on your ability to explain things clearly and succinctly to fit your proposal into the required 5 pages without going over the page limit.

The proposal should be written in English. This is to further improve your ability to write technical reports in English. However, this is not a requirement and you may choose to use Swedish instead.

The proposal should follow an accepted formatting guideline for the references. I recommend the [American Psychology Association’s publication manual](#), version 6 or 7. Please be aware that online sources for the APA manual may be outdated! Always check that the information is correct according to the latest standard.

The proposal should be written in a clear and comprehensible manner. The text should have a logical flow and structure. Spelling mistakes and grammatical errors should be virtually nonexistent. The text should be written in a formal and technical language and avoid colloquialisms. Specific terminology should be used, and vague unsupported claims avoided. In short, the proposal should be written to a high academic standard as befitting a master’s level course.

More specific requirements, or amendments to the requirements described within this document, may be provided during the course.

### 6.4 Proposal timeline

There are three advising sessions and hands-on lessons for the proposal. The table below outlines the dates, general topic and intended milestones for each.

#	Date	Topic	Milestones
1	12/11	Drafting, finding purpose	Selected topic; reviewed literature
2	26/11	Writing seminar	First draft
3	10/12	The revision process	Complete 5-page draft; peer feedback

For the first advising session (#1) you should have 1) selected the topic of your proposal, and 2) done a first literature search and review. That is, you should have an idea of what you are going to write and have some preliminary idea of relevant questions to explore based on current research. You may select a topic from the list of seminar topics, or pick another topic within the area of human factors. If you are unsure if your intended topic falls within human factors, you can either check the Human Factors and Ergonomics Society (HFES) website for “technical groups” and see if your topic would fit within any of those groups, or, if you are still unsure, email the course examiner. For the literature review, search primarily within human factors publications, e.g. the HFES Annual Meeting proceedings, or any of the major journals within the area, such as for example:

1. *Human Factors*
2. *Cognition, Technology and Work*
3. *Theoretical Issues in Ergonomics Science*
4. *Accident Analysis and Prevention*
5. *Ergonomics*
6. *Applied Ergonomics*
7. *Journal of Cognitive Engineering and Decision Making*
8. *IEEE Transactions on Human-Machine Systems*
9. *International Journal of Industrial Ergonomics*

For the second advising session (#2) you should have completed a first draft of your proposal. That means that you should have the overall structure (headings, subheadings), have at least an outline of the text (what you intend to cover under each heading and subheading), and have begun the process of writing text for at least some parts. You should have defined, at least informally, what your purpose and research question (or hypothesis) is and have outlined a general method for investigating that question. Parts of this advising session will be spent on hands-on activities working on general writing skills.

For the third session (#3) you must have a complete draft (4.5 to 5 pages in length) ready. This draft will be reviewed by two of your peers, and parts of the session will be spent on hands-on activities working with your text. Please note that the text must not be complete or in a “final state”, it is still a draft that you will continue to work with until the final deadline. However, as part of the general goal to improve your academic writing skills it is important that you have material to work with (i.e., 5 pages of text) for the remainder of the course. More specific details for the continued work, e.g. concerning peer feedback, will also be provided during this session.

## 6.5 Grading rubric for the written proposal

The grading rubric for the project report is available in Appendix A. There are seven criteria in the rubric for *content*, and three for *mechanics*. The proposal can either exceed, meet, or fail to meet the standard in each criterion. A holistic assessment is made based on how well the proposal meets these criteria. In general, a passing grade (G) is awarded to proposals who meets all criteria, and a pass with distinction (VG) is given to proposals that exceeds standard on key criteria. Proposals may receive a failing grade if they fail to meet key criteria, or if it receives a score of “No evidence” for any criteria. Be sure to read and review this grading rubric to ensure that you are meeting all the requirements for the proposal.

## 7 Course grade

To receive a passing grade (G) in this course you will need to:

- Be the seminar leader for one seminar
- Actively participate during the other seminars
- Pass the weekly team challenges
- Receive a passing grade on the proposal

The grade of pass with distinction (VG) will be given based on the quality of the written proposal.

### 7.1 Make-up work

If a student fails any of the course components, they can submit make-up work twice before the next course iteration starts. The specific deadlines and make-up assignments will be presented during the course.

## 8 Deadlines

### 8.1 Seminar question deadlines

Each student must submit questions for each seminar (as outlined in section 4 on Seminars). Submit your seminar questions on Lisam before the following deadlines.

Seminar #	Date	Deadline	Time
1	11/11	9/11	17:00
2	18/11	16/11	17:00
3	25/11	23/11	17:00
4	2/12	30/11	17:00
5	9/12	7/12	17:00
6	16/12	14/12	17:00

## 8.2 Question summary deadlines

The seminar leader(s) for each seminar will summarize the submitted questions into a discussion guide. This guide is to be emailed to the course examiner no later than the following deadlines.

Seminar #	Date	Deadline	Time
1	11/11	11/11	09:00
2	18/11	18/11	09:00
3	25/11	25/11	09:00
4	2/12	2/12	09:00
5	9/12	9/12	09:00
6	16/12	16/12	09:00

## 8.3 Team challenge deadlines

The deadline for the team challenge is always 12:00 the day before the next seminar. Some of these will be submitted through Lisam, others may require other submissions. Each challenge will specify this further.

Seminar #	Date	Deadline	Time
1	11/11	10/11	12:00
2	18/11	17/11	12:00
3	25/11	24/11	12:00
4	2/12	1/12	12:00
5	9/12	8/12	12:00
6	16/12	15/12	12:00

## 8.4 Proposal deadlines

Only the final submission of the proposal will be graded. The other deadlines are “soft” deadlines, intended to help you structure the work by providing set dates to work towards. There is no penalty for missing these soft deadlines, however you will likely benefit less from the assignment in terms of your own learning. See section 6 for more details on the proposal and the intended topics of the advising sessions.

Session #	Date	Deadline	Time	Submission
1	12/11			
2	26/11	25/11	17:00	An outline
3	10/12	9/12	17:00	A 5-page draft
		15/1/21	17:00	Final, complete proposal

## 9 Plagiarism and academic dishonesty

As with all courses at LiU, plagiarism and academic dishonesty is not allowed. Unfortunately, there have been recent instances in this course where students have tried to cheat, e.g. copied text from articles or used google translated text without editing. All such instances *will* be reported to the [Disciplinary Board](#), and may result in a disciplinary action such as a suspension. The decision to report a suspected attempt to cheat is not made by the course examiner. The course examiner *must* report such attempts as per the university guidelines:

“Suspected attempts at cheating and disturbances of the peace *shall* be reported to the Vice-Chancellor and the matter treated by the University Disciplinary Board.” ([link to source](#), my emphasis)

**Cheating** (from [LiU Disciplinary Board](#)):

According to chapter 10 in the Higher Education Ordinance, disciplinary measures can be used against a student who:

1. Uses prohibited aids and equipment, or in any other way, purposely acts inappropriately during the examination or the assessment of a study assignment.
2. Causes disturbance, prevents teaching, examinations or other university related activities from taking place.

Examples of what LiU's Disciplinary Board has judged as cheating:

- text written onto a formula sheet
- loose sheets of paper containing the student's own writing during a test
- plagiarizing an essay
- copying a programming project
- working with another group during individual projects when doing so was not allowed

**Plagiarism** (from [LiU Library](#)):

*What is plagiarism?*

To plagiarize means using somebody else's work and presenting it as your own without referring to the source. It may be a text, idea, theory, image, chart, figure, music, computer program or a product. Even reformulation, paraphrasing, text to your own words, without referencing the source is plagiarism. Plagiarism may also violate Copyright laws.

*What happens if I plagiarize?*

Plagiarism is a serious offense against good academic practice and can if worse comes to worst result in temporary suspension from studies by decision of The Disciplinary Board at Linköping University. A student who is suspended may not

participate in lectures, laboratory sessions, seminars, exams, tutorials, assignments, and may not access to LiU's computer labs. The suspension may also affect payment of student support.

## 10 Appendix A: Grading rubric for the proposal

<b>CONTENT</b>				
	<b>Exceeds standard</b>	<b>Meets standard</b>	<b>Does not meet standard</b>	<b>No evidence</b>
<b>Abstract</b>	Clearly and accurately summarizes the proposal within the given word limit.	Summarizes the proposal within the given word limit.	Fails to summarize the proposal or exceeds the word limit.	No abstract provided.
<b>Introduction</b>	The stated purpose with the proposal is motivated, clear and well defined, and within the scope of the course.	A purpose is stated and within the scope of the course.	The purpose is unclear or outside the scope of the course.	No purpose.
<b>Background</b>	Provides accurate and detailed background information that covers the seminal and current works as related to the purpose. A comprehensive selection of valid, scientific references is provided.	Sufficient relevant background information is provided for the reader to follow and understand the current work. Some valid, scientific references are used.	Very little and/or inaccurate information is provided. No valid, scientific references used.	No background information provided.
<b>Research statement</b>	The research questions or hypotheses follow from the purpose and reviewed background literature. They are testable, scientifically interesting, and can be feasibly answered.	Research questions or hypotheses are stated and follow from the purpose. The research is feasible.	Research questions or hypotheses are unclear or not connected to the purpose. The research is not feasible.	No research questions or hypotheses
<b>Method</b>	Empirical data collection procedures and analytical strategies are well suited to answer the research aims, and are presented logically and clearly, with detailed easy-to-follow steps that allow scientific replication.	Empirical data collection procedures and analytical strategies are appropriate to answer the research aims. They are presented in an understandable way but may lack in detail or clarity.	Empirical data collection procedures and analytical strategies are either inappropriate for the research aims or the presentation is confusing and lacking critical information.	No data collection procedures or analytical strategies provided.
<b>Limitations</b>	Critically examines the limitations in the design of the project and suggests improvements for future studies. Both planned and unavoidable limitations are examined.	Recognizes project limitations but lacks suggestions for improvement. Misses critical limitations.	Limitations are either not recognized or inadequately described.	Limitations are not described.
<b>Contributions</b>	Clearly and accurately outlines the potential results in relation to the research questions or hypotheses. Presents logical and rational arguments for the likely contributions this research will provide.	Outlines the potential results and connects them to the stated research questions or hypotheses. Outlines the contributions the research is likely to make.	Does not discuss potential results and/or does not connect to the stated research questions or hypotheses. The contributions of the proposal are unclear or not motivated.	Section is absent.
<b>MECHANICS</b>				
<b>Language (technical)</b>	No errors in grammar, punctuation, capitalization, word usage, or spelling. Formal, technical language is used consistently and throughout the report.	Few errors. Does not hinder comprehension. Some informal or non-technical language is used.	Many errors or few but critical errors that hinder comprehension. Large sections are written in informal language.	Not applicable.
<b>Language (usage)</b>	The language is clear and precise. Each paragraph has a main idea that is developed and supported by detail sentences. The sequence and progress of ideas and information is logical and cohesive.	The language is overall clear but contains unclear sections or sentences. Each paragraph has a main idea. The sequence and progress of ideas and information is not fully developed and contains some unsupported leaps.	The language is not clear or precise. Paragraphs lack main idea or supporting sentences. No evidence of structure or organization of ideas and information.	Not assessable.
<b>References</b>	At least ten relevant references are cited in the document, and all references in text as well as the bibliography are done in the correct format as per the chosen guideline (e.g., APA).	At least six relevant references are cited in the document, and references in text and the bibliography are mostly correct according to the chosen standard with only minor deviations.	There are fewer than 6 references provided, or references and bibliography are not correctly or coherently formatted.	No references provided.