

COURSE OUTLINE

ENGR 446 – Technical Report

Term –FALL 2020 (202009)

Instructor

Dr. Babak Manouchehrinia
E-mail: bmn14@uvic.ca

Office Hours

Days: Thursday
Time: 5:30 to 6:30 PM
link: <https://uvic.zoom.us/j/9286986526>

Course Objectives

The course helps develop the students' ability to:

- Select and appropriately scope an engineering problem.
- Explicitly determine the objectives and aims associated with the problem.
- Assess a number of potential solutions.
- Conduct a detailed technical analysis of the chosen solution to determine if and how it will fulfil the objective and aims of the project.
- Written communication of a technical analysis, in a concise and defensible manner.
- Evaluate and communicate limitations.
- Develop ideas for further work based of their analysis.
- Produce a complete and concise Executive Summary of their work.

Learning Outcomes

At the end of this course, students will have produced a major technical report demonstrating written communication and analytical skills.

LECTURE DATE(S) -Section(s): A01 / CRN 11423 &11424

There will be no in-class lecture, as per [UVic's COVID-19 response - (<https://www.uvic.ca/covid-19/>)]. Instead, PowerPoint slides, with accompanying voiceover, will be available in BrightSpaces to help guide students in their topic selection, and to review common report errors including plagiarism. Students with questions are encouraged to contact the course instructor.

TA (emails):

Fatima Talebzadeh
Mirali Seyed Shariatdoust

Email

talebzadeh@uvic.ca
shariatdoust.ali@gmail.com

Required Textbook

No book is required for this course.

Online Course Delivery:

As this course will be conducted online during this term, students will need to complete assignments/labs online. The students will require access to a computer which has the following software installed: PDF viewer and Microsoft Office.

References:

Assessment:

| | | |
|------------------------|-----|---|
| Topic submission form* | %5 | Due Dates: Monday, September 21 @ 11:59pm |
| Project Background | %10 | Due Dates: Friday, October 9 @ 11:59pm |
| Engineering Analysis | %10 | Due Dates: Friday, October 30 @ 11:59pm |
| Final report** | %75 | Due Dates: Friday, November 27 @ 11:59pm |

* A topic resubmission form, if required, is due by Friday, September 25 @ 11:59pm.

**Except in situations where legitimate academic concession exists (see Calendar), late topic resubmissions and late reports will be reduced by 5% of their total grade, for each day late.

I have furnished more details about each of the assessment scheme in Appendix A. Please take time to read through it.

Important: All deadlines and schedules for this course will reference Pacific Daylight Time until November 1, 2020, and then Pacific Standard Time.

Note:

Failure to submit the topic submission form and project background will result in a grade of N being awarded for the course.

The final grade obtained from the above marking scheme for the purpose of GPA calculation will be based on the percentage-to-grade point conversion table as listed in the current Undergraduate Calendar.

<https://www.uvic.ca/calendar/archives/202009/undergrad/index.php#/policy/S1AAgoGuV?bc=true&bcCurrent=14%20-%20Grading&bcGroup=Undergraduate%20Academic%20Regulations&bcltemType=policies>

There will be no supplemental examination for this course.

Note to students:

Students who have issues with the conduct of the course should discuss them with the instructor first. If these discussions do not resolve the issue, then students should feel free to contact the Chair of the Department by email or the Chair's Assistant to set up an appointment.

COURSE LECTURE NOTES

Unless otherwise noted, all course materials supplied to students in this course have been prepared by the instructor and are intended for use in this course only. These materials are NOT to be re-circulated digitally, whether by email or by uploading or copying to websites, or to others not enrolled in this course. Violation of this policy may in some cases constitute a breach of academic integrity as defined in the UVic Calendar.

Course Withdrawal Deadlines:

- September 22, 2020: Withdrawal with 100% reduction of tuition fees
- October 13, 2020: Withdrawal with 50% reduction of tuition fees
- October 31, 2020: Last day for withdrawal (no fees returned)

Accommodation of Religious Observance:

<https://www.uvic.ca/calendar/archives/202009/undergrad/index.php#/policy/r1q0gofdN?bc=true&bcCurrent=10%20-%20Accommodation%20of%20Religious%20Observance&bcGroup=Undergraduate%20Academic%20Regulations&bcItemtype=policies>

Policy on Inclusivity and Diversity:

Engineering: <https://www.uvic.ca/engineering/about/equity/index.php>

Academic Calendar:

<https://www.uvic.ca/calendar/archives/202009/undergrad/index.php#/policy/HkQ0pzdAN?bc=true&bcCurrent=%20General%20University%20Policies&bcGroup=General%20University%20Policies&bcItemtype=policies>

Standards of Professional Behaviour:

You are advised to read the Faculty of Engineering document Standards for Professional Behaviour, which contains important information regarding conduct in courses, labs, and in the general use of facilities.

<https://www.uvic.ca/engineering/assets/docs/professional-behaviour.pdf>

Academic Integrity

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult the entry in the current Undergraduate Calendar for the UVic policy on academic integrity.

https://www.uvic.ca/calendar/archives/202009/undergrad/index.php#/policy/Sk_0xsM_V?bc=true&bcCurrent=08%20-%20Policy%20on%20Academic%20Integrity&bcGroup=Undergraduate%20Academic%20Regulations&bcItemtype=policies

Equality:

This course aims to provide equal opportunities and access for all students to enjoy the benefits and privileges of the class and its curriculum, and to meet the syllabus requirements. Reasonable and appropriate accommodation will be made available to students with documented disabilities (physical, mental, learning) in order to give them the opportunity to successfully meet the essential requirements of the course. The accommodation will not alter academic standards or learning outcomes, although the student may be allowed to demonstrate knowledge and skills in a different way. It is not necessary for you to reveal your disability and/or confidential medical information to the course instructor. If you believe that you may require accommodation, the course instructor can provide you with information about confidential resources on campus that can assist you in arranging an appropriate accommodation. Alternatively, you may want to contact the Centre for Accessible Learning located in the Campus Services Building. <https://www.uvic.ca/services/cal/>. The University of Victoria is committed to promoting, providing, and protecting a positive, supportive, and safe learning and working environment for all its members.

Course Lecture Notes:

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Sexualized Violence Prevention and Response at Uvic:

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:

Where: Sexualized violence resource office in EQHR; Sedgewick C119

Phone: 250.721.8021

Email: svpcoordinator@uvic.ca

Web: www.uvic.ca/svp

Office of the Ombudsperson:

The [Office of the Ombudsperson](https://uvicombudsperson.ca/) is an independent and impartial resource to assist with the fair resolution of student issues. A confidential consultation can help you understand your rights and responsibilities. The Ombudsperson can also clarify information, help navigate procedures, assist with problem-solving, facilitate communication, provide feedback on an appeal, investigate and make recommendations. Phone: 250-721-8357; Email: ombuddy@uvic.ca, Website: <https://uvicombudsperson.ca/>

Appendix A

1. Topic submission form

The topic submission form demonstrates that an appropriate topic has been chosen and allows the student to initially formulate their planned approach to their topic. The topic form is found on the Brightspace site and is due to be submitted online, via Brightspace, by Monday, September 21 @ 11:59pm. Except in situations where legitimate academic concession exists (see Calendar), **no late submissions will be accepted**, however, a topic re-submission form can still be submitted with the associated penalties (see below.)

This assignment is worth 5% of your total course mark.

A topic re-submission form may be required because:

- It has been requested or recommended following evaluation of your topic submission form; and/or
- The student decided to change their topic.

Topic **re-submission** forms are due by **Friday, September 25 @ 11:59pm**, except in situations where legitimate academic concession exists (see Calendar.) **Marks for topic re-submissions will be reduced by 5% of their total grade for each day late.** If a re-submission was required, the final mark will be the highest out of the two topic submissions.

Topic Selection

The topic of the ENGR 446 report should be related to a project of your own choosing – **not directly related to a co-op work term**. All topics must receive prior approval using the topic submission form.

The ENGR 446 final report is expected to have a significant analysis component that addresses engineering issues, and demonstrates '*engineering thought process*'. A report which is purely descriptive and qualitative without a quantitative analytical component (e.g. a user manual or an overview) may expect to receive a very low or possibly even a failing grade.

Students will not be allowed to work on projects upon which they have previously worked, or are currently working, in courses nor in co-op placements. A new project must then be proposed. Students who plan to submit a report on their work in a student club/team must clearly explain their intended contribution to the club over this term.

2. Milestone Report 1: Project Background

This assignment covers the background, objectives and potential approaches to your engineering problem. The content of this report can be reused, if desired, in the final report. Further details on the requirements of this report are provided in the *Guidance to Milestone Report 1: Project Background*, available on Brightspace.

This report is due to be submitted online, via Brightspace, by **Friday, October 9 @ 11:59pm**; **no late submission will be accepted** except in situations where legitimate academic concession exists.

This assignment is worth **10%** of your total course mark.

3. Milestone Report 2: Engineering Analysis

This assignment covers the engineering analysis of your engineering problem. The content of this report can be reused, if desired, in the final report. Further details on the requirements of this report are provided in the *Guidance to Milestone Report 2: Engineering Analysis*, available on Brightspace.

Milestone Report 2: Engineering Analysis is due to be submitted online, via Brightspace, by **Friday, October 30 @ 11:59pm; no late submission will be accepted** except in situations where legitimate academic concession exists.

This assignment is worth **10%** of your total course mark.

4. Final Report

You may include material that has also been provided in the other assignments listed above. Further details on the requirements of this report are available in the *ENGR446 Final Report Guidance*, on Brightspace.

The ENGR 446 final report is due to be submitted online, via Brightspace, by **Friday, November 27 @ 11:59pm**. Except in situations where legitimate academic concession exists (see Calendar), **marks for late reports will be reduced by 5% of their total grade for each day late**.

This assignment is worth **75%** of your total course mark.