Faculty of Engineering and Applied Science

Co-operative Education Office



<u>Fall 2024</u> <u>COURSE OUTLINE – ENGI 002W</u>

This Outline provides information on the requirements, expectations, and evaluations for Work Term 2. It should be reviewed very carefully to ensure students' work progresses smoothly. Additional forms and information can be found on the co-op webpage at <u>https://www.mun.ca/coop/programs/engineering/work-term-dates-and-forms/.</u>

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CRITICAL DATES (for all work terms*):

| Monday, 26 Aug 2024 | Work Term Begins. Complete <i>Work Term Confirmation</i> . online in MyMUNLife. |
|----------------------------|--|
| Friday, 20 Sep 2024 | Deadline for submission of <u>Work Term Objectives Form</u> Submit via e-mail: coopeng@mun.ca |
| Friday, 18 Oct 2024 | Deadline for submission of <i>Work Report/Presentation</i> <i>Outline</i> . Complete online in MyMUNLife. |
| Friday, 20 Dec 2024 | Work Term ends and deadline for submission of: <i>End of Work Term Feedback Form</i> – Your Supervisor will receive an e-mailed link to the online form before this date. <i>Communications Component Deliverables</i> – Submit as per instructions from assigned ASM-CE. If mailing deliverables, the postmark date will be considered the received date. |
| Tuesday, 7 Jan 2025 | Academic courses begin for Winter Semester |
| January, 7, 8, 9 & 13 2025 | Oral Presentations. Students who are presenting must be prepared to present at this time. Schedule will be available before the end of the work term. |

STATEMENT OF EXPECTATIONS OF STUDENT CONDUCT

Like Professional Engineers, engineering students are expected to behave in a professional manner at all times. Students are encouraged to conduct themselves in a manner consistent with the the Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL) code of ethics. MUN has two sets of rules to address inappropriate behaviour by students, one pertains to academic offences and the other to non-academic offences. Both sets of rules can be found in the 'Regulations' section of the University Calendar. It is strongly recommended that students read and follow these rules because the penalties can be severe, the severest being expulsion from the University.

Organizations typically provide Internet access to their employees and work term students. These organizations often have specific policies governing Internet usage, including personal use. These policies would normally be explained during the job orientation, typically during the first few days at work. Students must follow these policies and should expect that their employer will monitor usage of the Internet during the work term. Students should also limit their use of personal cell phones during working hours as they may distract from assigned work activities. If employers do not address these issues during initial orientation, it is strongly suggested that students ask their supervisor for specific guidance.

Students should also be aware of and follow their employer's rules around the use of products such as recreational or medicinal drugs and alcohol which may be legal to use but may not be permitted by their employer. The use of such products may affect a student's employability.

PLAGIARISM

Plagiarism is a serious academic offence at Memorial University. Cases involving suspected plagiarism in a student's work term deliverables will be addressed as per the Procedures for Resolution of Alleged Academic Offences by the Senate Committee on Undergraduate Studies, stated in the University Regulations section of the Memorial University Calendar.

Original work, completed wholly by you, is expected to be submitted in this course. The use of artificial intelligence tools, such as ChatGPT is not permitted for work term deliverables to the Co-operative Education Office and their use would be considered Academic Misconduct.

COURSE DESCRIPTION: ENGINEERING 002W

Engineering Work Term 2 requires students, under supervision, to contribute positively to the engineering and problem solving processes practised in the work environment. They are expected to set objectives, take direction, work independently as required, learn professional behaviours, and function as effective team members. An ability to investigate work-related concepts should be demonstrated. Students should become better familiarized with the use of engineering tools, data analysis, prioritization of assignments, and effective communication of technical information.

002W LEARNING OUTCOMES / SKILLS EXPECTATIONS

There are a key set of skills that will be evaluated based on the End of Work Term Feedback Form. These skills are demonstrated in a number of ways, and considered important to an engineer's abilities. The expectations for these skills increase with progression through the engineering education program. During more junior work terms (e.g., work terms 1 and 2), students should demonstrate these skills at a beginner level, working their way to demonstrating the skill at an intermediate level (e.g., during work terms 2 and 3), before demonstrating the skills at a more advanced level in senior work terms (e.g., work terms 4 through 6). Students who meet the expectations listed below would get a rating of 3 on the 1-5 point rating scale. Exceeding these expectations would result in a rating of 4 or 5 for that skill/quality. Conversely, if a student does not meet the expectations they may receive a 1 or 2 rating for that skill/quality. The Skills Expectations for Work Term 2 are listed below:

- **1. Initiative:** Take independent action in completing assigned tasks, and show motivation in seeking new work
- 2. Organization and Planning: Prioritize work assignments based on their importance, and plan and use time efficiently and productively to complete work
- **3. Quality of Work:** Produce good quality work with few errors, checking own work with minimal assistance
- 4. **Productivity:** Independently learn new material to consistently complete an assigned amount of work on time
- 5. Written Communication: Communicate ideas and information in writing clearly, concisely, and in an organized way, with some review and editing required
- 6. Verbal Communication: Verbally express ideas and information clearly, concisely, and in an organize way, with minimal clarification required; comfortable speaking to small group

- 7. Work Independently: Work independently on assigned tasks and projects, taking direction and seeking assistance as required
- 8. **Teamwork:** Be an effective team member by working collaboratively and cooperatively with others and assuming responsibility for tasks
- 9. Problem Solving: Contribute to engineering problem analysis and solution generation
- **10. Project Management Techniques:** Demonstrate understanding of project management techniques and incorporate into work as instructed
- **11. Safety and Environment:** Understand the purpose of safety procedures, and demonstrate safe work practice
- **12. Ethics and Integrity:** Demonstrate knowledge of ethical standards, ethical issues, and ethical decision-making, and display honesty and fairness in interactions with others
- **13. Appreciation of Diversity**: Develop an understanding of and appreciate diversity and inclusion in the workplace; demonstrating respect for individual differences
- **14.** Adaptation to Organization's Rules and Policies: Recognize, understand, and follow an organization's rules and policies, with minimal guidance
- **15. Response to Supervision:** Openly accept direction and feedback and respond positively, incorporating feedback into work as required
- **16. Dependability:** Gain the trust of others by being reliable and consistent in completing work and in meeting commitments, while demonstrating a very good work ethic

WORK TERM DELIVERABLES

Students must submit on the date indicated above the following for Work Term 2

Work Term Confirmation Work Term Diary (to be completed but not submitted) Work Term Objectives Presentation Outline Presentation Package End of Work Term Feedback Form Oral Presentation

WORK TERM CONFIRMATION FORM

The ECEO depends on the Work Term Confirmation Form to confirm that students have arrived safely at work and for all means of contact while they are on their work term. **It is extremely important that the form is completed online in MyMUNLife within a couple of days of starting work.** Although the online form will appear as 'Approved' when the position is created, students must still input the required information. The WTC must be updated whether the student is in a new position, or is returning to a previous employer. <u>If any of the information changes during the term, it should be updated online and the student's ASM-CE (Academic Staff Member in Co-operative Education) notified.</u>

WORK TERM DIARY

In Work Term 2, the Work Term Diary must be presented to the ASM-CE during the monitoring meeting for review, but it is not required to be submitted for evaluation. Beyond work term two, all students are highly encouraged to keep a daily diary during each of their remaining work terms, as a best practice. Further details on the Work Term Diary can be found in the Work Term 1 Course Outline.

WORK TERM OBJECTIVES

Within the first three weeks of the work term, the student, in consultation with their supervisor will establish performance and personal/professional objectives for the work term. The objectives should also include identification of specific skills the student should develop in order to perform the duties and responsibilities of the position. Through this process, the student will acquire new skills or further develop existing skills required in the workplace. The key ingredient to a successful work term is the student's ability or openness to learn and/or further develop work related skills (see the Student Success Guide for more details on writing SMART Objectives). The student should submit a copy of the Work Term Objectives form to the ECEO (coopeng@mun.ca) for review and keep a copy for review later in the term. Students who start after the official first day of the work term should complete their objectives within the first two weeks of work.

PRESENTATION OUTLINE

The Presentation Outline shall be submitted via the appropriate form in MyMUNLife for review and topic approval by the stipulated deadline date (typically by the end of the second month of the work term). By that time, students are expected to have developed an appreciation and insight into the operations of their job to identify a potential topic and have it agreed to by the supervisor. The student should select a topic that is relevant, manageable, doable, and commensurate with their level in the engineering program.

To allow the assigned ASM-CE to provide formative feedback to the student after review the Work Term 2 Presentation Outline shall consist of:

- a title appropriately reflecting the planned scope and topic
- a purpose why the topic was selected, what it will cover, and how it will be useful
- a preliminary Table of Contents identifying the major sections and subsections

There should be no confidential material in an Oral Presentation.

PRESENTATION PACKAGE

The Presentation Package (defined in the appropriate appendix below) may be submitted electronically to a student's ASM-CE. It must be a single (one) professionally-created PDF file of all required components including cover page, letter of transmittal, appendices, etc.

The Presentation Package evaluation criteria is described in the appropriate appendix below.

ORAL PRESENTATION

The Oral Presentation evaluation criteria is described in the appropriate appendix below.

CONTACT DURING THE TERM

Students will be interviewed on-site by their assigned ASM-CE on most work terms. The ECEO combines this activity with an on-going program of marketing co-operative education to potential employers. These on-site visits are typically scheduled in the middle third of the term. If questions arise early in the work term, students should contact the ECEO right away.

The Work Term confirmation information entered in MyMUNLife by students during the first week of work will allow the ECEO to communicate with students and their supervisors during the term.

WORK TERM AWARDS

Students are encouraged to give their best effort to all aspects of the work terms, which usually present many opportunities to examine the role and contribution of professional engineering to society. The chance to compare theory from the classroom with practice in the field can be very rewarding.

Work Term awards are an incentive for students to give their best effort each semester and are a way for employers to recognize their students. Employers are encouraged to nominate exceptional students for various awards each semester.

Please refer to the Engineering Co-operative Education Student Success Guide for details on awards that may be relevant.

CONFIDENTIAL REPORTS/PRESENTATIONS

Students should discuss their work report or presentation topics with their supervisors early in the term and determine if any of the material is confidential because all required work term communications components must be submitted to the ECEO as the student's assigned ASM-CE is solely responsible for grading them. When sensitive or proprietary information is involved, the Non-Disclosure Request Form (NDRF) should be submitted. Confidential or proprietary information must not be included in any communications deliverable unless permission has been received from the employer to submit the confidential material. If there are ongoing concerns about confidential material, the student should consider changing to a less sensitive topic.

Once the NDRF is submitted, the student's ASM-CE will complete and sign an agreement that provides assurance that no information will be transmitted to any other person. Students should not submit confidential materials unless the ASM-CE has already signed a Non-disclosure agreement. All permitted confidential submissions must be watermarked or stamped "Confidential" on every page, including the front matter.

Some communications components may now be submitted electronically. Note that it is difficult for ECEO to guarantee the appropriate destruction of these electronic files. It is very important for students to discuss electronic submissions with their employers so the employer understands these limitations around

confidentiality. If they are not comfortable with electronic submission of a confidential report or presentation package, the student may need to consider amending their topic or the material included.

Following an opportunity to review by the student, the communications component will be destroyed by the ECEO if submitted in paper format, or the ASM-CE will follow MUN Information Technology office's best practices to delete any electronic submissions.

TIMELY SUBMISSION OF DELIVERABLES

As students progress through the Engineering program they learn that meeting deadlines is part of the role of a professional engineer. In the case of reports and to some extent other work term documents, students should realize there are really two clients involved – the employer and the University, with responsibilities to both. Students are often challenged to meet the expectations of both these clients and this is a further measure of their ability to manage time and resources.

ASMs-CE depend on feedback from supervisors, with the last two weeks of work being a convenient time to complete these documents. Students should make an effort to discuss their report and performance during that time. The timely submission of all work term documents is taken into consideration in the performance evaluation. Receipt of the report and feedback documents allows the Engineering Co-operative Education Office to complete overall evaluations and meet the Registrar's deadline for submission of grades.

It is suggested that a final version of the report or presentation summary/slide package be submitted to the student's supervisor at least two weeks before the work report deadline. After the document is checked and cleared for proprietary information it should be submitted to the ECEO in the required format. The absolute deadline is the published end date of the work term, after which documents are considered **late**.

EXIT INTERVIEWS

Often the opportunity to grow and take on an increased level of responsibility comes with returning on a subsequent work term with an employer. This should be balanced by the potential to gain a greater diversity of experiences during the co-op program. If the nature of the work term and the potential for additional learning exists, students are encouraged to consider returning to work with the same employer on a subsequent work term.

At the end of the work term, students are encouraged to arrange an exit interview with their employer and, separately consult with their ASM-CE to review the work term and discuss prospects for the next work term. The employer meeting would normally include the supervisor and a human resources representative.

CONTACT INFORMATION:

Telephone: E-mail: 709-864-8816 coopeng@mun.ca Mailing address: Engineering Co-operative Education Memorial University of Newfoundland S.J. Carew Bldg., EN-4021 St. John's, NL A1B 3X5

APPENDIX A WORK TERM EVALUATION

The work term will be evaluated on the basis of the work term communications component and work term performance, as described below.

Communications Component

The written (or oral) communication component is intended to develop the following skills:

- the ability to research the subject appropriately, to conduct the necessary analysis and to effectively substantiate conclusions and recommendations,
- the ability to summarize findings and communicate, in writing or orally, in a professional manner, and,
- the ability to apply concepts learned in the academic environment to learning objectives in the work environment.

The communication component will be evaluated by an ASM-CE or delegate.

Evaluation of the communication component will result in one of the following marks:

Outstanding - the communication component quality is exceptional; there is clear evidence of the following:

- comprehensive knowledge of the subject matter and principles used,
- high degree of originality and independence of thought,
- superior ability to organize and critically analyze ideas,
- outstanding ability to communicate,
- good planning,
- outstanding effort put into the production of the communication component.

To be considered outstanding, the communication component should have:

- all required sections completed, including letter of transmittal, summary and references,
- very few spelling, grammar and word processing errors,
- a professional presentation, and
- technical content verified by the employer.

Above Expectations - the communication component is of good quality with evidence of:

- substantial knowledge of the subject matter,
- moderate degree of originality and independence of thought,
- good ability to organize and analyze ideas,
- ability to communicate clearly and fluently,
- good planning,
- substantial effort put into communication component production.

Satisfactory - the communication component meets minimum requirements with evidence of:

- acceptable grasp of the subject matter,
- some ability to organize and analyze ideas,

- ability to communicate adequately,
- acceptable planning, and
- acceptable effort put into report production.

Marginal Pass - the written communication component has a number of weaknesses but would meet expectations after modifications are made. The communication component should, as a minimum, demonstrate evidence of:

- adequate knowledge of the subject matter,
- adequate ability to organize and analyze ideas,
- adequate ability to communicate,
- adequate planning, and
- adequate effort put into communication component production.

Fail - the communication component is unacceptable showing evidence of one or more of:

- inadequate knowledge of the subject matter,
- failure to complete required work,
- inability to organize and analyze ideas,
- inability to communicate,
- inability to plan the production of the communication component,
- inadequate effort put into communication component production,
- some or all of the report is plagiarised

At times, an ASM-CE may request that the student revise and resubmit their work report rather than be given a mark of *Fail*.

- When a student has been given the opportunity to resubmit the communication component, the student will not be eligible for a mark other than *Fail* or *Marginal Pass*.
- Normally, a student will be given two-weeks to resubmit the communication component.
- If the communication component is not revised to an acceptable standard within the specified time, a *Fail* will be recommended.

Work Term Performance

Work term performance is based upon several elements:

- An ASM-CE's assessment of the employer's End of Work Term Feedback Form. This form includes: feedback on the key set of skills outlined in the Learning Outcomes/Skills Expectations section above; and the ability to meet the objectives set at the beginning of the work term, taking into account the challenges and opportunities available to the student.
- Information gathered from contact with the student, employer, and others in the workplace.
- Timely receipt of all work term documentation by established deadlines, as the ability to plan and meet deadlines is essential to a Professional Engineer.

The performance marks below take into account how well the student meets these elements.

Outstanding - the student has successfully completed an excellent work term. Considerations include:

- exceeds employer's expectations in all areas,
- maintains an excellent working relationship with the ECEO,
- all documentation submitted in a timely manner.

Above Expectations - the student has successfully completed a very good work term. Considerations include:

- exceeds or meets employer's expectations in most areas,
- maintains a good working relationship with the ECEO, and
- all documentation received.

Satisfactory - the student has successfully completed a good work term. Considerations include:

- meets employer's expectations,
- maintains an acceptable working relationship with the ECEO,
- most documentation received.

Marginal Pass - the student meets the minimum requirement of the work term. The student will be monitored and is expected to improve in the next work term. Considerations include:

- did not meet all employer's expectations,
- working relationship with the ECEO needs improvement,
- some of the documentation late or not received.

Fail - the student's performance is unacceptable, demonstrated by one or more of:

- did not meet employer's expectations,
- poor working relationship with the ECEO, and
- most or all of the documentation not received.

Overall Work Term Evaluation

The overall evaluation of each work term will be based upon the communication component and work term performance and will result in the recommendation of one of the following grades:

Pass with Distinction - to receive a recommendation of *pass with distinction*, a student needs to obtain an evaluation of *outstanding* in both the communication and work performance components of the work term.

Pass - to receive a recommendation of pass a student must achieve an evaluation of *marginal pass* or better in both the communication component and the performance component of the work term.

Fail - a student receiving a *fail* in either or both the communication and performance components of the work term will receive a recommendation of *fail*.

For promotion from the work term, a student must obtain Pass with Distinction or Pass.

A student who receives a grade of Fail on any work term will be required to repeat that work term prior to graduation regardless of whether the work term is mandatory or elective.

Students should be aware of the University's policy on plagiarism. More information can also be found on the Writing Centre's web page <u>https://www.mun.ca/writingcentre/understanding-plagiarism/</u>

APPENDIX B ORAL PRESENTATION

General

Engineers are expected to be able to give a variety of presentations throughout their careers. These may take many different formats based on the need and audience. Being able to express ideas to colleagues, senior management, or other non-technical individuals is an important skill that will improve with practice. There are three main reasons to give a presentation: to inform; to persuade, as with a sales presentation; or to entertain. The Work Term Oral Presentation is to inform. Requiring students to complete an oral presentation in their program will provide valuable practice and feedback for future school and workplace presentations.

Permission to undertake an Oral Presentation in Work Terms 5 or 6 shall be at the discretion of the ASM-CE, upon review of previous report and presentation grades.

Presentations take place on campus usually during the first or second week of the following academic term. All students must present during the time specified. If for some specific reason a student is unable to present at that time, they must follow the guidelines established for a deferred exam as stated in the University Calendar and the Co-op Rules and Regulations Handbook. Faculty members and students' supervisors are encouraged to attend the presentations. Evaluation and feedback of the oral presentation will be carried out by ASM(s)-CE, and others attending the presentation, using the criteria attached. Note that the Presentation Package must be submitted to the ECEO before a student completes the oral presentation.

The length of the presentation is 10 minutes with five minutes for questions. Presentations will be given a +/- one minute leeway. Outside of this time, overall evaluation may be impacted. Material delivered in an oral presentation should differ from written material in its level of detail, organization and presentation. In a 10-minute presentation, excessive detail will confuse the audience. Students should concentrate on a couple of main points and keep reminding the audience what the central theme is by relating each major section of the presentation to the theme. It is also important that students customize their presentations to the audience – for instance, all industry related terms should be fully explained.

The strategy should be to: "tell the audience what you are going to say", "say it", and "tell them what you have said". An oral presentation should create awareness and an interest in the topic that should generate questions at the end.

For useful resources to assist with the completion of this Communications Component deliverable, see the Brightspace shell here: <u>Work Term Communications Components – Online Support Materials</u>

Topic

The topic of the presentation should relate to the student's work term activities, but it is not a presentation on the work term duties; **the presentation should focus on the project, not the student's role in the project.**

Presentation Package

Students are required to submit a Presentation Package which includes: an overview of the presentation; and the presentation slides. The overview of the presentation should be a **minimum of 750 words up to a maximum of 1000 words** in length. Writing succinctly is an important skill, so students should avoid going over the recommended maximum word count.

Presentation Package Structure

The submitted package should contain the following sections. The standard report sections are further described in the Work Term 001W Course Outline:

- Cover Page
- Letter of Transmittal
- Title Page
- Table of Contents @
- Presentation Overview, which contains:
 - \circ Introduction
 - Main Discussion
 - Results@
 - Conclusions
 - Recommendations @
- List of References
- Presentation slides

* Items marked @ above are considered optional based on the submission.

Presentation Package Guidelines

- Presentation Overview and presentation slides must be submitted as a single pdf document.
- Overview should be 750 to 1000 words of double-spaced, typewritten material.
- When determining length, word count only includes the body (introduction to conclusions or recommendations, if included). It does not include the back matter (reference list, appendices), or any front-matter (material before the introduction).
- Should be written as an overview of the presentation topic, and not a slide by slide description.
- Presentation Overview shall be written in the formal style including using appropriate language, and be written in the 3rd person.
- Overview and presentation slides must be appropriately referenced and cited in the same manner as other academic reports.
- Limit submitted presentation slides to no more than two per page.

Oral Presentation

Presentation Structure

The general structure of the presentation slides should be as follows:

- Introduction students should introduce themselves and give a brief overview on the company or department they worked with. The role of the student may be explicitly discussed here, or implicitly throughout the presentation.
- Agenda a 'Table of Contents' of what is being discussed.
- Background / Problem Definition an introduction to the topic, its purpose, objective, and scope.
- Body discusses some of the details of the topic, again bearing in mind the audience and not getting bogged down in detail.
- Conclusions summarizes the key points of the presentation, which may also include the essential features of a design or the significant outcomes of an investigation.
- Recommendations (if required) provides a recommended course of action.
- Questions the presenter sometimes has to encourage the audience to ask questions by posing one themselves, or asking the audience a question.

Presentation Guidelines

Note that all guidelines will be considered as part of the evaluation of the oral presentation.

- Students must develop their slides in a program that is compatible with MS PowerPoint (2003)
- Limit slides to one idea per page.
- Limit slides to at most 4-5 bullets per page.
- Use consistent sentence styles on each page i.e., actions starting with verbs, or descriptions starting with modifiers.
- Use a large enough font to be seen from the back of the room e.g., 35+ point for titles and 18-35 point for bullets.
- Ensure tables and figures are legible from a distance.
- Use a letter style that is easily read by viewers at the back of the room, avoid script fonts.
- Use as few words as possible. Use graphs, charts, a picture or key words.
- As a general guide, use one slide per minute of presentation.
- Reference all material i.e., pictures, graphs, etc.
- Avoid use of distracting slide transitions.
- Embedded videos or animations that are relevant to the presentation and are less than 15 seconds are permitted.
- Videos or animation should not include sound, as the presenter is expected to be able to speak over them.

Additional Guidelines and Areas for Evaluation

- Organization of Material/Logical Order –present the material in a way to walks the audience through the story logically or in a natural flow
- Internal Summaries/Transitions ensure that the transition from one area or topic to the next logical
- Main Points Highlighted provide a suitable explanation of the key presentation topics given the time provided; ensure that there is not too much material to cover it all suitably
- Well Defined Summary the summary should bring together the key points and conclusions/recommendations as necessary
- Referencing of Sources all material from other sources must be appropriately referenced
- Appropriate Subject the selection of a topic that is related to the student's work is important. The topic should also be appropriate for the audience.
- Knowledge of Subject students will be evaluated on how well they appear to know the subject they are speaking about. This may show through appropriate word choice, being able to explain complex topics, and in response to questions.
- Level of Challenge students should select a topic that contains an appropriate level of technical challenge depending on the employer and which work term the student has just completed.
- Idea(s) Clearly Explained it is critical to understand the audience and explain topics at a level that can be understood. Using examples, figures, or short animations can help in this area.
- Delivery
 - Posture/Presence/Appearance face the audience not the screen, avoid leaning on the podium, keep hands out of pockets, avoid playing with hair, etc.
 - Vocal Ability speak clearly and enunciate words.
 - Speed of Delivery maintain a moderate rate of speech.
 - Mannerisms / Gestures avoid excessive hand movements or filler words (umms).
 - Eye Contact maintain good eye contact with all of the audience.
 - Show confidence and enthusiasm by varying tone of voice.

- Use/Quality of AV Material the slides should be well put together, look attractive, often using a template to improve cohesiveness.
- Time Management the presentation is to be 10 minutes, +/- one minute. Completing the presentation outside of this time will impact the final evaluation.
- Response to Questions display confidence and directly answer the questions asked, if possible.
- Audience Interest this includes audience interaction and whether appropriate questions are posed.
- Students are required to be on time for the start of the session, and to attend the entire session on the day they are to present.
- Students will be asked to actively participate in each session, which includes asking questions and providing feedback to their classmates using the following form.

Presenting Tips

- Save a copy of the slide package in electronic format on a memory stick to bring to the presentation session. Students may not present using their own laptops.
- Students should have a printed back-up copy should their memory stick fail.
- Perform a trial launch of the presentation on a computer other than the one on which it was created to help confirm that the presentation will work on presentation day.
- Use notes or cue cards while presenting to keep on track. These are usually key words or short sentences.
- Practise the presentation to a friend or colleague. This will determine its final duration, allow fine tuning of the presentation and improve confidence. It is not possible to be too prepared

Evaluation

The Presentation Package and performance in the Oral Presentation are evaluated in conjunction with each other to assign an overall evaluation for the communications components.

The reviewer may require a student to give the oral presentation a second time if it is considered less than adequate. This second presentation would have to be completed before a final mark is assigned. Students who are required to re-present will receive a grade no higher than "Marginal Pass".

Both the Presentation Package and the Oral Presentation are required. A student not completing one or both components may receive a grade of "fail" for the work term communications component.

Each component will be assessed according to the following:

Presentation Overview

Structure and Format

- Cover and Title Page
- Letter of Transmittal
- Table of Contents (if required by the content)
- Proper binding
- Appropriate font
- Correct use of page numbering
- Overall length
- Easy to read layout
- Logical order of material
- Appropriate sections included (if required by the content)

- Tables and figures properly formatted (if included)
- Tables and figures properly cross-referenced in the text

Technical Quality

- Suitability of Topic
- Introduction
- Main discussion sections
 - o sufficient technical discussion/content,
 - \circ information and analysis (if included) is accurate,
 - $\circ\,$ content is consistent with stated purpose of the presentation,
 - $\circ\,$ tables and figures accurate and complete (if included),
 - \circ thorough, yet concise,
 - \circ original
- Conclusions
- Recommendations (if required)

Referencing and Resources

- Follows a consistent referencing style (e.g., IEEE, APA)
- Number of references listed
- Consistent/proper referencing of material
- In-text citations included where required, for both Presentation Overview and slides
- Variety of reference material used
- Validity/authority of the reference material used

Communication Effectiveness

- Writing is in the third person
- Use of contractions is avoided
- Vague language is avoided; material is qualified and quantified
- Ambiguous pronouns are avoided
- Unnecessary wordiness and redundancy are avoided; writing is concise
- Figures of speech are avoided
- Run-on sentences are avoided
- Definitive language is supported with evidence
- Word choices are appropriate
- Formal writing style is used
- Acronyms are correctly defined
- Punctuation is correct
- Spelling is correct
- Grammar is correct
- Parallel construction is used in sentences and lists
- Sentence structure is correct
- Paragraph structure is appropriate (one main concept with supporting details)
- Writing is clear
- Content is written for the appropriate audience
- Tables and figures included (if required) to support descriptions

Presentation Slides

• Limit slides to one idea per page.

- Limit slides to at most 4-5 bullets per page.
- Limit language to short bullets and avoid long sentences
- Write bullets using parallel language (Actions starting with verbs, or descriptions starting with modifiers)
- Use a large enough font
- Ensure tables and figures are large enough to be legible from a distance.
- Use a font style that is easily read by viewers at the back of the room, avoid script fonts.
- Use as few words as possible, balanced with the use of graphs, charts, or pictures.
- Reference all material including pictures, graphs, etc.
- Agenda included
- Organization of material is in a logical order, and uses appropriate internal summaries/transitions
- Presentation includes appropriate background and introduction to the student, role, and project
- Main points are highlighted
- Well defined conclusions/recommendations (if required)

Oral Presentation

Introduction

- Agenda
- Background / Problem Definition
- Objective
- Topic
- Student/role

Organization of Material

- Logical Order
- Internal Summaries/Transitions
- Main Points Highlighted
- Well Defined Summary
- Referencing of Sources

Content

- Appropriate Subject
- Knowledge of Subject
- Level of Challenge
- Idea(s) Clearly Explained

Delivery

- Posture/Presence/Appearance
- Vocal Ability
- Speed of Delivery
- Mannerisms / Gestures
- Eye Contact
- Use/Quality of AV Material
- Confidence/Enthusiasm
- *Time Management
- Response to Questions
- Audience Interest

*Note that going under or over the prescribed time may result in reduction of overall grade.

WORK TERM PRESENTATION

STUDENT'S FEEDBACK FORM

| Name of Presenter: | | Date: |
|---|----------------|----------------------|
| Introduction Agenda Background / Problem Definition Objective Topic Student/role | Weak -> Strong | Additional Comments: |
| Organization of Material Logical Order Internal Summaries/Transitions Main Points Highlighted Appropriate Conclusions/Recommendations Referencing of Sources | | Additional Comments |
| Content Appropriate Subject Knowledge of Subject Level of Challenge Idea(s) Clearly Explained | | Additional Comments: |
| Delivery Posture/Presence/Appearance Vocal Ability Speed of Delivery Mannerisms / Gestures Eye Contact Use/Quality of AV Material Confidence/Enthusiasm Time Management Response to Questions Audience Interest | | Additional Comments: |

OVERALL COMMENTS: (Strengths / Areas of Improvement)

How would you rate this presentation?

□ Satisfactory □ Very Good

□ Excellent

APPENDIX CREFERENCING

Introduction

Referencing is the act of acknowledging the sources of material and information used in a document. Not properly including these acknowledgements may be considered plagiarism. Citations and a corresponding reference list is how referencing is achieved. The citation is included in the body of the writing to indicate the exact material that originates from another source, the List of References includes the details on where that source can be found.

Citations and a List of References are used together to provide the appropriate information to indicate what material is from another source, and the details to document the original source. They are required for all sources of information included in the report – print, online, and word of mouth (personal communication). When using material found online, students should be careful to rely only on valid, trustworthy sites. Wikipedia, for instance, can be changed by any user and is therefore not a valid site for obtaining technical information.

There are four main reasons why writers need to reference material within their reports, including:

- 1) It allows proper credit to be given to the authors and/or source of the information cited and allows the reader to distinguish between the writer's own ideas and the referenced information.
- 2) It demonstrates that the writer has researched the claims and ideas put forth and supports these ideas with evidence and information from other sources.
- 3) It allows the writer to share their information sources with readers so that they can find that same resource material, if needed.
- 4) To avoid concerns around plagiarism, and the possible negative consequences.

General Guidelines

Please follow the guidelines listed below:

- The List of References should only contain entries for works cited directly within the report. That is, each reference in the list must have at least one in-text citation.
- Information from the sources should not be "cut and pasted" but instead paraphrased or summarized to offer support for the writer's own ideas.
- Even when a citation is included, copying material directly from the source without changing the wording is considered plagiarism if the material is not in quotation marks.
- Technical reports will rarely, if ever, include information enclosed in direct quotes. Direct quotes are only used when the information cannot be paraphrased (re-written in a student's own words) without altering the meaning.
 - To decide if a direct quote should be used, writers need to ask themselves the following question, "Can I re-write this in another way and still maintain the original message or meaning?"
 - If the answer to this question is yes, don't quote paraphrase.
- All diagrams or images that are not the personal creation or capture of the author must be correctly cited.
- Information obtained from conversations or interviews must be cited in the report but these sources do not appear in the reference list. This can be done in one of two ways, as follows:
 - Introduce the paraphrased information similar to this: "In an interview with John Smith on August 22/18, he suggested ..." OR

- Add the following citation at the end of the paraphrased information: "..... (Personal communication, John Smith August 22/18)".
- The List of References is only for works cited directly within the report.
- A Bibliography is a list of documents that have been read, but not directly or indirectly quoted.
- A Bibliography should only be included as needed, and in addition to the List of References.
- Work reports rarely have, or need a Bibliography, they almost always have a List of References.
- General information that can be considered public knowledge in the field need not be referenced.
- The requirement for precise referencing is greater for academic and scientific reports than for business and other technical reports; however, all reports must be referenced to the level that an interested reader can identify the sources and obtain them if desired.

Additional guidelines on referencing can be obtained from the library or online at: <u>https://www.mun.ca/writingcentre/understanding-plagiarism/</u> <u>https://www.mun.ca/engineering/undergrad/technical_communications/CitingAndReferencing.php</u>

Referencing Using IEEE

While students may choose any referencing style, however for consistency and versatility, the ECEO strongly recommends the IEEE style. For IEEE the List of References is listed in the order the material is first presented in the report.

An example of the IEEE format from the style guide <u>https://ieeeauthorcenter.ieee.org/wp-content/uploads/IEEE-Reference-Guide.pdf</u> is shown below.

Book

[#] Author(s). Book title. Location: Publishing company, year, pp.
Example:
[1] W.K. Chen. Linear Networks and Systems. Belmont, CA: Wadsworth, 1993, pp. 123-35.

World Wide Web

[#] Author(s)*. "Title." Internet: complete URL, date updated* [date accessed].
Example
[2] M. Duncan. "Engineering Concepts on Ice." Internet: <u>www.iceengg.edu/staff.html</u>, Oct. 25, 2000
[Nov. 29, 2003].

<u>E-mail</u>
[#] Author. Subject line of posting. Personal E-mail (date).
Example:
[3] J. Aston. "RE: new location, okay?" Personal e-mail (3 Jul, 2003).

Non-published sources such internal or unpublished documents J. K. Author, "Title of report/paper," unpublished. Examples: [4] B. Smith, "An approach to graphs of linear forms," unpublished

Other non-recoverable unpublished sources such as interviews or phone calls do not require a reference, or citation; however the author or source must still be acknowledged in the text. This is explained in greater detail on the Engineering Technical Communications page as listed above.