Contents

ENGINEER 2IW3 – Inclusion in the Engineering Workplace

Calendar description

Engineering workplaces are diverse but can pose challenges to underrepresented groups. Students will develop the vocabulary and tools to master perceptual, institutional, and psychological mechanisms of inclusion as allies and targets.

Learning outcomes

At the end of the course, students should be able to:

- Identify racist and sexist behaviours, structures and actions and outcomes in engineering workplaces.

- Use vocabulary and tools to engage in conversations about equity, diversity and inclusion.

- Formulate best practices for managing inclusion within diverse engineering workplaces.

Instructor contact information

Dr. Kim Jones (she/her); kjones@mcmaster.ca;
I do not set office hours, because they are restrictive. I am eager to get to know you and to help, so please reach out by email or through Teams and we'll set up a meeting time that works for both of us. My goal is to meet individually with each of you (briefly at least) at some time through the term. If you put "2IW3" in the subject line (or @ me on Teams), I will do my best to respond within 24 hours, but I do not consistently check my messages after 6 PM or on weekends because I'm spending time with my family. If I don't get back to you within that time, please send me a gentle reminder; I will appreciate it.

Online course information

This course will take place live (synchrously) from **7-10 PM on Wednesdays on Teams**. It is expected that all students will attend every class live as discussion is a key part of this course (please see the participation assessment description). Lectures will be recorded, and slides will be available on Avenue to Learn. We will also use MS Teams to share documents and information. This course is offered in this format so that it is accessible to students who are away on internship. I teach from the traditional territories of the Mississauga and Haudenosaunee nations, and within the lands protected by the "Dish with One Spoon" wampum agreement.

Expectations

We address sometimes difficult and contentious topics in this course, which is why respectful discussion is so important. We don't all have to leave with the same opinion, but we need to engage with the material. As engineers, you may not be as comfortable with your communication skills, but you will get practice in developing your ability to express yourself through this course. I have had to learn a lot moving into this space – and I am still learning! Please help me learn and I will do my best to help you learn too.

Schedule

Week	Description
1	Diversity, inclusion and equity: why they are important in engineering workplaces Introduction to basic terminology Creating an accepting classroom space for discussion
2	Inclusivity & the current Canadian engineering context - introduction: business case for change. - How are different groups affected? - What are the benefits to businesses that embrace diversity and inclusion?
3	Theories explaining social inequality and stratification - How is engineering recruitment affected by socioeconomic status? Myth of meritocracy Inequities in teams
4	Legal perspectives - Harassment and discrimination - Equal pay legislation and lawsuits - Accessibility
5	Best practices in hiring and promotion - Job ad - Resume evaluation - Interview - Allocation of tasks - Performance assessment
6	Work life balance and managing transitions; corporate policies
7	Barriers experienced by marginalized group members: microaggression, implicit bias, stereotype threat, imposter syndrome.
8	Privilege and Fragility Role of fragility and identity on workplace communication and relationships
9	Allyship: Why and how; dos and don'ts
10	Gender/culture and leadership in corporate culture - Values-driven leadership - Power of narrative (personal and as an influencer) - The warmth-competence tightrope (gender essentialization)
11	Networking and negotiation - Effect of gender; how to overcome
12	Developing influence to effect institutional change - What are your next steps to develop inclusion in YOUR future engineering workplace?

Note that this structure represents a plan and is subject to adjustment term by term. The readings will be posted on Avenue. The instructor and the University reserve the right to modify elements of the course during the term. The University may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes.

Assessment of learning

Assessment	Weight	Due date
Group presentation	10%	Class 3
Video training module or comic	20%	Class 7 (week after Reading Week)
Final essay including essay outline	5% outline, 25% essay	Outline: Class 10 Final paper: last class
2 article summaries and 2 critical reflection papers - distilling understanding of assigned articles or case studies	Each one 5% total 20%	Throughout term (5pm the night before relevant class)
Leading a 20-minute class discussion	10%	Throughout term (slides Sunday before relevant class)
Participation	10%	Throughout term

Assessment descriptions

Group project (10%)
Multimedia presentation – 10 mins

Students make groups of 4 or 5 and in those groups will choose a company's diversity/inclusivity or employment equity policy from large engineering firms of their choice. The group will assess the policy for its merits and limitations or gaps. The group will then suggest points of improvement on these issues.

The group project will be a presentation using PowerPoint.

Ideally the project will include meeting with a representative of the company to discuss the work being done in their workplace to build an inclusive community and provide a chance to network with people in the industry.

The presentation must be submitted electronically on Avenue on the day of the presentation before lecture.

Video Training Module (20%)

Since many EDI-focused messages do not effectively reach majority-students, we will construct a series of "Leadership Training" videos that will deliver useful leadership content but will also intentionally include EDI materials. Each video will not be longer than nine minutes. It should be based on a Powerpoint presentation and should not include footage of the presenter – just a voice over. It must include a script. It is better if it can engage the viewer – e.g. by asking multiple choice questions. You will be given some starting materials on various topics. If the result is of a high enough quality, these videos might be made available to undergraduate engineering students. Feel free to be inspired by https://diversifystem.ca/ microlessons and by https://about.rogers.com/life-at-rogers/fortheloveofwork/ podcasts.

Comic – alternative to video module (20%)

Sometimes, alternate forms of media communicate complex ideas with more impact. If you would prefer, you may create a comic rather than a video module. The comic would compellingly communicate one of the concepts we cover in class, intended for an engineering audience. Examples include https://english.emmaclit.com/2017/05/20/you-shouldve-asked/ and https://english.emmaclit.com/2017/09/25/waiting/ . It must be long enough to present a narrative, can include personal anecdotes or experiences and should leave the reader with a call to action. If you are open to it, these might be published on the onwie.ca website or shared by McMaster Engineering.

Final Essay (30%)

1500 words, double-spaced.

First, you will be expected to write a 1-2 page (300-500 words) point form outline on the topic you aim to explore in your paper. The outline should include an introduction to your topic and the texts from the course you will be using with brief notes on why each one is relevant to your topic. You must use 2-4 texts from the course in your presentation. The outlines will be discussed in class so any issues with topic or points of clarifications can be made before the final paper.

Submitting the outline on the due date (1 month before the paper) will earn 5% automatically.

For the essay you can choose a topic of your choice from the course with in-depth analysis of a relevant issue in diversity (privilege and fragility, stereotypes, implicit bias, myth of meritocracy, etc.) and you can choose a specific marginalized group (women, people of colour, disabled people, etc.) and explore how the issue has contributed to their exclusion from the engineering workplace or how

their discomfort in that workplace has been a deterrent. This should expand on the skills used in the short assignments i.e. article summary and critical reflection assignment, as your unique perspective and critical engagement with the topic will inform your central idea/argument.

Alternate essay option: choose an article or internet screed on the topic of equity in engineering with which you disagree. With reference to the theoretical concepts raised in class and relevant texts / articles, construct a well-reasoned response. (Same length, timing requirements as above.)

Article summaries (5% each)

2 x 200-300 words each

You can choose any of the texts from classes 1-6 for your first article summary and texts from classes 7-12 for your second summary. You may submit a summary and reflection in the same week but they must be for different texts scheduled for that week. You cannot write a reflection on a text you have done a summary on.

Article summaries are primarily designed to help you engage with the assigned reading by pulling out the main ideas and arguments. This assignment develops the skill of distilling complex ideas in theoretical language into concise summaries.

In your article summaries, you should aim to briefly describe the focus and argument of the chosen text. The summaries should ideally answer 2 or more of these questions;

- What is the aim of the text? What question or topic does it focus on? What does the text add to the discourse around that topic/subject matter to clarify, complicate, or resolve the issues?

- What is the text's central argument? How are the arguments and ideas developed?

Make sure to cite the article when necessary for clarity.

The article summaries will be submitted to the assignment folder and posted on Teams by 5pm the day before the corresponding lecture (A summary or reflection assignment on a reading scheduled for discussion in seminar on Tues. Jan. 12, will need to be submitted to Avenue by 5pm on Mon. Jan. 11) encourage you to think carefully, in advance of seminar meetings, so that in class you are well prepared for discussion at a critically advanced level.

Critical reflection assignments (5% each)

2 x 300-400 words each

You can choose any of the texts from classes 1-6 for your first critical reflection and texts from classes 7-12 for your second reflection. You may submit a summary and reflection in the same week but they must be for different texts scheduled for that week. You cannot write a reflection on a text on which you have done a summary.

Critical reflection assignments provide the opportunity to critically assess the ideas of a text and draw conclusions about the value of the text, or suggest connections with other readings that may be related. In your critical reflection, you have a chance to explore your individual perspective on the text so think about gaps in the arguments, concerns about ideas offered and also positive reflection on the value of the argument offered to the broader discourse.

The critical reflections will develop the skill of engaging with theory critically and responding to complex arguments succinctly. The reflection should engage with 1 or 2 of these questions;

- What other texts or theory is this text in dialogue or argument with?

- How successful is this text in addressing the issues it aims to? What is the value of the text in the conversation around the subject matter to you? What would you consider to be its gaps or limits? What implications might this text hold?

The critical reflection will also be submitted to the assignment folder and then copied and posted to Teams so all class members can read it beforehand and are able to engage in discussion/debate. The assignment is due by 5pm the day before the corresponding lecture.

Leading a 20-minute class discussion (10%)

You can choose one of your critical reflections on which you will lead a class discussion.

You must create a minimum of two (up to 20) Powerpoint slides on the content of the paper on which the discussion will be based and email them to me by **midnight of the Sunday before the class**. You must design questions or activities (e.g. pair-and-share, debates, games, etc.) which engage your classmates with the relevant material. You will be assessed on how you connect the material to our class (e.g. relevance to inclusion in the engineering workplace) and how well you foster interaction from your classmates.

Participation (10%)

You will be judged on quantity AND quality of your participation in class. If your preferred name is not the same as the name that appears on the university provided roster for the course, please let me know so that I can use your preferred name. High quality participation will demonstrate that you did and engaged with the required readings. You will be penalized if you treat your classmates disrespectfully. You must also post at least one relevant / interesting article or link on the Avenue Discussion board or on Teams.

You can miss one class with no penalty, but subsequent missed classes (without MSAFs) will count against this grade. If given notice, you may write a 2-page reflection after doing ALL the class readings and reviewing the Powerpoint slides, due prior to the subsequent class (due in the Avenue "Participation" dropbox). This is intended as an exception, and the instructor reserves the right to limit this option.

If you are very introverted or socially anxious, please tell me confidentially (so I don't put you on the spot in class) and you can choose to write a 100-word reflection on each class instead (though your presence in class is still expected), which you will submit to the Avenue "Participation" dropbox within 24 hours of the end of class.

Accommodations

If you need accommodations (through SAS or otherwise), please let me know what your needs are so we can best work toward your success together. For MSAFs, I negotiate extensions that work for both of us rather than re-allocating grades. I like to believe that all components of the course offer worthwhile learning opportunities.

If you have caregiving responsibilities that may interfere with this class, please contact me and we can try to find flexible solutions.

With the stresses to physical and mental health brought on by COVID (and life in general!), many students may need extra accommodations or support. Please do not hesitate to reach out to share what you need to succeed. At McMaster, the Student Wellness Centre and your Academic Advisors are helpful first touchpoints for help as well.

Policies

Anti-Discrimination

The Faculty of Engineering is concerned with ensuring an environment that is free of all discrimination. If there is a problem, individuals are reminded that they should contact the Department Chair, the Sexual Harassment Officer or the Human Rights Consultant, as soon as possible.
http://www.mcmaster.ca/policy/General/HR/Discrimination_Harassment_Sexual_HarassmentPrevention&Response.pdf

Academic integrity

You are required to exhibit honesty and use ethical behaviour in all aspects if the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. **It is your responsibility to understand what constitutes academic dishonesty.**

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, located at: http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf

The following illustrates only three forms of academic dishonesty:

- Plagiarism. E.g. the submission of work that is not the student's own or for which other credit has been obtained
- Improper collaboration in group work
- Copying or using unauthorized aids in tests and examinations.

Be aware that if you use phrasing identical to a source you did not write, it should be in quotation marks and properly cited. If you include concepts or ideas that are not your own (but paraphrased / in your own words), you should also cite your source. I encourage the use of the free referencing software, Mendeley to make citation easier.

Authenticity / Plagiarism detection

This course will use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. Avenue to Learn, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software. All submitted work is subject to

normal verification that standards of academic integrity have been upheld (e.g., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to www.mcmaster.ca/academicintegrity

Courses with an on-line element

Some courses may use on-line elements (e.g. e-mail, Avenue to Learn, MS Teams, LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in a course that uses on-line elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

Online proctoring

Some courses may use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict   their browser or other applications/software during tests or exams. This software may be required to be installed before the test/exam begins. (Note – this course does not have exams, thus no proctoring.)

Conduct expectations

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the Code of Student Rights & Responsibilities (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, whether in person or online.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, MS Teams, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

Academic accommodation of students with disabilities

Students with disabilities who require academic accommodation must contact Student Accessibility Services (SAS) at 905-525-9140 ext. 28652 or sas@mcmaster.ca to make arrangements with a Program Coordinator. For further information, consult McMaster University's Academic Accommodation of Students with Disabilities policy.

Requests for relief for missed academic term work

McMaster Student Absence Form (MSAF): In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "Requests for Relief for Missed Academic Term Work". Typically, I will grant extensions but will not re-allocate grades.

Academic accommodation for religious, indigenous or spiritual observances (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the RISO policy. Students should submit their request to their Faculty Office normally within 10 working days of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

Copyright and recording

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, including lectures by University instructors. The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

Extreme circumstances

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.

Communications

It is the student's responsibility to:

- Maintain current contact information with the University, including address, phone numbers, and emergency contact information.

- Use the University provided e-mail address or maintain a valid forwarding e-mail address.

- Regularly check the official University communications channels. Official University communications are considered received if sent by postal mail, by fax, or by e-mail to the student's designated primary e-mail account via their @mcmaster.ca alias.

- Accept that forwarded e-mails may be lost and that e-mail is considered received if sent via the student's @mcmaster.ca alias.

- Check the McMaster/Avenue email, Teams and course websites on a regular basis during the term.