

Term Information

Effective Term Autumn 2023

General Information

Course Bulletin Listing/Subject Area Engineering
Fiscal Unit/Academic Org Engineering Administration - D1400
College/Academic Group Engineering
Level/Career Undergraduate
Course Number/Catalog 2300
Course Title Exploring Diversity, Equity & Inclusion in Engineering Contexts
Transcript Abbreviation DEInEngineering
Course Description This course engages with thematic concepts and definitions of citizenship, diversity, equity, inclusion, and justice through historical and contemporary lenses. Students explore the applications and implications of these concepts across a wide range of engineering contexts. Students will approach the writing process from a rhetorical perspective.
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? Yes
Is any section of the course offered Greater or equal to 50% at a distance
Less than 50% at a distance
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Sometimes
Campus of Offering Columbus, Lima, Mansfield, Marion, Newark, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites Writing and Information Literacy Foundation
Exclusions Not open to students with credit for ENGR 2301
Electronically Enforced Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 14.0101
Subsidy Level Baccalaureate Course
Intended Rank Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Citizenship for a Diverse and Just World

Course Details

Course goals or learning objectives/outcomes

- Engage in an advanced, in-depth scholarly exploration of diversity, equity, and inclusion in engineering/STEM cultures, especially how race, ethnicity, gender, sexuality, age are experienced and intersect
- Engage in critical & logical thinking about the influence of engineering culture & its technical processes on communities & society at the local, state, national, and global level, with a focus on intersections with equity & justice
- Reflect critically on processes and learning (metacognition).
- Understand the importance of rhetorical communication and writing for technical and non-technical contexts and audiences
- Understand processes for composing informative and persuasive documents and plan and deliver presentations for a variety of audiences and purposes.
- Apply strategies for common types of workplace communication

Content Topic List

- Course Intro, Conceptual and Theoretical Foundations, Rhetorical Foundations & Technical Writing Style
 - Applications, Extensions, and Intersections–Theoretical
 - Applications, Extensions, and Intersections–Equity, Justice, and Citizenship at School and Work– Equity in Hiring, Pay and Promotion
 - Applications, Extensions, and Intersections–Equity, Justice, and Citizenship in Urban Design, Transportation and the Environment
 - Applications, Extensions, and Intersections–Equity, Justice, and Citizenship in Engineering Design–Automation, Robotics, Algorithms, and Artificial Intelligence
 - Applications, Extensions, and Intersections–Equity, Justice, and Citizenship on the Internet–Social Media, Privacy and Surveillance, Big Data and Augmented Reality
- No

Sought Concurrence

Attachments

- ENGR 2300 and 2301 Citizenship Readings Resource Database.xlsx: readings database
(Other Supporting Documentation. Owner: Casado,Ana Maria)
- ENGR 2300 GE Citizenship Theme Submission Form.pdf: citizenship theme submission form
(Other Supporting Documentation. Owner: Casado,Ana Maria)
- Revised ENGR 2300.pdf: revised syllabus
(Syllabus. Owner: Casado,Ana Maria)
- Revised 2300 and 2301 Cover Letter.pdf: cover letter
(Cover Letter. Owner: Casado,Ana Maria)

Comments

- Please see Panel feedback email sent 08/02/2022. *(by Hilty,Michael on 08/02/2022 08:09 AM)*
- - If this course is indeed requesting to be taught 100% online, please follow instructions for DL <https://ascas.osu.edu/curriculum/distance-courses> Please look at instructions for non-ASC units
-If this course is indeed repeatable, the panel will need to have some information on how a second iteration will be different, right? *(by Vankeerbergen,Bernadette Chantal on 04/06/2022 10:50 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Casado,Ana Maria	01/31/2022 07:34 PM	Submitted for Approval
Approved	Quinzon-Bonello,Rosario	02/23/2022 05:16 PM	Unit Approval
Approved	Quinzon-Bonello,Rosario	02/23/2022 05:17 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	04/06/2022 10:50 AM	ASCCAO Approval
Submitted	Casado,Ana Maria	04/07/2022 12:20 PM	Submitted for Approval
Approved	Quinzon-Bonello,Rosario	04/07/2022 01:02 PM	Unit Approval
Approved	Quinzon-Bonello,Rosario	04/07/2022 01:03 PM	College Approval
Revision Requested	Hilty,Michael	08/02/2022 08:09 AM	ASCCAO Approval
Submitted	Casado,Ana Maria	01/23/2023 04:38 PM	Submitted for Approval
Approved	Quinzon-Bonello,Rosario	01/23/2023 10:43 PM	Unit Approval
Approved	Quinzon-Bonello,Rosario	01/23/2023 10:43 PM	College Approval
Pending Approval	Cody,Emily Kathryn Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	01/23/2023 10:43 PM	ASCCAO Approval



January 10, 2023

GE CDJW Theme Review Committee:

Please accept this re-submission for our proposed courses, *ENGR 2300: Exploring Diversity, Equity, & Inclusion in Engineering Contexts* (3 credit hours) **and** *ENGR 2301: Exploring Diversity, Equity, & Inclusion in Engineering Contexts, Integrative (Research & Creative Inquiry Designation – 4 Credit Hours)*. We thank the committee for their previous review and feedback. Our original submissions provided sample syllabi and focused more on the required forms for each course. Based on the feedback we received and our review of recently approved courses for the new GE themes, we have prepared our materials for resubmission. We hope you will find the expanded syllabi and supporting materials sufficiently address your questions and concerns.

ENGR 2300: Exploring Diversity, Equity, & Inclusion in Engineering Contexts
3 Credit Hours

Following is a summary of the primary changes made to the ENGR 2300 course syllabi in response to feedback received.

Front Matter & Policy Updates

The issue noted with the outdated “GEC” reference has been corrected and the Academic Misconduct and Disability Services statements were updated in alignment with the website provided. The erroneous reference to “ENGR 1300” was deleted, and there is a clarification about how the Advanced Writing Embedded Literacies apply to students in various majors under “Advanced Writing Goals.”

Course Calendar

The calendar has been expanded to provide an overview of class lecture topics, due dates, and required readings. This should also address the committee’s desire to see a more explicit connection to the theme.

GE Theme: Citizenship for a Diverse and Just World

Please see the accompanying required GE Theme Submission form for connections between course content and the GE Goals and ELOs, as well as the expanded course calendar.

ENGR 2301: Exploring Diversity, Equity, & Inclusion in Engineering Contexts
Integrative Designation, Research & Creative Inquiry
4 Credit Hours

Following is a summary of the primary changes made to the ENGR 2301 course syllabus in response to the feedback:

Front Matter & Policy Updates

The issue noted with the outdated “GEC” reference has been corrected and the Academic Misconduct and Disability Services statements were updated in alignment with the website provided. The erroneous reference to “ENGR 1300” was deleted, and there is a clarification about how the Advanced Writing Embedded Literacies apply to students in various majors under “Advanced Writing Goals.”

GE Theme: Citizenship for a Diverse and Just World

The syllabus content has been expanded to reflect in more detail how the course content and the major projects will intersect with and prompt students to engage with this theme through instructor-led content, shared readings, and individual exploration. See in particular the Course Description and the “driving questions” (pp. 1 – 2) and the table under “Required Course Materials” outlining the planned readings and resources related to major course topics, including “Citizenship” (pp. 3 – 4).

The course assignments are described in “Graded Assignments & Activities (pp. 7 – 8) and aligned with the ELOs in the supporting inventory documentation. The content re-labeled “How will ENGR 2301 achieve these ELOs?” heading describes in more detail how ENGR 2301’s course-specific objectives will satisfy the GE ELOs.

Instructor’s Role in the Course

More specific descriptions of the instructor-led course content and activities has been included in the syllabus with an explicit statement about the “Instructor’s Role” (p. 2) and lecture topics and course activities in the “Sample Course Schedule” (pp. 11 – 15), which provides a calendar of in-class content (lectures, activities, discussion, etc.), readings, and cadence of the scaffolded minor and major assignments.

Research & Creative Inquiry Designation

The instructor’s role in helping students develop the skills needed to engage in the individual and team research and problem-solving process is outlined in “Instructor’s role” (p. 2). An effort was made in the Course Description & Overview and throughout the syllabus to clarify that although the projects will be student-led (allowing them to pursue their personal and discipline-specific interests), the instructor will be responsible for introducing content, providing instruction in methods and best practices, and helping students build the skills needed to achieve the course objectives.

The expected outcomes of the students’ research and creative inquiry has been made explicit in the “Student Activities & Deliverables” section (p. 2) and in the “Course Assignments, Grading, and Schedule Overview” section (pp. 7 – 15).

Students will be instructed in methods for conducting research throughout the semester (see Weeks 4 and 5 in the schedule in particular) and writing about research (Weeks 5 and 7). They will engage in research and creative inquiry in individual and team-based projects and will be intentionally reflecting on these experiences at regular intervals throughout the semester.

Thank you again for your consideration and your careful review of our proposed course materials. We believe this course will provide value to our students in all engineering disciplines, encouraging them to explore problems and create innovative, compelling solutions to complex, human-centered problems—

we are eager to see how this addition to the General Education program can support the development of intellectually engaged, holistic, and humane engineers who are strong communicators and good citizens.

Sincerely,

A handwritten signature in blue ink, appearing to read 'LH', is positioned above the printed name.

Lynn Hall

Director, Engineering Technical Communications



ENGR 2300: Exploring Diversity, Equity & Inclusion in Engineering Contexts

Semester Year / Class Day /Time /Location

“Citizen Engineers are the connection point between science and society—between pure knowledge and how it is used. Citizen Engineers are techno-responsible, environmentally responsible, economically responsible, socially responsible participants in the engineering community.” – The Citizen Engineer

Instructor

Name _____ [Pronouns: _____ | Honorific: _____]

Email: _____

Office Hours: _____

Course Description / Overview

This course engages with thematic concepts and definitions of citizenship, diversity, equity, inclusion, and justice through historical and contemporary lenses. Students explore the applications and implications of these concepts across a wide range of engineering contexts, including workplace dynamics, urban planning and built environments, transportation, design, machines, algorithms, big data, and the internet.

Course Philosophy

This course has two overarching goals: to explore what it means to be an engaged and responsible “Citizen Engineer” and to learn and practice writing and communication strategies vital to success in engineering curriculum and careers. As such, we will explore the thematic content of this course while also approaching the writing process from a rhetorical or UX (end user experience) perspective. We will engage with the writing process (from initial brainstorming through final edits/submission) for multiple modes of communication.

While practicing critical analysis and research skills, students learn technical writing style and genre conventions and create documents using technical/professional communications style. Genres covered include memos, emails, recommendation reports, research proposals, and presentations. Course projects include individual and team-based assignments. Because writing conventions vary by profession and organization, students will develop and engage general communication strategies that can be applied to other writing tasks both in their academic careers and in the workplace.

We will focus on composing from a rhetorical perspective, which means we will always consider the relationships between rhetorical elements (audience, subject, purpose) and their roles in the choices we make as communicators. We will ask ourselves what, how, and especially why we use language in particular ways in our documents.

The course will also emphasize two basic tenets of writing:

1. First, the course focuses on the *process* of writing rather than on the end product alone by incorporating exercises in planning, drafting, and revising.

2. Second, writing is not always easy; improving our work takes time, effort, and practice, especially when learning new writing styles.

Required Texts & Materials

This course uses Open Education Resources and therefore does not require purchased materials. All readings, handouts, and resources will be provided via Carmen.

Below is a general overview of the expected course readings and resources organized around major topic areas. Note that many of the readings span more than one topic area and our work with the theme and the technical/professional communications and writing foundations will be discussed and practiced throughout the course. Specific reading assignments and materials will be distributed throughout the semester on Carmen and communicated to students via the detailed course schedule. Students will also curate readings around topics to assign to one another and present as case studies for class discussion.

TOPIC AREAS	READINGS & RESOURCES
Citizenship	<p>Excerpts from “Citizenship and Social Class” (T.H. Marshall, 1950)</p> <p>Excerpts from <i>Citizen Engineer: A Handbook for Socially Responsible Engineering</i> (Douglas et al., 2009)</p> <p>Selections from <i>The Good Citizen: How a younger generation is reshaping American politics</i> (R. Dalton, 2020):</p> <ul style="list-style-type: none"> • “Chapter 1: Citizenship and the Transformation of American Society” (pp. 1 – 19) • “Chapter 2: The meaning and measurement of citizenship” (pp. 20 – 33) <p>Selections from <i>Digital Citizenship: The Internet, Society, and Participation</i> (Mossberger et al., 2007)</p> <ul style="list-style-type: none"> • 1: Defining Digital Citizenship (pp. 1 – 19) • 3: The Benefits of Society Online: Civic Engagement (pp. 47 – 66) • 5: From the Digital Divide to Digital Citizenship (pp. 95 – 122) <p>Excerpts from “What Kind of Citizen?: The Politics of Educating for Democracy” (Westheimer & Kahne, 2004)</p>
Diversity, equity, inclusion, justice	<p>“Chapter 3: Forming citizenship norms” (pp. 34 – 52) in <i>The Good Citizen</i> (R. Dalton, 2020)</p> <p><i>Diversity and Division in Advanced Economies</i> (Pew Research Center, 2021)</p> <p><i>“Is it better to know?”</i> [podcast] – <i>Hidden Brain</i></p> <p><i>“How they see us”</i> [podcast] – <i>Hidden Brain</i></p> <p>Selections from <i>Defined by Design: The Surprising Power of Hidden Gender, Age, and Body Bias in Everyday Products and Places</i> (Anthony, 2017)</p>

	<ul style="list-style-type: none"> • “Introduction” (pp. 17-24) • “Helpful or Harmful to Your Health?: The Design of Your Home or Neighborhood” (pp. 159-172) <p>“2023 Retrospective: The Story of Gender Equity from the Past Decade in 10 Trends” (Roy, 2023)</p> <p>“Why Should I Care About Diversity in Engineering” (NSPE, 2020)</p>
<p>Role of engineers / engineering in society</p>	<p>Selections from Citizen Engineer (Douglas et al., 2009)</p> <ul style="list-style-type: none"> • “Part I. Advent of the Citizen Engineer” • “Part II. Environmental Responsibility” or “Part III. Intellectual Responsibility” <p>Selections from “Engineering Design for Social Justice” in Engineering Justice: Transforming Engineering Education and Practice (Leydens & Lucena, 2017):</p> <ul style="list-style-type: none"> • “Introduction: 1 Pressing Issues for Engineering Education and the Engineering Profession” (pp. 3 – 11) • “Introduction: 4 Engineering for Social Justice” (pp. 14 – 18) • “Introduction: 5 Engineering for Social Justice Criteria” (pp. 19 – 30) • “Chapter 2: Engineering Design for Social Justice” (pp. 67 – 201) <p>“Innovative tools for diversity, equity and inclusion in urban planning” (Agyeman (2016)</p>
<p>Society, identity & technology</p>	<p>“How to Put Out Democracy’s Dumpster Fire” in <i>The Atlantic</i> (Applebaum & Pomerantsev, 2021)</p> <p>Selections from The Oxford Handbook of Digital Technology and Society (Yates & Rice [Eds.], 2020)</p> <ul style="list-style-type: none"> • “Introduction to the Oxford Handbook of Digital Technology and Society: Terms, Domains, and Themes” (pp. 1 – 27 [pdf]) • “5: Communities, Identities, and Class” (pp. 1 – 19 [pdf]) • “6: Citizenship, Politics, and Participation” (pp. 1 – 18 [pdf]) <p>Race and Technology in America [interactive article series] – <i>Axios</i></p> <p><i>Automating Inequality</i> (Eubanks, 2017)</p> <ul style="list-style-type: none"> • “Introduction” (pp. 1-13) • “High-Tech Homelessness in the City of Angels” (pp. 84-126) <p><i>Technically Wrong: Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech</i> (Wachter-Boettcher, 2017)</p> <ul style="list-style-type: none"> • “Welcome to the Machine” (pp. 1-12) • “Algorithmic Inequity” (119-146) <p><i>Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy</i> (O, Neil, 2017)</p>

	<ul style="list-style-type: none"> • “Introduction” (pp. 1-13) • “Civilian Casualties: Justice in the Age of Big Data” (pp. 84-122)
Problem solving and designing solutions	<p><u>“What is Design Thinking and Why is it so Popular?”</u> (via Interaction Design Foundation, 2022)</p> <p><u>“Rethinking Design Thinking”</u> (Norman, 2013)</p> <p><u>Design for All</u> [documentary] (Target, 2020)</p> <p><u>Gendered Innovations</u> [website and case studies] – Stanford</p>
Writing & research / communication in an Engineering context	<p><u>Choosing and Using Sources: A Guide to Academic Research</u> (University Libraries)</p> <p><u>Technical Writing Essentials</u> (Last, 2019)</p> <p><u>Planning and Organizing Proposals and Technical Reports</u> (Johnson-Sheehan, n.d.)</p> <p><u>Engineered to Speak: Helping You Create and Deliver Engaging Technical Presentations</u> (Chilcutt & Brooks, 2019)</p> <p>Revising Prose (Lanham, 2007)</p>

Course Technology

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Required Technology Skills Specific to This Course

- Carmen Zoom (for attending office hours or in the event of a shift in COVID policies/course delivery)

Required Equipment

- Computer: iPad or tablet or Mac (OS X) or PC (Windows 7+) with reliable/stable internet connection/WiFi capabilities
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Required Software

- You will need access to word processing software (Word, Google Docs) and the ability to save/export documents as PDFs.

- [Microsoft Office 365](#): All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found at go.osu.edu/office365help.

Carmen Access

This course uses Carmen *extensively* (announcements, resources, homework readings, assignments, graded work/feedback, etc.). You will need to use [BuckeyePass](#) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](#) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the [Duo Mobile application](#) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

Course Goals & Outcomes: What are they and what do they mean for students?

This course has been created in alignment with the General Education (GE) goals and expected learning outcomes (ELOs) and course-level goals described below. These goals and outcomes are created and assessed to ensure educational goals across programs and courses at Ohio State. This means that the course content—readings, lectures, and the various assignments—has been developed to help students practice and build the skillsets captured by these ELOs.

Course Objectives

To align with Ohio State's GE and thematic goals, along with advanced writing embedded literacy skills and ABET Criterion 3 outcomes, work completed in this course allows students to:

1. Engage in an advanced, in-depth scholarly exploration of diversity, equity, and inclusion in engineering/STEM cultures, especially how race, ethnicity, gender, sexuality, and age are experienced and intersect.
2. Engage in critical and logical thinking about the influence of engineering culture and its technical processes, and products on communities and society at the local, state, national, and global level, with a focus on intersections with equity and justice
3. Reflect critically on processes and learning (metacognition).
4. Understand the importance of rhetorical communication and writing for technical and non-technical contexts and audiences.
5. Understand processes for composing informative and persuasive documents and plan and deliver presentations for a variety of audiences and purposes.
6. Apply strategies for common types of workplace communication.

General Education

Goals

1. **INTELLECTUAL and COGNITIVE SKILLS:** Successful students will demonstrate the intellectual and cognitive skills that prepare them to be engaged citizens and leaders for life.
2. **MODES OF INQUIRY:** Successful students will engage with and apply a range of important modes of thought, inquiry and expression.
3. **EDUCATED GLOBAL CITIZENSHIP:** Successful students will be interculturally competent global citizens who can engage with significant aspects of the human condition in local, state, national and global settings.
4. **EMOTIONAL, SOCIAL and PROFESSIONAL ABILITIES:** Successful students will demonstrate skills and abilities needed for engaged citizenship and personal and professional growth.

OSU Citizenship for a Just & Diverse World Theme

Goals

1. Successful students will analyze concepts of citizenship, justice, and diversity at a more advanced and in-depth level than in the Foundations component.
2. Successful students will integrate approaches to understanding citizenship for a just and diverse world by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.
3. Successful students will explore and analyze a range of perspectives on local, national or global citizenship and apply the knowledge, skills and dispositions that constitute citizenship.
4. Successful students will examine notions of justice amid difference and analyze and critique how these interact with historically and socially constructed ideas of citizenship and membership within society, both within the United States and around the world.

Expected Learning Outcomes

Successful students are able to:

- 1.1 Engage in critical and logical thinking about the topic or idea of citizenship for a just and diverse world.
- 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of citizenship for a just and diverse world.
- 2.1 Identify, describe and synthesize approaches or experiences as they apply to citizenship for a just and diverse world.
- 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment and creative work, building on prior experiences to respond to new and challenging contexts.
- 3.1 Describe and analyze a range of perspectives on what constitutes citizenship and how it differs across political, cultural, national, global and/or historical communities.
- 3.2 Identify, reflect on and apply the knowledge, skills and dispositions required for intercultural competence as a global citizen.
- 4.1 Examine, critique and evaluate various expressions and implications of diversity, equity and inclusion, and explore a variety of lived experiences.

4.2 Analyze and critique the intersection of concepts of justice, difference, citizenship, and how these interact with cultural traditions, structures of power and/or advocacy for social change.

Advanced Writing

This course meets advanced writing embedded literacies for programs/majors within the College of Engineering. Students should review their major bingo sheet and discuss course selection with their academic advisors.

Goals

1. Successful students develop advanced skills in inquiry, critical thinking, composing and communicating for a specific purpose, context and audience using an appropriate genre and modality.
2. Successful students apply knowledge of writing and research to specific contexts.

ELOs

Successful students are able to:

- 1.1 Investigate and integrate knowledge of the subject, context and audience with knowledge of genres, conventions and rhetorical choices to advance a particular writing objective.
- 1.2 Use credible and relevant sources of information, evaluate assumptions, and consider alternative viewpoints or hypotheses to express ideas and develop arguments.
- 2.1 Reflect on how they adapt rhetorical and research strategies they have learned to new contexts.
- 2.2 Develop scholarly, creative or professional products that are meaningful to them and their audience.
- 2.3 Evaluate social and ethical implications of writing and information literacy practices.

ABET Criterion 3 Student Outcomes:

ENGR 2300 supports ABET's Student Outcomes for Engineering programs including:

Outcome 3: an ability to communicate effectively with a range of audiences

Outcome 4: an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

Outcome 7: an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Course Requirements/Assignments & Grading Policies

Grades in this course are calculated based on both individual and team-based assignments as listed. The assignments in this course are scaffolded, with smaller assignments geared toward topical exploration and building foundations for the major assignments. All assignments are designed to guide students to approach rhetorically (engage with and demonstrate an understanding of audience, purpose, and context) and learn and practice technical writing style and genre conventions. Course grades are determined by the quality of projects and level of class participation, as explained below.

Individual Assignments

- Reading Engagement/Reflection: Reading Journal or Discussion Boards (10%)
- Reading Engagement/Reflection: Reading Response (Synthesis) Memos x2 (10%)
- Recommendation Memo (15%)
- Case Study Presentation (10%)
- Process: Peer Response (5%)
- Process: Self- & Team Reflections/Evaluations (5%)
- Participation (5%)

Team Assignment: Research Project (White Paper / Proposal)

- Research Plan & Team Contract (5%)
- Annotated Bibliography (10%)
- Research Project (15%)
- Research Project Presentation (10%)

Project Assignments. Each project has a detailed assignment sheet and rubric outlining instructions, requirements, and grading criteria. All work is turned in via Carmen. Always check your work against the assignment sheet, rubric, and submission instructions prior to turning in your work for a grade.

Grading Criteria for Projects. As noted above, each project will have a detailed assignment sheet and rubric. In addition to meeting assignment criteria, I expect work that shows you put effort and care into preparing it. I also expect you to apply the concepts you've learned earlier in the term to each subsequent project, as appropriate. In addition to the specific project criteria, the following general criteria apply to all your projects:

- *Audience.* Your communication should be directed to a specific audience and should reflect a concern with the needs and potential responses of all who may read it.
- *Clarity.* Your writing should convey its message precisely and with immediate clarity to the reader. In style, it should be substantially free of wordiness, jargon, or other stylistic awkwardness.
- *Completeness.* Your communication should contain all of the information necessary for your audience to act or make a decision, but no irrelevant information.
- *Organization.* Your communication should be appropriately organized. The information should be conveyed usefully and persuasively. Your organization should be clear to your readers so they'll know what point you're making and how that point relates to the rest of your message.
- *Grammar and Mechanics.* Your writing should be free of grammatical and mechanical errors. Though I will point out and help you learn from mistakes, I am not an editor and I expect the work you turn in to be polished and proofread.

- *Promptness.* In this course, as in the workplace, you must turn in your work on time. All homework and projects are due at the beginning of class on the dates given in the syllabus. See the “Late Work” section for further details.
- *Appearance.* Whether a memo, proposal, or presentation, you should follow the appropriate conventions of that genre.

With the above-noted general criteria in mind, this course uses the following standard grading scale:

A	100-93 %	B-	82-80 %	D+	69-67 %
A-	92-90 %	C+	79-77 %	D	66-60 %
B+	89-87 %	C	76-73 %	F	Below 60%
B	86-83 %	C-	72-70 %		

Late Work. All assignments are to be turned in by their assigned due date/time. **I do not accept late work.** If you should have an emergency, contact me as soon as possible. Each student is entitled to one extension provided the extension is requested at least 24 hours in advance with adequate explanation.

Process Points (Peer Response + Self-Evaluation). This course follows the premise that writing is a process. To that end, we workshop our drafts in peer response writing group workshops and reflect on our finished products. In these workshops, you and your classmates will be given prompts to help guide you, and you’ll be able to see how others are approaching the same assignment. Peer response workshops require that you (1) upload a *complete* draft to the assignment’s draft folder on the day it is due and (2) review the work of others in your workshop group. To receive credit for peer response (10 points), you must meet both of those criteria.

Each project for this course also requires you to reflect in the form of a self-evaluation consisting of a rhetorical analysis of your work and an earnest reflection of your effort on the project. Process points are built into each assignment. **NOTE:** You cannot receive a grade for the major project/overall unit without completing each component part of the project. This includes process points. All major projects must be completed to receive a passing grade for the course.

Reading Engagements: Reading Journals & Discussion Boards. The class offers a variety of ways for us to engage with readings and one another. We will use reading journals and discussion boards to help prepare for and/or extend discussions over class topics and readings. Detailed instructions and prompts for each type of assignment can be found on Carmen.

Reading Engagements: Reading Response Synthesis Memos. You will be asked to write two memos (a common professional workplace genre) this semester in order to practice putting texts into conversation with one another. Detailed instructions can be found on Carmen.

Participation Overview: We will utilize the scheduled class times for lectures, class activities and scheduled work sessions for team projects. As with any class, you will also be expected to use out-of-class time to complete course readings, assignments, and engage with your project teams as required. You can anticipate participating in the following ways:

- **Participating in our scheduled class sessions. [CLASS SESSIONS “X” WEEKLY]** You are expected to attend our scheduled class sessions and actively participate. You’ll find more details on participation below. Please note the attendance policy and communicate with me if you have questions/concerns or are experiencing illness.

- **Office Hours: OPTIONAL**
Regular office hours every week as noted at the top of this syllabus and on Carmen. If you are unavailable during office hours, email for an appointment.
- **Discussion Boards, ICW, Homework Readings. FREQUENT ENGAGEMENT**
In addition to our work together during our scheduled class time, you are also expected to complete assigned homework readings, and complete reading engagements/discussion board posts/replies. The work in this course is scaffolded; this means that every smaller assignment is meant to help with the major assignments for each module. The course schedule is designed so background readings happen early in the module and then taper off as work is expected to shift to drafting the final assignment for the module. Many of these assignments will have their own point value assigned, as documented on Carmen; others will be factored into the overall participation grade for the course (see Course Policies).

The participation points for this class are **earned**, not automatically awarded. They are earned through your active engagement with your instructor, your peers, and the course content. The most successful students in this course:

- make effective use of all course resources: text/readings, instructor, assignment sheets, peer review opportunities, grading rubrics, informational handouts, Carmen site, videos, web links, etc.,
- are on time and are present at every class meeting,
- ask questions,
- participate meaningfully in discussions (via discussion boards; via Zoom audio or chat feature during class, etc.),
- treat others and their instructor with respect,
- keep track of their course progress and turn assignments in on time,
- are diligent in planning their time in advance by utilizing the course calendar and working ahead, and
- consider the ways that skills gained in this course will help them to be more successful in future classes, in searching for internships and jobs, and in their early experiences of professional life.

Unless designated as “suggested,” course readings are a required part of course participation. Over the course of the term, you are expected to read assigned reading carefully and thoughtfully—engaging with the reading and spending time thinking about it in preparation for completing course projects and participating in class discussion. In class discussions will often draw on assigned readings and I will assume that you have read and applied the assigned readings to your project assignments when I grade.

Credit hours and work expectations: This is a **3-credit-hour course**. According to [Ohio State policy](#), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average.

How this Course Works: Policies, Procedures and Resources

The course policies below outline the expectations for this course. If you have any questions about a course policy or about the course in general, please see me. It also contains information about resources and services you may find helpful. The course has been carefully designed and each

assignment created to build on the previous with the ultimate goal of meeting the goals and objectives noted in the learning outcomes expressed above.

Academic Integrity & Misconduct. I expect all work to be your own. When you use someone else's ideas or words as your own without proper attribution (such as citations), you are plagiarizing. Plagiarism is a form of academic dishonesty, as is cheating on a quiz or exam. Cheating and plagiarism are serious offenses that could result in a grade of F for the course. If at any time you are unclear about how to include others' ideas or words within your writing, please ask me. **Do not copy the writing of others.** Examples of documents given in class or on Carmen are to provide guidance and perspective, not an opportunity to copy someone else's work.

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Academic Support. I encourage you to take advantage of academic support services offered to students here at OSU. If you are having difficulty with this [course](#) or need help accessing resources available to you here at Ohio State, please contact me. I will do everything I can to help connect you with resources.

Civility and Title IX. I am committed to making the classroom a comfortable space for all of us, and I ask that we all work toward this goal during our class sessions and in all of the course's online spaces. We will respect each other and practice civility at all times. Disrespectful language including, but not limited to, sexist, racist, homophobic, or anti-ethnic slurs, or bigotry will not be tolerated.

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources. If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

Copyright Disclaimer. The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Disability Services. The University strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Health and Safety Requirements. All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>).

Instructor Contact and Grading/Feedback. I monitor and respond to email within 24 hours. If you send an email after normal business hours (M-F; 9-5 EST), I will respond the next day—please keep this in mind and plan accordingly since assignments are sometimes due at 11:59PM. I am also available during my posted office hours and by appointment.

Feedback/graded work for this class is returned via Carmen so be sure to familiarize yourself with how to use Carmen's gradebook and feedback viewing features. You should feel free to meet with me during office hours or by appointment to discuss feedback and/or grades. I do not discuss grades via email. Grades are non-negotiable and, absent a math error, will not be adjusted—no exceptions. Grades, whether on assignments or cumulative final course grades, are not curved or rounded—no exceptions.

Mental Health/Wellbeing. As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling [614-292-5766](tel:614-292-5766). CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at [614-292-5766](tel:614-292-5766) and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Syllabus. This syllabus and course schedule may be modified from time to time as appropriate in order to ensure course objectives are being met. All changes will be announced and posted to the course site on Carmen.

The Writing Center (Center for the Study and Teaching of Writing). We have a fantastic writing center! The trained writing consultants can help with individual or team projects at all stages of the writing process. Please visit <https://cstw.osu.edu/writing-center> to make an appointment and check out their resources.

Course Schedule (Sample)

Assignments are scaffolded throughout the course to build upon one another. In addition to overarching topics listed below, students will be introduced to and practice technical and professional communication strategies (including technical writing style conventions document design). All readings, assignment descriptions/instructions and rubrics, and deadlines are provided on Carmen.

Week 1: Course Foundations	
Theme Concept/Theoretical Foundations; Rhetorical Strategy; Technical Writing Style	
CLASS	<p>Introductions, course overview and goals, our Thinking – Writing – Thinking approach; initial course theme discussion</p> <p>In-class writing prompt: Reflection on “Citizenship for a Just and Diverse World” Theme and syllabus opening quotation on the citizenship engineer</p>
CLASS	<p>Introduction to Rhetorical Strategy / Audience Centered Approach to Writing; Introduction to Technical Writing Style</p> <p>Forming Writing Groups</p>
READINGS & RESOURCES	<p>Course Syllabus; Carmen Course Shell</p> <p>Citizen Engineer (Douglas et al., 2009): “Part I. Advent of the Citizen Engineer” and either “Part II. Environmental Responsibility” or “Part III. Intellectual Responsibility” (based on writing group assignment)</p> <p>“Chapter 2: The meaning and measurement of citizenship” (pp. 20 – 33) in <i>The Good Citizen</i> (R. Dalton, 2020);</p> <p>Excerpts from “What Kind of Citizen?: The Politics of Educating for Democracy” (Westheimer & Kahne, 2004);</p> <p>Rhetorical Foundations: What is Rhetoric and Applications in Technical Communications from <i>A Guide to Technical Communications: Strategies and Applications</i> (Hall & Wahlin, n.d.)</p> <p>What is Technical Communications (Last, 2009)</p> <p>Excerpts from “Citizenship and Social Class” (T.H. Marshall, 1950);</p>
ASSIGNMENTS	<p>Intro Note</p> <p>Reading Response: Discussion Board <u>or</u> Reading Journal</p>
Week 2: Course Foundations	
Theme Concept/Theoretical Foundations; Rhetorical Strategy; Technical Writing Style	
CLASS	<p>Class Discussion of theme concepts (citizenship, justice, diversity, equity, inclusion) and readings; Overview / Assign Recommendation Report Assignment</p>
CLASS	<p>Review of OSU Library Resources and Information Literacy (research questions, choosing and evaluating sources, source integration); APA citation</p>

READINGS & RESOURCES	<p>“Chapter 3: Forming citizenship norms” (pp. 34 – 52) in <i>The Good Citizen</i> (R. Dalton, 2020); <i>Diversity and Division in Advanced Economies</i> (Pew Research Center, 2021); “Is it better to know?” and “How they see us” [podcast] – Hidden Brain; <i>Race and Technology in America</i> [interactive article series] – Axios</p> <p>Selections from <i>Choosing & Using Sources: A Guide to Academic Research</i> (OSU Libraries)</p>
ASSIGNMENTS	<p>Reading Response: Discussion Board <u>or</u> Reading Journal</p> <p>Technical Writing Style Exercise</p> <p>Recommendation Report Synthesis Matrix + Outline</p>
Week 3: Course Foundations	
Theme Concept/Theoretical Foundations; Rhetorical Strategy; Technical Writing Style	
CLASS	<p>Continued in-class exploration and discussion about diversity, equity, and inclusion in engineering contexts (working with <i>Gendered Innovations</i> [website and case studies] in class)</p> <p>Putting texts in conversation / incorporating research; more with technical style</p> <p>Genre Intro: Memos</p>
CLASS	<p>Lecture and discussion about the role of engineering in society; problem solving processes and design (review case studies); watch and discuss <i>Design for All</i> documentary</p> <p>Genre Intro: Recommendation Reports</p>
READINGS & RESOURCES	<p>“Engineering Design for Social Justice” in <i>Engineering Justice: Transforming Engineering Education and Practice</i> (Leydens & Lucena, 2017): “Introduction: 1 Pressing Issues for Engineering Education and the Engineering Profession” (pp. 3 – 11); “Correspondence: Text Messages, Emails, Memos, and Letters” and “Recommendation Reports” (Last, 2009)</p>
ASSIGNMENTS	<p>Reading Response: Synthesis Memo 1</p> <p>Information Literacy Exercise</p>
Week 4: Applications, Extensions & Intersections	
Digital Citizenship	
CLASS	<p>Writing Process Focus: Revision, Lanham’s Paramedic Method; Giving/Receiving Feedback; Self-Evaluations: Building a Reflective Approach to Writing and Learning</p>
CLASS	<p>Recommendation Report Peer Response Workshop</p>
READINGS & RESOURCES	<p>Technical Writing Essentials: “Appendix H: Peer Review Essentials”; <i>Revising Prose</i> (Lanham, 2007); <i>Reflective Practice: Thinking About the Way You Do Things</i> (Shatz, n.d.)</p>
ASSIGNMENTS	<p>Recommendation Report Draft Due for Workshop</p>

Week 5: Applications, Extensions & Intersections Digital Citizenship	
CLASS	Class Discussion: Digital Citizenship
CLASS	Analyzing arguments, evidence, and claims by examining digital citizenship and technology in society (using <i>The Oxford Handbook of Digital Technology and Society</i> for in-class activities and discussion)
READINGS & RESOURCES	Selections from <i>Digital Citizenship: The Internet, Society, and Participation</i> (Mossberger et al., 2007): 1: Defining Digital Citizenship (pp. 1 – 19); 3: The Benefits of Society Online: Civic Engagement (pp. 47 – 66); 5: From the Digital Divide to Digital Citizenship (pp. 95 – 122)
ASSIGNMENTS	Recommendation Report Due Self-Evaluation Due
Week 6: Applications, Extensions, Intersections Equity, Justice, and the Citizen Engineer at School & Work: Equity in Hiring, Pay and Promotion	
CLASS	Discussion of Case Study Assignment Presentations (presented via topic from either Gendered Innovations or Project Drawdown or related to readings topic); in class gathering of resources to assign to one another for reading and discussing specific to Week 6/7 topics (organized and posted to Carmen page for student selection)
CLASS	Genre: Presentations: Effective Presentations from Preparation to Delivery
READINGS & RESOURCES	Technical Writing Essentials: "8.1 Building Confidence as a Presenter" and "8.2 Developing Presentation Skills"; Engineered to Speak: "Ch. 4 Asking the Questions" and "Ch. 5 Organizing and Outlining Your Presentation"; Class curated readings
ASSIGNMENTS	Reading Response: Discussion Board <u>or</u> Reading Journal
Week 7: Applications, Extensions, Intersections Equity, Justice, and the Citizen Engineer at School & Work: Equity in Hiring, Pay and Promotion	
CLASS	Case study presentation and class discussion
CLASS	Case study presentation and class discussion
READINGS & RESOURCES	"2023 Retrospective: The Story of Gender Equity from the Past Decade in 10 Trends" (Roy, 2023); "Why Should I Care About Diversity in Engineering" (NSPE, 2020); Class curated readings
ASSIGNMENTS	Reading Response: Discussion Board <u>or</u> Reading Journal Case Study Presentation Mid-Term Self-Assessment and Reflection
Week 8: Applications, Extensions, and Intersections Equity, Justice, and the Citizen Engineer in Urban Design, Transportation, and the Environment	
CLASS	Case study presentation and class discussion; Introduce Team Project: Research Proposal or White Paper and Presentation

CLASS	Case study presentation and class discussion; Skills for effective teamwork; collaborative writing strategies; Introduce Annotated Bibliography assignment
READINGS & RESOURCES	Defined by Design: The Surprising Power of Hidden Gender, Age, and Body Bias in Everyday Products and Places (Anthony, 2017): “Introduction” (pp. 17-24) And “Helpful or Harmful to Your Health?: The Design of Your Home or Neighborhood” (pp. 159-172); Class curated readings; “Proposals” and “Teamwork and Communication” (all sections within) (Last, 2009)
ASSIGNMENTS	Case Study Presentations and Class Discussion Reading Engagement Journal or Discussion Board Team Agreement/Contract Project Topic Memo & Research Plan
Week 9: Applications, Extensions, and Intersections Equity, Justice, and the Citizen Engineer in Urban Design, Transportation, and the Environment	
CLASS	Case Study Presentations and Class Discussion
CLASS	Case Study Presentations and Class Discussion
READINGS & RESOURCES	“Innovative tools for diversity, equity and inclusion in urban planning” (Agyeman (2016); “High-Tech Homelessness in the City of Angels” (Eubanks, 2017); Class curated readings; “Progress Reports” (all) (Last, 2009)
ASSIGNMENTS	Case Study Presentations Reading Engagement Journal or Discussion Board Annotated Bibliography (Individual) Team Progress Report
Week 10: Applications, Extensions, and Intersections Equity, Justice, and the Citizen Engineer in Engineering Design: Automation, Robotics, Algorithms, and Artificial Intelligence	
CLASS	Case Study Presentations and Class Discussion
CLASS	Case Study Presentations and Class Discussion
READINGS & RESOURCES	<i>Technically Wrong: Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech</i> (Wachter-Boettcher, 2017): “Welcome to the Machine” (pp. 1-12)
ASSIGNMENTS	Case Study Presentations Reading Engagement Journal or Discussion Board
Week 11: Applications, Extensions, and Intersections Equity, Justice, and the Citizen Engineer in Engineering Design: Automation, Robotics, Algorithms, and Artificial Intelligence	
CLASS	Case Study Presentations and Class Discussion
CLASS	Project Team Work Session
READINGS & RESOURCES	<i>Technically Wrong: Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech</i> “Algorithmic Inequity” (pp. 119-146)
ASSIGNMENTS	Case Study Presentations Reading Synthesis Memo 2 Deadline

Week 12: Applications, Extensions, and Intersections	
Equity, Justice, and the Citizen Engineer in Engineering Design: Automation, Robotics, Algorithms, and Artificial Intelligence	
CLASS	Case Study Presentations and Class Discussion
CLASS	Case Study Presentations and Class Discussion
READINGS & RESOURCES	Weapons of Math Destruction (O’Neil, 2017) “Introduction” (pp. 1-14); Class curated readings
ASSIGNMENTS	Case Study Presentations Reading Engagement Journal or Discussion Board
Week 13: Applications, Extensions, and Intersections	
Equity, Justice, and the Citizen Engineer on the Internet–Social Media, Privacy and Surveillance, Big Data and Augmented Reality	
CLASS	Team Work Session
CLASS	Team Project Peer Response Workshop
READINGS & RESOURCES	Technical Writing Essentials: "8.3 Presenting as a Team" Engineered to Speak: "Ch. 6 Perfecting Your Pitch" (pp. 63 – 69) and "Visualizing Your Message" (pp. 71 – 85)
ASSIGNMENTS	
Week 14: Applications, Extensions, and Intersections	
Equity, Justice, and the Citizen Engineer on the Internet–Social Media, Privacy and Surveillance, Big Data and Augmented Reality	
CLASS	Team Presentations and Class Discussion
CLASS	Team Presentations and Class Discussion
ASSIGNMENT	Presenter Feedback Worksheets
Finals Week	
DUE	Team Project (White Paper / Proposal) Team Assessment Project Self-Evaluation Course Self-Evaluation

GE THEME COURSES

Overview

Courses that are accepted into the General Education (GE) Themes must meet two sets of Expected Learning Outcomes (ELOs): those common for all GE Themes and one set specific to the content of the Theme. This form begins with the criteria common to all themes and has expandable sections relating to each specific theme.

A course may be accepted into more than one Theme if the ELOs for each theme are met. Courses seeking approval for multiple Themes will complete a submission document for each theme. Courses seeking approval as a 4-credit, Integrative Practices course need to complete a similar submission form for the chosen practice. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you develop and submit your course.

Please enter text in the boxes to describe how your class will meet the ELOs of the Theme to which it applies. Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document. Because this document will be used in the course review and approval process, you should be *as specific as possible*, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Course subject & number

General Expectations of All Themes

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

Please briefly identify the ways in which this course represents an advanced study of the focal theme. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities. (50-500 words)

Course subject & number

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Course subject & number

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met.

(50-700 words)

Course subject & number

Specific Expectations of Courses in Citizenship

GOAL 1: Successful students will explore and analyze a range of perspectives on local, national, or global citizenship, and apply the knowledge, skills, and dispositions that constitute citizenship.

ELO 1.1 Describe and analyze a range of perspectives on what constitutes citizenship and how it differs across political, cultural, national, global, and/or historical communities. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 1.2 Identify, reflect on, and apply the knowledge, skills and dispositions required for intercultural competence as a global citizen. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Course subject & number

GOAL 2: Successful students will examine notions of justice amidst difference and analyze and critique how these interact with historically and socially constructed ideas of citizenship and membership within societies, both within the US and/or around the world.

ELO 2.1 Examine, critique, and evaluate various expressions and implications of diversity, equity, inclusion, and explore a variety of lived experiences. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

2.2 Analyze and critique the intersection of concepts of justice, difference, citizenship, and how these interact with cultural traditions, structures of power and/or advocacy for social change. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Title	Publisher	Author	Date Published
The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies	Princeton University Press	Scott Page	2007
Invisible Women: Data Bias in a World Designed for Men	Abrams Press	Caroline Cri	12-Mar-19
Algorithms of Oppression	NYU Press	Safiya Umo	Feb-18
Technically Wrong	Norton Books	Sara Wacht	Oct-18
Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy	Crown	Cathy O'Ne	6-Sep-16
Defined by Design: The Surprising Power of Hidden Gender, Age, and Body Bias in Everyday Products and Places	Prometheus Books	Kathryn H. J	2017
On Being Included	Duke Press	Sara Ahmed	Mar-12
Data Feminism	MIT Press	Catherine D	Mar-20
Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor	St. Martin's Press	Virginia Eub	2018
Engineering Justice: Transforming Engineering Education and Practice	Wiley-IEEE Press	Jon A. Leyd	Dec-17
Inclusion and Democracy	Oxford University Press	Iris Marion	Jun-05

Resource Type	Link	Academia	Age	Bias	Citizenship	Coding	Data	Discrimination	Diversity	Engineering	Equity	Gender	Governance	Inclusion	Lifestyle	LGBTQ	Medicine
Book	https://www.oxford.com	X			X				X				X		X		
Book	https://www.oxford.com			X			X	X				X	X				X
Book	https://nytimes.com			X		X	X				X	X					
Book	https://www.oxford.com			X								X			X		
Book	https://www.oxford.com	X					X				X		X		X		X
Book	https://books.google.com	X	X	X					X			X		X	X		X
Book	https://www.oxford.com	X							X					X			
Book	https://mit.edu						X				X	X					
Book	https://uscourts.gov			X			X	X					X		X		
Book	https://www.oxford.com	X							X	X			X				
Book	https://oxford.com			X				X				X	X	X			

Workplace	Technology	Stereotypes	Science	Race
X	X	X	X	X
	X	X		
	X	X		
X	X			
	X			
			X	
			X	
				X
				X