

CIV_ENV 301-1 – Professional Development Seminar 1
Winter quarter, 2023
Monday, 6 – 7 pm

Course Instructor: Kimberly Gray, Tech A234, k-gray@northwestern.edu, 847-467-4252

Catalog Description – Case studies in engineering ethics, and discussion of topics associated with professional development and lifelong learning. Prerequisite: junior or senior standing in civil or environmental engineering or consent of instructor.

Course Goals – At the end of this course, the students should:

1. Understand professional and ethical responsibility
2. Understand how to engage in lifelong learning experiences
3. Be aware of broad range of career paths available with CE or EE undergraduate degrees

Grading – a grade of Satisfactory (passing) will be awarded after completing each of the following tasks:

1. Attend two CEE departmental seminars plus attend a MLK event and write a one paragraph summary of each seminar/event and what you learned. A list of departmental seminars (SPREE, EES, TRN) is available here:
<https://www.mccormick.northwestern.edu/civil-environmental/news-events/events/>
Other department's seminars may be substituted with prior approval from me (KAG).
(**Note** – Highly recommend Feb. 17th seminar of Conor McGarvey, 2 – 3 pm; *An Integrated Approach to Flood Mitigation: Landscape Analysis, Stormwater Modeling & Green Infrastructure Design in Markham, IL.*)
2. Attend all meetings of 301-1. One excused absence will be allowed. Attendance will be taken and for each meeting missed beyond the excused absence, an additional departmental seminar with summary paragraph is required. A seminar is considered attended if camera is on for the majority of the presentation (contact Prof. Gray if this will be a problem). If week 2 is missed, a seminar focusing on engineering ethics must be substituted.
3. Complete all assigned tasks in weekly meetings of 301-1. Not all seminars will have tasks, and there will not be assignments out of class time other than item #1 above & preparation for Ethics seminar in Wk. 2.

Schedule:

1. Jan. 3 - Overview (KAG)
2. Jan. 9 – Engineering Ethics (Carol Post, PE)
3. Jan. 16 – MLK Day – attend lecture, event, write short essay

4. Jan. 23 – **Forensic Engineering** (David Corr, PhD, PE)
5. Jan. 30 – **Earth, Space & Beyond - CEE prepares you to do unexpected things** (Chris Trigg, BSEEnv'08 – SpaceX)
6. Feb. 6 – **Environmental Engineering in Industry: Environmental career opportunities in a Fortune 500 Company** (Jen Cowman Moore, BSEEnv '04, Environmental Engineer @ 3M)
7. Feb. 13 – **International Water Resources Engineering** (Andrew Regnery, BSEEnv '15, International Water Resources Engineer at V3 Companies)
8. Feb. 20 – **Renewable Energy** (Maggie Pakula, BSEEnv '08, Senior VP Strategy, Invenergy)
9. Feb. 27 – **The Many Sides of Infrastructure Development** (Sofia Berger, Senior Vice President and Transportation National Business Line Leader at WSP)
10. Mar. 6 – **Careers in Structural Engineering** (Shelley Finnigan, PE, Director MPM, NU)