ENR 325 Assignment #1

Due: 8/29/25 10:00 pm

Welcome to digital electronics! Here's the task list for week 1:

1. Finish the entry polling for ENR325 (link will be sent via an email)
   This is a crucial step for course development and eventually the accreditation of the engineering program. Your help is greatly appreciated!

2. Get ready for digital design:

   1.1 Register you edu account for the following software:

   Autodesk: https://www.autodesk.com/education/home

   1.2 The software we are looking for is: Fusion: https://www.autodesk.com/education/edu-software/fusion?utm_source=ec_stu_us&utm_medium=int_ref&utm_campaign=edumkt_bts

   With an active edu account, you can renew your student license every year.

To complete this task, use fusion to draw ANYTHING and **screen capture it, and put it into a slide. (In the future we will call these kinds of tasks as "reporting as a slide"**.

3. Library and literature review:

To get in touch with the state-of-the-art of anything, we are going to take advantage of the google scholar and librarians.

3.1 Get your library account ready (if you haven't done so): https://www.coe.edu/academics/stewart-memorial-library/help-services/my-library-accounts

3.2 Bother the librarian by submitting an interlibrary loan and get your hands on a paper you find interesting. The good place to look is Nature, Science, Nature Electronics, Nature Physics, etc. If you would like to venture to Cell, Cell Stem Cell, Nature Biomedical Engineering, and Science Translational Medicine, I will be so so happy ☺

3.3 Many open access journals, like Nature communications, and MDPI etc.… doesn't requires interlibrary loan since it's OPEN ACESS. Same with pre-prints.

No reporting needed for this task. But talk to me if you have trouble getting papers you want to read in week 2.

4. Talking to your faculties.
   Engaging two faculties with at least 15 min of talks. **Ask them to sign the slip, and reporting your finished task as a slide.**
   You can talk about any topics, course, your research, their research, your planning, your hobby, their hobby etc.… The goal is to get to know each other better.

5. Try to use the power of AI to see if it can help you to learn faster
   Find this paper: Shannon, Claude E. "A symbolic analysis of relay and switching circuits." *Electrical Engineering* 57.12 (1938): 713-723.

   5.1 Before using the AI, scan through the papers really quickly, and answer the following three questions with your own efforts (and **report in one slide**):
      a) Why this paper is considered the greatest master thesis ever published?
      b) Find 3 specific terms or concepts you find confusing.
      c) List 1 question you have about the paper's significance, theory, or methods.

   5.2 Use any AI tool(s) you desire and upload the paper. Prompt the AI to:
      Summarize the most significant contribution of this paper.
      Clarify the terms/concepts in 5.1b.
      Give you examples (either in this paper or in a relevant applications) to clarify your question in 5.1c.

Organize and **report this section in maximum two slides**. **Add at least one take-home-message** evaluating whether AI provide any help, or you spotted any false claims (hallucination).