As an engineer, you will be required to submit solutions to problems in a clear, orderly, logical, and legible form. The following guidelines are intended to help you prepare submittals of professional quality. These guidelines should be followed to receive full credit for homework assignments. Failure to consider them may result in a lower grade.

For all assignments:

- Students are expected to prepare and submit their own individual work only, unless instructed otherwise, e.g. working on a team project. Individual work means that you are not permitted to discuss with or make accessible to your classmates any part of your own assignment, including e.g. numerical details. You are permitted and indeed encouraged to discuss with your classmates any general concepts and topics of the course. You are always permitted to contact your instructor with questions.

- The Honor Code applies to all coursework.

- Submittals may be handwritten in pencil or ink or typed on a computer. If your work is not legible, it will neither be graded nor given credit.

- You may use any word-processing, spreadsheet, mathematical, and graphics software (including CAD) for solving the problems.

- You may use any written materials, e.g. other textbooks, to solve your assignments, provided you reference them properly. Reference all sources used (except for the textbook) in the accepted ASCE referencing style at the end of your submittal.

- Use only 8½-by-11-inch paper, unless e.g. a schedule or flowchart requires a larger format. Fold larger sheets to 8½-by-11-inch size. Squared engineering paper is preferred for handwritten work. Do not tear sheets out of a spiral binder.

- Use only the front of the paper and leave at least a 1-inch space on all sides.

- Write your name, course number, assignment number, the due date, and the page number in the top right corner of each page. A cover page is not needed, but can be included. Consider setting up a standard layout for your documents.

- Include a problem statement. Provide clearly what is given followed by what is sought. Describe your approach, assumptions, and simplifications where necessary. Use subheadings to structure your document. Prepare your document in steps as if the reader is not familiar with the problem. Creating a comprehensive and detailed submittal, e.g. in
memorandum format, assists with understanding the assignment fully and with ensuring that no required part of the assignment is overlooked.

- Include a well-labeled sketch, diagram, or drawing, if appropriate. Provide a scale in the bottom right corner and dimensions in drawings of structures or project sites.
- Use a pencil and a ruler or drawing software, e.g. the simple yet powerful drawing tool of your word-processing software, for all tables, diagrams, and drawings.
- Staple all pages together at the top left corner. Project documents may also be submitted in folders or binders.
- All electronic submittals that are emailed or uploaded must follow the naming format “SemesterYear CourseLabel Type Number (PartNumber) FirstName LastName”, e.g. “Spring 2005 CE 101 Assignment 1 Mike Smith.doc” to be acceptable for being graded.

For numerical problems:
- Show the flow of your solution in a clear, orderly, logical, and legible form. Write all new equations in symbol form followed by numeric substitutions. All numerical values must have a unit. Show all unit conversions for the equations.
- If a verbal comparison is made, always state the amount against which the value is compared, e.g. larger than 8 of the observations. Percentages alone are not acceptable, as they are simply the ratio 1/100. They must always be followed by an explanation based on what the percentage is calculated, e.g. percent of fuel cost.
- Clearly indicate your solution to the problem. Underline or enclose in a box all numerical answers and their units. Be reasonable with implied accuracy that your pocket calculator delivers. Three significant figures are usually sufficient. Include a diagram or drawing, if appropriate.
- Consider presenting your results in a table if they depend on a parameter (e.g. a variable value depending on time). Each row and column in a table needs a label.
- Use the computer only after you understand how the values are calculated manually.

For spreadsheets:
- Check the references of all cells and the dimensions and units that your results should have. Separate values from their dimensions to use them in calculations.
- Give the spreadsheet a logical flow, use headings, and highlight, underline, or enclose in a box the key inputs and outputs.
- Layout the spreadsheet so that it can be printed completely on 8½-by-11-inch pages (horizontal or vertical). Write your name, course number, assignment number, and the due date into the spreadsheet so that it prints at least onto the first page.
- Delete unnecessary blank spreadsheets in your file that come with the default settings.

For presentations:
- See separate handout.
For network diagrams:

- Arrange the activities (and resource queues, if applicable) in equidistant rows and columns. Arrange the elements so that the network can be followed in a logical flow, e.g. in chronological order from the top left corner to the bottom right corner. Use the grid function of the drawing software and align the network elements on it.

- Give equal attention to the activities and to the logic links (arrows) for an overall balanced graphical layout. Do not “squeeze” the arrows between activities and do not “funnel” too many arrows along the same path.

- Give the entire network diagram a consistent layout, e.g. by attaching all arrows in the middle of the activity boxes that they connect.

- Attempt to connect all activities with arrows on the most direct path but at the same time minimize (a) the length of each arrow, (b) the number of bends in each arrow, and (c) the number of crossovers between arrows.

- A horizontal landscape page format may be helpful for larger network diagrams. If necessary, tape 8½-by-11-inch sheets of paper together lengthwise and fold the larger sheet to 8½-by-11-inch size before including it in the submittal.

For papers:


Acknowledgement:
Dr. Kirsten A. Davis is thanked for permission to use and modify this material.