


## Civil and Environmental Engineering Department Homework Format Standard

This document is provided as a guide to the format/style that is expected and required for all homework assignments submitted in CEE courses. The format described below follows standard engineering practice and is what will be expected from you on “day one” when you enter professional practice. By requiring this format across the CEE curriculum, it will be second nature to you and your ability to communicate technical solutions will meet professional standards well before your graduate.

1. The homework solutions that you submit should stand on their own. Your solution should begin with a brief statement of the problem and then be followed by a list of the given data, and then statements of any assumptions, estimations, or approximations that need to be made in solving the problem. The engineering principle or solution technique (if there is a single identifiable one) should also be stated early in the solution. This information is then followed by calculations that often occur in a series of steps with each step typically providing a result that feeds into a following step. Each solution step should be clearly identified and this is typically accomplished with headings that are underlined. Ultimately what you submit should be a problem solution that consists of a well organized series of steps that follow a natural progression leading to the final answer. Your instructor may give you examples of this format to further illustrate what is expected.
2. Your answers should stand out so that that they are easily found. Underline, double underline, or put a box around the answer(s) and remember to include the appropriate units. Another common technique used by engineers is to have an arrow from the right margin point to the answer. 
3. When using equations with variables represented by letters (e.g.  $Q$ ,  $\mu$ ), identify what each variable (letter) in the equation stands for the first time it appears; e.g.  $v = Q/A$  ;  $v$  is the velocity,  $Q$  is the volumetric flow rate, and  $A$  is the area).
4. The solution should be neat and spaced well so that the individual steps can be easily followed.
5. Use a straight edge to draw lines and a French curve, flexible curve, or other curved objects when drawing curves. (Avoid free-hand drawings unless you are an accomplished artist.) In place of hand drawings, feel free to use computer programs with graphics capabilities. Learn how to cut-and-paste graphics and photos into word processing software if you use these tools to complete homework assignments.
6. All pages must be numbered typically in one (not both) of the formats used on this handout (see upper right-hand corner and lower right-hand corner).
7. Your homework should be completed in a timely manner. The deadline that is set should be adhered to. If you are late with a submission, either points will be deducted or it will not be accepted (each instructor sets this policy). If a solution set is distributed or posted before you hand in your homework solution, it's too late.

8. You are encouraged to utilize computer software packages (you can also write your own programs) that will assist you in completing homework assignments. If you use word processing software, you should master the equation writing feature in the software package and use it where you would normally be writing out equations in your solution. Anytime you conduct calculations within a computer program and import the results to your homework, be sure to explain where these data came from and how they were calculated; e.g. “a linear regression analysis of the stress-strain data from the sample steel specimen used in Laboratory Exercise #6 was conducted using Excel.”
9. If an assignment submittal is delayed due to sickness, or some other legitimate reason, you should immediately contact your instructor. Don’t wait until the next regularly scheduled class to inform the instructor of your situation.
10. When writing text, write in a technical writing style, use proper punctuation, capitalization, spelling, and grammar, and do not use jargon.
11. The emphasis in having you complete homework assignments is for you to **learn** various engineering solution techniques through practice and to hone the skill of being able to communicate a technical solution using the proper engineering “language.”
12. Please note that the ODU Honor Code should be adhered to at all times. It is an honor code violation to copy the work of others students and submit it as a representation of your work. This action would also violate the tenets of the professional engineering societies.

Civil and Environmental Engineering Department  
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