

Homework 9
Perspectives on the Evolution of Structures
Final Project Assignment
Annotated bibliography and outline

You must submit at this point an outline, a bibliography, and the results of a search of a scholarly index from the university library. These will be turned in and marked.

It is nearly impossible to write a successful final project in a couple of days, or even a week, because the project relies heavily on research and organization. Both research and organization take time, and this assignment will make you get an early start on both of these aspects of the project.

Research, preparing an annotated bibliography:

An annotated bibliography is a list of references containing all relevant bibliographic data and, the annotated part, a short summary statement on the importance of the reference to your work. An example entry for a bibliography on the Bunker Hill Bridge is

[1] Menn C, Chandra V, Donington K. Conceptual Design of the Leonard P. Zakim Bunker Hill Bridge, Boston, MA, USA. Structural Engineering International. 14 (2004) pp. 42-45.

Christian Menn, the designer of the Bunker Hill Bridge, describes the conceptual design process that led to the final form of the Bunker Hill Bridge. Conceptual design is the preliminary process in which the form and layout of the bridge are determined without attention being paid to detailed sizing of the structural members and details. This stage of design largely determines whether the uncoded goals of economy and beauty will be achieved along with the codified goals of safety and serviceability. Menn describes the structural and site constraints that led him to choose the asymmetric cable-stayed solution, stating that cable stayed systems are the most versatile for use in dense urban environments.

Organization, preparing an outline:

At the top of your outline should be a well thought out, strongly and clearly worded thesis statement and an image of your structure. Following this should be an outline of your paper in which you delineate the main ideas you want to convey in support of your thesis in the order you want to present them. Number the main ideas in order and give letters to any sub-ideas you include in the outline. Each idea should be followed by a sentence or two describing in more detail what you plan to write about in this part of the paper. You should also indicate places in the outline where you expect to use illustrations, and describe what those illustrations will be (photo, load path diagram, ...)

If you can compose a good outline, you will have done most of the thinking necessary to succeed on the project, and will be left only to write clear sentences and paragraphs to flesh out the outline. If you start with a poor outline it will be very difficult to compose a paper that is well organized in support of your thesis statement.