DSGN 617 Energy Efficient Building Design Strategies

Assignment 1

Green buildings are; energy and resource efficient, non-wasteful and non-polluting, sustainable enough that helps minimise broad environmental impacts (e.g. ozone depletion), highly flexible and adaptable for long-term functionality, easy to operate and maintain (lower running costs), supportive of the productivity and well-being of the occupants.

From this point of view, here by this assignment, it is aimed to reveal current research studies related with the major issues of energy efficient building listed below:

Thermal aspects of Building envelope

Natural ventilation

Solar control and daylighting

Renewable energy systems

Each participant chooses one of the topics above and makes a deep literature review on the subject. A short report is going to be written based on the literature in order to reveal the fields of study on that specific topic.

The tips of the research report are:

- 1. During literature survey, only related articles, thesis and books should be listed. Any of the internet site will not be accepted as a literature base.
- 2. The report should include a brief description of each literature. The answers of the questions "what?", "why?" and "how?" are clearly defined during description of the literature.
- 3. At the end of the report, there will be a discussion part that contents a ciritism of the literature and the available study fields of the topic.
- 4. The main structure of the report will be;
 - a. An introduction part: describes the topic
 - b. <u>Literature review part:</u> introduces each literature (article, book or thesis) by the help of the answers of "what, why, how" questions.
 - c. Discussion part: your opinions on the topic and available fields of study.
 - d. <u>Reference list:</u> the list of all the literature that is related with the topic. The references should described as the author, the year of publication, the name of the literature, the name of the Publisher, the place where it published.

The reports will be delivered at 08 April 2016. Good Luck!