

**King Fahd University of Petroleum & Minerals**  
**Electrical Engineering Department**  
**Fall 2006 (061) - Section 04**  
**EE 203 – Course Project**

*Instructor: Dr. Sheikh Sharif Iqbal*

*Coordinator: Dr. M. A. Alsunaidi*

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The aim of the project is to select/design, study by simulation/theoretically, build, test and document a small interesting electronic application. The project work should be a valuable opportunity to apply knowledge and experience gained through lectures and lab experiments in a real-life electronic circuit. Due to constraints of time, projects should be simple and involve only commonly available circuit components.

The **final grade (5%)** of the projects depends on how much is done out of the following tasks.

Task	Marks	Comments
A one-page brief of the project including source of circuit, schematic of circuit, component list, cost, etc. to be submitted <b>before</b> starting work.	<b>0.5%</b>	You can select the project of your choice from the instructor, internet, books, magazines and other sources. Circuit should contain only discrete components ( <b>no ICs</b> ) and <b>maximum</b> of <b>three transistors</b> .
Hardware implementation tested and appropriate environment built around it.	<b>2%</b>	Take an appointment with your instructor to present to him the working circuit.
A report documenting all work and testing and improvement ideas, including Pspice simulations and/or theoretical analysis	<b>2.5%</b>	If hardware implementation is done, then Pspice and theoretical analysis become optional.
Packaging and finishing	<u><b>1%</b></u>	<u><b>Bonus</b></u> activity
Photographs of the completed hardware with abstract for publication on the web	<u><b>1%</b></u>	<u><b>Bonus</b></u> activity

*Instructions*

- 1) Work out the project in groups of two (unless approved by instructor).
- 2) The project can be implemented on the EE203-Lab trainers (see the lab technician for any equipment needed), or on a personal breadboard setup.
- 3) When you have your project ready, an appointment should be made to test the work.
- 4) Any improvements to the project, even in the form of ideas, will be considered in grading.
- 5) As a starter you check out the following sites:  
<http://www.electronicsteacher.com/list-of-schematics/>  
<http://www.electronicsforu.com/electronicsforu/Bulletin/mydefault.asp?id=23&s=t>