

**REQUIRED RESEARCH PAPER: (25% of Final grade)**

Students are required to research any of the topics covered in the syllabus **or textbook** and write a short, three-page, double-spaced, 12-point type (750-1000 word) paper on that topic, **PLUS** a one-page bibliography with at least three citations, on either:

1. a topic covered in the syllabus or textbook

OR

2. an instrument or device that uses the principles or topics covered in the syllabus or textbook

*You can look through the various syllabus or textbook topics and Google your heart away trying to find a topic that interests you. Then check to see what Wikipedia says about it.*

*What devices are included in the topic area? What physical theories are being used?*

*Clearly, this is NOT a true research paper, but you DO need to include a one-page bibliography including at least three (3) citations of Journal papers you have consulted as well as all the Web Site links you have reviewed in your search for additional information on the particular topic.*

*For example: If you selected a topic on the color of commercial light sources – you might decide to research light emitting diodes or fluorescent light bulbs or incandescent lights and compare their energy consumption at a particular light output level. Or, you might investigate the scientific principles behind an architectural success or failure.*

*In class we will review using Pratt’s Library research tools to find articles about your research topic.*

**DELIVERABLES**

*(due by 12:00pm NOON on the day of your class during the week indicated)*

**One-page Topic Proposal** : Due Week of 8 February

**Three-page DRAFT (5%)** : Due Week of 15 March

**Draft returned to you with my comments** : Due Week of 29 March

**Final Paper Submission (20%)** : Due Week of 5 April

**Paper Header**

Your paper **MUST** have the following header information, must be emailed to me as a word-processed file (e.g., **lastname\_section\_proposal.doc**, etc.) - NO PDFs or JPGs!

Your Name

Your Class and Section

Date of Submission

Title\*

(\*Title can be: **“Proposal: Topic Title”** or **“DRAFT: Topic Title”** or **“FINAL: Topic Title”**)