RESEARCH PAPER ASSIGNMENT

Objective: Provide broad device-specific exposure to classmates and the professor.

Student	Topic
Browne, David B.	Photonic Devices (Laser Diodes)
Bukay, Mikhail Y.	Floating Gate Devices (EPROMs, EEPROMs, EAPROMs)
Colinco, J Honey C.	Piezoelectric Devices
Martin, Paul C.	High Temperature (77K) Superconducting Devices
McMaster, William T.	Low Temperature (4K) Superconducting Devices
Mercer, Rebecca S.	Josephson Junctions
Nichols, William	Photovoltaic Devices (Solar Cells)
Pittman, Charles	Memristors
Potts, Christian T.	Superconducting Quantum Interference Devices (SQUIDs)
Reyes, Christerpher A.	Thermoelectric or Peltier-Seebeck Refrigeration Devices
Whitlock, Catherine E.	Micro-Electro-Mechanical Systems (MEMS)
Wilson, William S.	Charge Coupled Devices (CCDs)
Wolf, Ean H.	Bubble Memories
OPTIONAL TOPICS Inform Instructor NLT MAY 27, 2015 If you choose a different topic.	Tunnel Diodes
	Liquid Crystal Displays (as applied in flat panel television)
	Surface Acoustic Wave (SAW) devices
	Ferroelectric Memories
	Nanomechanical Memories
	Molecular Memories

Research your assigned topic and complete the following:

1. Provide a concise, well written two-page summary of your topic to the class for their review on June 17, 2015. Attach your references as a third sheet. Do not short change this part of the assignment. It will count as half the grade.
2. Present a 10 minute presentation on your assigned topic to the class on June 22, 2015.
3. Answer a few questions on your research after your presentation.

Suggestions: Plan to spend more than an hour on this. Use a search engine to understand the scope of your topic and to select a fragment on which to report.

Requirement: Use and cite the 2013 IRTS, The Citadel's on-line IEEE Explorer, and CRC resources.

HINT: Treat this like it will account for 1.5 letter grades (15% of your grade), because it will.