

MSCI222C – Research Paper Requirements

Research Paper Information Sheet **WORTH: 30% of Your Final Grade**

MSCI-222C, Introduction to Electronics, is a Pratt Core Course that requires students to write a Term Research Paper. Your research paper will account for a total of 30% of your Final Grade.

TOPICS:

Your research paper MUST research either an electronic component, device, or system. It could be something that you might use in a future installation or something that you have always been interested in. It MUST include a bibliography of web and traditional (research paper) resources.

Topic examples include:

- Research into audio amplifiers – past and present – which might include the differences between vacuum tube and solid-state amplifier systems
- What is IoT and how it can be used?
- What are embedded microcontrollers (Arduino, Raspberry Pi, nodeMCU)?
- What sensor(s) can be used for ___ (e.g., temperature, distance, light/color)
- How LEDs work and can be controlled
- What is AM and FM radio transmission and/or what is digital radio transmission?

RESEARCH PAPER REQUIREMENTS:

Your Research Paper must be written in double-spaced 12-point type and be at least three (3) pages long – at least 750 words for the Midterm Paper, and at least six (6) pages – at least 1500 words for the Final Paper. At least four (4) references must be clearly noted in your text as well as listed on a bibliography page which is NOT part of the 3-page or 6-page minimums.

Your file name MUST be of the form: lastname_PaperDraft.doc (docx, rtf, etc.)

Your research paper MAY be reviewed by the Pratt Writing & Tutorial Center (WTC) prior to handing it in – or by someone else that can assist you if not on campus. This is OPTIONAL but recommended if you feel your writing may need some help. (NOTE: Schedule your review at the WTC at least two weeks before your drafts are due!)

RESEARCH PAPER TIME LINE:

- **Your topic is due for my review and approval not later than 12:00Noon ET on 28 September 2021. (5 points)**
- **Your 3-page Midterm DRAFT Paper, plus one page bibliography, is due not later than 12:00Noon ET on 19 October 2021. (5 points) I will review your midterm paper draft, and return it to you with my comments, on or before 26 October 2021.**
- **Your 6-page Final DRAFT Paper, plus one page bibliography, is due not later than 12:00Noon ET on 23 November 2021. (5 points) I will review your Final paper draft, and return it to you with my comments, on or before 30 November 2021.**
- **Your FINAL PAPER is due not later than 12:00Noon ET on 7 December 2021. (Final Paper 10%, Bibliography Page 5%)**

These are FIRM DEADLINES - If you submit late, you are subject to a 20% per week penalty.