CAD 1203 Final Exam Study Guide

- Understand how single line, and block drawings are used.
- Know the conventions that apply to creating single line and block diagrams.
- Know the conventions that apply when creating a flow chart and which symbols are used to designate different types of processes.
- Understand how flow charts are used and the direction of the flow is shown.
- Know and be able to apply the basic rules for creating schematics.
- Be able to identify the basic logic symbols.
- Be able to define the basic logic gates.
- Wire List, specifically what information does it contain?
- Shielded and coaxial cable, what type of applications are they used for? Be able to identify.
- Wire terminations, There are three possible ways to terminate the wire, what are they? Be able to identify.
- Point to point wiring diagram rules?
- Highway wiring diagrams rules
- Baseline wiring diagram rules
- Cable assembly drawings, what information is included?
- Wire Harness\Assembly drawings, how are they used? What information is included. Is scale a factor?
- Flexible printed wire circuitry. What is it? When is it used?
- Proper way to identify components.
• Printed Circuit Boards. What are they? Why are they used? Are there different styles?

• Printed Circuit Boards – What information is required to design.

• What factors are considered when locating components on a pcb?

• What are the different types of pcb drawings? (Be able to define/identify each)

• What types of component attributes would be collected by printed circuit board design software?

• What are the advantages of using electronic circuit design software for pcb design?

• What is printed circuit board substrate composed of?

• What is a via? Are there different types of vias? Be able to identify them

• How is the location of components selected when designing printed circuit boards?

• What would the optimal arrangement of components be like on a pcb?

• What information would be contained in a routing schedule?

• What is a power/ground plane mask?

• Why would a power/ground mask be used?

• What factors must the designer consider when designing an electrical enclosure?

• What factors would be considered when looking at housing materials, and fasteners?

• Be able to specify a welded connection, (fillet, bevel, v groove, and plug).

• Be able to specify a threaded connection.

• How many classes of plastics are there?
- How do the different classes of plastics differ?
- What are the qualities of aluminum?
- What are the qualities of steel?
- Know the basic terms used in sheet metal fabrication?