## A Lab Report Guideline on

## Making a Straight-through & Cross-over Cables

- 1. Title, name, date, format (paragraph preferred, 12 Times New Roman, double space).
- 2. Purpose
  - What is the objective of your lab work?
- 3. Knowledge
  - What is a straight-through cable and what is a crossover cable?
  - What are the differences between the two cables?
  - What are the cables used for?
  - What standards do you use to make a straight-though cable and a cross-over cable?
  - Why are the standards important?
- 4. Tools and Materials
  - What tools do you use to make a straight-though cable and a crossover cable?
  - What materials do you use to make a straight-through and a crossover cable?
- 5. Process
  - Briefly describe the process you make the straight-through cable. (Steps may be numbered)
  - Briefly describe the process you make the crossover cable.
  - When you make the cable, what cautions do you take to ensure that the cable is reliable?
- 6. Test
  - What are the ten primary test parameters that must be verified for a cable link to meet the TIA/EIA-568-B standards?
  - Briefly describe how you test the straight-through cable?
  - Briefly describe how you test the crossover cable?
- 7. Conclusions
  - What is the result of the straight-through cable?
  - What is the result of the crossover cable?
  - How many cables did you make to get one good straight-through cable?
  - How many cables did you make to get one good crossover cable?
  - What are the conclusions of this lab?
- 8. Discussion
  - What is your biggest challenge to make the straight-through cable?
  - What is your biggest challenge to make the crossover cable?
  - What are the tips that you have learned?
  - What have you learned from this lab?
  - In what way(s) does the lab relate to what you have learned in class or from reading materials?
  - How are you going to improve it? (If you can't think of any improvements, then describe how the lab's concept could be further explored. Suggest "spin-off" experiments.)
  - What is the significance of learning to make the cables?
  - How can this lab work relate to the real business world?
- 9. Submit
  - Email the Lab Report to the Cisco Networking Conference in First Class.