NUMERICAL HEAT TRANSFER PROJECT
ME 375 THERMAL FLUID SCIENCES II

Report Format

The format for the heat transfer project is given below. It should include at least the information listed.

1. Title Page
   Include project title, student name, course name, date, and instructor.

2. Table of Contents

3. Problem Definition
   a. Discussion of the defined problem.
   b. Discussion and identification of the governing equation with boundary conditions.

4. Solution Method
   a. Discussion of how the defined model will be solved using the finite-difference method.
   b. Presentation and discussion of the grid to be used in the method.
   c. Development of the recursive formulas that will be used. Discussion of method accuracy. Discussion of stability if applicable.

5. Results
   a. Graphical representation of the solutions.
   b. Discussion of every figure.
   c. Results of hand calculations to estimate validity of numerical solution.
   d. Answers to original problem statement integrated into report.

6. Conclusions
   a. Brief summary of results and conclusions (Analysis).
   b. Brief summary of results and conclusions about numerical method.

7. Appendix
   a. Program listing.
   b. Hand calculations

Note:

i. Everything must be typed.
ii. CD-ROM disk with matlab program.
iii. Equations must be created using equation editor and numbered.
iv. Figures and tables should be in text of paper.
v. Figures must be numbered and have caption following figure number.
vi. Tables must be numbered and have caption preceding table number.
vii. 1.5 line spacing.
viii. Straight left and right margins.
ix. Figures and tables should be completely discussed in body of paper.
x. Font size 12 pts and Times Roman.