Measurable Student Learning Outcomes

At the completion of the course, students will be able to

1. Use $O$, $\Omega$, $\Theta$ and simple recurrences to analyze the time complexity of iterative and recursive algorithms

   This will be tested in the midterm

2. Prove the correctness of algorithms.

   This will be tested in the midterm as well as the final exam

3. Implement recursive, iterative and heuristic algorithms.

   This will be best tested by the implementation projects

4. Prove that a problem is NP-complete using reductions.

   This will be tested in the final exam