Core Objectives for Lesson 4:

- know the definition of inversion-bound sorting algorithm and how it is related to average-case analysis

- know three examples of inversion-bound sorting algorithms (BubbleSort, InsertionSort, SelectionSort)

- know the result that InsertionSort is the best of the inversion-bound sorting algorithms

- know how to perform amortized analysis in simple cases

- be aware of the result that, by amortized analysis, the size-doubling strategy for resizing an array performs in linear time while the incremental strategy performs in quadratic time.