|  |  |  |  |
| --- | --- | --- | --- |
| **Operation** | **Vector** | **Hash Table** | **Binary Search Tree (BST)** |
| **Load Data** | O(n) | O(n) | O(n log n) |
| **Search for Course** | O(n) | O(1) average | O(log n) average |
| **Insert Course** | O(1) (at end) | O(1) average | O(log n) |
| **Print All Courses (Sorted)** | O(n log n) (sort) | O(n log n) (sort) | O(n) (in-order traversal) |
| **Memory Usage** | Low | Medium (buckets) | Medium (pointers) |
| **Ordering Maintained?** | No | No | Yes |