

CS 2110: Object-Oriented Programming and Data Structures



About Syllabus Schedule Office hours Assignments Exams Resources

Schedule

See the <u>lectures</u> page for a fine-grained list of chapter sections and online readings that contain core material for this course, as well as reminders of post-lecture tasks. Remember: it is best to skim the required reading *before* its associated lecture.

| Day | Date | Lecture | Discussion | Work due |
|-------|--------|---------------------------------------------------------------------------|------------------------------------------------------------|-----------------------|
| Tue | Jan 23 | Lecture 1: Overview, structured programming [slides, code] | Discussion 1: Introductions [code] | |
| Wed | Jan 24 | | | |
| Thu | Jan 25 | Lecture 2: Objects [slides, code] | | |
| Fri | Jan 26 | | | Discussion activity 1 |
| Mon | Jan 29 | | | Q1 |
| Tue | Jan 30 | <u>Lecture 3</u> : Abstraction, encapsulation [slides, code] | Discussion 2: Object diagrams, arrays [code] | |
| Wed | Jan 31 | | | A1 |
| Thu | Feb 1 | <u>Lecture 4</u> : Specifications, testing [slides, code] | | |
| Fri | Feb 2 | | | Discussion activity 2 |
| Mon | Feb 5 | | | Q2, add deadline |
| Tue | Feb 6 | Lecture 5: Interfaces, subtyping [slides, code] | <u>Discussion 3</u> : Designing and testing classes [code] | |
| Wed | Feb 7 | | | |
| Thu | Feb 8 | <u>Lecture 6</u> : Inheritance, dynamic dispatch, equality [slides, code] | | Syllabus quiz |
| Fri | Feb 9 | | | Discussion activity 3 |
| Mon | Feb 12 | | | Q3 |
| Tue | Feb 13 | Lecture 7: Exceptions, I/O [slides, code] | <u>Discussion 4</u> : Reading and writing files [code] | |
| Wed | Feb 14 | | | |
| Thu | Feb 15 | Lecture 8: Bags, Generics | | A2 |
| Fri | Feb 16 | | | Discussion activity 4 |
| Mon | Feb 19 | | | Q4 |
| Tue | Feb 20 | <u>Lecture 9</u> : Linked structures | <u>Discussion 5</u> : Java collections | |
| Wed | Feb 21 | | | |
| Thu | Feb 22 | Lecture 10: Ordered collections | | |
| Fri | Feb 23 | | | Discussion activity 5 |
| Feb 2 | 4–27 | February break | | |
| Wed | Feb 28 | | | |
| Thu | Feb 29 | Lecture 11: Efficiency | | |
| Fri | Mar 1 | | | |

| Mon | Mar 4 | | | Q5 |
|---------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|
| Tue | Mar 5 | Lecture 12: Recursion | Discussion 6: Prelim 1 review | А3 |
| Wed | Mar 6 | | | |
| Thu | Mar 7 | Lecture 13: Trees I | | Prelim 1 |
| Fri | Mar 8 | | | |
| Mon | Mar 11 | | | Q6 |
| Tue | Mar 12 | Lecture 14: Trees II | Discussion 7: TBD | |
| Wed | Mar 13 | | | |
| Thu | Mar 14 | Lecture 15: Loop invariants | | |
| Fri | Mar 15 | | | Discussion activity 7 |
| Mon | Mar 18 | | | Q7, drop deadline |
| Tue | Mar 19 | Lecture 16: Sorting | <u>Discussion 8</u> : Loop invariants | |
| Wed | Mar 20 | | | |
| Thu | Mar 21 | <u>Lecture 17</u> : Hash tables | | |
| Fri | Mar 22 | | | Discussion activity 8 |
| Sun | Mar 24 | | | A4 |
| Mon | Mar 25 | | | Q8 |
| Tue | Mar 26 | Lecture 18: Graphical user interfaces | <u>Discussion 9</u> : Hash tables | |
| Wed | Mar 27 | | | |
| Thu | Mar 28 | Lecture 19: Event-driven programming | | |
| Fri | Mar 29 | | | Discussion activity 9 |
| Mar 3 | 30–April 7 | Spring break | | |
| Mon | Apr 8 | | | |
| Tue | Apr 9 | Lecture 20: Concurrency | <u>Discussion 10</u> : TBD | |
| Wed | Apr 10 | | | |
| Thu | Apr 11 | Lecture 21: Synchronization | | |
| Fri | Apr 12 | | | Discussion activity 10 |
| Mon | Apr 15 | | | |
| Tue | . 10 | | | Q9 |
| | Apr 16 | Lecture 22: Graphs | <u>Discussion 11</u> : Prelim 2 review | Q9 A5 |
| Wed | Apr 16 | Lecture 22: Graphs | Discussion 11: Prelim 2 review | |
| Wed Thu | | Lecture 22: Graphs Lecture 23: Graph traversals | Discussion 11: Prelim 2 review | |
| | Apr 17 | | Discussion 11: Prelim 2 review | A5 Prelim 2 |
| Thu | Apr 17 Apr 18 | | Discussion 11: Prelim 2 review | A5 Prelim 2 |
| Thu Fri | Apr 17 Apr 18 Apr 19 | | Discussion 11: Prelim 2 review Discussion 12: Graph traversals | Prelim 2 Discussion activity 11 |
| Thu Fri Mon | Apr 17 Apr 18 Apr 19 Apr 22 | Lecture 23: Graph traversals | | Prelim 2 Discussion activity 11 |
| Thu Fri Mon Tue | Apr 17 Apr 18 Apr 19 Apr 22 Apr 23 | Lecture 23: Graph traversals | | Prelim 2 Discussion activity 11 |
| Thu Fri Mon Tue Wed | Apr 17 Apr 18 Apr 19 Apr 22 Apr 23 Apr 24 | Lecture 23: Graph traversals Lecture 24: Shortest paths | | Prelim 2 Discussion activity 11 Q10 |
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| Thu Fri Mon Tue Wed Thu Fri Mon Tue Won Thu Tue Tue Thu | Apr 17 Apr 18 Apr 19 Apr 22 Apr 23 Apr 24 Apr 25 Apr 26 Apr 30 May 1 May 2 | Lecture 23: Graph traversals Lecture 24: Shortest paths Lecture 25: Heaps Lecture 26: Assessment | Discussion 12: Graph traversals | Prelim 2 Discussion activity 11 Q10 Discussion activity 12 Q11 |

TBD Final exam