## CS 4307: Database Systems

<table>
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<tr>
<th>Spring 2022</th>
<th>Reading</th>
<th>Project</th>
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<tr>
<td>Jan 10–14</td>
<td>2: relational model</td>
<td>SQL: simple queries on single tables</td>
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<tr>
<td>Jan 17–21 (MLK Day)</td>
<td>3: introduction to SQL</td>
<td>SQL: aggregation on single tables</td>
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<tr>
<td>Jan 24–28</td>
<td>4: intermediate SQL</td>
<td>SQL: joins</td>
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<td>Jan 31–Feb 4</td>
<td>5: advanced SQL</td>
<td>SQL: advanced topics</td>
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<td>Feb 7–11</td>
<td>7: relational database design</td>
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<td>Feb 14–18</td>
<td>13: data storage structures</td>
<td>social network</td>
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<td>Feb 21–25 (Presidents’ Day)</td>
<td>14: indexing</td>
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<td>Feb 28–Mar 4</td>
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<td>btree iterator</td>
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<td>Mar 7–11</td>
<td>15: query processing</td>
<td>query execution: single tables</td>
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<td>Mar 14–18 (Spring break)</td>
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<td>Mar 21–25</td>
<td>16: query optimization</td>
<td>query execution: aggregation</td>
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<td>Mar 28–Apr 1</td>
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<td>query execution: joins 1</td>
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<td>Apr 4–8</td>
<td>17: transactions</td>
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<td>Apr 11–15</td>
<td>18: concurrency control</td>
<td>query execution: advanced</td>
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<td>Apr 18–22</td>
<td>19: recovery system</td>
<td>final project</td>
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<td>Apr 25–29 (Wednesday last day)</td>
<td>in-memory databases</td>
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All readings are from the textbook.

### Resources

- [Syllabus](#)
- [Textbook slides](#)
- [Stonebraker: One Size Fits None](#)