Princeton University
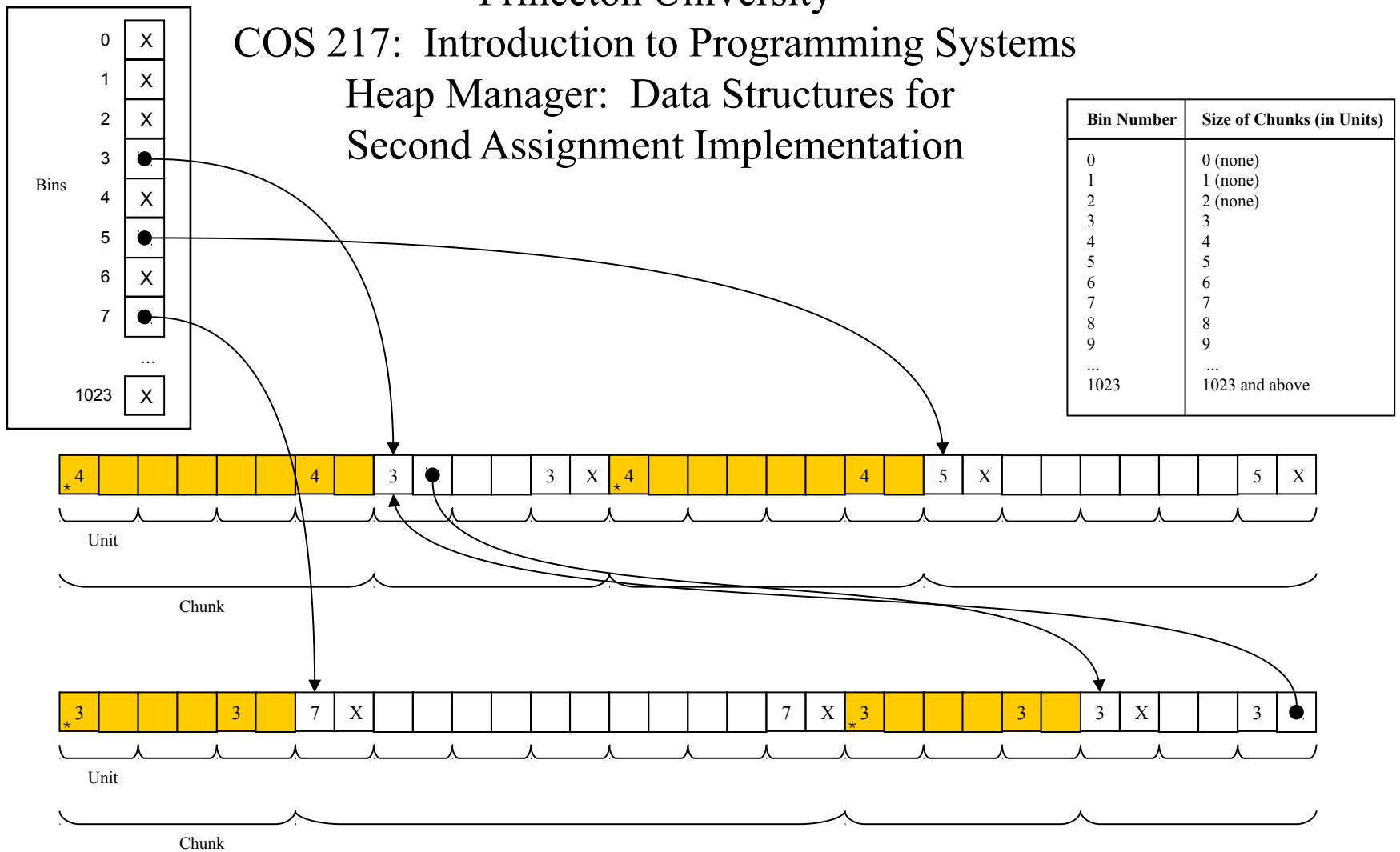## COS 217: Introduction to Programming Systems
Heap Manager: Data Structures for
Second Assignment Implementation

Bins

0	X
1	X
2	X
3	●
4	X
5	●
6	X
7	●
...	
1023	X

Bin Number	Size of Chunks (in Units)
0	0 (none)
1	1 (none)
2	2 (none)
3	3
4	4
5	5
6	6
7	7
8	8
9	9
...	...
1023	1023 and above

Unit

Chunk

Unit

Chunk

Each box consists of 8 bytes.
Each Chunk's header Unit contains a status (INUSE or FREE), a length, and, if the Chunk is free, a pointer to the next Chunk in its Bin.
Each Chunk's footer Unit contains a length and, if the Chunk is free, a pointer to the previous Chunk in its Bin.
The Chunks in the Bins are in no particular order.
 * means INUSE; absence of * means FREE.