





ON	ILINE FEED	BACK SURVEY
 Feedback Sur Extra credit a Tuesday surve Thursday surve 	vey "Quiz" in Ca vailable for com eys: due by ~ We veys: due ~ Mon = TCSS 422 A > A	nvas – Available After Each Class pleting surveys <u>ON TIME</u> ed @ 11:59p @ 11:59p Assignments
	Spring 2021 Home Announcements Zoom	Search for Assignment • Upcoming Assignments
May 1, 2025	Syllabus Assignments Discussions TCSS422: Computer Operating School of Engineering and Tec	TCSS 422 - Online Daily Feedback Survey - 4/1 Available until Apr 5 at 11:59pm Due Apr 5 at 10pm -/1 pts Ouiz 0 - C background cuprov Systems [Spring 2025] thnology, University of Washington - Tacoma

	Questi	on 1								0.5 pts	
	On a scale of 1 to 10, please classify your per class:			our persp	pective on material covered in today's						
	1 Mostly Review	2	3	4	5 Equal	6	7	8	9	10 Mostly	
	Questi	on 2								0.5 pts	
	Please	ate the	pace of	today's	class:						
	1 slow	2	3	4	5 Just Right	6	7	8	9	10 Fast	



































18





























BAS	SIC SPIN LOO	CK: CORRECT?	
If both thread requires luck.	ls can run at the sa (e.g. basic spin	ame time, then correctnes lock is incorrect)	SS
Thread1		Thread2	
call loc while interrup	<pre>tk () (flag == 1) t: switch to Thread 2</pre>	<pre>call lock() while (flag == 1) flag = 1; interrupt: switch to Thread 1</pre>	
flag =	1; // set hag to 1 (too!)		
Here both thr	eads have "acquire	ed" the lock simultaneous	ly
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	CONCURRENT COUNTER		
1	typedef structcounter_t {		
3	<pre>pthread_lock_t lock; } counter_t;</pre>		
678	<pre>void init(counter_t *c) { c->value = 0; Pthread mutex init(cc->lock_NULL);</pre>		
9 10	<pre>void increment(counter t to) {</pre>		
12 13	Pthread_mutex_lock(&c->lock); c->value++;		
14 15 16	<pre>} }</pre>		
Add loc	k to the counter		
Require	e lock to change data		
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	CONCURRENT QUEUE - 2				
Add to a	queue				
(Con 21 22 23 24 25 26 27 28 29 30 31 32	<pre>tt.) void Queue_Enqueue(queue_t *q, int value) { node_t *tmp = malloc(sizeof(node_t)); assert(tmp != NULL); tmp->value = value; tmp->next = NULL; pthread_mutex_lock(&q->tailLock); q->tail=>next = tmp; q->tail = tmp; pthread_mutex_unlock(&q->tailLock); }</pre>				
May 1, 20	25 TCS5422: Operating Systems [Spring 2025]	L10.65			









1 #define BUCKETS (101) 2 3 turgedef struct bash t	
2 3 typedef struct hash t	
3 typedef struct hash t	
5 Cypeder Struct Hash C	{
4 list t lists[BU	CKETS];
5 } hash_t;	
6	
7 void Hash_Init(hash_t *H) {
8 int i;	
9 for (i = 0; i <	BUCKETS; i++) {
10 List_Ir	<pre>it(&H->lists[i]);</pre>
12 }	
13	The state bases of
14 Int Hash_Insert(hash_t ~	H, INC KEY) {
15 Int bucket - ke	y & BUCKEIS;
	erc(an >rrscs[buckec], key);
18	
19 int Hash Lookup (hash t *	H. int key) {
20 int bucket = ke	v % BUCKETS;
21 return List Loo	<pre>kup(&H->lists[bucket], key);</pre>
22 1	· · · · · · · · · · · · · · · · · · ·





