

CM3120 Transport/VO II, Morrison, 2021

Week	lecture	Module	Date (Monday/ Wednesday)	CM3120 Transport/VO II, Spring 2021		(Geankoplis)
1	1	1	11-Jan-21	Course introduction		5.3
1	2	1	13-Jan-21	Prerequisite review-steady heat xfer and dim analysis		5.4
2			18-Jan-21	Class Cancelled, Martin Luther King Jr. Day		
2			20-Jan-21	EXAM 1		
3	3	I	25-Jan-21	(Lec-I) Intro to unsteady state heat transfer		5.4
3	4	II	27-Jan-21	(Lec-II) Solve unsteady micro-E-balance (Will pipes freeze?)		
4	5	III	1-Feb-21	(Lec-III) Unsteady macro-E-Balance		
4	6	IV,V	3-Feb-21	(Lec-IV) Dimensional Analysis/ Low Biot number: lumped parameter method	(Lec-V)	
5	7	VI	8-Feb-21	(Lec-VI) Short Cut Solutions-Heissler, Gurney Lurie charts		
5	8	VII	10-Feb-21	(Lec-VII) Full analytical solutions		6.1, 6.2
6	9	I	15-Feb-21	(Lec-I) Introduction to diffusion/Mass transfer		6.2
6			17-Feb-21	Class Cancelled Career Fair		
7	10	II	22-Feb-21	(Lec-II) Classic diffusion/mass transfer: a) 1D evaporation		6.3, 6.4
7	11	III	24-Feb-21	(Lec-III) Classic diffusion/mass transfer: b) 1D radial diffusion		6.5
8	12	IV	1-Mar-21	(Lec-IV) Cycle back: Fick's mass transport law		
8			3-Mar-21	EXAM 2		
			8-Mar-21	Spring Break		
			10-Mar-21	Spring Break		
9	13	V	15-Mar-21	(Lec-V) Microscopic species A mass balance		6.6
9	14	VI	17-Mar-21	(Lec-VI) Classic diffusion/mass transfer : c)heterogeneous reaction		7.1
10	15	I	22-Mar-21	(Lec-I) Classic diffusion/mass transfer: d) EMCD		7.5
10	16	II	24-Mar-21	(Lec-II) Classic diffusion/mass transfer: e) penetration model		7.3C, 7.5D, 7.5E
11	17	III	29-Mar-21	(Lec-III) Unsteady macroscopic species A mass bal: Introduction		
11			31-Mar-21	EXAM 3		
12	18	IV	5-Apr-21	(Lec-IV) Interphase species A mass transfers: To an interface		7.8, 7.3, 7.4
12	19	V	7-Apr-21	(Lec-V) Unsteady macroscopic species A mass balance: Redux		
13	20	VI	12-Apr-21	(Lec-VI) Interphase species A mass transfers: Multiple resistances		
13	21	VII	14-Apr-21	(Lec-VII) Dimensional analysis in mass transfer		
14	22	VIII	19-Apr-21	(lec-VIII) Data correlations in mass transfer		
14			21-Apr-21	Exam review		
15				FINAL EXAM		

MONDAY-WEDNESDAY

FRIDAYS

Week	module	date	Friday Schedule	Deliverable	Exams
1	1	Friday, January 15, 2021	Problem session Module 1		
2	2	Friday, January 22, 2021	Problem session Module 2	Mod 1 SG	Exam 1
3	2	Friday, January 29, 2021	Distillation (conventional, azeotropic, multicomponent)		
4	2	Friday, February 5, 2021	Winter Carnival		
5	2	Friday, February 12, 2021	Problem session Module 2	UO 1 W	
6	3	Friday, February 19, 2021	Gas absorption-packed column and tray towers		
7	3	Friday, February 26, 2021	Problem session Module 3	UO 2 W	
8	3	Friday, March 5, 2021	Problem session Module 3	Mod 2 SG	Exam 2
	3	Friday, March 12, 2021	Spring Break		
9	3	Friday, March 19, 2021	Membrane Separation (RO, micro/ultrafiltration)		
10	3	Friday, March 26, 2021	Problem session Module 3	UO 3 W	
11	4	Friday, April 2, 2021	Problem session Module 4	Mod 3 SG	Exam 3
12	4	Friday, April 9, 2021	Liquid-Liquid Extraction		
13	4	Friday, April 16, 2021	Problem session Module 4	UO 4 W	
14	4	Friday, April 23, 2021	Problem session Module 4	Mod 4 SG	
					Final