

TENTATIVE SUMMER 2004 ATM OCN 100 COURSE OUTLINE

The following topics and text readings are to be covered in lecture:

DATE	TOPIC	TEXT page numbers
14 JUN (M)	Introduction Weather/climate elements; surface & aloft Surface weather charts and satellite imagery	1-14 301-307
15 JUN (T)	Composition of present and past atmosphere Atmospheric pressure and barometry	15-35 93-102, 105-107
16 JUN (W)	Temperature, thermometry and vertical temperature structure	69-73; 89-90 (Review 29-30)
17 JUN (R)	Energy forms and transport – Radiation	37-41; 73-77; 91-92
21 JUN (M)	Radiation (<i>continued</i>) and energy budgets	41-67; 78-87
22 JUN (T)	Behavior of Gases: Gas laws and stability	102-103, 124-126
23 JUN (W)	Water, Hydrological cycle & atmos. humidity variables	109-121; 132-135
24 JUN (R)	Cloud, fog, dew and frost formation	122-126, 128-130; 139-142
28 JUN (M)	Fog & cloud observations and classification	142-151
29 JUN (T)	Precipitation: formation processes, precipitation measurement and types	151-166
30 JUN (W)	Precipitation (<i>con't</i>), weather modification; review	167-168
1 JUL (R)	1st Hour (3 Weeks) Exam	---
5 JUL (M)	<i>Independence Day observed, no classes</i>	---
6 JUL (T)	Atmospheric optical phenomena	319-327 (Review 38-40)
7 JUL (W)	Wind measurements, weather system scales	169-172; 184-185; 186-188
8 JUL (R)	Theory of winds: Forces of motion	172-178
12 JUL (M)	Theory of winds: (<i>con't.</i>) Atmospheric motions vertical & horizontal motions associated with highs and lows; local circulations; forecasting	178-183 306-307 240-244; 307-309
13 JUL (T)	Planetary scale atmospheric circulation patterns, Upper air observations and Jet streams	191-199 200-207; (Review 306-307)
14 JUL (W)	Planetary circulation regime (<i>con't</i>):	
15 JUL (R)	Monsoons, El Niño-Southern Oscillation events	199-200; 207-217
19 JUL (M)	Extratropical weather systems: Air masses, fronts	221-229; 189-190
20 JUL (T)	Extratropical cyclones: morphology, evolution, weather sequences and forecasting	230-238, 246-247
21 JUL (W)	Midlatitude anticyclones; review	238-240
22 JUL (R)	2nd Hour (6 Weeks) Exam	---
26 JUL (M)	Link between surface and upper air circulation patterns Longer term weather prediction	313-317; (review 200-209)
27 JUL (T)	Thunderstorms: Stability and morphology	249-258 (review 124-130)
28 JUL (W)	Thunderstorms: Hazards and lightning	258-265, 274-275, 276
29 JUL (R)	Thunderstorms: Tornadoes	265-273, 277
2 AUG (M)	Tropical Weather Systems – Hurricanes	279-299
3 AUG (T)	Present climates	329-337; 367-373
4 AUG (W)	Past climates, climatic change and review	338-358
5 AUG (R)	3rd Hour (8 Weeks or Final) Exam	-----