

SPRING 2004, EASB8800* (3101), **EES77600 CLIMATE AND CLIMATE CHANGE (3-2-4)**

W 1830-2030h & F 1630-1900h, J925/J902

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Wk	Mtg	Date	Topic	Reading	Assign
1.	1	F 30	Jan Climate in motion: Introduction, Earth in space	B06-13,154-55, Sch02	
2.	2	W 4	Feb Earth in space (cont.), Lab: Radiation		1
	3	F 6	Earth in space (cont.), Atmospheric motion	B14-15, Sch11	
3.	4	W 11	Atmospheric motion (cont.), Lab: General Circulation		2
	5	F 13	Atmospheric motion (cont.), Ocean currents	B16-17, Sch03	3
4.	6	F 20	Water cycle, Clouds, Lab: Adiabatic diagram	B18-21, Sch05,06,12	
5.	7	W 25	Monsoons, Volcanoes, Sunspots, Gia principle	B138-39, 23-25, 28-29	4
	8	F 27	Climate records: surface, satellite, Lab: www data	B32-35, Sch12	
6.	9	W 3	Mar Exam 1, Depressions/anticyclones	B110-11	
	10	F 5	Weather forecasting, historical and proxy records	B36-41, Sch14	5
7.	11	W 10	Ice ages, Cont. drift, Asteroids, Lab: www data	B42-47	
	12	F 12	Koeppen classification, Polar regions: Climates	Handout, B50-53	6
8.	13	W 17	Aurora, Ice sheets, extreme cold, Lab: McIDAS-Antarctica	B54-59	
	14	F 19	Ozone hole, Sea ice, Ice cores, Tundra-taiga: climates	B60-69	7
9.	15	W 24	Clim. extremes, Flora/fauna, Forests, Snow, Permafrost, Lab: McIDAS-Siberia	B70-79	8
	16	F 26	Mt. Regions: Climates, Avalanches, Vegetation, Living, Glaciers	B82-93	
10.	17	W 31	Lab: East coast "Chinook"		
11.			Spring break!		
12.	18	W 14	Apr Exam 2, Mediterranean regions: Climates, Winds	B94-99	
	19	F 16	Vegetation, Diet, Deforestation, Lab: McIDAS:-Mediterranean climate	B100-105	9
13.	20	W 21	Temperate regions: Climates, Agriculture, Urbanization, Little Ice Age	B108-121, S284-85	
	21	F 23	Prairies: Thunderstorms, Lab: McIDAS-Thunderstorms	B126-27, Sch15	10
14.	22	W 28	T-storms (contd.), Tornado, Lightning, Climates, Plants, Dust Bowl	B124-33, 26-27	
	23	F 30	Desert regions: Climates, Lab: McIDAS-Water/land & Sfc./air temps	B152-153	11
15.	24	W 5	May Albedo, Energy, Flora/fauna, Heat, Drought, Dust	B154-167	
	25	F 7	Tropical regions: Climates Lab: Climate change	B136-137	12
16.	26	W 12	Monsoons, Tropical cyclone, Biodiversity, Rainforests, El Nino, Cycles	B138-149, Sch16	
	27	F 14	The future: Modeling, monitoring, costs, food, health, modification.....	B170-185	
17.	28	W 19	Exam 3		
		TBD	Final (optional)		

Readings:

B = Burroughs, W. J., 1999: *The Climate Revealed*, Cambridge Univ. Press.

S* = Stull, R. B., 2000: *Meteorology for Scientists and Engineers*, 2nd Edition, Brooks/Cole (ISBN 0-534-37214-7)

*On reserve, CCNY Science and Engineering Library (~\$30, www.tomsonlearning.com)

Course grade:

Exams - 80%, Assignments - 20%

Grading: A $\geq$ 90, B $\geq$ 80, C $\geq$ 60, F < 60 (I do not curve)

Exams: There will be no make-up exams. If you miss an exam, you must take the comprehensive final. You can take the final in an attempt to improve a lower exam grade.

Assignments: Due at the beginning of class, late assignments will not be accepted. If you wish, mail your work to Prof. Hindman, EAS Dept., CCNY, NYC, NY 10031 postmarked no later than date due. You may also fax the work to the department office (212-650-6482, attn. Prof. Hindman). You may also e-mail your work. There will be no make-up assignments. Extra credit on exams will help make up for missed assignments.

Miscellaneous: Your assignment and exam work must be created by you and not copied from others. Keep all your work in case of a grade dispute. All grade disputes must be resolved by the scheduled final exam. No food or drink allowed in the classrooms. Kindly disable your cell phone and pager when in the classroom.

*Undergraduates enrolled in EASB8800 "by permission" earn credit in **EAS488**. Thus, there will be three levels of exams and assignments: B. Sc., M. A. and Ph. D.