GEOF 220 Physical meteorology
Syllabus Spring 2018

Radiation – Jan Asle Olseth

Dennis L. Hartmann: **Global Physical Climatology,** Academic Press 1. Edition 1994

Chapter	2	p. 18 – 39 (the whole chapter)
Chapter	3	p. 40 – 80 (the whole chapter)
Chapter	4.4	p. 87 – 92
Chapter	4.7	p. 103 – 106
Chapter	9.2 - 9.3	p. 230 – 234
Chapter	11.4	p. 294 – 300
Chapter	12.5.1	p. 330 – 332

or

Dennis L. Hartmann: **Global Physical Climatology,** Academic Press 2. Edition 2016

Chapter	2	p. 25 – 48 (the whole chapter)
Chapter	3	p. 49 – 93 (the whole chapter)
Chapter	4.4	p. 101 – 106
Chapter	4.7	p. 120 – 122
Chapter	10.2 - 10.3	p. 294 – 303
Chapter	10.7	p. 317
Chapter	12.4	p. 371 – 376
Chapter	13.12.1	p. 407 – 408

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A ppt presentation (based on selected literature) will give an overview of both short wave and long wave radiation at the surface, with special focus on spatial and temporal variations on local scale. This last presentation is about 50% of the Syllabus.

Cloud Physics - Joachim Reuder

Rogers and Yao: A Short Course in Cloud Physics

In general all relevant material is delivered as pdf-files. The content of Rogers and Yao that has been covered by the lecture directly is listed below and recommended for reading (but keep in mind that the lectures covered more than that):

Chapter	1	p1-p10 (complete)
Chapter	2	p12-p26 (complete)
Chapter	3	p28-p35
Chapter	4	p44-p57 (complete)
Chapter	6	p81-p96 (complete)
Chapter	7	p99-p119 (complete)
Chapter	8	p121-p136; p143-p148
Chapter	9	p150-169 (complete)
Chapter	10	p170-p183 (complete)
Chapter	11	p184-p193 (complete)