

The midterm exam will be mainly conceptual, short answer, followed by a quantitative problem or two, with choice. Material will be drawn from the assigned readings (see below for omitted readings), lectures, homeworks, and handouts. All needed formulae, constants, etc will be given. Closed book, no notes, but bring a calculator for the quantitative part.

Readings covered:

Chapter 1 (all), Chapter 2 (p. 17-74), Chapter 3 (p.85-120),  
Chapter 4 (173-190, 204-277)

Homeworks: #1, #2, #3, #4, #5

Handouts: Concept summaries for Chapter 2, 3, 4 (through 2/7/00)  
"What we know about climate change"  
"Smog recipe"

Lectures: through Monday Feb 7 (overheads, notes on file at Reserve Desk UGL)

**NOTE:** Be able to give the following chemical reaction sequences:

Chapman mechanism for oxygen-only ozone cycle  
Mechanism I, II for catalyzed stratospheric ozone loss  
Smog recipe for tropospheric ozone production

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Readings **not** covered (so not on this exam): pp 121-163, and 190-204