Atmo 201 Midterm 5 study guide

This exam is not explicitly cumulative, and covers material from chapters 14 (tornado formation, 15 November), 15, 18, and 16. In addition, a few questions from the Ch. 13 reading assignment will be on the exam. Material introduced in earlier parts that is covered in these chapters will be included. The number of questions will be loosely proportional to class time spent on a chapter (1 day is about 7-9 questions).

Chapter 13 assignment (2-4 questions)
“P. 344-351 (Weather Forecasting methods to Types of forecasts) including Table 13.1 and the special topic on p. 345, but not the one on 349; and P. 354 of the main text (Predicting the weather) plus Table 13.3 and the box that is all of P. 356. Associated review questions (not to be turned in, but for studying guides) are 9-11 and 18.”

Chapter 14 (<1 day)
- Questions for review: 33, 34, 37
- Tornado formation (emphasize super-cell)
- Waterspouts

Chapter 15 (2.5 days)
- Questions for review: 1, 3-17, 19-20, 24
- Questions for thought: 1
- Tropical weather
- Anatomy of a hurricane (emphasize)
- Hurricane formation and dissipation (emphasize)
- How do hurricanes compare with mid-latitude storms (for information only)
- Naming hurricanes …
- Devastating winds, flooding, and the storm surge (emphasize)
- Tropical storm Allison (for information only)
- Some notable hurricanes (emphasize Ivan, Katrina, class presentation)
- Record setting seasons (for information only)
- Hurricane watches, warnings, and forecasts (reference only)
- Hurricanes in a warmer world (for information only)
- Modifying hurricanes (reference only)

Chapter 16 (2.5 days)
- Questions for review: all
- Questions for thought: 3, 8
- Reconstructing past climates (emphasize)
- The ocean conveyor belt and climate change
- Possible causes of climate change (emphasize)
- Nuclear winter (reference only)
- Climate models (reference only)
- Global warming (emphasize)
- Radiative forcing (for information only)
- The sahel (for information only)
Chapter 18 (<1 day)

- Questions for review: 1-2, 4-5, 7-12, 18, 26

A brief history of air pollution (for information only)
Types and sources of pollutants (emphasize)
The ozone hole
Factors that affect pollution
Indoor air pollution (for information only)
Smokestack plumes (for information only)

General info (copied from exam 1 guide)
The exam will be multiple-choice, with a (large) scantron required. The distribution of questions will approximately be proportionate to the amount of class time spent on a general topic. Most questions are drawn from the reading, but selected based on what was covered and how it was covered in class. However, coverage of the material in class is the best indicator it may be on the exam. Below, I will indicate specifically which parts of chapters are most (or least) important. I will note review and other questions that will best help you study what I want you to learn. I will note sections as emphasize (more likely to result in a question on the exam), informational (not likely to independently generate a question, but may be referred to later in the class), or reference (majors and other interested parties should read and enjoy). All other sections are of average likeliness to lead to a question (note that “section” includes “focus on …” and pretty much anything written in a chapter.

A good way to study a chapter is to review your notes and/or the posted class slides; look at the review questions briefly; read the chapter; answer the review questions in writing, rereading parts of the chapter as needed; make sure you understand the “key terms” that come from assigned parts of chapters; reread the “brief review” and “summary” sections.

Finally, you may bring one page (one side of a letter-sized piece of paper) of handwritten notes to the exam, and no calculator will be needed or allowed. Any material you have difficulty with should be written there. Another good study technique is to write out a many-page “cheat sheet” while studying, covering all the material; then write a 1-page version with the hardest stuff; only the latter may be used during the actual exam.