UCF Physics: AST 6165 Planetary Atmospheres

Spring 2020 Final Examination

Special at-home instructions:

- 1. This exam is being administered at home. During the administration, you must neither seek, send, nor receive information or communication of any kind from any source, including other people, the internet, books, notes, etc., except as indicated below. As you are aware, the UCF Golden Rule honor code applies and has severe consequences for violations.
- 2. You are responsible for providing the testing environment you require.
- 3. You may communicate with the instructor by telephone or text. The instructor may communicate responses individually or to the entire class.
- 4. The standard testing interval is 3 hours. The exam starts at 2:00 pm on Thursday April 23. Give yourself three hours exactly (or the correct interval if you have an accommodation), then stop writing and erasing.
- 5. When you are done or out of time, upload a legible image of every exam page, in order, as a single PDF file in WebCourses. You will have about 15 minutes to do this, and you must do it immediately.

UNDERSTAND THE SCORING RULES:

- 1. Grading will be out of (no more than) 130 points, to a maximum of 110%.
- 2. One third of incorrect points on attempted questions will be deducted from the total correct points. For example, if a question is worth 20 points and you get 14/20 correct, it is recorded as 12 points.
- 3. Write "do not count" at the top of any answer you do not wish to have considered.
- 4. All subparts of multi-part problems count.
- 5. Questions with a * are required.
- 6. At least 2 questions from the open-book section are required.

Other Rules:

- 1. Give complete answers that address the question. For example, if the question asks, why is X brighter than Y, don't say, "It's hotter," say "It's hotter. The Planck function says hot things are brighter than cool things."
- 2. Justify all answers completely, but as briefly as you can.
- 3. In general, explanations require a small number of sentences, not paragraphs.
- 4. Derive a mathematical expression for the answer before plugging in numbers. Show all work if you wish to receive partial credit for incorrect answers.
- 5. No calculation devices are allowed.
- 6. Use one significant digit in your final answers, but preserve precision as much as you reasonably can in the steps leading to those answers.
- 7. Write your name on each answer page.
- 8. Record your start time, time part 2 started, and end time.
- 9. Do not write on this exam, not even your name or scratch notes. It will be discarded and not graded.