

## Reading Guide for August 25

I realize that you won't read this before class on the 25th, but it is applicable to what we'll discuss in class on that day. Ordinarily, you are expected to read ahead of class.

### from Neil de Grasse Tyson, *Universe Down to Earth*

This reading is reproduced in your course pack, pp. 3–14. Pay close attention to the block assigned to your group. Questions about this reading are also in your course pack, pp. 15–16.

### from Cvancara, *Field Manual for the Amateur Geologist*

## Chapter 20. How to Read Geologic Maps and Cross Sections

p. 254. This describes the main types of geologic maps. Most “geologic maps” are those showing the bedrock.

pp. 254–257. *Reading Geologic Maps and Cross Sections*. This gives an example map of a portion of the Appalachian Ridge-and-Valley province. It is actually easier to follow a geologic map in real life than in this book example, because the real maps are almost always in color.

This map is also hard to decipher because it is so small. At least try to identify the features described in the text. Also follow the cross-section at the bottom of Figure 20-1 (page 256). Notice how much distortion of the rock layers is shown in the cross-section, and how little of it remains in the land surface.

pp. 257–264. *Constructing Geologic Maps and Cross-Sections*. This tells you how to make your own geologic map from observations made in the field. We won't be doing that in this class, so you may skip the rest of the chapter.