

## Engaging Students with Textbook Readings using Review Questions: Two Examples

CSC 210 Computer Architecture and Organization  
CSC 310 Operating Systems & Systems Programming

### *Purpose*

This assignment is designed to encourage students to engage with the textbook readings prior to attending class. Exposing students to the process fulfills several objectives.

- Students read the entire reading assignment before attending class.
- Students engage the text by actively prioritizing and selecting sentences and passages.
- Students are directed to the fundamental concepts in the reading.
- Students are exposed to all of the material in the reading rather than the subset chosen by the instructor for a traditional lecture.
- Students actively engage in class discussion that selects and develops the fundamental concepts in the reading.

### *Methodology*

The reading review questions are distributed before the class when the reading is discussed. Students read the assigned text and answer the reading review questions. It is important that students write out their answers. If this is not actively enforced through a paper or online journal, then students tend to read the section and make minimal notes for class discussion. Although this is better than not reading the material, it requires less engagement by the student.

### *Results*

Students come to class prepared and ready to discuss the material. The class discussion allows the class to explore the fundamental concepts in the reading, and it allows the students to articulate the concepts. It is obvious when students are having difficulty with a topic; these points can be addressed on the fly and time spent on the difficulties. At the end of class, students have read the entire assignment, they have engaged with the text to answer the reading review questions, they have articulated their understanding of the fundamental concepts by sharing their answers to the reading review questions in class, and they have developed an understanding of the fundamental concepts. In addition to the fundamental concepts, students have read more than the typical lecture will cover, and may explore topics that would otherwise be omitted.

Computer Science students tend to complain about doing the reading review questions, but they admit that if they were not required to do them they would not read the text. They also admit that they do understand the concepts better so that when it comes time to study for an exam, they are better prepared.



## CSC 310 Operating Systems & Systems Programming

### Chapter 9 Reading Review Questions

Read 9.1-9.2 (pp 393-419)<sup>†</sup>. *Record reading notes in your Reading Journal.*

Answer the following questions.

1. Select one sentence that highlights the *most important* consideration when selecting a scheduling policy. Briefly (3-5 sentences) explain why you chose this sentence.
2. For one of the scheduling algorithms presented in Section 9.2, select one sentence that *best summarizes* the algorithm's benefits. Briefly (3-5 sentences) explain why you chose this sentence.
3. On page 394, Stallings makes the following statement, "Fundamentally, scheduling is a matter of managing queues to minimize queuing delay and to optimize performance in a queuing environment." Find one other sentence in the reading to support this statement. Briefly (3-5 sentences) explain why you chose this sentence.

Problems to be solved by each group. Problems are on pp 423-426.

Windows Group: 9.1, 9.6, 9.11, 9.16

Unix Group: 9.1, 9.4, 9.11, 9.14

Linux Group: 9.4, 9.6, 9.14, 9.16

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<sup>†</sup> W Stallings, *Operating Systems: Internals and Design Principles, 5/e*, Pearson Prentice-Hall, Upper Saddle River NJ, 2005.