# GENERAL GUIDELINES TO PREPARE FOR THE OPEN BOOK EXAMS

## FACULTY GUIDE

## What is an open-book exam?

An "open-book examination" allows students to refer to their class notes, textbooks or other (approved) material while taking the exam. Additionally, an open-book exam can also mean that students are provided with the exam questions prior to sitting the formal exam or are to complete as a "take-home" exam.

## Why give an open-book exam?

An open-book exam allows faculty to devise questions that require students to answer in more critical and analytical ways, thus encouraging high-order thinking skills in their students. It has a tremendous impact on promoting the right mental sets in both learning and teaching.

## Closed vs. open-book exam

Most conventional closed book examinations test how much information the students have been able to store in their minds. An open-book exam on the other hand equips students with the ability to acquire knowledge, to modify existing knowledge on the basis of new experience, to build new knowledge, and to apply available knowledge to solve problems and make intelligent decisions.

## Types of open-book exams

There are two commonly used types of open-book exams:

1. Restricted: Students are permitted to bring into the examination room one or more specific documents approved by the course instructor.
2. Unrestricted: Students are free to bring whatever they like.

## Challenges with open-book exams

One of the most challenging issues of an open-book exam is how to develop and devise effective exam questions that require students to apply their knowledge through analysis and critical thinking.

Students may falsely assume that the exam will be easy, and they will be able to find all the answers in the textbook or on their memory aid, therefore they do not have to study for the exam. Students may also assume that the exam will be very difficult, and they will not be able to find answers in the textbooks, class notes or handouts.

## How to best design an open-book exam?

Well-designed open-book examinations can restore the true meaning of the education for both faculty and students. However, it will take some time and effort on the part of both students and faculty to adapt to the demands of open-book examinations.

- Consider using case-based short answer exam questions that require students to apply critical reasoning skills in response to a given scenario.
- Questions should assess the interpretation and application of knowledge, comprehension skills, and critical thinking skills rather than only knowledge recall.
- Create clear and unambiguous questions to limit student confusion and time spent interpreting the question.
- Devise questions that require students to apply and make use of the information from their textbook or notes rather than simply requiring them to locate and re-write this information.
- Develop questions that are specific to your course, requiring students to apply the materials discussed in class to the given scenario.
- Design questions that are directly links to the course learning outcomes, that test for students' ability to apply, analyze, evaluate, create or synthesize their knowledge.

Sources:

Erbe, B. (2007). Reducing test anxiety while increasing learning: The cheat sheet. College teaching, 98-96 ,(3)55. Weimer, M., ed. 1989. Exams: Alternative ideas and approaches. Teaching Professor 4–3 :(8) 3.

Open-book exams require all levels of learning in Bloom's taxonomy, particularly remembering a certain amount of facts and formula, understanding of principles behind these facts, and application to real life situations.
[Adapted from: Anderson, L. & Krathwohl, D. (2001)]

## Bloom's Taxonomy

| Type or level of question | Students are asked to … | Example questions and starters |
|---|---|---|
| Knowing and remembering | recall knowledge of subject matter relevant to the discussion. | • What, where, who, when, where …?<br>• How many …?<br>• List …<br>• Describe …<br>• Define … |
| Understanding | demonstrate understanding by constructing meaning from information. | • In your own words, …<br>• Explain how …<br>• What did X mean when …?<br>• Give an example of … |
| Applying | apply knowledge and understanding to a particular task or problem. | • How would you use …?<br>• What examples can you find to …?<br>• How would you solve ___ using what you've learned?<br>• What would happen if …? |
| Analyzing | examine different concepts and make distinctions between them. | • What are the parts or features of …?<br>• What are the competing arguments within …?<br>• Why is X different to Y?<br>• Compare and contrast …<br>• What is the relationship between A and B? |
| Evaluating | make judgements about concepts or ideas. | • What is most important/effective?<br>• Which method is best?<br>• Which is the strongest argument? |
| Creating | develop new ideas from what they know and understand. | • How would you design a …?<br>• What alternatives are there to …?<br>• What changes would you make?<br>• What would happen if …?<br>• Suppose you could ___ what would you do?<br>• How would you evaluate …?<br>• Can you formulate a theory for …? |

Anderson, L. & Krathwohl, D. (2001). A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman.