

Final exam: Study guide

General information

The final exam will be made available on Canvas on December 14, 2022. You will have until the midnight of December 15, 2022 to complete it. You can take it on Canvas using the SmarterProctoring feature (\$5 fee applied), or at EOU's Testing Center or at an EOU Regional Center. It is a closed book and closed note exam. You may bring a 4" x 6" note card (both sides) with any formulas or notes on it. A business, scientific, or graphing calculator is highly recommended. Scratch paper is allowed. The time limit is 90 minutes.

The exam has a *mandatory* section and a *bonus* section. The mandatory section has 10 multiple choice questions (2 points each) and 2 free response questions (5 points each), constituting 26% of the total course credit (as written in the syllabus). Because of that, the exam will be on the scale of 30. The bonus section has 4 multiple choice questions (2 points each), adding to directly to the credit of the final exam. For example, if you get 8 out of 10 mandatory questions correct, 7 out of 10 points from the free response questions, and 2 out of 4 bonus questions correct, you will get 27/30. The bonus problems and the overflowed points from the bonus midterm exam (if you have any) will be counted toward your final exam score, but will not make it exceed 30/30.

The mandatory problems cover Section 1.1, 2.1, 2.2 (except for lease), 2.3 of the textbook "The Mathematics of Finance". The bonus problems may ask you anything from the beginning of the course.

Review

For the mandatory section, you should review the last 2 homework sets (HW 7 and 8) and read the examples in the textbook.

- Section 1.1: solve questions of the form $a^b = c$.
- Section 2.1: compound interest (discretely/continuously), effective interest rate.
- Section 2.2: present value, future value, present/future value of annuities.
- Section 2.3: amortization schedule.

For the bonus section, you should review the midterm exam, the bonus midterm exam, HW 5 and HW 6.

Additional problems to practice

- Problems 28 and 39 page 15.
- Problem 7 and 17 page 22.
- Problem 41 page 39. *Correction: interest rate is 9% per year, not per month!*
- Example 1 page 43.