Fall 2019

Finite Mathematics - 10515 - MTH 102 - B1

Time: MWF, 9:10 am - 10:10 am

Room: Bierenbaum Fisher Hall 210

SYLLABUS

Instructor: Dr. Arkady Kitover

Office: Lynch Adler Hall, Room 110,

Office hours: MW 10:15 am - 11:15 am

(please make an appointment)

Email: (the best way to contact me) <u>akitover@rider.edu</u>

Alternative emails: akitover@ccp.edu

akitover@hotmail.com

Web Page (contains the syllabus and the reviews for all tests with detailed solutions): http://faculty.ccp.edu/FACULTY/akitover

Text: Mathematical Ideas, Thirteenth Edition,

by Miller, Heeren, and Hornsby.

Addison Wesley Educational

Publishers. ISBN 0-321-69381-7

Class Attendance: Students are required to attend all

classes. I will subtract 5 points from the

total sum of your grades for every

unexcused absence. Only the students

with no more than 3 unexcused

absences will be entitled to make-ups (if

needed).

Class Rules:

- (a) You may not use electronic devises in the classroom for any purposes not related to the class work (texting, browsing, et cetera).
- (b) The cell phones must be in vibration mode. You may not use cell phones during a test unless you use your phone as a calculator.
- (c) Lateness is strongly discouraged.
- (d) If you need to leave early, notify me before the class starts, otherwise I will consider it as an absence.

Homework: Homework will be assigned regularly, discussed in class, and collected before each test. It will count 100 points toward your final grade.

Examinations: There will be four one-hour examinations, worth 50 points each and one two-hour final examination, worth 100 points.

Grades: Your grade will be determined by your total score out of 400 (100 for the homework and 300 for the examinations).

COURSE OUTLINE

Chapter 2. The Basic Concepts of Set Theory

Review 1.

Test 1.

Chapter 5. Number theory.

Chapter 6. The Real Numbers and Their Representations.

Review 2.

Test 2.

Chapter 8. Graphs and Functions. Sections 8.1 - 8.5

Review 3.

Test 3.

Chapter 10. Counting Methods.

Review 4.

Test 4.

Chapter 11. Probability.

Chapter 12. Statistics.

Review 5.

Test 5.

HOMEWORK

List of the homework problems due on the day of the first examination. This part of the homework is worth 17 points.

Section 2.1. Pages 52, 53. Problems 44, 56, and 64.

Section 2.2. Pages 58, 59. Problems 6, 12, 22, and 34.

Section 2.3. Pages 69 - 71. Problems 58, 60, 62, and 64

Section 2.4. Page 76. Problems 20 and 24.

List of the homework problems due on the day of the second examination. This part of the homework is worth 17 points.

Section 5.1. Pages 183 – 184. Problèmes 16, 39 and 42.

Section 5.4. Pages 206 – 207. Problems 20, 28, 36, and 42.

Section 6.1. Page 228. Problem 12.

Section 6.3. Page 257. Problems 90, 92, and 94.

List of the homework problems due on the day of the third examination. This part of the homework is worth 17 points.

Section 8.1. Page 374. Problems 26, 36, 40, 42, and 44.

Section 8.2. Pages 382 - 384. Problems 16, 44, 46, 58, 60, and 62.

Section 8.3. Pages 390, 391. Problems 38, 60, 62, 64, and 66.

Section 8.4. Page 397. Problems 18, 20, 26, and 28.

Section 8.5. Pages 407 – 409. Problems 42, 44, 46, 50, and 52.

List of the homework problems due on the day of the fourth examination. This part of the homework is worth 17 points.

Section 10.1. Pages 539 – 541. Problems 40 and 64.

Section 10.2. Page 550. Problems 52 and 60.

Section 10.3. Pages 562, 563. Problems 30, 50, and 52.

Section 10.4. Problem: Expand $(3f+2h)^4$.

Section 10.5. Pages 577. Problems 32, 38, and 48.

List of the homework problems due on the day of the fifth examination. This part of the homework is worth 32 points.

Section 11.1. Pages 593 – 595. Problems 6, 8, 14, 44, and 58.

Section 11.2. Pages 603, 604. Problems 14, 18, and 24.

Section 11.3. Pages 613 – 615. Problems 16, 22, and 58.

Section 11.4. Pages 622, 623 . Problems 34, 46, 50, and 54.

Section 11.5. Pages 634. Problems 16 and 18.

Section 12.2. Pages 667 – 669. Problems 10 and 48

Section 12.3. Pages 678. Problems 31–34.

Section 12.5. Pages 694, 695. Problems 33 – 36 and 52 – 55.