

Course Prefix/Number/Title: MATH 104 – Finite Math

Number of Credits: 3

Course Description:

Systems of linear equations and inequalities, matrices, linear programming, mathematics of Finance, elementary probability and descriptive statistics.

Pre-/Co-requisites: ASC 93 Algebra Prep III with a grade of C or higher, or appropriate math placement test score

Course Objectives:

Upon completion of the course the learner will be able to

1. Students will be able to work with elementary probability.
2. Students will be able to work with mathematics of finance.
3. Students will be able to solve systems of linear equations.
4. Students will be able to solve systems of linear inequalities.
5. Students will be able to work with linear programming.
6. Students will be able to work with statistics.
7. Students will demonstrate an understanding of matrices.

Instructor: Tracy Chisholm

Office: Nelson Science Center, Room 112

Office Hours: MTWF 3-4pm or by appointment

Phone: (701) 228-5424

Email: tracy.chisholm@dakotacollege.edu

Lecture/Lab Schedule: MWF 9-9:50am

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|---------|-----------|----------|----------|
| NSC 124 | | NSC 124 | | NSC 124 |
| 9-9:50am | | 9-9:50am | | 9-9:50am |

Textbook(s):

Finite Mathematics 11th Edition by Lial, Greenwell, and Ritchey with MyMathLab online learning software. Pearson Publishing.



Course Requirements:

The sequential nature of mathematics deems it necessary for students to attend class on a regular basis, therefore one of the course requirements is regular attendance. Learning math requires practice, mistakes, and more practice. Understanding the examples provided by the instructor and textbook is a good first step. However, to truly know the material, you should be able to look at a problem, know how to proceed, and carry out the steps **WITHOUT ASSISTANCE**. The independent practice and graded homework provide opportunities for you to get to that point. Passing grades on quizzes and tests demonstrate that you have indeed learned the skills taught.

Homework Assignments: All homework assignments will be due Sunday nights at 11:59pm CST and must be submitted in Blackboard unless stated otherwise. Do the work well in advance. If the assignment is submitted after the posted due date, 30% will be deducted from your score.

Tests: Five graded tests are administered over the semester. Students are allowed one attempt on each test and must be completed in one sitting. If a student leaves the classroom during a test, the test will be collected and graded. Tests must be taken on the day they are given or previous arrangements must be made prior to the test day. **If you miss an exam you must contact me within 24 hours of the missed exam to arrange for a time to make up the exam. Exams must be made up within 72 hours of the original exam time. If you do not contact me within 24 hours, a grade of 0 will be entered for the exam that was missed. Students are only allowed to make up ONE exam per course. The exam grade will be docked 10% per day for late points. Cheating on tests will not be tolerated. If you are caught cheating, that will result in an automatic 0 for the exam.**

A = 90-100% B = 80-89% C = 70-79% D = 60-69%

Tentative Course Outline:

| Chapter | Topics | Dates |
|-------------------------------|---|--------------|
| Chapter 2 Sections 2.1-2.6 | Systems of Linear Equations and Matrices | Weeks 1-3 |
| Chapter 3 Sections 3.1-3.3 | Linear Programming: The Graphical Method | Weeks 4-5 |
| Chapter 5 Sections 5.1-5.3 | Mathematics of Finance | Weeks 6-7 |
| Chapter 7 Sections 7.1-7.5 | Sets and Probability | Weeks 8-10 |
| Chapter 8 Sections 8.1-8.5 | Counting Principles: Further Probability Topics | Weeks 11-13 |
| Chapter 9 Sections 9.1-9.4 | Statistics | Weeks 14-16 |

My final is: Monday, December 14 @ 9:00am

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):

Competency/Goal 3: Demonstrates the ability to solve a variety of mathematical problems

Learning Outcome 1: Utilizes mathematical skills to solve problems

Learning Outcome 2: Employs critical thinking skills to solve problems

Relationship to Campus Focus:

Students will explore real-world applications of mathematics in nature, economics, statistics, behavioral, social and life sciences.

Classroom Policies:

- Respect is to be shown towards the instructor and fellow students in the classroom.
- Attendance and participation is expected. You are responsible for the activities of each class period. If you know of a conflict ahead of time, you are welcome to submit assignments early.
- Show up to class on time and be prepared (pencil, notebook, calculator, etc).
- Cell phones and all other electronics should be off/silenced and put away. You will be asked once to put the phone away, if asked again you will be asked to leave.
- **Do NOT wear headphones during class or tests. They are not allowed.**

Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.