MT 103BX Intermediate Algebra

***DONNELLY COLLEGE***

Term

Day/Time

Room

3 credit hours

**INSTRUCTOR INFORMATION:**

Name:

Office:

Office hours:

Telephone:

E-mail address:

**COURSE DESCRIPTION:**

This course includes the algebra of polynomials, linear and quadratic equations, applications involving linear and quadratic equations, linear and quadratic inequalities, functions and graphs, rational expressions and equations, systems of equations, factoring, rational exponents, radicals and complex numbers.

**PREREQUISITES:**

C or better in MT 085 or by an appropriate score on the placement test.

.

**REQUIRED TEXTBOOK & SUPPLIES:** ALEKS 360 access code is the key to the ALEKS online learning environment and to the following electronic textbook (NOT a printed-on-paper textbook: **Dugopolski: Intermediate Algebra, 7th Ed. (McGraw-Hill) - ALEKS 360,** eBook Access: **Mandatory**

* Device and web browser that can run ALEKS. The list of devices with various operating system and web browser configurations capable of running ALEKS can be found at <https://www.aleks.com/support/system_requirements>.
* Calculators may be used to check your homework; however, calculators are NOT permitted on Tests or Exams.

Aleks Access code VUXX3-A3AYP

* Scientific calculators (cell phone calculators are not allowed)

**PHILOSOPHY OF GENERAL EDUCATION:**

Donnelly College has consistently maintained a strong commitment to the liberal arts and sciences as a foundation for a complete education. The faculty strongly believes that the liberal arts and sciences provide the context through which students can engage with the larger questions about students’ place in the world and their pursuit of truth. Therefore, the College’s general education requirements are designed to ensure that liberal arts and sciences graduates develop a breadth of content knowledge and the skills and abilities which will enable them to become educated participants in a diverse global community.

**DONNELLY COLLEGE LEARNING OUTCOMES:**

1. **Communication Skills:** Students will communicate effectively in writing and speaking.
2. **Technology and Information Literacy Skills:** Students will demonstrate proficiency in information literacy skills.
3. **Symbolic Problem Solving:** Students will demonstrate competency in qualitative and quantitative problem-solving.
4. **Analytical Thinking:** Students will employ reflective thinking to evaluate diverse ideas in the search for truth.
5. **Personal and Interpersonal Skills:** Students will develop an understanding across cultural differences locally, nationally, and internationally.
6. **Academic Inquiry:** Students will engage independently and effectively in lifelong learning.
7. **Values:** Students will demonstrate moral and ethical behavior in keeping with our Catholic identity.

**LIBERAL ARTS AND SCIENCES PROGRAM LEARNING OUTCOMES:**

In addition to the general education learning outcomes – communication skills, technology and information literacy skills, symbolic problem solving, analytical thinking, personal and interpersonal skills, academic inquiry, and values – upon successful completion of the Associate of Arts in Liberal Arts degree, the graduate should be able to demonstrate:

1. Proficiency and creativity in written and verbal communication.

2. Effective use of current technology in support of academic work.

3. Proficient use of qualitative and quantitative methods in problem-solving.

4. Critical and Analytic thinking across a range of disciplines.

5. A commitment to ethics and integrity in academic and professional relationships, within the community and the environment.

6a. The ability to conduct research using sources, strategies, and approaches across disciplines. (AA)

6b. Use of the scientific method. (AS)

**MT 103 INTERMEDIATE ALGEBRA STUDENT LEARNING OUTCOMES:**

Upon completion of MT 103, the student will have the ability to:

1. Solve equations and inequalities.

2. Solve application problems.

3. Evaluate functions.

4. Factor and simplify algebraic expressions.

5. Construct and graph equations of lines.

|  |  |  |  |
| --- | --- | --- | --- |
| **Donnelly College**  **Learning Outcomes** | **Program Learning Outcomes1** | **Student Learning Outcomes2** | **Application and Assessment3** |
| Students will communicate effectively in writing and speaking. | 1. Students will demonstrate proficiency and creativity in written and verbal communication. | 2. Students will have the ability to solve application problems. | Class average of 70% or more on problems on related problems on the Exam. |
| Students will demonstrate proficiency in information literacy skills. | 2. Students will demonstrate effective use of current technology in support of academic work. | 5.Students will have the ability to construct and graph equations of lines. |  |
| Students will demonstrate competency in qualitative and quantitative problem-solving. | 3. Students will demonstrate proficient use of qualitative and quantitative methods in problem-solving. | 1. Students will have the ability to solve equations and inequalities. |  |
| Students will employ reflective thinking to evaluate diverse ideas in the search for truth. | 4. Students will demonstrate critical and analytic thinking across a range of disciplines. | 4. Students will have the ability to factor and simplify algebraic expressions. | Class average of 70% or more on problems on related problems on the Exam. |
| Students will develop an understanding across cultural differences locally, nationally, and internationally. | 5. Students will demonstrate a commitment to ethics and integrity in academic and professional relationships, within the community and the environment. |  |  |
| Students will engage independently and effectively in lifelong learning. | 6b. Use of the scientific method. | 3. Students will have the ability to evaluate functions. |  |
| Students will demonstrate moral and ethical behavior in keeping with our Catholic identity. |  |  |  |

**COURSE REQUIREMENTS:**

**ALEKS Initial Assessment** **(Knowledge Check)**: Students **must** take the initial assessment in class on the first-class session. The purpose of this assessment is to determine the topics you are most ready to learn. It is therefore very important to answer each question as best as you can without any help whatsoever. Click the I don't know button only if a question is completely unfamiliar to you. Note that this assessment is not a "test" to pass or fail and will not be graded.

Students will need paper and pencil to work out each problem in order to input their answers. It is recommended that students have a dedicated ALEKS notebook to track their work and help them stay organized throughout the course.

**ALEKS Objectives:** Students are expected to complete the assigned objective(s) by the due dates in order to earn a grade of 100% on this category. If the objective(s) are not completed by then, a percentage based on goal topics completed will be awarded.

ALEKS Time Goals: The student must spend at least four hours weekly working on ALEKS, a graded weekly time goal required.

**ALEKS Scheduled Knowledge Checks:** There will be a graded scheduled knowledge check in the end of each assigned objective. They will be either progressive or comprehensive knowledge checks.

**Tests:**There will be six **in class tests** on ALEKS. Test dates are indicated on the schedule. Each test is timed and proctored. You will be allowed a first full attempt and a second quick attempt at each test. **Failure to take a test by the due date without approval from your instructor may result in a score of zero. There are no retests. A calculator may be used.**

**Quizzes:** There will be three in-class quizzes. Quizzes dates are indicated on the course schedule. Each quiz is timed, you will allow two attempts at each quiz. There is no makeup for a missing quiz.

**Final Exam:**There is a comprehensive final exam that is timed. Failure to take the exam by the due date will result in a score of zero. You will be allowed one attempt and there is no make-up exam. Books or notes must not be used while taking the exam. A calculator may be used.

***Make-up Tests***: **You may make up only ONE test for the entire semester. In order to be allowed to make up a test, you must call or e-mail me BEFORE the start of the test**. You must have a valid reason and give it at this time (“I’m not ready” is NOT a valid reason.) If you do not provide prior notice, you must provide documentation (doctor’s note, etc.) as to why you could not take the test. Unless there are extenuating circumstances, all tests must be made up within one week of the scheduled test time. It is up to the student to schedule the test. A make-up test can only be scheduled once. The make-up passing grades will be 70% regardless of the makeup test passing score.

***Additional Assistance:***

**ALEKS:** Almost all the course materials will be in ALEKS. In addition, there might be a paper based assignments, the instructor and the student/s are going to this choice accordingly .

The student user guide can be found at: <https://www.aleks.com/user_guides/learners-highedmath>

To contact ALEKS customer support call **(800) 258-2374** or visit <https://www.aleks.com/support/form>.

**CANVAS:**Some course materials, grades, and communication with the instructor will be conducted in the Canvas online learning platform. Students are expected to check their accounts on a regular basis (i.e., 2X a week minimum).

*Note: All communications with your instructor regarding this course will be made via your Donnelly College email account.*

If you have questions about using Canvas, check the Online Student Guide available at <https://community.canvaslms.com/docs/DOC-10701-canvas-student-guide-table-of-contents>

For any technical problems, call the assistance line at 1-855-593-5537.  This line is available 24/7.

ACE (Academic Center for Excellence) is in the ground level room 14 Tutoring center. They provide tutoring at no cost.

**Note that**:  All communications regarding this course will be made by your Donnelly College email account.

If you have questions about using Canvas, check the Online Student Guide available at <https://community.canvaslms.com/docs/DOC-10701-canvas-student-guide-table-of-contents>

For any technical problems, call the assistance line at 1-855-593-5537.  This line is available 24/7.

***Retests***: There are no retests.

**GRADING POLICY:**

Grades are awarded on the basis of the following scale:

|  |  |  |
| --- | --- | --- |
| **Category** | **Points** | **Percent** |
| TESTS | **350** | 35% |
| ALEKS objectives | **150** | 15% |
| ALEKS Knowledge check | **100** | 10% |
| Time on ALEKS | **100** | 10% |
| ALEKS Pie progress | **200** | 20% |
| ALEKS Quizzes | **100** | 10% |
| **Total** | **1000** | 100% |

The letter grade will be awarded as the following:

A 900–1000 pts

B 800 – 899 pts

C 700 --799 pts

D 600 –699 pts

F 0 – 599 pts

Since the points distribution are varies, the following rubric will be used to evaluate individual problems on the chapter tests, quizzes and homework problems. This rubric applied on the paper-based assignments.

The rubric that measures the course assessment will be listed in the last page.

The modified rubric to ALEKS objectives, exams, and knowledge checks:

|  |  |
| --- | --- |
| No credit | Full credit |
| The answer is incorrect | The answer is correct |

**CALCULATOR POLICY**: Students wishing to use a calculator must provide their own. Cell phones with calculator capabilities may NOT be used on tests. Calculators may NOT be shared on tests.

**CELL PHONE POLICY**: Cell phones should be turned off (or placed on vibrate) and should be kept in your book bag or on the floor (not on the desk or in your lap) during class.

**ACADEMIC INTEGRITY:** Academic integrity is to be maintained at all times to insure genuine educational growth. Cheating and plagiarism in all forms, therefore, will be subject to disciplinary action. Serious infractions will be reviewed by an ad hoc committee, appointed by the appropriate dean. Appropriate sanctions will be imposed.”

**PLAGIARISM:** Plagiarism-the appropriation or imitation of the language or ideas of another person and presenting them as one’s original work – sometimes occurs through carelessness or ignorance. Students who are uncertain about proper documentation of sources should consult their instructors.

**ACCOMMODATIONS:** In compliance with the Americans with Disabilities Act, Donnelly College will make every attempt to provide equal access for persons with disabilities. Students in need of accommodations must request them in writing from the Vice President of Academic Affairs.

**CIVILITY & DECORUM:** As noted in its Code of Conduct, Donnelly College is committed to maintaining an overall atmosphere of civility and respect. Civility and decorum both inside and outside the classroom are fundamental foundations of the values at Donnelly College. Classroom discussions and interactions outside the classroom will always be focused on the learning process and should always be respectful of both students and faculty. In open discussions of ideas and issues, disagreements should focus on ideas and facts. Name calling, and assaults (either in person or on-line) will not be tolerated. Should any problems occur, the instructor should be notified immediately. Those who do not comply with civility and decorum requirements may be subject to a grade reduction and other sanctions up to and including dismissal from Donnelly College.

**ATTENDANCE POLICY:** Students are expected to attend each and every class period. Any student who misses six or more class sessions may be withdrawn from the class at the discretion of the instructor.

***All students will be asked to self-report if they must quarantine or have been exposed to COVID-19 by filling out the COVID-19 Incident Report Form***

**WITHDRAWAL FROM COURSES OR SCHOOL:** It is the responsibility of the student to withdraw from a class. If a student decides to withdraw from a class, ideally, they should see an advisor and the financial aid staff before taking the withdrawal form to the Registrar's office for processing.  However, any verifiable contact (e-mail, fax, phone, mail, etc.) with authorized college personnel expressing the student's intent to withdraw from a class will be honored.

If students withdraw before they have earned their financial aid, they will owe Donnelly College a debt for the unearned portion of the financial aid as well as for any unpaid balances (subject to the College's refund policy). Not attending class is not a withdrawal from class.

**Donnelly College reserves the right to withdraw a student from class(es) if the student does not meet their financial obligations, including two missing or incomplete payments, or loss of financial aid.** Faculty may initiate an administrative withdrawal by non-attendance. In extreme circumstances (i.e., a disciplinary problem), the Vice President of Academic Affairs may initiate an administrative withdrawal. The student remains responsible for the tuition owed in this instance.

The deadlines for withdrawing from classes are as follows:

|  |  |
| --- | --- |
| 14 to 16 weeks | Three weeks before the end of the class |
| 6 to 8 weeks | Seven weekdays before the end of class |
| 4 to 5 weeks | Four weekdays before the end of class |
| Less than four weeks | Withdrawals are not allowed |

**MT 103BX Intermediate Algebra** **Course Schedule/ Fall2021**

The following is a tentative schedule is subject to change based on the progress or needs of the class.

|  |  |  |  |
| --- | --- | --- | --- |
| Week | Date | Section | Assignment Due / NOTES |
| 1 | T8/17 | Syllabus, Introduction to ALEKS. | Initial knowledge check must be finished in the first-class period. |
| R8/19 | Covering the Prerequisites topics in class 23 topics  Objective 1: Module Ch 1: Sec.1.3, 1.4 | MODULE 1 (CH 1) |
| Module 1: Sec. 1.5,1.6 | Biweekly Time and Topic Goals are due every other Sunday. |
| 2 | T8/24 | Chapter 1 Supplementary topics |  |
| Module 2: Ch2 Part 1  2.1 – 2.3(Ch2A) |  |
| R8/26 | Module 3: Ch2B (2.4 - 2.6) | MODULE 3 STARTS ON 8/29 |
| 3 | T8/31 | Covering the Module topics in class |  |
| R 9/2 | Covering the Module topics in class | . |
| 4 | T9/7 | Quiz 1 (Ch1&2) |  |
| R 9/9 | Test 1 (Ch1&2) |  |
| Module 4(Ch3 A) (3.1 - 3.3) (25 topics) | MODULE 4 |
| Covering the Module topics in class | Module 5 (Ch3B) (3.4) |
| 5 | T9/14 | Module 5 Ch3B (3.4,3.5)  Covering the Module topics in class |  |
| Covering the Module topics in class. |  |
| R9/16 |  |  |
|  | Module 6 Ch4(4.1-4.2) |
| 6 | T9/21 |  | IN CLASS |
|  | R9/23 | QUIZ 2 (Ch3 & 4) | IN CLASS. |
| 7 | T9/28 | TEST 2 (Ch3&4) | IN CLASS. |
|  | R9/30 | Module 6 Ch4 (4.1, 4.2) |  |
| Covering the Module topics in class |  |
|  | Module 7 Ch5A (5.1,5.2) |
|  | Module 8 Ch5AB(5.3,5.5) |
| 8 | T10/5 | Covering the Module topics in class |  |
| R10 | Covering the Module topics in class |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Week | Date | Section | Assignments/ Notes |
| 9 | T10/12 |  |  |
| R10/14 |  |  |
| 10 | T10/19 | Covering the Module topics in class | Module 9 Ch5AB(5.6, 5.7,5.8) |
| R10/21 | Covering the Module topics in class |  |
| 11 | T10/26 | TEST 3 (Ch5) |  |
|  | Module 10 Ch6A (6.1, 6.2) |
| R10/28 | Covering the Module topics in class |  |
| 12 | T11/2 | Covering the Module topics in class |  |
| R11/4 | MODULE 11 | MODULE 11 (CH 6 B) |
| 13 | T11/9 |  |  |
| R11/11 | MODULE 12 | MODULE 12 (CH 6 C) |
| 14 | T11/16 | Covering the Module topics in class | MODULE 13 (CH 7) STARTS ON 11/17 |
| R11/18 | Covering the Module topics in class |  |
| 15 | T11/23 | TEST 4 (Ch 6) | In class |
| 11/24 THRUGH 11/26 | THANKSGIVING HOLIDAY BREAK |
| 16 | T11/30 | SCHEDULED KNOWLEDGE CHECH DUE |  |
| R 12/2 | TEST 5 (Ch 7) | In class |
| 17 | T 12/7 | Review of Comprehensive Final Exam | FINAL SCHEDULE KNOWLEDGE CHECK |
| R12/9 | Comprehensive Final Exam on ALEKS | At 1:00 -3:00 pm INLASS |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **100% of assigned points** | **75% of assigned points** | **50% of assigned points** | **25% of assigned points** |
| **Interpretation**  *Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)* | Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. *For example, accurately explains the trend data shown in a graph and makes reasonable predictions regarding what the data suggest about future events.* | Provides accurate explanations of information presented in mathematical forms. *For instance, accurately explains the trend data shown in a graph.* | Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. *For instance, accurately explains trend data shown in a graph, but may miscalculate the slope of the trend line.* | Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means.  *For example, attempts to explain the trend data shown in a graph, but will frequently misinterpret the nature of that trend, perhaps by confusing positive and negative trends.* |
| **Representation**  *Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)* | Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding. | Competently converts relevant information into an appropriate and desired mathematical portrayal. | Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate. | Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate. |
| **Calculation** | Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.) | Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. | Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem. | Calculations are attempted but are both unsuccessful and are not comprehensive. |
| **Application / Analysis**  *Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis* | Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work. |  | Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work. | Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work. |
| **Assumptions**  *Ability to make and evaluate important assumptions in estimation, modeling, and data analysis* | Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate. | Explicitly describes assumptions. | Attempts to describe assumptions. |
| **Communication**  *Expressing quantitative evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized)* | Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality. | Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven. | Uses quantitative information, but does not effectively connect it to the argument or purpose of the work. | Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as "many," "few," "increasing," "small," and the like in place of actual quantities.) |

**FALL 2021 COVID–19 Good Faith Agreement Statement**

Due to the COVID-19 pandemic Donnelly college has instituted several measures for your safety.

The Donnelly college website has an update center. Here is a link to the Donnelly College COVID information:  <https://www.donnelly.edu/updates>

All students will read and sign the following Good Faith Agreement; “I pledge to monitor myself for the symptoms of COVID-19 and to observe the 3 “W’s” while on campus: Wash my hands, watch my distance and wear a mask. I will look out for others and encourage them to stay committed to keeping everyone healthy and I will participate in contact tracing to preserve the wellness of the Donnelly Community.”

Additionally, Donnelly College is instituting the following attendance policy; “All students will be asked to self-report if they must quarantine or have been exposed to COVID-19 by filling out the COVID-19 Incident Report Form”.

Here is a link to the COVID-19 Incident Report Form: <https://forms.office.com/Pages/ResponsePage.aspx?id=S_8IWW-rUkmWHLbDxQ34Kzw0_67sUS1Ov9jbznJoRWBUNVU2UzhPR0tUREZRQUdHME9aVDY1NzRBVi4u>

I have read and agree to Good Faith Agreement above:

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Printed Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_