Math 101 – Math for Liberal Arts (3 cr. hrs.)

Prerequisites: Math 099

Instructor:

Text:

Calculator, Webcam, and Scanner: A scientific calculator is necessary for this course. A graphing or programmable calculator is not permitted on quizzes or exams. You will also need a webcam for quizzes and exams as well as for the presentation project. In addition, you will need a scanner or download a scanner app to your phone in order to scan written work to submit to the instructor.

COVID-19 Policy:

Students who have been diagnosed with COVID-19 or who have been advised to quarantine or isolate by a medical professional or a Friends University employee should contact their instructors to make arrangements in order to avoid falling behind in class. Such arrangements may include independent work assigned by the instructor. Instructors are not currently obligated to provide a Zoom link to a face-to-face class. Students who are concerned about the possibility of missing class due to COVID-19 are advised to be vaccinated. Vaccination will be available free of charge on campus a number of times during the first weeks of the semester. Students are also able to be vaccinated at many local pharmacies. This policy may be subject to change during the course of the semester due to a variety of factors, including developments related to COVID-19; changes in local, state, or federal regulations; or the adoption of new university policies.

Course Outline: Sections 1C-1E, 2A-2C, 3A-3E, 4A-4F, 5A-5E, 12A-12C, additional topics

1. Thinking Critically

4. Financial Management

2. Problem Solving

5. Statistical Reasoning

3. Numbers in the Real World

12. Mathematics and Business

Grading (90-80-70-60 scale):

Homework

There are three types of homework assignments you are expected to complete: MyLab Math assignments online, discussions/posts on Moodle, and various written work. Due dates and instructions will be included with the assignments. Any written work should be neat, organized, and display a collegiate quality; sloppy or unreadable work will receive no credit. Late homework will not be accepted. The homework average will be worth 50% of the final grade (divided evenly between the three categories).

Exams

Exams will be conducted via Moodle. You must have a working webcam to take exams. See further instructions on Moodle. If the open time for an exam conflicts with your required participation in a university sponsored event, you must make arrangements with the instructor to take the exam prior to your absence. With the exception of extreme circumstances as approved by the instructor, no other make-up exams will be allowed. Please note that exams are closed book, closed note, and the use of any external aid is prohibited. Exams make up 40% of your final grade.

Presentation Project

You will be expected to research a topic of your choice (approved by the instructor) pertaining to mathematics in your personal life. You will develop a presentation of that research including at least one visual aid (poster, slides, video, etc.) you designed. You will utilize Zoom to record your presentation and post to Moodle. In addition, you must view the presentations of your classmates and comment on Moodle. More detailed instructions will be on Moodle. The project and comments combined are 10% of your final grade.

Study Habits:

- In addition to the time spent viewing lesson videos and materials, you should expect to spend about 6-9 hours per week studying and doing homework for this class.
- Make sure that you attempt to do your homework. Do not get behind!
- Utilize the Academic Resource Center free tutoring if you need additional help with homework or as you study for exams.
- Ask questions!
- Do not wait until the day before an exam to study. You should be studying every day as we go along.
- Working problems is the best way to learn. Watching the instructor working problems is not the same as doing it yourself. Practice is the most important thing.

Outcomes:

This course will be important in meeting the University Outcomes, Divisional Outcomes, and Program Outcomes listed below. These outcomes will be measured through homework, computer assignments, and test questions.

University Outcomes:

1. The ability to use mathematical concepts to solve problems.

Division Outcomes:

- 1. Students should demonstrate knowledge of important mathematical principles.
- 2. Students should have an appreciation of the role of science and mathematics in life.
- 3. Students should demonstrate problem solving ability.

Course Outcomes:

- 1. Students will be able to think critically to solve problems.
- 2. Students will be able to solve mathematical problems using numbers and their properties.
- 3. Students will be able to understand numbers, percentages, and errors in a real world context.
- 4. Students will be able to understand how numbers are involved in managing money.
- 5. Students will be able to use statistics to make decisions.
- 6. Students will be able to understand the mathematics of politics and voting.

HONOR CODE Sanctions and Procedures:

Part of the value of an Academic Honor Code and Sanctions for Honor Code violations is that it allows faculty and students to have a clear indication of how specific types of "cheating" and violations of academic integrity are addressed. (See page 18/19 of the Friends University Catalog.)

Academic Integrity Process

Sanctions for first time offenses:

The professor suspects and verifies violation of the honor code and notifies the Division Chair/Program Director who sends the information via a form to the Registrar to check for priors. The professor meets with the student to discuss the problem. If the student has no priors, he or she can admit and accept the sanction (generally a zero for the assignment). If the student disagrees, a meeting with the Division Chair/Program Director is scheduled. If the student then agrees to the sanction, notification is sent to the adviser and appropriate division chair/program director. The case is closed and filed in the Registrar's office. If there is no agreement, the case is sent to the Academic Integrity Board for a final decision.

Sanctions if there has been a prior offense:

All second (or 2+) time offenses and those where the student doesn't agree with the sanctions will be heard by the Academic Integrity Board. If the student is deemed not guilty, the case is closed and the information is filed in the Registrar's office. If the student is found responsible, sanctions could include a failing grade for the course, a notation on the transcript, suspension or expulsion from the university or any combination of these sanctions.

Examples of Academic Dishonesty:

- 1. Cheating: using unauthorized notes, study aids, or information on an examination; altering a graded work after it has been returned, then submitting the work for re-grading; allowing another person to do one's work and submitting that work under one's own name; submitting identical or similar papers for credit in more than one course without prior permission from the course instructors.
- **2. Plagiarism:** submitting material that in part or whole is not entirely one's own work without attributing those same portions to their correct source.
- **3. Fabrication:** falsifying or inventing any information, data or citation; presenting data that were not gathered in accordance with standard guidelines defining the appropriate methods for collecting or generating data and failing to include an accurate account of the method by which the data were gathered or collected.
- **4. Obtaining an Unfair Advantage:** (a) stealing, reproducing, circulating or otherwise gaining access to examination materials prior to the time authorized by the instructor; (b) stealing, destroying, defacing or concealing library materials with the purpose of depriving others of their use; (c) unauthorized collaborating on an academic assignment (d) retaining, possessing, using or circulating previously given examination materials, where those materials clearly indicate that they are to be returned to the instructor at the conclusion of the examination; (e) intentionally obstructing or interfering with another student's academic work (f) unauthorized consultation with other students personally, or use of any electronic devices or (g) otherwise undertaking activity with the purpose of creating or obtaining an unfair academic advantage over other students' academic work.
- **5.** Aiding and Abetting Academic Dishonesty: (a) providing material, information, or other assistance to another person with knowledge that such aid could be used in any of the violations stated above, or (b) providing false information in connection with any inquiry regarding academic integrity.
- **6. Falsification of Records and Official Documents:** altering documents affecting academic records; forging signatures of authorization or falsifying information on an official academic document, grade report, letter of permission, petition, drop/add form, ID card, or any other official University document.
- **7. Unauthorized Access** to computerized academic or administrative records or systems: viewing or altering computer records, modifying computer programs or systems, releasing or dispensing information gained via unauthorized access, or interfering with the use or availability of computer systems or information.

Examples of academic dishonesty used by permission of the Northwestern University Undergraduate Academic Conduct Committee.