

AMBERTON UNIVERSITY
e-COURSE SYLLABUS

MAT1016.E1 Practical Math Applications
Fall 2026

PROFESSOR INFORMATION:

Professor: Dr. Jackie Johnston
Amberton Extension: 972-279-6511 ext. 261
Amberton Email: **JJohnston@amberton.edu**

COURSE INFORMATION:

MAT1016.E1 Practical Math Applications
Level: Undergraduate
Beginning Date of Session: Saturday, September 12, 2026
Ending Date of Session: Thursday, November 19, 2026

Student access available to the Student Portal: Saturday, September 12, 2026.

Students enrolled in distance learning courses are not assessed any additional fees for security or identity verification.

PREREQUISITES:

None

TEXTBOOK(S) AND REQUIRED MATERIALS:

Title: Math in Society
Author: David Lippman
Publisher: OER – Amazon/Lulu.com
Year Published: 2017
Edition: 2.6
ISBN: 13: 9781479276530
Price: Available at <http://amberton.ecampus.com>

Students should verify enrollment in course before purchasing textbooks. Textbook information and ordering options are available through the Amberton Virtual Bookstore. Since no books are sold on campus, students should plan accordingly and purchase their books in advance of the first day of class, allowing time for shipping.

APA REQUIREMENT:

APA (American Psychological Association) style is most commonly used to cite sources within the social sciences. This resource, revised according to the 7th edition, offers examples for the general format of APA research papers, in-text citations, endnotes/footnotes, and the reference page. For more information, please consult the Publication Manual of the American Psychological Association, (7th ed.). All coursework at Amberton University will comply with the standards contained in the APA Publication Manual.

COURSE COMPETENCIES:

Practical Math Applications presents a variety of practical time-tested mathematical principles and procedures for enhanced problem solving. Practical applications to real-life situations include reading comprehension, arithmetic, algebra, probability and statistical endeavors leading to personal improvement, vocational support, and enhanced achievement strategies. Practical and applied math skills are provided specifically for adult learners.

UPON COMPLETION OF THE COURSE, THE STUDENT WILL BE COMPETENT IN:

1. Developing a general problem-solving methodology
2. Deducing from general to specific analysis and problem-solving techniques
3. Inducing from part to whole

4. Designing a formula for a given situation
5. Graphing on a coordinate system
6. Employing technology and calculators to solve problems
7. Determining the probability of an event
8. Calculating measures of central tendency
9. Interpreting measures of variation
10. Analyzing data using the standard normal distribution
11. Solving a variety of applied financial investment problems
12. Using linear equations and inequalities to model everyday situations
13. Calculating perimeter, area, and volume
14. Utilizing the concept and application of various functions
15. Expressing analytical thinking, orally and in writing, and applying that knowledge to other disciplines and to real-world situations
16. Solving practical math problems by integrating AI-based approaches with traditional mathematical concepts, such as probability and statistics, to enhance problem-solving in real-world scenarios

ACQUIRED SKILLS

1. Quantitative Problem-Solving
2. Data Interpretations and Analysis
3. Applied Statistical Reasoning

COURSE POLICIES:

All assignments (homework/participation) and exams are due according to Moodle due dates. Late work may be accepted at the discretion of the instructor, so view the due dates in Moodle as the last possible moment for submission. No extra credit or makeup work will be given. All homework assignments and exams will be completed via MyOpenMath which will be accessed through Moodle. Late passes are available for online MOM homework. These passes extend the homework date for 48 hours. Participation is through emails, Moodle messaging, and discussion forums. Chats are NOT mandatory but may be very helpful.

STUDENTS' RESPONSIBILITIES:

This syllabus contains information, policies, and procedures for a specific course. By enrolling, the student agrees to read, understand, and abide by the policies, rules, regulations, and ethical standards of Amberton University as contained in the current university catalog and schedule of classes.

ATTENDANCE POLICY:

Regular and punctual class attendance and engagement is expected at Amberton University. In case of an absence, it is the student's responsibility to contact the professor as soon as possible. If a student intends on withdrawing from a course, it is the student's responsibility to follow the university's policy on formally withdrawing from a course. **Ceasing to attend classes does not constitute an official withdrawal.**

Attendance in a lecture course is defined as punctual arrival to, and engagement in, a full lecture session. A Student in a lecture course missing more than 20% (two class periods for weekday classes or one class period for Saturday classes) of the class meetings may be assigned a grade of an "F" or withdrawn at the discretion of Amberton University.

Attendance in a distance learning course is defined as active participation in the weekly online class sessions. "Active participation" can be defined as: submitting an academic assignment, taking an exam, engaging in an interactive tutorial, participating in an online discussion forum (or chat session), or initiating (or responding to) a communication with a faculty member about an academic assignment or the subject matter of the course. A student not meeting these requirements may be assigned a grade of an "F" or withdrawn at the discretion of Amberton University.

PLAGIARISM POLICY:

Plagiarism is the presentation of someone else's work as though it were your own. If you use another person's words, ideas, or information; or if you use material from an outside source – whether a book, magazine, newspaper, business publication, broadcast, speech, or electronic media – you must acknowledge that

source. Plagiarism is a violation of the University's code of student ethical conduct and is one that is taken seriously. Amberton University operates on an honor system; therefore, honesty and integrity are essential characteristics of all who are associated with the institution. All Amberton students are expected to abide by the honor system and maintain academic integrity in all their work. Amberton University and its instructors monitor student work for plagiarism and reserve the right to submit such work to technology-based plagiarism detection services and applications at any time.

Self-plagiarism means reusing work that you have already published or submitted for a class. It can involve:

- Resubmitting an entire paper
- Copying or paraphrasing passages from your previous work

Self-plagiarism misleads your readers by presenting previous work as completely new and original. Students may not submit the same paper in substance in two or more classes without prior written permission of the instructors involved.

Amberton University students who use Artificial Intelligence (AI) generated content must adhere to the following policies:

Originality: Students must avoid presenting AI generated content as their own original work. It is essential to acknowledge the involvement of AI in the content creation process in order to maintain academic and ethical standards.

Paraphrasing: When using AI generated content, students must rephrase and/or modify the generated text. Paraphrased AI generated content should also be properly cited.

Acknowledgement: When using AI generated content in any assignment, proper credit must be given to the AI system that generated the content. <https://apastyle.apa.org/blog/how-to-cite-chatgpt>

Students agree that by taking this course, all required assignments may be subject to submission for a textual similarity review to Turnitin.com for the detection of plagiarism and self-plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism in future papers. Use of Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com website.

Turnitin is a writing improvement and plagiarism prevention tool which uses special algorithms, to compare text-based student submissions to the Turnitin database and other online sources. Turnitin produces a detailed **similarity report** that can be customized and viewed by instructors and students.

Turnitin "Draft Coach" is a Google based add-on to Turnitin which supports students in developing high-quality academic writing; and serves as an integrity coach. Draft Coach helps address errors and improve the quality of student's writing by highlighting grammar mistakes, identifying incorrectly cited sources, and scanning for similarity across several databases. By providing formative feedback on how to address citation issues, incorrect grammar, and matches with the Turnitin database, Draft Coach provides explanations to help students become more confident writers, capable of producing higher quality work both in academics and in the workplace.

COURSE OUTLINE AND CALENDAR:

I. Problem Solving: Read pages 1-17; Complete MyOpenMath (MOM) Online

II. Graph Theory: Read pages 117 – 145; Complete MyOpenMath (MOM) Online

III. Growth Models: Read pages 173-192; Complete MyOpenMath (MOM) Online

IV. Finance: Read pages 197 – 221; Complete MyOpenMath (MOM) Online

V. Statistics: Read pages 227-242; Complete MyOpenMath (MOM) Online

VI. Describing Data: Read pages 247-274; Complete MyOpenMath (MOM) Online

VII. Probability: Read pages 279-309; Complete MyOpenMath (MOM) Online

VIII. Sets: Read pages 319-328; Complete MyOpenMath (MOM) Online Homework

IX. Historical Counting Systems: Read pages 333-360; Complete MyOpenMath (MOM) Online

X. Logic: Read pages 407-444; Complete MyOpenMath (MOM) Online Homework

All assignments due by **midnight of the due date**. Please check Moodle due dates. **If there are any conflicts between the syllabus and Moodle, use the Moodle dates as it will be the most current.*

Week	Topic	Assignment	Competencies Covered	Due Date
Week 1: 9/12/26 - 9/18/26	Problem Solving	Read pages 1-17, Watch Videos, & Complete online Homework DF#1: Introduction	1, 2, 3, 13, 14, 15	9/18/26
Week 2: 9/19/26 – 9/25/26	Graph Theory	Read pages 117 – 145, Watch Videos, & Complete online Homework	5, 15	9/25/26
Week 3: 9/26/26 – 10/2/26	Growth Models	Read pages 173 – 192, Watch Videos, & Complete online Homework	4, 5, 6, 12, 14, 15	10/2/26
Week 4: 10/3/26 – 10/9/26	Finance	Read pages 197 – 22, Watch Videos, & Complete online Homework	11,14, 15	10/9/26
Week 5: 10/10/26 – 10/16/26	Statistics	Read pages 227-242, Watch Videos, & Complete online Homework DF#2: Midterm Discussion Forum Midterm Exam Due by Midnight	15	10/16/26
Week 6: 10/17/26 – 10/23/26	Describing Data	Read pages 247-274, Watch Videos, & Complete online Homework	6, 8, 9, 10, 15	10/23/26
Week 7: 10/24/26 – 10/30/26	Probability	Read pages 279-309, Watch Videos, &	6, 7	10/30/26

		Complete online Homework		
Week 8: 10/31/26 – 11/6/26	Sets	Read pages 319-328, Watch Videos, & Complete online Homework	7, 15	11/6/26
Week 9: 11/7/26 – 11/13/26	Historical Counting Systems	Read pages 333-360, Watch Videos, & Complete online. Homework	1, 6 14	11/13/26
Week 10: 11/14/26 – 11/19/26 (Thursday)	Logic	Read pages 407-444, Watch Videos, & Complete online Homework DF#3: Final Discussion Forum *Final Exam Due by Midnight *Note the due date is Wednesday, 11/18/26	1, 15	11/18/26

GRADING CRITERIA:

Homework Exercises 25%

Midterm Exam 25%

Discussion forums/Online Participation 25%

Final Exam 25%

Total: 100%

Undergraduate

90 – 100 A

80 – 89 B

70 – 79 C

60 – 69 D

Below 60 F

GRADE NOTIFICATION AND INSTRUCTOR FEEDBACK:

Students should review instructor feedback provided through Moodle or Amberton CampusWeb Portal. Final grades are processed approximately one week after the session and may be viewed through the student portal. Grades will not be released by phone or through unsecured channels. University instructors will not leave a message with comments or grades in any type of media that is not secure.

For questions regarding grades after the semester has ended, students should use their university email account and contact the instructor at the faculty email address as provided above in Professor Information area.

INCOMPLETE GRADES:

An "I" (Incomplete) grade is granted only at the professor's discretion for emergencies or illness.

Students have 30 days from the end of the session to complete the course requirements. If the conditions are not met within this 30-day window, the "I" automatically converts to an "F".

HOW TO WITHDRAW FROM A COURSE:

To be official, the class withdrawal must be in writing and signed by the student requesting the withdrawal; no withdrawal is accepted verbally. Please review the "Schedule of Classes" (online or in-print) for procedures for class changes or withdrawals and the refund policy and schedule.

COURSE DELIVERY METHODOLOGY:

This course is delivered through Moodle. Students are expected to have reliable internet access, basic computer skills, the ability to upload/download files, use Amberton email, and submit assignments in the required format. Students needing assistance should use the Amberton SSO support/ticket process.

HOW TO ACCESS YOUR COURSE:**SINGLE SIGN-ON (SSO) INSTRUCTIONS FOR AMBERTON UNIVERSITY:**

Students should access Amberton systems through the Single Sign-On portal at <https://sso.amberton.edu>. After logging in, students can access Moodle, Amberton email, CampusWeb, and other assigned applications. Students who need help accessing SSO should submit a support request through the SSO support option or contact support@amberton.edu.

MOODLE TUTORIAL:

Upon successful log in and access to the Moodle learning platform, there is a Student Moodle Tutorial course available, to learn about the basics of Moodle. Simply click on the link for the Student Moodle Tutorial and read through the various learning topics: Navigating; Communicating; Assignments & Exams; Grades; and Student Resources.

COURSE COMMUNICATIONS:

Students will communicate with faculty through the Moodle Learning Platform or the Amberton University email system.

EMAIL COMMUNICATION:

Students are expected to use their Amberton email account and Moodle for course communications. Students must use their official university email account for all university related communication and should check their Amberton emails regularly for course and university notices.

Upon completion of a session, all communication and course specific information is removed from the Moodle system. If a student needs to maintain a record of communications or assignments, the student is strongly encouraged to print out or download these items to a disk for their own records.

FORMAT AND SUBMISSION OF ASSIGNMENTS:

Assignments must be submitted through the appropriate Moodle assignment link unless otherwise directed by the instructor. Students are responsible for submitting files in the format required by the instructor.

INSTRUCTOR/COURSE EVALUATION:

Students will have the opportunity to complete an anonymous course and instructor evaluation near the end of the session. Instructions and dates will be provided through Moodle and/or Amberton email.

RESEARCH RESOURCES:

The Amberton Library provides access to full-text articles, peer-reviewed databases, and research tools, with options like Interlibrary Loan (ILL) and TexShare for items outside its collection. For research assistance, students can connect with library staff during operating hours via email (library@amberton.edu), phone (972-

279-6511 ext. 185), "How-to" videos, live online chat, or in person at the Garland campus. The online library is available through Single Sign On (SSO).

MICROSOFT OFFICE 365 EDUCATION:

Amberton University students may access Microsoft 365 Education resources as provided by the university.

GOOGLE WORKSPACE FOR EDUCATION:

Amberton students are assigned a Google Workspace for Education account, including Amberton Gmail, Google Drive, Google Docs, Sheets, and Slides. Students should use their Amberton Google account for course-related work when required.