

---

# Syllabus

MATH 1029, version 2.0

Effective: February 2023

---

## MATH 1029—Introduction to Contemporary Mathematics

**Course Description:** *Primarily for students in liberal arts and social sciences.* Mathematical approaches to practical life problems. Topics include counting techniques and probability, statistics, graph theory, and linear programming.

### Textbooks and Other Materials

Students enrolling in ODL courses are *required* to follow the textbook ordering information provided in the syllabus and Getting Started module of the course. ODL is *not responsible* for student purchases that result in *the receipt of the wrong materials*. *It is the responsibility of the student to order the correct textbook materials.* Courses are written to specific textbook editions; edition substitutions *are not allowed*.

#### Textbook

Robert Blitzer. *MyMathLab with Pearson eText for Thinking Mathematically*. Eighth edition. Boston, MA: Pearson Education, Inc., 2023.  
**ISBN-13:** 9780137551361

Notice: This is an eText accessible only through MyMathLab.

Access to the eText and MyMathLab can be purchased from the publisher's website at <http://www.mypearsonstore.com/> (enter the ISBN to search) or from the MyLab site, <http://www.pearsonmylabandmastering.com/>.

If you choose to purchase access from the MyMathLab site, follow the instructions listed in the "Ordering Information" section below, or the "Materials" section in Moodle.

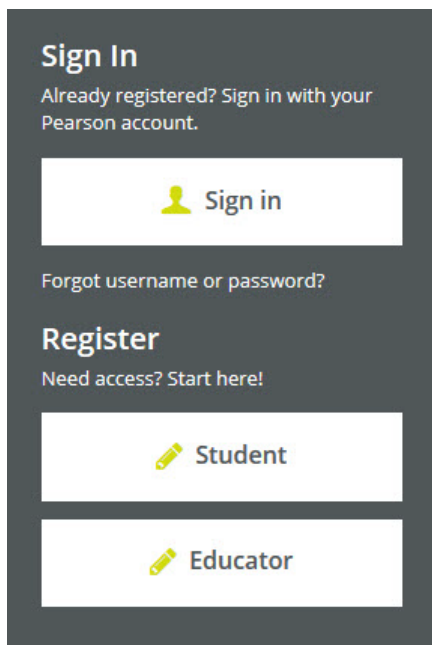
### Ordering Information

---

#### Steps for Purchasing Access to MyMathLab Course and eText

To purchase access from the MyMathLab site, follow these steps:

1. Go to <http://www.pearsonmylab.com>.
2. On the home screen, click "Student" in the sign-in/registration box.



3. On the next screen, you will click "Register now." Make sure that you have the three things required to register successfully: an e-mail address, your course ID, and either an access code (purchased prior) or a credit card or Pay Pal account (if you do not already have a code). Your Course ID for this course can be found in the Getting Started module and the Materials link on the course Moodle page.
4. On the next screen, you will see the name of the course listed in the "Your Course" box on the right side of the screen. It should read **MATH 1029 2.0: Introduction to Contemporary Mathematics**, taught by "LSU ODL." Disregard the course end date. At this point, you should create a Pearson account. Once you complete the registration steps, you will have a choice between using a previously purchased access code (see below) and purchasing access with a credit card or PayPal.

---

Please review the following tips for ordering your course materials:

1. Do not purchase your textbooks until your enrollment is approved. During the processing period, a new section may be opened that could require a different textbook or edition.
2. *Always order by the ISBN.* Publishers and vendors often offer the same textbook title under different ISBNs. You must have the correct ISBN to access your online website.
3. If you are having problems locating a textbook, contact us at [Answers@outreach.lsu.edu](mailto:Answers@outreach.lsu.edu) for assistance.

---

## Other Materials and Resources

### Calculator

A non-graphing calculator with logarithmic and exponential capabilities is required. The TI-30XIIS or the TI-30XIIB with a two-line display is preferred. Graphing calculators are not allowed on exams. No calculators on mobile phone devices are permitted.

**Software:** Adobe Acrobat Reader

It is recommended that you use Mozilla Firefox or Google Chrome as your web browser. Internet Explorer is not compatible with your Moodle course site.

**Hardware:** Web cam with a microphone (built-in or external), headphones or working speakers, and high speed internet

Proctored exams are completed online and require the hardware listed above. Students are encouraged to review the technical requirements provided on the ProctorU website and to perform a test on their equipment prior to enrolling in this course to make sure they have the necessary resources available. There is a separate charge for each proctored exam.

**Technical Requirements:** <https://support.proctoru.com/hc/en-us/articles/115011772748-Equipment-Requirements>

**Equipment Test:** <http://www.proctoru.com/testitout/>

## Nature and Purpose of the Course

Course Outcomes. Upon completion of this course, students are expected to be able to:

1. Solve counting problems that involve techniques such as the fundamental counting principle, permutations, and combinations.
2. Solve probability problems by using fundamental rules of probability along with counting techniques to find the number of ways a particular event can occur and the total number of items in the sample space.

3. Select a sample for data collection, being sure that the sample chosen is a random sample so that every element in the population has an equal chance of being selected for the sample.
4. Organize data into a frequency table, histogram, frequency polygon, and stem and leaf plot.
5. Compute and interpret measures of central tendency including the mean, median, mode, and midrange.
6. Compute and interpret measures of dispersion including the range and the standard deviation.
7. Label normal distributions using the mean, standard deviation, and z-scores.
8. Use the 68-95-99.7 Rule to interpret data given in a normal curve.
9. Solve applied problems involving normal distributions and percentiles.
10. Use the vocabulary of graph theory.
11. Explain relationships in a graph and model relationships using graphs.
12. Solve problems using Euler's Theorem.
13. Solve problems involving Hamilton paths and Hamilton circuits.
14. Solve problems involving trees and spanning trees.
15. Solve linear programming problems that require some basic algebra skills which include plotting points, graphing lines, solving systems of linear equations, and graphing linear inequalities.

This course is a contemporary math course. Usually, when someone hears, "contemporary math course," their first question is, "What's that?" Simply put, this is an "everyday math course." You will gain a working math knowledge about how certain things behave in everyday life. For example, things like understanding the probabilities associated with games of chance, interpreting percentile scores from a standardized test, selecting a "good" route to travel from place to place, and finding production levels to optimize outcomes in a business setting.

### Working with the Course Materials

Remember, this course covers an entire semester of work or the equivalent of a classroom course lasting 15 weeks. That means that each module in this course equals nearly a week of course work and will require the same time and effort on your part. *Do not expect to complete each module in a single study session. Understand, too, that if you choose to submit assignments at a very high pace, your instructor may not be able to grade your work at the same rate.*

Each module contains information, activities, and assignments organized under a consistent series of headings. Get familiar with how the module is organized. Each module in this course is organized into the following sections: the Module Learning Objectives, the Reading Assignment, graded Module Assignment(s), and graded Quiz(s). You should work through these parts of the module in order. Some modules feature video example problems and solutions in addition to the written lecture notes. Specific recommendations are provided in a link to the course module instructions, which you should review before beginning the first module.

This course requires students to complete activities in both Moodle and in Pearson's MyMathLab. All assignments, quizzes, and exams will be completed online using MyMathLab. For more information please see the "Module Assignments" section of this syllabus

### **Integrative Learning Core**

Integrated learning allows students to make simple connections among ideas and experiences and across disciplines and perspectives. The LSU Integrative Learning Core (ILC) curriculum is designed to develop student abilities to transfer their learning to new situations and demonstrate a sense of self as a learner. A fundamental goal of the ILC is to foster students' practical and intellectual capacities associated with integrative learning in preparation for high competence and functionality in their post-baccalaureate careers. This course fulfills the Louisiana Board of Regents (BoR) Area of Mathematical/Analytical Reasoning and provides students experience with the ILC proficiency of Quantitative Literacy. The BoR Common Course name and number for this course is CMAT 1103 Contemporary Math.

---

### **MyMathLab Learning Aids**

#### **Help Me Solve This**

This feature provides an exercise that matches exactly the current iteration of the homework exercise. It is interactive and requires feedback from you throughout parts of the solution process. After completing the "Help Me Solve This" and getting or being given the correct answer, you will be returned to the exercise page, but you will get a different iteration of that exercise to work. The skill being practiced will be the same, but the values and the answers will change.

#### **View an Example**

This feature provides you with a static example similar to the current iteration of the homework exercise. You can progress through the solution without giving input using the Continue button at the bottom. When you close that window, you will be returned to the original homework exercise.

---

### **Suggested Study Techniques**

1. Carefully review the module objectives to help you focus on the information that will be covered on the exams.
2. Concentrate on the reading assignments, the module lecture material, and any additional resources provided. This review should include a detailed examination of any illustrative problems and examples. After an assignment has been completed, a rapid re-reading of the related text and other materials is strongly recommended.

## Syllabus

---

3. Put yourself on a definite schedule. Set aside a certain block of hours per day or week for this course and work in a place where distractions are minimal.
4. Try to submit one assignment each week or at least every two weeks. Delays in submitting assignments usually result in lagging interest and the inability to complete the course.
5. Review your module assignments after they have been graded, paying special attention to any instructor feedback provided. (We suggest that you wait for assignment feedback before you submit subsequent assignments.)
6. Regardless of how you complete your graded assignments, keep in mind that module completion should not be your sole preparation for your exams. As with any college course, you should study for your exams.

## Reading Assignments

To do well in this course, it is essential that you read and study the eText before attempting the module assignments. Specific information on reading assignments will be given in each module.

Written lecture material is posted in Moodle for each module covered in the course. The lecture PDFs contain definitions, rules, procedures, and common mistakes made by students, as well as examples and solutions.

You will read an average of 12 pages per module. Specific reading assignments will be given in each module.

## Topic Outline

This course covers the following specific topics:

<b>Module</b>	<b>Topic</b>
01	The Fundamental Counting Principle; Permutations
02	Combinations and Fundamentals of Probability
03	Events Involving <i>Not</i> and <i>Or</i> ; Odds
04	Events Involving <i>And</i> ; Conditional Probability
05	Probability with Counting Techniques
06	Graphs, Euler Circuits, and Euler Paths
07	Hamilton Paths and Hamilton Circuits
08	Trees
	<b>Mid- Course Examination</b>
09	Sampling and Displaying Data
10	Measures of Central Tendency

- 
- 11 Measures of Dispersion
  - 12 Normal Distributions
  - 13 Algebra Review
  - 14 Linear Programming
- Final Examination**

## Graded Assignments

Each module contains one or more graded module assignment related to sections in the eText along with a quiz on that content. You should complete the module assignment(s), making sure that you can work each exercise on your own, then take the quiz. The goal of the quiz is to be able to make a 100% without any assistance.

---

## Module Assignments

Module assignments can be found under the “Homework” tab in MyMathLab. You should review the module lecture notes and read the eText before attempting the assignment. When working your assignments, you should save after completing each exercise.

If you rely on the MyMathLab learning aids or other help to get a Skill Check, Standard, Step-by-Step, or Brief Exercise correct, then use the Similar Exercise feature and rework the exercise repeatedly until you can get it correct without any help. This is essential. Many students who become overly dependent on the learning aids or other assistance to get a score of 100% on the module assignment find that they score much lower on the exams. You are permitted ten attempts per assignment.

### Assignment Verification: Getting Credit for Your Assignment

When you have completed a module assignment in MyMathLab, you must also submit the corresponding assignment verification in Moodle. This sends a notice to your instructor that you have completed the assignment in MyMathLab and the grade can be transferred to the Moodle gradebook. You can review your completed assignments in the Gradebook in MyMathLab.

To submit the module assignment verification in Moodle, click on “Module XX: Section XX Assignment Verification” in the module and follow the instructions given there.

---

## Quizzes

You should master your module assignments before attempting the quizzes, and you should try to do the quizzes without any help. If you rely on help to get a 100% on the quizzes, you will score much lower on the exams.

## Syllabus

---

Each quiz contains questions drawn from a pool of module assignment exercises having the same or similar learning objectives. Each quiz in MyMathLab can be attempted up to five times, but only the highest score of your attempts for each quiz will be recorded in Moodle to be used in the course grade. The maximum working time allowed for each attempt of each quiz is 75 minutes. While working on a quiz with time remaining, you can close the browser (rather than choosing Submit) and re-open that same quiz later without any additional elapsed time.

You will not get feedback after each exercise answer is entered. You must work through the quiz and submit it before seeing your score. You can review your quiz in the gradebook in MyMathLab, and the MML learning aids will appear for the review.

Quizzes should be used as preparation for the exams. Re-take the quizzes until you can do the work correctly without any assistance.

### Quiz Verification

Just as you do with the module assignments, when you have completed a quiz in MyMathLab, you must also submit a quiz verification in Moodle. Go to Moodle and click on "Module XX Quiz Verification" and follow the instructions.

### Quiz Collaboration

You are allowed to consult with other people regarding math concepts but not regarding specific answers to questions. You may discuss the concepts demonstrated in the quizzes, but do not share or assist another student in deriving an answer. Your work must be independently written and entered into MyMathLab. You are prohibited from using any additional online or third-party resources that are not explicitly listed in the syllabus or provided by your instructor.

---

### Permission to Take the Final Exam

You must have a *grade posted in the Moodle grade book for the Module 14 assignment and quizzes in order to unlock access to the Final Exam*. Please allow at least seven days for the final assignment grade to be posted in the gradebook. Understand that occasional delays will occur, such as during holidays and semester breaks or if you submit several module assignments within the same week. You must have been enrolled in the course for *at least three weeks*, regardless of when the modules and other exams are completed.

## Academic Integrity

Students in Online Distance Learning (ODL) courses must comply with the *LSU Code of Student Conduct*. Suspected violations of the academic integrity policy may be referred to LSU Student Advocacy & Accountability (SAA), a unit of the Dean of Students. If found responsible of a



violation, you will then be subject to whatever penalty SAA determines and will forfeit all course tuition and fees.

### Plagiarism

Students are responsible for completing and submitting their own course work and preparing their own modules. All work submitted in the course modules must be the student's own work unless outside work is appropriate to the assignment; all outside material must be properly acknowledged. It is also unacceptable to copy directly from your textbook or to use published answer keys or the teacher's edition of a textbook.

### Collaboration

Unauthorized collaboration constitutes plagiarism. Collaborative efforts that extend beyond the limits approved by the instructor are violations of the academic integrity policy. Students who study together are expected to prepare and write their own individual work for submission and grading.

For more information and links to the *LSU Code of Student Conduct* and the SAA website, go to the [ODL Academic Integrity policy](#) on our website.

## Examinations and Grading Policy

There will be two proctored exams to be completed in MyMathLab. The mid-course exam covers material from modules 01–08 and follows module 08. The final exam covers material from modules 09–14 and follows module 14. Each exam consists of approximately 40 to 45 questions. You can expect the questions to be in the form of multiple-choice, fill-in-the-blank, and computation.

Just like the assignments and quizzes, once you have completed your exam in MyMathLab, you must also submit your "Exam Verification" in Moodle.

The maximum time allowed is *three* hours for the exams.

Textbooks, notes, or other study aides are not permitted on exams. While testing, you are not allowed to access other online materials, including your module assignments, quizzes, and online learning aids in MyMathLab. Remember, academic dishonesty is a violation of the university Code of Student Conduct. A nongraphing, scientific calculator is allowed on exams.

Along with an approved calculator, you are allowed a white board during the exam. To verify the white board is blank, you must show your white board to the proctor before you begin your exam. At the end of the exam, the proctor will instruct you to clean the white board; the proctor must witness you cleaning the white board.

## Syllabus

---

After completing the module assignments and quizzes, you should prepare for exams by repeatedly practicing until you can get all exercises correct without any assistance. Practice exams are available in MyMathLab for each exam and will be open throughout the course. The practice exams do not count toward your course grade, but it is essential that you work the practice exams repeatedly until you can do the work without any help.

### **YOU MUST EARN A PASSING AVERAGE ON THE EXAMINATIONS IN ORDER TO PASS THE COURSE.**

If you earn a passing average on the exams, your grade will be computed as follows.

Course grade = average of module assignments + average of quizzes + exam scores. Each component is weighted by the percentages in the table below.

Course grade =

Component	Weight (%)
Average of Homework Assignments	15%
Average of Quizzes	15%
Mid-Course Exam	35%
Final Exam	35%

The following grading scale applies:

97%–100%	= A+
93%–96%	= A
90%–92%	= A-
87%–89%	= B+
83%–86%	= B
80%–82%	= B-
77%–79%	= C+
73%–76%	= C
70%–72%	= C-
67%–69%	= D+
63%–66%	= D
60%–62%	= D-
0%–59%	= F

**IMPORTANT:** Remember, the final exam cannot be taken until you meet the following requirements. Under no circumstances may the final exam be taken earlier.

1. You must have been enrolled in the course for *at least three weeks*, regardless of when the modules and other exams are completed.

2. You must have a *grade posted in the Moodle grade book for the module 14 assignments and quizzes in order to unlock access to the Final Exam*. Please allow at least seven days for the final assignment grade to be posted in the gradebook.

To read the full exam policy and other policy statements, visit <http://www.outreach.lsu.edu/Extended-Campus/Online-Distance-Learning/Guidelines-Policies/Policies>. Go to Continuing Education's homepage. Click on *Extended Campus*, select *Online Distance Learning*, and then click the link for *Guidelines and Policies*.

## Taking Your Examinations

You are *required* to create a Louisiana State University ODL ProctorU account and to take your examinations through ProctorU, a remote proctoring service that allows you to take exams anywhere with internet access (some restrictions apply). Information on creating your ProctorU account can be found in the *Getting Started* module. You cannot use an account created through another university, so if you already have an account, you will still need to create an account associated with LSU Online Distance Learning (ODL).

The ProctorU website provides links you can use to find out how ProctorU works and to check your computer to see that it meets the technical requirements. In addition, to test using ProctorU, you need *access to a web cam with a microphone (built-in or external), headphones or working speakers, and high speed internet* to use this service. A complete list of technical requirements is available from the ProctorU website.

You should schedule your exams about a week before you are ready to take them in order to avoid any additional charges.

## Transcript Information

After you have completed this course, your grade will be filed with the Office of the University Registrar. If a transcript is needed, it is your responsibility to make a request to the registrar. If you would like to order a transcript, visit the Office of the University Registrar Transcript Requests page to view your options (<http://sites01.lsu.edu/wp/registraroffice/student-services/transcript-request/>).

## Copyright

MATH 1029 Introduction to Contemporary Mathematics  
Copyright © 2023 LOUISIANA STATE UNIVERSITY  
BATON ROUGE, LOUISIANA

Julia Ledet, PhD  
Distinguished Instructor  
Department of Mathematics  
Louisiana State University

All rights reserved. No part of this material may be used or reproduced without written permission of the LSU Continuing Education Distance Learning Programs. Created in the United States of America.

TK

JL