# Math 1431 Calculus with Business and Economic Applications

# Spring 2024 Dual Enrollment Syllabus

# Instructor of Record

IOR NAME IOR EMAIL

# Course Website

[www.math.lsu.edu/programs/DualEnrollment](http://www.math.lsu.edu/programs/DualEnrollment)

# Course Eligibility

To be eligible to enroll in Math 1431, a student must have a high school GPA of at least 2.5 and either a minimum Math ACT score of 25 (Math SAT 590) OR a minimum grade of “C-” in MATH 1021. PreACT or PSAT scores cannot be used for eligibility in place of ACT or SAT scores.

# Course Design Overview

* High school facilitators will present course content one-third of the face-to-face time, and students will work individually with facilitator guidance in a lab environment the remaining time.
* Homework, quizzes, tests, and the Final Exam will be completed online using a web-based learning and assessment system called MyMathLab (MML).

**Required Materials**

* **Barnett, Ziegler and Byleen Calculus for Business, Economics, Life Sciences, and Social Sciences (14th edition) MyMathLab** online accountwhich includes the eText
* **Your LSU email address** which must be used in MyMathLab as your email address
* The **course ID#** for your section of the course which will be given to you by your high school facilitator
* A **non-graphing scientific calculator**

The **TI30XIIS** (solar) **or the TI30XIIB** (battery) with a two-line display is preferred. Graphing calculators are NOT allowed. Also, calculators with symbolic notation or natural display capabilities, such as the TI-36XPro and any of the TI Multiview series, Casio Natural Display series or ClassWiz series, HP SmartCalc series, and Sharp Writeview series are NOT allowed.

# MyMathLab Tips

* It is possible that at some point during the semester, after you have successfully registered and enrolled in your current semester’s course at [www.mymathlab.com](http://www.mymathlab.com), you will not be able to access your account in MML by going to [www.mymathlab.com](http://www.mymathlab.com/) and selecting “Sign in” on the upper right side. In this situation, you can try using [www.mathxl.com](http://www.mathxl.com/) but be sure to click the small link for MML users in the middle of the right side of the MathXL home page and not the large Sign in button for MathXL users.
* If you need technical assistance, fill out a support request form at <https://support.pearson.com/getsupport>.  If your issue is not addressed in the Popular Topics list, click Contact Us at the top to access the form.  Do not leave the page until you have received a case number and are directed to a support agent.

# Moodle

LSU uses a course management tool called Moodle to give you access to your grades and other important course information. Your high school facilitator should help you to access Moodle for the first time. You will be required to complete a final course evaluation survey in Moodle.

# Topics

Topics included in this three-credit-hour course are Review of Lines and Functions, Limits, Continuity, the Derivative, Marginal Analysis in Business and Economics, Graphing using Derivatives, Optimization, Antiderivatives, the Definite Integral, and Applications of the Definite Integral.

# Code of Student Conduct

The LSU Code of Student Conduct explains student rights, excused absences, and what is expected of student behavior. Students are expected to understand this code, which can be found at <https://lsu.edu/saa/students/codeofconduct.php>. If you are found responsible for a violation of the LSU Code of Student Conduct and receive a zero on any assignment for this violation, that zero is non-replaceable and non-droppable.

# Homework

* You should review your class notes and read the eText before attempting the homework.
* When working your homework assignments, you should save after completing each exercise.
* You can re-work exercises, enter and exit your homework, and get back to it at a later time prior to the due date.
* The work you submit must be your own. Your work must be independently written and entered into MyMathLab. You are prohibited from using any additional online or third-party resources to get answers to homework exercises. This is a violation of the Code of Student Conduct.
* If you rely on the learning aids or other help to get an 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 homework assignment find that they score much lower on the tests than they would if they had done the work independently.
* The homework counts as 15% of your course grade. Your two lowest homework assignments will not be used in the course grade calculation (even though those scores show in the Moodle gradebook).
* Graded homework for each section has due dates and will close then, but a copy of each homework assignment (labeled Practice Homework) is open throughout the semester to be used for studying. The Practice Homework does not count toward your course grade.
* An additional practice homework assignment called Practice What You Missed on Test x is created when you submit each test. This does not count toward your course grade, but you should use it to practice what you missed on the test in preparation for the Final Exam.
* For each homework exercise, the result of your last attempt for each exercise will be recorded when you save.

# Quizzes

* All quiz questions come from the homework, so you should master your homework before attempting the quizzes. You should try to do the quizzes without any help. If you rely on help to get a score of 100% on the quizzes, you will score much lower on the tests than you would if you had done the work independently.
* You are allowed to consult with other students regarding math concepts but not regarding specific answers to questions. You may discuss the concepts demonstrated in the quizzes but not share or assist another student in deriving an answer. Your work must be independently written and entered into MyMathLab. Using any additional online or third-party resources to get answers to quiz exercises is a violation of the LSU Code of Student Conduct.
* 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 Gradebook, and the MyMathLab learning aids will appear for the review.
* Quizzes should be used as preparation for tests. Re-take the quizzes until you can do the work correctly without any assistance from notes, the eText, or the MyMathLab learning aids.
* Each quiz contains ten questions with each question drawn from a pool of exercises having the same or similar learning objectives. It is recommended that you take a quiz at least four times even if you earn a score of 100% before that to ensure that you see a cross-section of the exercises.
* Each quiz in MyMathLab can be attempted up to ten times prior to the due date, but only the highest score of your attempts for each quiz will be recorded in Moodle.
* The quizzes count as 15% of your course grade. Your lowest quiz grade in Moodle will not be used in the course grade calculation (even though this score shows in the Moodle gradebook).
* 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

# Tests and the Final Exam

* The proctored, password-protected tests and the Final Exam are taken using MyMathLab.
* You will not get feedback after each exercise answer is entered. You must work through the test and submit it before seeing your score. You can review your test in Gradebook, and the MyMathLab learning aids will appear for the review.
* After completing all homework and quizzes, you should prepare for tests and the Final Exam by repeatedly practicing until you can get all exercises correct without any assistance from MyMathLab learning aids, notes, or the eText. Practice Tests and a Practice Final Exam are available in MyMathLab for each test and will be open throughout the semester. They do not count toward your final course grade, but it is essential that you work the Practice Tests repeatedly until you can do them without help.
* Only one attempt is allowed for each test and for the Final Exam.
* The maximum time allowed is 90 minutes for each test and 120 minutes for the Final Exam.
* You are not allowed assistance of any kind on tests or on the Final Exam. This includes notes, formula sheets, or any other type of outside help. While testing, you are not allowed to access other online materials, including your homework, quizzes, and online learning aids in MyMathLab. You are also not allowed to have access to your phone, smart watch, or any other electronic device. All electronic devices with the exception of the approved calculator must be stored out of your reach during the entire time you are testing. Remember, academic dishonesty is a violation of the university Code of Student Conduct.
* There will be four test scores and a Final Exam. Your four tests count as 45% of your final course grade, or 11.25% each. The Final Exam counts as 25% of your final course grade, with the following exception. Your Final Exam score will be entered in the Moodle gradebook as your Final Exam score and also as a (fictitious) Test 5 score. Then, the lowest of the scores on Tests 1-5 will not be used in the final grade calculation (even though that score shows in the Moodle gradebook). This has the effect of replacing your lowest of four test scores with the Final Exam score if the Final Exam score is higher. In this situation, your Final Exam score counts as 36.25% of your final grade and each of your three highest test grades counts as 11.25% of your final course grade.

# Final Grade Calculation for LSU grade\* (posted in Moodle)

| Weight | Category | Details |
| --- | --- | --- |
| 15% | Homework | Lowest 2 of 25 homework scores will be excluded |
| 15% | Quizzes | Lowest 1 of 12 quiz scores will be excluded |
| 45% | Tests | 4, lowest will be replaced with Final Exam score if higher |
| 25% | Final Exam | cumulative, never excluded |

The Practice Homework, Practice Tests, Practice What You Missed on Test x, and the Practice Final Exam do not count toward the final grade in the course. A replaced test grade and dropped homework or quiz grades will always show in the Moodle gradebook but will NOT be used in the Moodle final course grade calculation.

\*The high school course grade may be calculated using different criteria.

**Grading Scale**

A+:  98-100%

A:  93-97%

A-:  90-92%

B+:  88-89%

B:  83-87%

B-:  80-82%

C+:  78-79%

C:  73-77%

C-:  70-72%

D+:  68-69%

D:  63-67%

D-:  60-62%

F:  0-59%

Your course grade will be determined by rounding your course average (either up or down) to the nearest whole number using standard rounding procedures.

**Syllabus Changes**

The LSU Instructor of Record (IoR) reserves the right to make adaptations to this Syllabus by written notice to the facilitator if any unforeseen disruptions to the spring schedule warrants those changes.

**Integrative Learning Core**

Integrative 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 and Formal Reasoning. The Louisiana Board of Regents Common Course Number for this course is CMAT2103 Applied Calculus.