

# **Math 123: Mathematics Applications for Business**

## **Math 105: Corequisite Support for Algebra**

### **Spring 2021**

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Virtual Office Hours: Tuesday: 9am – 10:30am, Thursday: 1pm – 2:30pm, or by appointment.

#### **Course Web Site**

We will be using Blackboard and MyLab for the course homepages. Class notes, HW assignments, and announcements will be posted there (some announcements will also be sent to your WKU e-mail).

Students should obtain notes and assignments from this site prior to class each day.

#### **Description**

Mathematical Applications for Business (3 hours) meets five learning objectives as part of the Colonnade Plan education requirement for quantitative reasoning. Math 123 is a course in which graphing and problem solving are integrated throughout the study of algebraic concepts including polynomial, rational, exponential and logarithmic functions. Topics also include mathematics of finance, introduction to probability, and derivatives. This course emphasizes applications in business-related fields.

#### **Learning Outcomes**

- Interpret information presented in mathematical and/or statistical forms.
- Illustrate and communicate mathematical and/or statistical information symbolically, visually and/or numerically.
- Determine when computations are needed and execute the appropriate computations.
- Apply an appropriate model to the problem to be solved.
- Make inferences, evaluate assumptions, and assess limitations in estimation modeling and/or statistical analysis.

#### **Course Material**

To enhance your learning experience and provide affordable access to the right course material, this course is part of an inclusive access model called First Day. You can easily access the required materials for this course at a discounted price, and benefit from single sign-on access with no codes required in Blackboard. WKU will bill you at the discounted price as a course charge for this course. It is NOT recommended that you Opt-Out, as these materials are required to complete the course. You can choose to Opt-Out on the first day of class, but you will be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended. For more information and FAQs go to [customer care.bncollege.com](http://customer care.bncollege.com).

#### **Technology**

Each student will need a graphing calculator for use in class and for assignments. TI-83 and TI-84 are preferred, and instruction for these models will be given. **PROHIBITED CALCULATORS include: TI-89, TI-92, Casio FX-115 series, Casio FX-991 series, and any calculator with CAS capability. Cell phone calculators are also prohibited!**

#### **Academic Dishonesty**

“Students who commit any act of academic dishonesty may receive from the instructor a failing grade in that portion of the coursework in which the act is detected or a failing grade in the course without possibility of withdrawal.”

## Attendance

Class meeting will be done through Zoom. You will need internet access on your computers or smart phones to join Zoom meeting. I will post a link to join Zoom meeting on Blackboard. There will be only one Meeting ID for all class meetings. The ID is 550 272 3688. Attendance will be recorded each day, and regular attendance is expected. Attendance is used to help determine "borderline grades" at the end of the semester. For this class, absence from more than 4 classes (whether excused or unexcused) will be considered excessive, and a borderline grade will **NEVER** be bumped up. The instructor will note students who arrive excessively late or leave excessively early; such instances will be counted as an absence.

## Student Accessibility Resource Center

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at [sarc.connect@wku.edu](mailto:sarc.connect@wku.edu). Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

## Graded Work

- **Study Plan (10%)** Part of your grade will come from working in the Study Plan. This is a part of MyLab allows you to get some extra practice in any topic you want, as well as directing you to some of the things you need to work on in particular. There are several ways you can use the Study Plan, some of which are required and some of which are entirely your choice. Your Study Plan grade will be based on the number of "mastery points" you earn for the semester. Mastery points are earned in two ways:
  - Whenever you take a quiz, each problem you get correct will automatically fill in mastery points for the objective it covers. (So you don't have to do anything special for this.)
  - When you are working in the Study Plan itself, any time you pass a "Quiz Me" over a particular topic ("objective"), you will earn mastery points.

**For students who are also in Math 105, Study Plan grade is the entire basis for Math 105 course grade.**

- **Homework (15%)** Homework will be assigned daily with specific deadlines for completion. Most homework will be done online via the MyLab system. This homework is your responsibility to complete on time. It will not be reopened once it is closed. After the due date, homework will remain open until the unit exam for a 5% per day reduction in grade. Unit homework will be turned off permanently once the exam is completed.  
**Reviews** A review for each exam must be completed, AND will be included in the homework assignments grade. A grade of 80% will be necessary on the review for the module unit exam; online learning aides will be accessible with this review. Organizing and keeping completed homework and notes will be beneficial in preparing for exams.
- **Quizzes (15%)**
  - Pre-Quizzes:** These are online pre-quizzes using MyLab and they cover basic algebra skills needed for the class. You will have 2 attempts. There are no due date for these pre-quizzes but it is ideal to do them before attempting homework assignments. You will need to work on **Study Plan** before doing Pre-Quizzes.
  - Post-Quizzes:** There will be online quizzes using MyLab, for these quizzes you will take them during the open window only and NO partial credit is given...so be very careful to enter the answers as asked. You will have 2 attempts. Post-quizzes will have a deadline for completion.

For quizzes, no partial credit given....no matter how small the error.

- **Exams** (60%, 4 exams worth 15% each) Exams will be administered using MyLab, which algorithmically generates different versions of each test. Exams may also contain a non-computer written portion (show all work). All exams will be scheduled in advance and will be proctored through Zoom. Students will work their exams on paper and enter the answers into the computer. For all testing, the instructor will review the written answers, awarding partial credit when deemed appropriate and making any necessary grade adjustments.  
!!!! Students will be required to complete each review for an exam before taking the exam. Exam 1 is a crucial exam, if you do not earn a grade of at least 70% or better...You will be strongly advised to drop the class by the drop date!!!!  
The 4<sup>th</sup> exam is scheduled during the final week on Friday April 30<sup>th</sup>.

**After each test, an approximated grade percentage will be computed and posted on Blackboard/Gradebook. Note that the overall percentage computed by Mylab is not correct because it does not reflect the correct scales of different portions of the grade and does not reflect missing assignments.**

### **Grading Scale**

90% - 100% A  
80% - 89% B  
70% - 79% C  
60% - 69% D  
0% - 59% F

### **Important Dates**

January 26: Last day to drop without a grade

March 25: Last day to drop with a W, last day to change a class from credit to audit

### **How to submit work for tests**

For the test, please show your work on papers. Use PEN, not pencil. Make sure that you clearly mark the question number (e.g: 1a, 2b, etc...) on the paper.

At the end of the exam period, scan the work and email the file to me. For instruction to scan the work using Iphone or Android phone, please see the instruction posted on Blackboard under content.