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**Fall 2024**

**MATH 1001-LS3, Quantitative Reasoning, 3-0-3 Credits**

**MW 9:30-10:45 Instructional Complex (IC 222) CRN 1554**

**Lecture**

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| **Instructor Information** |  |
| Instructor: | Dr. Geoff F. Clement |
| Phone: | 678-359-5820 |
| Email: | gclement@gordonstate.edu |
| Office: | IC 243 (= 3^5) |
| Office Hours: | MW 12:30-3 & TR 11-12:30 (in MS Teams/IC 243/Navigate (with other times by appointment (via e-mail) |

**Course Description:**

This course places quantitative skills and reasoning in the context of experiences that students will be likely to encounter. It emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. This course emphasizes quantitative reasoning skills needed for informed citizens to understand the world around them. Topics include logic, basic probability, data analysis and modeling from data, linear, quadratic, and exponential modeling and applications.

**GORDON LEARNING OUTCOMES:**

**Specific Objectives:**

This course is directed toward the following general education expected outcome of the college:

**Mathematical Skills:** Students will demonstrate a basic knowledge of the fundamentals of college-level mathematics.

**General Education Outcomes**: This course, by means of the lectures, activities, and course requirements, addresses the following Gordon College General Education Expected Outcomes:

1. Students will demonstrate competence in college-level reading and writing.

2. Students will demonstrate competence in oral communications.

3. Students will be aware of basic bibliographic research and resources.

4. Students will conduct routine information technology tasks through using a variety of computer applications.

5. Students will demonstrate a basic knowledge of the fundamentals of college-level   
 mathematics.

**IMPACT CORE Objectives**

**Course Student Learning Objectives (SLOs):**

This is a Core IMPACTS course that is part of the Mathematics area.

Core IMPACTS refer to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content and support students’ broad academic and career goals.

This course should direct students toward a broad Orienting Question:

* How do I measure the world?

Completion of this course should enable students to meet the following Learning Outcome:

* Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms.

Course content, activities, and exercises in this course should help students develop the following Career-Ready Competencies:

* Information Literacy
* Inquiry and Analysis
* Problem-Solving

**Course Prerequisites:**

None mentioned in the College Catalog

**CORE IMPACTS Objectives:**

***The CORE IMPACTS information is required for core courses only.***

**This is a Core IMPACTS course that is part of the [*Mathematics, Citizenship, STEM*] area.**

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students’ broad academic and career goals.

**The orienting question, learning outcome(s), and career-ready competencies for each area and the courses that they apply to are available online.**

* [Institution](https://cte.ggc.edu/impacts-institution/)
* [Mathematics](https://cte.ggc.edu/impacts-mathematics-and-quantitative-skills/)
* [Citizenship](https://cte.ggc.edu/impacts-political-science-and-us-history/)
* [Humanities](https://cte.ggc.edu/impacts-arts-humanities-and-ethics/)
* [Writing](https://cte.ggc.edu/impacts-communicating-in-writing/)
* [STEM](https://cte.ggc.edu/impacts-technology-mathematics-and-sciences/)
* [Social Sciences](https://cte.ggc.edu/impacts-social-sciences/)

This course should direct students toward a broad Orienting Question:

|  |  |  |  |
| --- | --- | --- | --- |
| Mathematics & Quantitative Skills (Mathematics) | How do I measure the world? | Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms. | Information Literacy, Inquiry and Analysis, & Problem-Solving |

Completion of this course should enable students to meet the following Learning Outcome:

**GORDON LEARNING OUTCOMES:**

**Specific Objectives:**

1. Use knowledge of truth tables and Venn diagrams to determine the soundness of logical arguments.
2. Determine the validity of a statistical study and what information can be inferred from it.
3. Use and interpret descriptive statistics in numerical and graphical forms.
4. Solve basic applied problems involving unit conversion and probability.
5. Interpret and apply linear, quadratic, and exponential models, including applications involving financial literacy.

The primary outcome for a student who successfully completes a MATH 1001 course is the achievement of a certain level of proficiency in using and analyzing quantitative information. The focus is upon the methodology and skills needed to analyze quantitative information for the purpose of making decisions, judgments, and predictions. This will entail defining problems by means of numeric, graphic, or symbolic representations of real-world phenomena, identifying and pursuing methods of solution, deducing consequences, formulating alternatives, and predicting outcomes.

Students should have an understanding and be able to demonstrate their knowledge of:

1. Constructing and analyzing logical arguments, negations, quantifiers, conditional   
 statements, converses, and inductive and deductive reasoning

2. Financial management and compound interest

3. Statistical reasoning and basic ideas of data analysis

4. Fundamentals of probability

5. Exponential growth and modeling; doubling time and half-life

6. Linear growth and modeling

7. Quadratic modeling

**Common Content and Topics:**

1. Sets and Set Operations

2. Logic: Negations, Quantifiers, Conditional Statements, Converses

Inductive and Deductive Reasoning, Valid Arguments

3. Basic Probability

4. Data Analysis

Basic Descriptive Statistics (Mean, Median, Mode, Standard Deviation)

Correlation, Causality, and Inferences

Interpreting Graphical Displays

Sampling and Randomness

5. Modeling from Data (Scatter Plots, Regression Lines)

Linear Models

Quadratic Models

Exponential and Logarithmic Models

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

|  |  |
| --- | --- |
| Critical Thinking | Using logic and reasoning to identify the strengths and weaknesses of alternative approaches to solving problems and making decisions |
| Information Literacy | Recognizing when information is needed, and locating, evaluating, synthesizing, and effectively using the needed information, while appropriately crediting the original source of information |
| Problem-Solving | Designing, evaluating, and implementing strategies to solve problems using data, knowledge and facts |

**Course Communication**

* This course requires students to participate in web-based exercises, which will be included in computing their grade. A Course shell been developed for this course in Blackboard and D2L, which includes: course assignments, additional web links, multimedia resources, and links to the discussion forum. Additional web resources may be added to the page throughout the semester. A copy of this syllabus is also available. In combination, this syllabus and the Moodle course shell explain all the requirements for this course.

**Course Format:**

Our class meets online Mondays and Wednesdays 11:00-12:15 in room 222 of the Instructional Complex (IC 222). Our course is divided into five units outlined at the end of this syllabus. Homework is in MML and in D2L. All the tests including the final exam will be in our classroom.

**Course Resources:**

Bennett, J. and Briggs, W. 2015. Using and Understanding Mathematics: A Quantitative Reasoning   
 Approach. 7th edition. Pearson Addison-Wesley. ISBN: 13:9780321914620 Chapters 1-2 & 4-9

MML (**Course ID:** We are integrating MML into Desire2Learn (D2L), so should not need an access code or course ID since you are in the class by virtue of Banner enrollment.

**MML/Technical Support: 1-800-677-6337;** [**https://mlm.pearson.com/northamerica/**](https://mlm.pearson.com/northamerica/)

**Calculator:** *A graphing calculator is required*. A Texas Instruments TI-83/TI-84 or higher (or equivalent\_ is recommended. They are available for purchase in our College Bookstore and for checking out from our Library.

**Course Assessments:**

* Grades will be computed based on any combination of the following:

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| --- | --- |
| **ASSIGNMENTS** | **POINTS OR % OF GRADE** |
| A detailed list with assignment deadlines are in the Tentative Schedule at the end of this syllabus. | 100% (see below for the categories/weights) |

A student’s grade in the course will be determined by individual test scores, projects, and daily assignments (including My Math Lab homework and other D2L activities). The **daily grade** comes from classwork and homework activities, projects, discussions, and journal entries (together worth 25%) (With the lowest grade dropped). **My Math Lab homework** on each section in the course will count 25%. **Tests** count for 50% of the course average. There are four unit tests (worth 100 points each), and there will be a comprehensive final exam over all 5 units, worth 100 points, counting as part of the test average and replacing the lowest of the 4 unit tests). There is a brief “gap unit” (Unit V) on linear (and nonlinear) systems between the last unit test and the final exam. In an Excel spreadsheet formula, the final exam substitutes for the lowest unit exam. The student’s final grade will then be computed as a weighted average.

**A.** There will be four unit tests [with a “gap unit” between the last test and final exam] given during the semester, plus a comprehensive final examination over all 5 units. All tests will be in class, and all tests and the final examination are required. The dates for the in-class tests are announced in a tentative course schedule at the end of this course syllabus, and the final examination details are announced by the College Registrar/Provost. If you miss a test, you may receive a grade of “zero” for that test unless you have a documented excuse. Make-up tests are given at the instructor’s convenience. If your final exam grade is higher than your lowest test grade, then the final exam grade will replace your lowest test grade (in an Excel spreadsheet formula).

**B.** All D2L assignments, discussions, quizzes, projects, and journal assignments are required. There are no make-up quizzes and no make-up homework assignments. The lowest daily grade will be dropped in the last course average calculation (in my Excel spreadsheet).

**C.** All daily assignments are due during class time with a 20% penalty for  
 assignments coming in late on the same day and a 0 for all missed deadlines.

**D.** When submitting assignments online, either scan your completed work (Past   
 students have recommended the CamScanner app) or take photos of each page.   
 Note: File formats that work well include .jpg and .pdf, not .heic.   
 Please include your name on each page, and take good quality photos with a   
 lot of light. I can only assess what I can see.

* Homework for each content section (e.g., Section 1B Propositions and Truth Values) will be completed on-line via My Math Lab (MML). The homework assignments are found in D2L Content.
* There are D2L Assignments; for face-to-face classes, copies are generally provided by your instructor. When assignments are not turned in during class time, they will be expected to be uploaded into D2L by the assignment deadline, and that is the expectation for online students.
* There will be four (4) in-class tests given during the semester. The tentative dates of the tests are: Wednesday 9/4, Monday 9/23, Monday 10/21, and Wednesday 11/13, with the final exam TBA. Your lowest test grade will be dropped at the end of the term, with the final exam score replacing it.
* There will be a comprehensive Final Examination TBA (by the College Registrar/Provost’s Office).

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| **Category** | **Assessment Information/Turn-Around Time** | **Percentage of overall grade** |
| MML Homework | My Math Lab, for each section in our textbook: points vary by assignment; averaged automatically in MML. | 25% |
| Daily Assignments | Worksheets, Journal Assignments, Quizzes, and Projects provided by your instructor in D2L Assignments, Discussions, and Quizzes; graded by next day after deadline; max of 100 points each | 25% |
| Tests | Four unit tests (in class); max of 100 points; averaged/I aim for the next class day. | 50% |
| Final Exam | In class; max of 100 points; I count this in the test category and let it also replace the lowest unit test in my Excel gradebook. |  |

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| **Conversion Chart** |  |
| 89.5+ | A |
| 79.5-89.49 | B |
| 69.5-79.49 | C |
| 59.5-69.49 | D |
| Below 59.5 | F |

The course points fall 90-100 (A), 80-89 (B), 70-79 (C), 60-69 (D), and 59 and below (F), with rounding to the nearest percent. This second table shows the usual turn-around time for grades to post in the D2L gradebook which should match well with the primary Excel grading spreadsheet.

You can expect to access the course materials and grades via our course in MyCourses (Brightspace by D2L). Students should check this MyCourses (Brightspace by D2L) course daily, as changes will always be announced and recorded on the course site.

**Late Work:**

I want to work with you so that you will succeed in this course and have good strategies for your other classes too; so, I will not give my okay for anything that will be detrimental to your academic health. If you are late for class, please still join us, but you may miss some of our course content. If you miss a test, please contact me as soon as you can so I can work with you. If missing tests is consistent, please know that there will be a penalty. Generally I take 20% off late work scores, and two days late with no reasonable excuse is too late for any credit.

**Final Exam Details:**

**-** The final exam will be given during the week of R-T December 5-11. The date and time of the final exam is set by the Registrar’s Office, and details will be posted at midterms. The exam schedule cannot be changed at the convenience of the student. You should not plan to be absent during that week. A make-up final exam will only be given in cases of a verifiable excused absence.

**College-wide Statements:**

* ATTENDANCE POLICY
  + The classroom experience is a vital component of the college learning experience. Interaction with faculty and with other students is a necessary component of the learning process. Students are expected to attend regularly and promptly all class meetings and academic appointments. Students who are absent from classes bear the responsibility of notifying their faculty that they will be absent and keeping up with class assignments in conjunction with Faculty provisions in the course syllabus. However, faculty will not request information from students about the specific reason for the absence nor documentation from students regarding a request for an excused absence. Students are not required to give faculty the specific reasons for an absence and students are not expected to send any documentation (including medical documentation) to faculty regarding an absence. Students who are absent and wish to submit documentation (including medical documentation) regarding the absence in order to have the absence qualify as an excused absence can submit the documentation to the Dean of Students. The Dean of Students will verify the absence and will notify the faculty member that the request for an excused absence is justified. An individual faculty member bears the decision as to whether a student’s absence is excused or unexcused, and whether work will be permitted to be made up. The decision of the faculty in this case is final. However, as with any course-related issue, students may seek additional assistance through the school administration (Department Chairs, Associate Deans, Dean), and may choose to file a written student complaint. Students may also appeal a final grade in a course through the grade appeal process if they feel the faculty’s decision on attendance has affected their final grade. The student complaint process and the grade appeal process are both outlined in the Student Handbook. Students who are absent because of participation in college-approved activities (such as field trips and extracurricular events) will be permitted to make up the work missed during their College-approved absences, provided that the student discussed with and obtained approval from the faculty to make up the work missed prior to the student's going on the field trip.

Individual faculty may establish additional attendance requirements appropriate to their course’s context, e.g. lab attendance. A student whose class schedule would otherwise prevent them from voting will be permitted an excused absence for the interval reasonably required for voting.

**This course has been selected by the USG as a “pilot attendance course”. Attendance data will be input in Banner Web (and also in Navigate) for each class session.**

* tECHNOLOGY COVENANT
  + Technology will be used to deliver content, provide resources, assess learning, and facilitate interaction, both within the classroom and in the larger learning community. This covenant provides a general guideline for the course. I reserve the right to make periodic and/or necessary changes to the covenant, including technology use and communication channels, to accommodate the needs of the class as a whole and fulfill the goals of the course.
* Standards of Academic Conduct and Student Integrity
  + The College expects academic honesty from students and instructors. Students have the obligation both to themselves and to the College to make the appropriate College representative aware of instances of academic deceit or dishonesty. Generally, this entails making the situation known to the instructor, and if needed, to the Dean of the student’s school. Likewise, faculty members are responsible for enforcing the stated academic standards of the College. Instances of violating academic standards might include, but are not necessarily limited to, the situations outlined below:
    - **Cheating** – Receiving or providing unapproved help in any academic task, test or treatise. Cheating includes the attempt to use or the actual use of any unauthorized information, educational material, or learning aid in a test or assignment. Cheating includes multiple submission of any academic exercise more than once for credit without prior authorization and approval of the instructor.
    - **Plagiarism** is presenting someone else’s work as though it is your own. In an academic community the use of words ideas or discoveries of another person without explicit, formal acknowledgement constitutes an act of theft or plagiarism. To avoid the charge of plagiarism, students must engage in standard academic practices such as putting quotation marks around words that are not their own, employing the appropriate documentation or citation and including a formal acknowledgement of the source in the proper format. Students are expected to use the proper APA format for citations. An online APA manual can be found at: <http://www.dianahacker.com/resdoc/>.
    - **Fabrication** involves inventing or falsifying any data, information, or records.
    - **Obstruction** is impeding the ability of another student to perform assigned work.
    - **Collusion** comprises assisting any of the above situations or performing work that another student presents as his or her own.
    - **Use of AI** will be determined by the Faculty member.
* **Title IX & Mandatory Reporter Information:** Gordon State College is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence and stalking. If you (or someone you know) has experienced or experiences any of these incidents, know that you are not alone. Please know also that all faculty members at GSC are mandated reporters. Any student reporting any type of sexual harassment, sexual assault, dating violence, domestic violence, or stalking must be made aware that any report made to a faculty member under the provisions of Title IX will be reported to the Title IX Coordinator or a Title IX Deputy Coordinator. If you wish to speak with someone confidentially, you can contact the Counseling and Accessibility Services via the email above. The licensed counselors in the Counseling Office can provide confidential support. GSC does not discriminate against any student on the basis of pregnancy, parenting, or related conditions. Students seeking accommodations on the basis of pregnancy, parenting, or related conditions should contact Counseling and Accessibility Services at the email above regarding the process of documenting pregnancy related issues and being approved for accommodations, including pregnancy related absences as defined under Title IX.”
* **ADA, IEP, and 504:** If you have a documented disability as described by the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973, Section 504, you may be eligible to receive accommodations to assist in programmatic and/or physical accessibility. The Counseling and Accessibility Services office can assist you in formulating a reasonable accommodation plan and in providing support in developing appropriate accommodations to ensure equal access to all GSC programs and facilities.” Contact Counseling and Accessibility Services at [aliciad@gordonstate.edu](mailto:aliciad@gordonstate.edu)
* **COVID updates:** [**https://www.gordonstate.edu/corona-virus/index.html**](https://www.gordonstate.edu/corona-virus/index.html)
* **Religious Holidays:** GSC acknowledges that the academic calendar can sometimes conflict with major holidays from among our diverse religious traditions. If you need to miss class to observe a religious holiday, just let me know beforehand so we can figure out how you’ll get your work completed.
* **School-Related Absences:** If you need to miss class because of a school-related activity (sports, field trips, etc.), please contact me.
* **GA House Bill 280:** See the University System of Georgia at the following link <http://www.usg.edu/hb280>.

**Miscellaneous Student Resources:**

* **Tutoring:** The GSC Student Success Center provides tutoring services for students on a variety of topics. [They also provide online academic resources](http://www.gordonstate.edu/successcenter/online-resources.asp). [Please see the Student Success Center’s website for more information.](http://www.gordonstate.edu/successcenter/index.asp)
  + **NetTutor** This free online tutoring is available 24/7 via D2L. To access, select “Tools/Resources” from within the D2L course. Then select NetTutor & pick the subject. Leave a question or start live tutoring (link to tutoring hours will be in upper right corner). You can use the chat feature or ask tutor to turn on audio. These sessions are recorded, so you watch them multiple times.
* **D2L:** Brightspace by D2L is GSC’s online learning management system (LMS). Course materials and your gradebook are housed on D2L. Here are the instructions for getting into our course, in case you’re new to this system:
* Go to the homepage [www.gordonstate.edu](http://www.gordonstate.edu)
* Choose “My Gordon” link (top middle of page)
* Choose “Brightspace by D2L”
* Log in with GSC email username (do not include @gordonstate.edu) and current GSC email password
* Once D2L opens, choose our class under the “My Courses” widget (on far right of page)
* Choose “Content” on the course navigation bar at top to view our course materials.
  + Do Note that you cannot see any of your courses in D2L until the first official day of classes. If you add the class in Banner Web during the Drop/Add period, it will take an overnight process for you to be added into D2L.
* **Assistance with D2L:** 
  + If you cannot log in, [Consider resetting your password here](https://falcon.gordonstate.edu/changepass/gdnreset.asp) (passwords must have uppercase letters, lowercase letters, and numbers/symbols, must be at least 10 characters and cannot include name/username).
  + If you still cannot log in or if you have some other weird problem, then email [d2lhelp@gordonstate.edu](mailto:d2lhelp@gordonstate.edu) and provide your name, your 929 number, and the course/section information. This email is checked M-F, 8-5.
* You also have access to a 24/7 Live Chat hosted by the University System of Georgia. [Chat live here](https://c1.websitealive.com/3312/operator/guest/gDefault_v2.asp?cframe=login&chattype=normal&groupid=3312&websiteid=922&departmentid=10606&sessionid_=&iniframe=&ppc_id=&autostart=&proactiveid=&req_router_type=&text2chat_info=&loginname=&loginnamelast=&loginemail=&loginphone=&infocapture_ids=&infocapture_values=&dl=https%3a%2f%2fd2lhelp.view.usg.edu%2f&loginquestion=).
* **Assistance with** **computer hardware** (i.e., loading Microsoft Office, removing a virus from your computer, etc.)
  + You can call GSC Information Technology at 678-359-5008. They are open M-F 8-5. If you leave a voicemail, please include your name, 929 number, a brief description of the problem, and a call-back number.
  + You can go to GSC Information Technology in the Instructional Complex Building, room 109.
* **Computers on Campus**: There are computers all over the campus if you need to use one, including in the first-floor computer lab of the Instructional Complex (IC), as well as in Academic, Russell, Smith, Nursing & Allied Health Services, Hightower Library, and the Student Success Center. If you live in the residence halls, there are computer labs located there as well.
* **Counseling and Accessibility Services Office**: If you (or someone you care for at GSC) feels overwhelmed, depressed, or in need of support, please contact this office for free counseling. [alisonb@gordonstate.edu](mailto:alisonb@gordonstate.edu)
  + Please know that there is also a 24-hour crisis line available: 1-800-715-4225
* **Highlander House**: If you or someone you know is facing food insecurity or needs toiletry items, check out this free student success resource: SARC 113.
* **Career Services Center:** Our Career Services Center offers many forms of assistance for you, such as Kuder Interest Assessments; Career readiness, preparation, & assistance; internship preparation & opportunities; Toastmasters; Professional Development Events; and Community Engagement & Service-Learning opportunities (328 Lambdin Hall, 678.359.5719).
* **Library Services:** The Hightower Collaborative Learning Center & Library offers Gordon State students specialized library research assistance. Students can meet with their personal librarians for one-on-one help in each discipline, major, or course to search and evaluate information sources effectively. Go to http://libcal.gordonstate.edu/ to schedule an appointment by clicking the Personal Librarian tab or click on the Presentation Practice Room tab to make a reservation. For immediate help, call 678-359-5076 or stop by the Circulation/Check-Out Desk. You can also Ask A Librarian or drop by the Circulation/Checkout Desk. Check the library’s web site for hours, electronic resources, and LibGuides (subject- or class specific research guides)

**Miscellaneous Student Resources**

Read your book. Ask your instructor for help in class and outside of class. We will schedule extra

help sessions when the need arises. There is free tutorial help available from the Student Success Center (in the Student Center above the Bookstore).  
  
The course syllabi and course resources are in Desire2Learn and on your instructor’s website at http://faculty.gordonstate.edu/gclement/. In D2L, we use News Announcements, Content, Assignments, Quizzes, Discussions, and Grades. Besides office hours, the SSC (Student Center 2nd floor) and the STEM Center (IC 319) are available for tutoring assistance. Also consider creating a study group with fellow classmates.

* **How You Can Accomplish Goals in This and Other Courses:**

1. Prepare for lecture. Read the textbook and do the examples there (do not just look at how the book did it). Do any worksheets or other lecture preparation activities. Look over the previous lecture notes right before class.

2. Actively participate in the lecture. Ask questions.

3. Review the lecture. Read over your notes as soon as possible after the lecture. Where needed restate your notes so they make more sense to you.

4. Study mathematical concepts a little each day. Being able to solve the problems is not enough. Explain ideas and how you solve problems as if you were teaching a class. Memorizing formulas and rules, understanding why they are true will help.

5. Do the homework. Complete all the problems, not just the ones you already know how to solve. Work on the problems without looking at examples from online videos or books; your goal is to learn math, not to learn how to copy material from a video. Check your work. Do not enter an answer unless you are certain it is correct.

6. Use resources. The student success center (SSC), professor student hours or review sessions, and student study groups can help you clarify things that are hard to understand and learn challenging concepts.

7. Prepare for quizzes and exams. Make your own study guides. Make sure to get 8 hours of sleep the night before an exam.

8. Monitor your progress. If things are not going well, ask your professor for suggestions as soon as possible. Do not wait until the week before an exam.

* **Skills You Need to Succeed in College:**

1. Health management. Get enough sleep, water, nutrition, and exercise. Manage stress.

2. Time management. Schedule 1 – 2 hours for studying math each day. Keep track of deadlines.

3. Strong work ethic. Learning math is a major commitment.

4. Curiosity. Even when the material seems boring, ask yourself why things work the way they do.

5. Adaptability. If you treat this course as a harder version of high school, you will be much less successful.

6. Using resources. Asking questions and visiting the Student Success Center (SSC) are signs that your education matters enough to you to take advantage of every available opportunity.

7. Self-awareness. Honestly assess which concepts you understand and which require more work. Keep track of what studying techniques work best for you.

8. High expectations. Do not settle for anything less than your best.

* **Keys to Success in this class:**   
  (1) Have a goal for this class. Make this class a priority. You can succeed in this class!   
  (2) Be on time every day. Don’t miss class; when you must, communicate to your instructors.  
  (3) Review class notes just before and just after class.  
  (4) Read the text. Study the examples. Keep up with the pace of the class.  
  (5) Practice, practice, and then practice some more. Do homework as soon as possible after class.   
  (6) Ask questions. You have the right; asking questions shows you care and will often help others.   
  (7) Read the directions carefully. On tests, start by “unloading” important formulas and concepts.  
  (8) Actively listen in class. Take good notes.   
  (9) Use our tutoring center whenever you need help. Don’t let things snowball.   
  (10) Correct any mistakes you make on quizzes and tests.  
  (11) Be a lifelong learner. Live and learn! Rise to the challenge of college-level mathematics!
* *Other tips:* Prepare for class. Read every page of the section that is to be covered in class at the next class meeting. If nothing else, look at each topic heading and every diagram to at least have a clue about what is to be covered. Shortly after class, do all homework assigned and have a written list of questions about anything you don’t completely understand. Pace yourself by doing SOMETHING each day - without skipping a day.
* Take notes in class. Get plenty of exercise and rest. Eat properly. Be on time. Turn your cell phone off (not “vibrate”). Focus. Get your questions answered. Only write down the highlights of the class time – not every word. If you cannot attend class for some reason, please get someone else’s notes. Read over your notes. Fill in any extras that you recall from class time.
* Keep all homework and classroom notes organized in some way: for example, a 3-ring or spiral bound notebook. Keep the proposed schedule in the front of your notebook.
* Studying for an exam requires practice. If possible, you should try a sample timed test (with no help) the day before the real exam. The painful reality of this exercise will show you what to study more. Cramming everything in one day is like eating all your meals for a month on the last day. It doesn’t work! A little bit each day works much better.
* **A final few words:   
  *Treat this class like any job; take deadlines seriously.***

***The schedule below is tentative but will give you a good idea of our expected pace.***

***Keep up with your homework & studies; you can do this!***

**NOTE: This syllabus MAY be changed at the discretion of the instructor with clear communication to the class.**

**COURSE CALENDAR:**

**Math 1001-LS3 Fall 2024** **SCHEDULE OF CLASSES  
Quantitative Skills and Reasoning MW 9:30-10:45 Math 1001-LS3 CRN 1554 IC #222**

**My Math Lab website:** [**https://mlm.pearson.com/northamerica/**](https://mlm.pearson.com/northamerica/) **Course IDs:** The MML content is integrated into D2L, so no course ID/access code are needed.

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| **Section** | **Section and/or Topics** | **Date** |
| 1B | Introductions, Propositions and Truth Values | W 8/14 |
|  | Sets and Venn Diagrams, **Personal Intro Due (in D2L Discussions) & Syllabus Quiz (in D2L Quizzes)** | M 8/19 |
| 1D | Analyzing Arguments, **Symbols & Number Sets Task Due, Sets & Set Operations Due** | W 8/21 |
| 2A | The Problem-Solving Power of Units | M 8/26 |
|  | Review, **Problem Solving Strategies (Any 5) Due** | W 8/28 |
| M 9/2 | **Labor Day Holiday (No Classes)** |  |
|  | **TEST #1, Journal I & MML Homework (1B-1D, 2A) Due 9/4 by 11:59 PM** | **W 9/4** |
| 4B | The Power of Compounding, **Exponent Rules Worksheet Due** | M 9/9 |
| 4C | Savings Plans and Investments | W 9/11 |
| 9C | Exponential Modeling, **Interest Practice Due** | M 9/16 |
|  | **Review, Exponential Modeling Supplement Due** | W 9/18 |
|  | **TEST #2, Journal II & MML Homework (4B-4C, 9C) Due**  **\*This is the last test before the Registrar’s midterm withdrawal date, F 10/11)** | **M 9/23** |
| 5A-5B | Fundamentals of Statistics; Should You Believe a Statistical Study | W 9/25 |
| 5C-5D | Statistical Tables and Graphs; Graphics in the Media, **U.S. Record High Temps Activity** | M 9/30 |
| 5E | Correlation and Causality | W 10/2 |
| 6A | Characterizing Data | M 10/7 |
| 6B | Measures of Variation, **MLB Home Run ‘Kings’ Statistics Activity** | W 10/9 |
|  | Review, **Data Analysis/Statistics Quiz (in D2L Quizzes)** | W 10/16 |
|  | **TEST #3, Journal III & MML Homework (5A-5E, 6A-6B) & MML Quiz on 6A-6B Due** | **M 10/21** |
| 7A | Fundamentals of Probability; **Take-home Stats or Statistics Lab Project Due** | W 10/23 |
| 7B | Combining Probabilities | M 10/28 |
| 8A-8B | Growth: Linear versus Exponential, Doubling Time and Half-Life, **Prisoner Strategy Activity** | W 10/30 |
| 8B | Logarithms (Supplement), **Quiz on 7A-7B Due in MML, Probability Quiz (in D2L Quizzes)** | M 11/4 |
| 8C | Real Population Growth, **Intro to Logarithms Activity** | W 11/6 |
|  | Review | M 11/11 |
|  | **TEST #4, Journal IV & MML Homework (7A-7B, 8A-8C) & MML Quiz on 8A-8B Due** | **W 11/13** |
| 9A | Graphing lines: Intercepts and slope; Finding equations of lines; Functions: The Building Blocks of Mathematical Models; | M 11/18 |
| 9B | Linear Modeling Supplement Classwork, **Hot Air Balloon Classwork** | W 11/20 |
| Suppl. | Quadratic Functions & Modeling, **Linear Modeling Supplement Due** | M 11/25 |
|  | Review for Final Exam/Study Guide, MML (9A, 9B, Quiz on 9A-9B Lines), **Quadratic Functions & Applications Activity** | M 12/2 |
|  | **Review, Journals V & VI Due, Assessment Quiz** | **W 12/4** |
|  | **Final Exam** | **TBD** |

**Important Dates  
 Labor Day M, Sept. 2 Midterm Withdrawal Deadline F, Oct 11**

**Fall Break MT, Oct. 14-15 Thanksgiving Holiday Break W-F, Nov. 27-29   
Last Day of Classes W, Dec 4 Final Exams R-T, Dec. 5-11**

**Office Hours: MW 12:30-3:00 & TR 11:00-12:30 in IC 243/MS Teams, with these and other times by appointment (Please feel free to call or e-mail your professor.)**

**Study smart!!! Do your best! Rise to the challenge! Live and learn!**