

# MATH 120 Fundamentals of College Math Spring 2021

This class has mandatory online homework and a common departmental final exam. For more information on these and other policies, read this syllabus in detail and view the course information posted in the 'Course/Final Exam Info' section at <a href="https://faculty.unlv.edu/bellomo/CourseInfo/CourseInfo.html">https://faculty.unlv.edu/bellomo/CourseInfo/CourseInfo.html</a>.

## **CLASS INFORMATION:**

 Course Section: 1009

 Lecture Times: 1000-1115 TR

 Lecture Location: Remote instruction course. Class meetings will be online.

 Online homework Course ID: ain96888

 Zoom Classroom: 996 1486 0070 (Class)
 Passcode: MATH120TR

 928 6751 4574 (Office Hours)
 Passcode: OfficeHour

 Note: You have to call me in my office first, so I can launch the Zoom meeting.

# **INSTRUCTOR INFORMATION:**

Name: Bob Ain Office Location: CDC-710 Office Phone: (702) 895-5173 Email: ain@unlv.nevada.edu Instructor Web Page: http://ain.faculty.unlv.edu Office Hours: 0830-0930 MTWR, or by appointment Department Phone: (702) 895-3567 Department Web Page: http://www.unlv.edu/math

## **COURSE DESCRIPTION:**

Real numbers; consumer mathematics; variation; functions, relations, and graphs; geometry of measurement; probability and statistics; sets and logic. Broad in scope course, emphasizes applications.

## **PREREQUISITES for the COURSE:**

Three years of high school mathematics at the level of algebra and above and a satisfactory score on the Math Placement Test, or a minimum score of 22 on the ACT, or a minimum score of 500 on the SAT, or a C or better in Math 095 or equivalent.

## **COURSE MATERIALS:**

**Required Text:** *Using and Understanding Mathematics* (7th edition) by Bennett and Briggs; Pearson Publishing.

**Required Account:** Pearson MyLab and Mastering (online account for homework) **Suggested Calculator:** A non-programmable, non-graphing scientific calculator is recommended

## **SPECIAL NOTE:**

During full semesters (fall and spring), students enrolled in Math 095 through Math 182 are required to attend a mandatory presentation regarding the online evaluations, tutor clinic and other tutoring options offered. Your instructor will provide you with specific details.

Weight	Item
10%	Online Homework and Reading Checks (Course ID: ain96888)
30%	Test One, Test Two, Test Three
34%	Projects, Mini-Projects, Classwork, Other Assignments
6%	Portfolio
20%	Comprehensive Final Examination

## **EVALUATION AND GRADE ASSIGNMENT for MATH 120**

\* Your final exam will contain assessment questions common to all sections of this course.

\* Letter grades will be assigned according to the following scale:

A: 93-100, A-: 90-92.9, B+: 87-89.9, B: 83-86.9, B-: 80-82.9, C+: 77-79.9,

C: 73−76.9, C-: 70−72.9, D+: 67−69.9, D: 63−66.9, D-: 60−62.9, F: ≤ 59.

#### Extra credit will not be permitted on final grades, or the final examination.

## **LEARNING OUTCOMES:**

There are three overarching Themes for the course as described below. Necessary prerequisite topics will be designed and implemented for each Theme, and reviewed in real time for the prerequisite course.

**Theme 1** (*Using Mathematics to Reason and Answer Questions*) **Topics and Objectives:** Define and identify 10 common fallacies or deceptive arguments; Identify sets and elements, describe relationships with and without Venn diagrams; Define argument types (inductive or deductive), and use Venn diagrams to test the validity of arguments; Use the seven provided hints to analyze statements and solve problems; Identify standardized units, convert between units; Develop experience with unit analysis as a problem solving technique; Use the four step problem solving process and 8 provided hints to solve problems; Use percentages to compare and answer questions; Identify significant digits, properly round, find relative error;

**Theme 2** (*Financial and Practical Numeracy*) **Topics and Objectives:** Budget and Manage Expenses; Calculate simple and compound interest, Comparing APR and APY; Using savings for future use, and recognizing types of investments; Calculating Loans and Mortgages, Understanding Credit Card Bills. Interpret and generate frequency tables, bar graphs, pie charts, histograms and line charts; Use correlation to describe relationships between two data variables. Calculate and interpret measures of central tendency; describe the shape of a distribution with modes, symmetry, skewness and variation; Find and interpret quartiles; calculate and interpret standard deviation; Identify a normal distribution and apply the 68-95-99.7 rule;

**Theme 3** (*Using Mathematics and Statistics to Model Life*) **Topics and Objectives:** Define outcome and event, describe and find theoretical probability and relative frequency probability; Identify and apply the basic rules for adding and multiplying probabilities; Explore the law of large numbers; Identify linear versus exponential growth; Identify half life and doubling models; relate half life and doubling times to exponential growth; Identify linear models; identify rates of change and the linear equation; graph linear functions; Identify and find exponential models.

## CALCULATOR/TECHNOLOGY:

Calculators are optional in this course. A sophisticated (EXPENSIVE) calculator provides no significant advantage over a good scientific calculator. In any case, we won't be spending time mastering their use. The primary focus of this course is to be able to think well. You will probably be using your computer, tablet, and phone to communicate with classmates (social distancing and all that), but it is your personal responsibility to make sure your technology use is on-task.

#### **ACADEMIC INTEGRITY:**

Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at: <u>http://studentconduct.unlv.edu/misconduct/policy.html</u>.

While the UNLV Department of Mathematical Sciences encourages students to collaborate with peers, there is a distinction between verbal collaboration and copying. Specifically – it is *not* acceptable to "divide" work, and it is *not* acceptable to use another persons' hard work (current or former student, teaching assistant, or tutor) as your own. Further, if you feel you are being misguided, it is *your* responsibility to report this to your instructor *before* testing, so they can correct the situation and give you proper clarification.

Academic dishonesty will *not* be tolerated; the College of Sciences emphasizes zero tolerance for academic dishonesty. All acts of academic dishonesty may result in: automatic zero on the assignment, F in the course, disciplinary review, revoking of degree, probation, expulsion, etc.

#### **HOMEWORK:**

Homework will be assigned and graded using Pearson MyLab and Mastering (online account). The necessary account information is included with new textbooks. Students who purchase used textbooks may purchase an access code at <u>http://www.pearsonmylabandmastering.com/</u>. The **Course ID** for this course is ain96888. Projects and other homework will be assigned, always with adequate time between assignment and due date.

#### **MAKE-UP POLICY:**

Late work is not generally accepted; if it is, expect a points penalty. Make-up exams may or may not be given at the discretion of the instructor.

#### **TESTING:**

Testing (Test One, Test Two, Test Three, and the Final Exam) for this course will be online, using MyMathLab. You will not need to attend class on test days.

#### **TUTORING:**

The Department of Mathematical Sciences and the Academic Success Center both support tutoring for this course. Under the current circumstances, the access will be virtual, rather than face-to-face. More details as they become available.

#### **GUIDELINES FOR COURTESY AND RESPECT:**

I would like to welcome all students into an environment that creates a sense of community pride, courtesy, and respect; we are here to work cooperatively and to learn together.

In order to create a smooth and harmonious learning community, please make every attempt to *come to all the class sessions*, to come to class *on time*, and to *stay* until the end of the meeting. There may be a time when you are unavoidably late for class. In that case, please come into the room quietly and choose a seat closest to the entrance. Once the class session has begun, please do not leave the room and then re-enter unless it is an emergency.

It is important that we are all able to stay focused on the class lecture/discussion. For this reason, only *one person at a time* in the class should be speaking. Side conversations are distracting for surrounding students and for the professor. All *electronic devices should be turned off BEFORE* entering the room. You must have instructor permission for use of a laptop, and it is only to be used for instructional purposes.

As you can see, simple norms of courtesy should be sufficient to have our class run in the best interests of all. Any student considered to be a distraction to the learning environment may be asked to leave the classroom at any time. Any student who is continually a distraction to the learning environment may be administratively dropped. Thank you in advance for your cooperation.

#### **OTHER INSTRUCTOR POLICIES:**

This is a remotely-instructed class. It is **<u>NOT</u>** an Online class. Your attendance and participation at the designated class times are important to the course, and important to your grade.

We will be using a mix of technology platforms for this class. Some classes we will use the discussion board on WebCampus, sometimes we will be in a Zoom classroom. Maybe sometimes, we'll use both in parallel. I expect to learn a lot about this teaching environment this term. I also suspect y'all will be the ones teaching me quite a bit of it.

A substantial part of this course is based on student collaboration. I doubt the online environment makes this easier. I also doubt is will be as much fun as being in the same room. Regardless, each of us will have to extend ourselves to make it work.

Have your textbook available every class period.

A positive attitude is expected in this course daily.

While we are not in classroom together, I still want to remind you about a few things important to our success here. Wear your mask, wash your hands, and try to maintain social distancing as much as possible. I want you to be careful and courteous, without being fearful. I don't want you to disappear from my screen because you got sick.

Have fun.

# **UNIVERSITY POLICIES:**

## Academic Misconduct

Academic integrity is a legitimate concern for every member of the Campus community; we all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy, and are encouraged to always take the ethical path whenever faced with choices. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's educational mission. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another person, from the Internet or any other source without proper citation of the sources. See the <u>Student Conduct Code</u>, https://www.unlv.edu/studentconduct/student-conduct.

## **Auditing Classes**

Auditing a course allows a student to continue attending the lectures and/or laboratories and discussion sessions associated with the course, but the student will not earn a grade for any component of the course. Students who audit a course receive the same educational experience as students taking the course for a grade, but will be excused from exams, assessments, and other evaluative measures that serve the primary purpose of assigning a grade.

## **Classroom Conduct**

Students have a responsibility to conduct themselves in class and in the libraries in ways that do not interfere with the rights of other students to learn or of instructors to teach. Use of electronic devices such as pagers, cellular phones, or recording devices, or potentially disruptive devices or activities, are only permitted with the prior explicit consent of the instructor. The instructor may rescind permission at any time during the class. If a student does not comply with established requirements or obstructs the functioning of the class, the instructor may initiate an administrative drop of the student from the course.

# Copyright

The University requires all members of the University Community to familiarize themselves with, and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The University will neither protect nor defend you, nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional <u>copyright policy information</u> is available at http://www.unlv.edu/provost/copyright.

## **Disability Resource Center (DRC)**

The <u>UNLV Disability Resource Center</u> (SSC-A, Room 143, https://www.unlv.edu/drc, 702-895-0866) provides resources for students with disabilities. Students who believe that they may need academic accommodations due to injury, disability, or due to pregnancy should contact the DRC as early as possible in the academic term. A Disabilities Specialist will discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours, so that you may work

together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

## **Final Examinations**

The University requires that final exams given at the end of a course occur on the date and at the time specified in the Final Exam schedule. The general schedule is typically available at the start of the semester, and the classroom locations are available approximately one month before the end of the semester. See the Final Exam Schedule, https://www.unlv.edu/registrar/calendars.

## **Identity Verification in Online Courses**

All UNLV students must use their Campus-issued ACE ID and password to log in to WebCampus.

UNLV students enrolled in online or hybrid courses are expected to read and adhere to the <u>Student</u> <u>Academic Misconduct Policy</u>, https://www.unlv.edu/studentconduct/misconduct/policy, which defines, "acting or attempting to act as a substitute for another, or using or attempting to use a substitute, in any academic evaluation or assignment" as a form of academic misconduct. Intentionally sharing ACE login credentials with another person may be considered an attempt to use a substitute and could result in investigation and sanctions, as outlined in the Student Academic Misconduct Policy.

UNLV students enrolled in online courses are also expected to read and adhere to the <u>Acceptable Use</u> of <u>Computing and Information Technology Resources Policy</u>,

https://www.it.unlv.edu/policies/acceptable-use-computing-and-information-technology-resources-policy, which prohibits sharing university accounts with other persons without authorization.

To the greatest extent possible, all graded assignments and assessments in UNLV online courses should be hosted in WebCampus or another UNLV-managed platform that requires ACE login credentials for access.

#### **Incomplete Grades**

The grade of "I" (Incomplete) may be granted when a student has satisfactorily completed threefourths of course work for that semester/session, but cannot complete the last part of the course for reason(s) beyond the student's control and acceptable to the instructor, and the instructor believes that the student can finish the course without repeating it. For undergraduate courses, the incomplete work must be made up before the end of the following regular semester. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the period indicated, a grade of "F" will be recorded, and the student's GPA will be adjusted accordingly. Students who are fulfilling an Incomplete grade do not register for the course, but make individual arrangements with the instructor who assigned the "I" grade.

#### **Library Resources**

Librarians are available to consult with students on research needs, including developing research topics, finding information, and evaluating sources. To make an appointment with a subject expert for this class, please visit the <u>Libraries' Research Consultation</u> website:

http://guides.library.unlv.edu/appointments/librarian. You can also <u>ask the library staff</u> questions via chat and text message at: <u>http://ask.library.unlv.edu/</u>.

#### **Missed Classwork**

Any student missing class, quizzes, examinations, or any other class or laboratory work because of observance of religious holidays will be given an opportunity during that semester to make up the missed work. The make-up opportunity will apply to the religious holiday absence only. It is the responsibility of the student to notify the instructor within the first 14 calendar days of the course for Fall and Spring courses (except for modular courses), or within the first 7 calendar days of the course for Summer and modular courses, of their intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit the Policy for Missed Work, under Registration Policies, on the <u>Academic Policies</u> webpage, https://catalog.unlv.edu/content.php?catoid=6&navoid=531.

In accordance with the policy approved by the Faculty Senate regarding missed class time and assignments, students who represent UNLV in any official extracurricular activity will also have the opportunity to make up assignments, provided that the student provides official written notification to the instructor no less than one week prior to the missed class(es).

The spirit and intent of the policy for missed classwork is to offer fair and equitable assessment opportunities to all students, including those representing the University in extracurricular activities. Instructors should consider, for example, that in courses which offer a "Drop one" option for the lowest assignment, quiz, or exam, assigning the student a grade of zero for an excused absence for extracurricular activity is both contrary to the intent of the Faculty Senate's policy, and an infringement on the student's right to complete all work for the course.

This policy will not apply in the event that completing the assignment or administering the examination at an alternate time would impose an undue hardship on the instructor or the University that could reasonably have been avoided. There should be a good faith effort by both the instructor and the student to agree to a reasonable resolution. When disagreements regarding this policy arise, decisions can be appealed to the Department Chair/Unit Director, College/School Dean, and/or the Faculty Senate Academic Standards Committee.

For purposes of definition, extracurricular activities may include, but are not limited to: fine arts activities, competitive intercollegiate athletics, science and engineering competitions, liberal arts competitions, academic recruitment activities, and any other event or activity sanctioned by a College/School Dean, and/or by the Executive Vice President and Provost.

## Rebelmail

Rebelmail is UNLV's official email system for students, and by University policy, instructors and staff should only send emails to students' Rebelmail accounts. Rebelmail is one of the primary ways students receive official University communications, information about deadlines, major Campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the University. Emailing within WebCampus is also acceptable.

# **Tutoring and Coaching**

The Academic Success Center (ASC) provides tutoring, academic success coaching, and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, please visit the <u>ASC website</u>, https://www.unlv.edu/asc, or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A, Room 254. Drop-in tutoring is located on the second floor of the Lied Library, and on the second floor of the College of Engineering building (TBE A 207).

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