

CENTRAL TEXAS COLLEGE

DSMA 0394

NCBO DEVELOPMENTAL MATH FOR STATISTICS

Instructor: _____

Contact Information: _____

Office Hours: _____

I. Course Description

The NCBO course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving.

Additional topics include order of operations, problem solving with sales tax, commission, discounts, compound interest, and linear equations. This course will assist the student in developing the critical-thinking and problem-solving skills necessary for other developmental or college-level courses.

Students must be enrolled in a specific Elemental Statistical Methods Course (MATH 1342) concurrently.

This course is required for students who have not achieved a passing score on the state-mandated placement examination. Prerequisite: None

II. Learning Outcomes

Upon successful completion of this course, NCBO Developmental Math for Statistics, the student will:

- A. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts. (F1, F2, F5, F10)
- B. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real

- world problems in a variety of contexts. (F1, F2, F3, F4, F6, F8, F9)
- C. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations. (F2, F4, F8, F9)
 - D. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems. (F3, F4, F8, F9)
 - E. Use graphs, tables, and technology to analyze, interpret, and compare data sets. (F2, F3, F5, F8, F10)
 - F. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions. (F2, F3, F4, F5, F6, F8, F9, F10)
 - G. Compute basic operations of addition, subtraction, multiplication and division of fractions and decimals. (F1, F3, F4, F5, F8)
 - H. Interpret and create graphs to include bar graphs, pie graphs, scatter graphs, and line graphs. (F1, F3, F4, F5, F8, F9, F10, F12)
 - I. Analyze and solve problem that pertain to area and probability. (F1, F3, F4, F5, F8)
 - J. Solve and graph linear equations and inequalities. (F1, F3, F4, F5, F8, F9, F10, F12)
 - K. Use electronic and other media, such as the computer and DVD, to reinforce and supplement the learning process. (F1, F2, F3, F6)
 - L. Demonstrate critical thinking, communication, and empirical and quantitative skills. (F1, F3, F4, F7, F9)

Some learning outcomes are followed by letters and numbers; i.e., C9 or F11. These refer to SCANS foundations skills (F) and workplace competencies (C). View a chart showing these skills at <http://www.ctcd.edu/scans>. For more on the (Labor) Secretary's Commission on Achieving Necessary Skills, or SCANS, go to the U.S. Department of Labor site at <http://wdr.doleta.gov/SCANS/>.

III. Instructional Materials

Check for required, recommended, and optional materials at <https://www.ctcd.edu/books>. Note that some courses do not require the purchase of a book although a print option may be available for purchase. Don't forget to check technical requirements.

IV. Course Requirements

- A. **Required or recommended readings:** None
- B. **Major Assignments**

- a. Homework and quizzes are located in Blackboard and are due as scheduled by your instructor. The instructor will monitor students' progress in completing the assignments.

- b. All assignments are due on time. Late Assignments will be penalized: 30% penalty for the Homework assignments and 30% penalty for the quizzes.
- c. Students are encouraged to use the tutoring resources in the Math Express Tutoring Lab.

C. Examinations

- a. Periodic examinations will be given during the course in order to evaluate a student's progress. A comprehensive final will be given. All exams are located in Blackboard Knewton Alta.
- b. The instructor may require students to use a Bluebook for each examination. Bluebooks are available in the Campus Bookstore.
- c. Class exams will be returned to students within three class periods after the exam is administered.
- d. If you miss an exam, and have an excused absence, your instructor will arrange a make-up at his/her discretion. Said make-up may involve counting the next exam as double points.
- e. If you miss an exam, and do not have an excused absence then a make-up exam will be granted only at the discretion of the instructor. The make-up exam, if granted, will be given by appointment only.
- f. Failure to take the final examination for the course will result in a grade of zero to be posted for that examination. Students may not "retake" any exam.

D. Grade Computations

- a. To receive a passing grade of "A," "B," or "C" in this course, each student must complete all requirements and assignments, score at least 50% on the final exam and earn a weighted average of 70% or above. Grade Distribution: HW 250 points, Blackboard Assignments 100 points, Quizzes 400 points, Exam 1 225 points, Exam 2 225 points, Final Exam 300 points for a overall total of 1500 points.
- b. Students will receive the same grade in both DSMA0394 and MATH1342 since the course material is inter-mingled with just-in-time instruction.
- c. Students must pass the coreq courses with a "C" or better to be deemed TSI MATH Complete.

- d. Final grades will follow the grade designation for developmental courses below:
 - “A” – Weighted average of 90 – 100%
 - “B” - Weighted average of 80 – 89%
 - “C” - Weighted average of 70 – 79%
 - “D” – Weighted average of 60 – 69%
 - “F” – Weighted average of 0 – 59%
 - “W” - Withdrawal from course (initiated by student)
- e. Instructors will post the final grades in the Blackboard course and in Eagle Self Service.

E. Other

- f. Regular and punctual attendance is required. Students are responsible for all material covered during an absence.
- g. If the student is absent from class, it is his or her responsibility to contact his or her classmate/instructor to determine missed instruction. Each student must make appropriate arrangements to acquire assignments, announcements, lecture notes, and other pertinent information missed. Material on each class topic is available as video lectures and lecture notes in My Labs (MyMathLab)

V. Central Texas College’s Policies, Procedures, and Student Services

As a CTC student, you should become familiar with the multitude of services that are available to you. These include academic advising and support as described at the CTC website at <https://www.ctcd.edu/students/current-ctc-students/academic-advising/> . Recognizing that CTC serves students around the world, CTC ensures that these services apply to all CTC students regardless of location. Refer to the catalog and handbook for your location for additional information. Check with your local CTC office if you have questions.

Americans with Disabilities Act (ADA): Disability Support Services provide services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at <https://www.ctcd.edu/disability-support> for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

You are responsible for upholding the Academic Policies and Guidelines presented in the CTC catalog, Student Handbook, and at the CTC website at <http://www.ctcd.edu/academics/catalog/catalog-texas/academic-policies/> . Note these important policies:

Absence/Participation Policy: The census date is the day that CTC legally certifies with the State of Texas the number of enrollments in each course. This chart depicts the census date based on course length:

Length of Class in Weeks	Census Date	Last date to Withdraw From a Class
3	2nd Class Day	2nd Week
5	4th Class Day	3 1/2 Week
8	6th Class Day	6th Week
10	7th Class Day	7th Week
12	9th Class Day	9th Week
16	12th Class Day	12th Week

Instructors are required to document attendance through the census date by requiring students to complete an academically related activity or to communicate extenuating circumstances to the instructor PRIOR to census. For all courses, including self-paced, lack of evidence of active student participation before census may result in the student being dropped from the course and having to pay tuition and fees. For blended or hybrid classes where the first class meeting is after census, completion of a graded activity is still required.

Faculty are prohibited from withdrawing students from a course after census. **After the census date, students wishing to withdraw must withdraw themselves through the CTC business office, Eagles on Call, or Etrieve (online).** Contact your local site representatives or Eagles on Call if you have questions.

NOTE: For co-requisite classes a withdrawal/drop from one class will result in an automatic withdrawal/drop from the other co-requisite class.

Academic Integrity Policy

Postsecondary students are scholars. As such, students earn course completion credit by demonstrating the requisite level of content mastery (i.e., knowledge, comprehension, application, analysis, synthesis, evaluation) via original thought often supported by appropriately cited work of others (i.e., credible, scholarly, published). Students are expected to maintain academic honesty by refraining from academically dishonest behaviors (i.e., plagiarism, collusion, cheating). Faculty guard against student academic misconduct to preserve the integrity and reputation of the learning and teaching environment. CTC leverages technology to aid in detecting academic misconduct. By enrolling in CTC courses, students agree that all assignments and assessments (i.e., required papers, exams, class projects, portfolios) submitted as coursework to faculty may be further reviewed and evaluated by SafeAssign or a similar vendor for originality and intellectual integrity. CTC also employs Biometric Signature ID (BioSig-ID) via Internet Protocol (IP) address tracking to determine host/network interface location that the registered student is indeed the person submitting the coursework and/or completing the exam or assessment.

Scholastic Honesty and Academic Misconduct: All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all coursework and during examinations. The following are considered examples of scholastic dishonesty and are addressed in the CTC Catalog and the Student Handbook:

- **Plagiarize** - present the words or ideas of another as their own to include: • Copy without proper citation/source • Duplicate ideas without proper citation
- **Self-plagiarize** - presenting (i.e., recycling) large portions or in entirety one's own previously completed, submitted, and graded work as original and new without current assignment faculty permission and proper citation
- **Commit collusion** - someone other than the student authors some or all of the presented work unless such joint preparation is explicitly approved in advance by the faculty member. NOTE: Collaboration becomes collusion when the intention is to deceive (e.g., permitting someone other than themselves to log in to CTC systems via shared password or BioSig-ID and/or prepare coursework or complete an exam/assessment on behalf of the enrolled student).
- **Cheat** - act in an attempt to gain an academic advantage (e.g., looking at another's answers, copying another student's coursework, using unauthorized written or web-based materials during an exam or assessment, masking IP addresses or otherwise disguising location, permitting someone other than themselves to prepare/submit coursework or complete an assessment/exam).

Academic Misconduct includes

- sharing passwords and other log-in information to Blackboard or BioSig-ID.
- masking IPs, using Virtual Private Networks (VPNs), or otherwise disguising location.

Students guilty of scholastic dishonesty may be administratively dropped from the course with a grade of "F" and subject to disciplinary action, which may include suspension and expulsion.

EagleMail: All official electronic communication from CTC and from your instructors will be sent to your student email account. It is essential that you set up your account and check it at least three times a week. For instructions on using this account, go to <https://www.ctcd.edu/students/current-ctc-students/student-email/> .

Tutors: Tutoring services are available through the Academic Studio and other resources.

- **Academic Studio** at <https://www.ctcd.edu/locations/central-campus/student-support/student-success-persistence/academic-studio-student-success-center/> .
- **Advanced Math Lab** at <https://www.ctcd.edu/academics/instructional-departments/mathematics/advanced-math-lab/>
- **Online Writing Lab and Math Tutors** in Blackboard.
- **Eligible service members and dependents** at <https://military.tutor.com/home>
- **CTC Library Services for Students** at <https://www.ctcd.edu/academics/library/> .

Contact the **CTC IT Department** for help with WebAdvisor, Etrieve, and EagleMail. See this URL for Points of Contact: <https://www.ctcd.edu/students/student-it-services/> .

Contact **DEET technical support** as described at https://online.ctcd.edu/on_demand_blackboard.cfm for help with Blackboard and BioSig-ID.

Please direct questions to your local site representative or student advisors at **Eagles on Call** if you are not at a CTC location. Go to this webpage for contact information: <https://www.ctcd.edu/students/current-ctc-students/academic-advising/distance-education-students/>

Refer to the CTC website at <https://www.ctcd.edu/> and the Distance Education and Educational Technology (DEET) website at <https://online.ctcd.edu> for further updated information. Check the Quick Links at the DEET website for Blackboard Help and Student Resources.

VI. General Description of the Subject Matter of each Lecture or Discussion

Within this course we will remediate the necessary concepts of Pre-Algebra and Beginning Algebra for the student to be successful in the credit bearing paired course, Elementary Statistical Methods (the student must be enrolled in MATH 1342 concurrently). The concepts may include, but not limited to the following:

- Order of operations
- Basic Fraction operations
- Basic Decimal operations
- Solving problems involving percents
- Solving problems involving proportions
- Exponent rules
- Properties of radicals
- Basic graphing to include bar graphs, pie graphs, scatter graphs
- Solving and graphing linear inequalities
- Solving and graphing linear equations
- Solving problems pertaining to area
- Solving problems pertaining to probability
- Word Problems
- Calculator Usage
- Measurements of central tendencies

Additional concepts will be covered in this NCBO based on the Developmental topics required to be successful in the Co-Req MATH1342 Elementary Statistical Methods course. The concepts will be presented in a Just-In-Time environment – concepts will be taught as needed to complete material based on individual student’s mastery of outcomes.

Please note: This syllabus is subject to change at the discretion of the instructor.