MAT 160

Math for Business and Finance

Course Description
This course includes the following topics: commissions, mark-on depreciation, and interest on unpaid balances, compound interest, payroll, taxes, and graphs. The content includes, but is not limited to a review of decimals and percents, ratio and proportions, and measurement and emphasizes real-life applications.

Prerequisite: MAT 102.

3.0 Cr (3 lect/pres, 0 lab, 0 other)

Course Focus
The focus of the course is to provide the student with the tools needed to solve mathematical problems that will be encountered in everyday business transactions and in your personal life.

Text and References

MAT 160 CORE CURRICULUM COMPETENCIES

All courses approved for the general education core curriculum help students develop communication skills and/or critical thinking.

This course develops communication skills, as demonstrated by the following:
- Discussion of financial situations that will be encountered in everyday business transactions and in your personal life.
- Comparison of the differences and advantages of the mark-up on cost to the mark up on selling price.
- Application of compound interest and annuity tables.
- Discussion of reconciling bank statements and deposit slips
- Communications that use the appropriate terminology.
This course develops critical thinking skills, as demonstrated by the following:

- Calculating commissions, depreciation, and interest on unpaid balances and compound interest.
- Review of calculation with fractions, decimals and percent.
- Calculate personal and property tax under various conditions.
- Calculate payroll for different pay situations.

Course Goals

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. Use basic operations with whole numbers
2. Use the basic operations with fractions
3. Write percent as a fraction
4. Convert between decimals, fractions, and percent’s.
5. Convert to mixed numbers
6. Define ratio
7. Solve linear equations *
8. Solve percent problems
9. Solve proportion problems
10. Solve word problems
11. Translate phrases into math expressions
12. Write equations from information
13. Understand double-time, shift differential and split shift differences
14. Evaluate formulas
15. Compute simple interest *
16. Compute monthly service charges *
17. Compute compound interests *
18. Compute commission rate *
19. Compute commission *
20. Calculate trade discounts *
21. Calculate total sales
22. Calculate series discounts *
23. Calculate sales tax
24. Calculate overtime earnings *
25. Calculate net costs
26. Calculate markup
27. Calculate markdown *
28. Calculate income tax *
29. Calculate gross pay
30. Calculate gross income
31. Calculate credit card deposit discount fees
32. Calculate break even point
33. Calculate bank discounted proceeds
34. Calculate annuity values *
35. Calculate after deductions net pay *
36. Find adjusted or current bank balance
37. Find bank note due dates *
38. Find face value time and rate of a bank note
39. Find federal withholding tax *
40. Find property tax given tax rate and assessed value *
41. Find salaried employees gross earning
42. Find selling price when sales tax
43. Find state withholding tax
44. Identify parts of a check
45. Reconcile checkbook bank statement *
46. Find net cost after discount

Student Contributions
Each student will spend at least 6 hours per week preparing for class. Attendance is critical in this class.

Course Evaluation
Your performance objective and exams will be translated to points and the points to grades. There are 750 points possible and grades will be earned as follows: A = 675 to 750, B = 600 to 674, C = 525 to 599, D = 450 to 524.

The grading scale is as follows:
90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D
Below 60 = F

Course Schedule
The class meets for 3 lecture/presentation hours per week.

ADA STATEMENT
The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

ACADEMIC MISCONDUCT
There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student’s responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the TCL Student Handbook, the Division Office, and the Learning Resources Center.
ATTENDANCE
The College’s statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

- Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
- Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
- Reinstatement requires the signature of the division dean.

- In the event it becomes necessary for a student to withdraw from the course OR if a student stops attending class, it is the student’s responsibility to initiate and complete the necessary paperwork. Withdrawing from class may have consequences associated with financial aid and time to completion.
- When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdrawal the student with a grade of “W”, “WP”, or “WF” depending on the date the student exceeded the allowed absences and the student’s progress up to the last date of attendance or
- Under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.
- Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
  ▪ A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.
  ▪ A copy of TCL’s STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

HAZARDOUS WEATHER
In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGOZ 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGRZ 104.9, WFXH 1130 AM, WLHV 101.1, WSOK 1230 AM, WAEV 97.3, WTCV TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

EMERGENCY TEXT MESSAGE ALERT
Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancelations via text messaging on their cell phones. Participants can also opt in to receive non-emergency news and announcements. Go to www.tcl.edu. On the homepage, click on “emergency TextAlert at TCL” and fill out the form or go to www.tcl.edu/textalert.asp
GRADING METHODOLOGY
The final grade must be 70 or more in order to pass the course and progress in the program. Students absent from an examination or presentation will receive a “0” grade for the examination unless other arrangements are made with the individual instructor prior to the examination or presentation day or on the examination or presentation day before the test/presentation is scheduled to be given.

The student is responsible for notifying the instructor for the reason of the absence. It is also the responsibility of the student to contact the appropriate instructor to arrange to make up the examination. Arrangements may be completed by telephone.

If the instructor is not available, a message should be left on the instructor’s voice mail AND with another member of the faculty or administrative assistant. The make-up exam will be scheduled and the instructor will decide the method of examination. Messages sent by other students are unacceptable.