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

Core Curriculum Competencies
All courses approved for the general education core curriculum helps 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 earning
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.

The grading scale is as follows:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 - 100</td>
<td>A</td>
</tr>
<tr>
<td>80 - 89</td>
<td>B</td>
</tr>
<tr>
<td>70 - 79</td>
<td>C</td>
</tr>
<tr>
<td>60 - 69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
</tr>
</tbody>
</table>

The student **must** earn a grade of C or better in order to pass the course.

Course Schedule
The class meets for 3.0 lecture/presentation hours per week.

**STATEMENT OF NON-DISCRIMINATION**
The Technical College of the Lowcountry is committed to a policy of equal opportunity for all qualified applicants for admissions or employment without regard to race, gender, national origin, age, religion, marital status, veteran status, disability, or political affiliation or belief.

**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) 525-8219 or (843) 525-8242 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 complete an assignment designated by 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 contact the instructor via e-mail requesting to be withdrawn from the class. Withdrawing from class may have consequences associated with financial aid and time to completion. Students are strongly encouraged to consult with Financial Aid prior to withdrawing from any class, particularly if the student is currently on a warning or probation status.

• When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdraw 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.

ONLINE ATTENDANCE PROCEDURE
For all online courses, students must complete an assignment designated by the instructor during the first week of classes. The instructor will drop the student from the course if the initial assignment is not completed.

Instructors will withdraw students from the class when 90% attendance is not maintained. Attendance in an online course is defined by regular course access and by timely completion of assignments as required by the instructor. Each student will be expected to access the web class at least once a week and complete 90% of assignments on time. Additional access is encouraged and may be necessary for successful completion of classes.

Failure to log in and complete assignments will result in the student being withdrawn from the course. The instructor will assign a grade of “W,” “WP,” or “WF” based upon the student’s academic standing as the last date of attendance, which is the last login. Students are responsible for any financial matters associated with an administrative withdrawal. If a fails to email the instructor (using the my.tcl.edu email account) requesting to be dropped from the course and has not submitted the initial assignment required during the first week of class, the instructor will assign a “Never Attended” code in the student information system (web-advisor) no later than ten calendar days after the first day of the class. Students who are dropped as a result of never attending the course are still responsible for all fees associated with the course.
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, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLHV 101.1, WSOK 1230 AM, WAEV 97.3, WTCO 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. http://www.tcl.edu/current-students/text-alert

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 http://www.tcl.edu/current-students/text-alert

SAFETY ADDENDUM
Purpose
The purpose of this safety addendum is to provide each student with safety guidelines during an incident, emergency, or disaster at TCL. In addition, it provides students guidelines for lockdown procedures, evacuation procedures, and active shooter.

Definitions
An incident is any event, potential or actual, that may impact normal operations but has no immediate health or life threatening consideration or serious effect on the overall functional capacity of the College. An event of this nature should be reported to the Office of the Vice President for Administrative Services. Also notify the off-site campus administrator if applicable.

An emergency is any incident, potential or actual, which may endanger life or health or which affects an entire building or buildings, and will disrupt the overall operations of the College. Outside emergency services will probably be required, as well as major efforts from campus support services. Major policy considerations and decisions will usually be required from the college administration during times of crises. An emergency should be reported immediately by directly using 911 if life or health/injury considerations exist and then to the Office of the President or Vice President for Administrative Services as quickly as possible. Also notify the off-site campus administrator if applicable.

A disaster is any event or occurrence that has taken place and has seriously impaired or halted the operations of the College. In some cases, mass personnel casualties and severe property damage may be sustained. A coordinated effort of all campus-wide resources is required to effectively control the situation. Outside emergency services will be essential. In all cases of disaster, an Emergency Control Center will be activated, and the appropriate support and operational plans will be executed. The disaster should be immediately reported, first by calling 911 and then to the Office of the President or Vice President for Administrative Services. Also notify the off-site campus administrator if applicable.

Types of Emergencies
- Hurricane
- Tornado
Fire
Biochemical or Radiation Spill
Explosion/Bomb
Downed Aircraft (crash which directly impacts campus operations)
Utility Failures
Violent or criminal behavior
Psychological Crisis

Procedures:
Active Shooter

Building Evacuation
1. Building evacuations occur when an alarm sounds and/or upon notification by Security or the Emergency Director.
2. When the building evacuation alarm is activated during an emergency, individuals should exit according to the building evacuation plan and alert others to do the same.
3. Once outside, individuals should proceed to a clear area that is at least 500 feet away from the affected building. Streets, fire lanes, hydrant areas and walkways should be kept clear for emergency vehicles and personnel.
4. Individuals should not return to an evacuated building unless told to do so by Security or the Emergency Director.
5. Individuals should assist persons with disabilities in exiting the building. Elevators are reserved for disabled persons

Campus Evacuation
1. A uniformed Security Guard, the Emergency Director, or an Emergency Resource Team member will announce evacuation of all or part of the campus grounds.
2. All persons (students and staff) are to immediately vacate the campus, or in the case of a partial evacuation relocate to another part of the campus grounds as directed.

Lockdown
1. Clear the halls
2. Report to the nearest classroom/office
3. Assist those needing special assistance
4. Ensure classroom/office doors are closed and locked
5. Turn off lights
6. Stay away from doors and windows (out of the line of sight)
7. BE QUIET and follow instructor’s directions
8. Silence cell phones
9. Wait for the “All Clear” before leaving