PEIRCE COLLEGE SYLLABUS

Spring 2007 - 2008

Course Title: Introduction to College Mathematics  
Course Number: MAT 101  
Professor:  
Office:  
Course Prerequisite: Fulfillment of all College entrance requirements.  
Office Hours:  
Credits: 3  
Telephone:  
Class Day/Hours: Course access is 24/7; check content in web site for details on due dates/ deadliens.  
Email: Only use in emergency: please use the private correspondence dropbox for private questions.  
Fax:  

Class Dates:  

Required Text:  

Optional Resources:  
Math tutorials and self quizzing feature free online resource: www.Interactmath.com  

Course Description: Content begins with basic mathematical foundations and extends to include topics from finance and algebra such as simple and compound interest, investments, and loans. Concepts are interwoven with practical applications.  

Learning Outcomes:  
1. To apply the arithmetic of percents  
2. To be proficient at reading tables or using special features of a calculator needed in business and finance calculations  
3. Use algebraic methods to solve problems involving formulas  
4. To solve applied problems using the latest banking practices
5. To apply concepts of personal debt management using current market rates  
6. To demonstrate an understanding of and apply concepts of time-value of money  
7. To calculate amounts for simple and compound interest  
8. To solve problems involving percents and decimals encountered in daily living: basic calculations and applications from both business and personal finance  
9. To make intelligent decisions involving consumer business applications  

Course Requirements:  
- Course Text -- see above  
- Calculator -- a scientific or financial calculator is advised  
- Microsoft Office Suite  
- Assignments & projects  
- Optional but strongly Recommended: Math XL Tutorials on CD ROM and/or free online resource: [www.Interactmath.com](http://www.Interactmath.com)  

Learning Outcomes Assessment: Your grade for this course will be determined by the total number of points you have earned by the end of the course. You can earn a maximum of 1000 points through the following types of evaluations.  

- Textbook Assignments 600 Points  
- Exams/Tests 350 Points  
- Participation and/or Threaded Discussions 50 Points  

Total Possible = 1000 Points  

Netiquette:  
- Utilize the rules of good grammar, punctuation, and word choice for all written responses.  
- Show consideration and respect for diverse points of view.  
- Respond to individuals professionally; never write anything that you would not want others to see.  
- Utilize the same rules of etiquette that one would use with others when conversing on the phone.  
- Avoid using vulgar language.  
- Avoid using flaming language - be insightful, not incite-ful.  
- Make meaningful contributions to discussions; do more than just ask questions. Offer opinions and answers using facts to back your findings.  
- Do not type in all capitals; it may be perceived as shouting.
• When sending emails, be sure to address the recipient and to identify yourself.

The following chart illustrates the grading system at Peirce College:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Course Average</th>
<th>Grade Point Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>63-66</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>60-62</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
<td>0.0</td>
</tr>
<tr>
<td>P</td>
<td>Passing</td>
<td>None</td>
</tr>
<tr>
<td>W</td>
<td>Voluntary Withdrawal</td>
<td>None</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Grades are calculated and submitted by the instructor within 48 hours of the completion of a course. Final grades are based on the performance of class requirements as stated in the course syllabus and/or modified during the course by the instructor. Grades submitted become part of the College’s permanent student records. Failed courses in major subjects must be repeated at Peirce College. A “major subject” is a course that is required by the student’s degree program. Courses in which grades of “F,” “D-,” “D,” “D+,” or “C-” are earned may be repeated no more than once. In the case of repeated courses, the original grade earned will remain on the transcript, although it will not be computed in the grade point average. Courses for which a grade of “C” or better has been earned may not be repeated for the purpose of improving grades. A student who wishes to contest a grade must do so within 30 calendar days of receipt of the grade. See the Academic Grievance Policy for procedures for contesting a grade.

Students are allowed seven (7) calendar days from the start date of a course to drop the course and receive 100% tuition reimbursement. If a course is dropped after the seventh day, full tuition is charged for the course. The student is responsible for initiating the drop process with his/her Program Advisor. (See Drop/Add Policy.)

Students may add a course only during the first seven (7) calendar days after the course has started. A course cannot be added after the seventh day. Full tuition will be charged for a class that is added under these circumstances. The student is responsible for initiating
the add process with his/her Program Advisor. Students are also responsible for contacting the professor and obtaining new textbooks or any missed work for their newly added course. (See Drop/Add Policy.)

It is the student’s responsibility to withdraw from a course. Instructors do not have the authority to enter a grade of “W”. If a student voluntarily withdraws by the withdrawal deadline as stated on the academic calendar by completing the necessary paperwork, a grade of “W” will appear on the final grade sheet. If a student fails to attend a course for which the student is registered and the student fails to properly withdraw, the student will receive an “F” for the course and be charged for the course. (See the Withdrawal from Class Policy.)

Incomplete grades are assigned due to illness, emergency, or extenuating circumstances. The student must make a written request for an Incomplete to the instructor 24 hours before the last class session. The student has 14 calendar days from the date of the last class session to resolve the Incomplete. After 14 calendar days have elapsed since the date of the last class session, the Incomplete will automatically convert to an “F.” Incomplete grades are approved at the sole discretion of the College and should not be considered the norm.

Disability Accommodations:

Please consult the Peirce College Policy Handbook for information on Disability Services (opens in a new window).

Academic Honesty:

Please consult the Peirce College Policy Handbook for information on the Academic Honesty Policy (opens in a new window).

Consult the Library Website http://library.peirce.edu (opens in a new window) for additional information on plagiarism.

Attendance and Participation Policy:

Please consult the Peirce College Policy Handbook for information on the Attendance and Participation Policy (opens in a new window).

Faculty Response Time

Please consult the Peirce College Policy Handbook for information on Faculty Response Time (opens in a new window).

MAT 101 14-Week Course Outline
It is recommended that students independently review chapters 1, 2 and 3 then seek assistance right away if these topics require more than a review. A review and basic assistance with using the calculator will be provided; please use the **Review and Respond** threaded discussion in week 1. Online students can also utilize tutors at the Walker Center for Academic Excellence (215-670-9251). Students are encouraged to use the InterAct Math web resources associated with this text as well as Smarthinking, the web-based tutoring services which are available to all Peirce students.

<table>
<thead>
<tr>
<th>There are 11 buttons on the left navigation portion of your course. They correspond as follows:</th>
<th>Chapters Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1 (weeks 1 and 2)</td>
<td>1, 2, and 3</td>
</tr>
<tr>
<td>Unit 2 (weeks 3 and 4)</td>
<td>4 and 5</td>
</tr>
<tr>
<td>Unit 3 (weeks 5 and 6)</td>
<td>6 and 7</td>
</tr>
<tr>
<td>Unit 4 / Week 7</td>
<td>Exam 1: Chapters 1-5</td>
</tr>
<tr>
<td>Unit 5 (week 8)</td>
<td>8</td>
</tr>
<tr>
<td>Unit 6 (week 9)</td>
<td>9</td>
</tr>
<tr>
<td>Unit 7 / week 10</td>
<td>Exam 2: Chapters 6-8</td>
</tr>
<tr>
<td>Unit 8 (week 11)</td>
<td>10</td>
</tr>
<tr>
<td>Unit 9 (week 12)</td>
<td>11</td>
</tr>
<tr>
<td>Unit 10 (week 13)</td>
<td>Selected topics from chapters 12, 13, and/or 14 covered at instructor’s discretion</td>
</tr>
<tr>
<td>Unit 11 / week 14</td>
<td>Exam 3: chapters 9-11</td>
</tr>
</tbody>
</table>

1. Whole Numbers and Decimals.

   **Whole Numbers.**

   **Application Problems.**

   **Basics of Decimals.**

   **Addition and Subtraction of Decimals.**

   **Multiplication and Division of Decimals.**

2. Fractions.
Basics of Fractions.
Addition and Subtraction of Fractions.
Addition and Subtraction of Mixed Numbers.
Multiplication and Division of Fractions.
Converting Decimals to Fractions and Fractions to Decimals.

3. Percent.
Writing Decimals and Fractions as Percents.
Finding Part.
Finding Base.
Finding Rate.
Increase and Decrease Problems.

Checking Accounts and Check Registers.
Checking Services and Credit-Card Transactions.
Reconciliation.

5. Payroll.
Gross Earnings: Wages and Salaries.
Gross Earnings: Piecework and Commissions.
Social Security, Medicare, and Other Taxes.

Income Tax Withholding.


Invoices and Trade Discounts.

Single Discount Equivalents.

Cash Discounts: Ordinary Dating Method.

Cash Discounts: Other Dating Methods.

7. Mathematics of Selling.

Markup on Cost.

Markup on Selling Price.

Markdown.

Turnover and Valuation of Inventory.

8. Simple Interest.

Basics of Simple Interest.

Finding Principle, Rate, and Time.

Simple Discount Notes.

Discounting a Note Before Maturity.

Compound Interest.

Interest Bearing Bank Accounts and Inflation.

Present Value and Future Value.

10. Annuities, Stocks, and Bonds.

Annuities and Retirement Accounts.

Present Value of an Ordinary Annuity.

Sinking Funds (Finding Annuity Payments).

Stocks.

Bonds.


Open-End Credit and Charge Cards.

Installment Loans.

Early Payoffs of Loans.

Personal Property Loans.

Real Estate Loans.

12. Taxes and Insurance. (Covered at instructor’s discretion)
Property Tax.

Personal Income Tax.

Fire Insurance.

Motor-Vehicle Insurance.

Life Insurance.

13. Depreciation. (Covered at instructor's discretion)

Depreciation: Straight-Line Method.

Depreciation: Declining-Balance Method.

Depreciation: Sum-of-the-Years'-Digits Method.

Depreciation: Units-of-Production Method.

Depreciation: Modified Accelerated Cost Recovery System.

14. Financial Statements and Ratios. (Covered at instructor's discretion)

The Income Statement.

Analyzing the Income Statement.

The Balance Sheet.

Analyzing the Balance Sheet.