Contemporary Mathematics
Math 135 Section – 3 Credits

Day(s):
Time(s):
Classroom:

Instructor:

Office Hours:

Office Location:

Phone:
Email:

The material in this syllabus is important to ensure your success in this course.

Establishing Attendance:
Students must establish attendance in each course for which they are registered.

Prerequisite/Co-requisites: Placement evaluation score or completion of Math 097 with a grade of "C" or better

Course Description

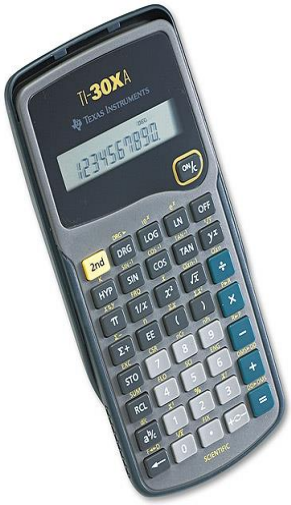
This course is a survey of a wide range of topics that gives students the opportunity to apply mathematics to the solution of everyday problems. Students will become proficient in problem solving with percent, calculating simple and compound interest, computing payments and finance charges for consumer loans, solving problems involving angle relationships, finding perimeter, area, volume, and surface area of basic geometric figures. In addition to using the Pythagorean Theorem, converting measurements using dimensional analysis, solving counting problems using permutations and combinations, calculating probabilities, and calculating and interpreting measures of central tendency. A scientific calculator is required for this course.

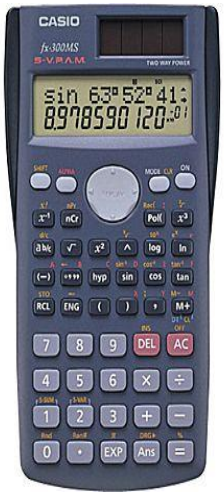
This course fulfills the general education-learning competency of Mathematics ***(MATH****).*

Template last updated 6/25/2015; 8/15/2016; 6/21/2017

Required Text
Access to MyMathLAb

Calculator Policy
Students will need a scientific calculator such as Texas Instrument's TI – 30X IIS which costs approximately $10 - $15. If you already have a TI-83 or TI-84 graphing calculator, you can use it for this course. **Students will not be able to use their cell phone as a calculator during quizzes and exams.**





Recommended Text
Mathematics All Around Plus MyMathLab Access Card, 5th edition., by Thomas Pirnot, Pearson, ISBN 9780321923264

***Note you do not need the book, but you must have the access card.**

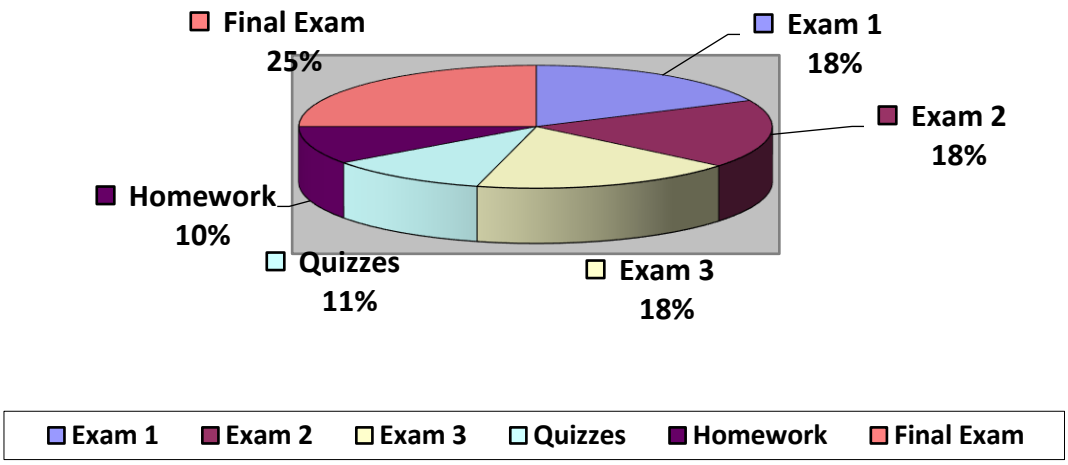
Course Goal
Students will learn a variety of mathematical tools that can be used to solve everyday Problems.

Student Learning Outcomes
At the end of this course, students will be able to:

- Apply formulas containing percentages, fractions, and decimals to calculate solutions to consumer mathematics
- Demonstrate the use of perimeter, area, volume, and surface area to compare rates, pricing comparisons, and project planning
- Use the Pythagorean Theorem to solve problems to measure distances indirectly
- Illustrate, label, and solve conversions within the metric and/or household measurement systems using Dimensional Analysis
- Translate numbers from standard/decimal notation to scientific notation and to use scientific notation to solve science or monetary problems
- Apply and interpret Counting Techniques to various problems involving counting with permutations and/or combinations
- Solve and interpret probability problems
- Illustrate, solve, and analyze the Measure of Central Tendency for data and create box and whisker plots
- Solve, construct, and interpret graphs of linear equations in two variables and draw a line of best fit

Grading Policy

- Exam 1 18%
- Exam 2 18%
- Exam 3 18%
- Homework Assignments 10%
- Quizzes/Mini Projects 11%
- Final Exam Math Portfolio 25%



Coursework Expectations
Below are descriptions of the methods of assessment.

Homework
Complete the homework assignments for the sections that we completed in class before the **next** class. **You must complete the homework online in MyMathLab**. You can keep revising it until you get everything right to guarantee that you receive a 100%. **If homework is turned in late you will lose 2% a day.** Homework will not be accepted if it's more than 2 weeks late unless prior arrangements have been made.

NOTE: You cannot give this class your attention only once a week. Most assignments will take several hours to complete. You must realize that to be successful in this course will require a commitment on your part to work conscientiously outside of class.

Class Policies

- Students are to attend every class session and be punctual.
- Respect each other's right for a positive learning environment
- **All** Your skills will improve only to the extent that you practice them. You must follow up in the next class session with questions on any of the exercises that you are uncomfortable with or having difficulties completing.

- Cell phones **must be shut off or set to vibrate and out of site** during class unless they are used for lesson.

- You are encouraged to **form study groups** with other members of the class. Exchange email addresses and meet regularly to go over course assignments and anything that you are having difficulties with.

- **Homework & Professionalism**- Students must be actively involved in each class session. This includes responding to questions posed, asking to have points explained, staying focused, and trying all practice problems**. Homework**

assignments in MyMathLab will not be available for updates after the Exam for that unit.

- Complete the homework assignments for the sections that we completed in class before the **next** class. **You must complete the homework online in MyMathLab**. You can keep revising it until you get everything right to guarantee that you receive a 100**%. If homework is turned in late you will lose points.**
- Students will be required to demonstrate completion of homework by either showing completed work to instructor, asking a question, going to the board and illustrating a problem for peers, and active participation in group activities

- **Class Notes -**It is suggested that anything that is written on the board should be copied into your notes for future reference.

Attendance Policy

- Students are **required to attend every class session** and **be punctual**. Please email me to explain any class absence.

- **Up to 2 absences may be excused** for the following reasons **<u>if documentation is provided</u>**:

  Illness of yourself or a family member
  Death in the family
  Car trouble
  Religious observance

- **If you are absent on the day of an exam, the exam may be made up if it is considered an excused absence. A make-up must be taken <u>within a week of the day the exam was given</u>**.

- A break will be provided midway through the class. **Students should not be walking in and out while class is in session.** This is discourteous and disrespectful to the class.

- Do not underestimate how important it is to attend <u>every</u> class and be on time.

- **Vacations and Family Reunions are not considered an excused absence please be mindful of your exam dates as well as your Final Exam Date.**

- Students are **required to attend every class session** and **be punctual**.

Math 135 UDL Course Outline

CLASS	DATE	TEXT SECTIONS	TOPICS	HOMEWORK (due next class)	ASSESSMENTS
			M135 Syllabus SMART Goals MyMathLab Set Up & Practice Lines and Angles *p. 437 – 440* Perimeter and Area *p. 456 – 463*	**Practice Entering Answers into MyMathLab** **Section 9.1 & 9.3 in MyMathLab** Read/Review 9.1 e-text Lines and Angles p.437 – 440 Or Lecture Videos Section 9.1 in MyMathLab Read/Review 9.3 Perimeter and Area e-text p.456 -463 Lecture Videos	

CLASS	DATE	TEXT SECTIONS	TOPICS	HOMEWORK (due next class)	ASSESSMENTS
		9.4	Volume and Surface Area *p. 468 – 474* *(Guest Speaker TDB)*	**Section 9.4 in MyMathLab** Read/Review 9.5 The Metric System and Dimensional Analysis Lecture Videos Read Section 6.5 Exponents and Scientific Notation e-text p. 275 – 283 Lecture Video	**ACE Questions 9.1 & 9.3** **Quiz 1 (9.1 & 9.3)**
		9.5 6.5	The Metric System and Dimensional Analysis *p. 477 – 485* Exponents & Scientific Notation p.275 - 283 (Guest Speaker TBA)	**Section 9.5 in MyMathLab** **Section 6.5 in MyMathLab** **Review for Exam 1**	**ACE Questions 9.4** **Quiz 2 (9.4)**
		Sections 9.1, 9.3 – 9.5, and 6.5		Read/Preview Section 7.1 Linear Equations e-text p 300 – 310 Read/Preview Section 7.2 Modeling with Linear Equations e-text p.313-318	**Exam 1 Sections 9.1, 9.3 – 9.5, and 6.5**

CLASS	DATE	TEXT SECTIONS	TOPICS	HOMEWORK (due next class)	ASSESSMENTS
				A.C.E Questions 9.5 & 6.5	
		7.1 7.2	Linear Equations p.300-310 Modeling with Linear Equations p.313 - 318	**Sections 7.1 & 7.2 in MyMathLab** Read/Preview Section 8.1 Percentages, e-text p.379-384 Lecture Video	**A.C.E Questions 6.5** **Self-Assessment Exam 1**
		8.1	Percentages p. 379 – 384	**Section 8.1 in MyMathLab** Read/Preview Section 8.2 Interest e-text p.388-393 Lecture Video	**A.C.E. Questions 7.1 & 7.2** **Quiz #3 (7.1 & 7.2)**
		8.2	Interest p. 388 – 393	**Section 8.2 in MyMathLab** Read/Preview 8.3 Consumer Loans p.399-405 Lecture Video	**ACE 8.1** **Quiz 4 (8.1)**
		8.3	Consumer Loans p. 399 – 405 **Review for Exam 2**	**Section 8.3 in MyMathLab**	**ACE 8.2** **Quiz 5 (8.2)**
		Sections 7.1 -7.2, 8.1 – 8.3		Read/Preview Sections 12.1 Introduction to Counting p. 606 -610, Section 12.2 The Fundamental Counting	**Exam 2 (7.1 – 7.2, 8.1 – 8.3)**

CLASS	DATE	TEXT SECTIONS	TOPICS	HOMEWORK (due next class)	ASSESSMENTS
				Principle p.614-620 Lecture Videos **Mini Project Student Loan Debt** **Review Goals**	
		12.1 12.2	Introduction to Counting *p. 606 – 610* The Fundamental Counting Principle *p. 614 – 620* *(Guest Speaker TBD)*	**Sections 12.1 and 12.2 in MyMathLab** Read/Preview Section 12.3 Permutations and Combinations p.622-630 Lecture Videos	**Self - Assessment Exam 2**
		12.3	Permutations and Combinations *p. 622 – 630*	**Section 12.3 in MyMathLab or in Textbook** Read/Preview Section 13.1 The Basics of Probability p. 644-650, 652-655 Read/Preview Section 14.2 Measures of Central Tendency, p. 714 -715, 717-722 Lecture Videos	**A.C.E 12.1 & 12.2** **Quiz 6 (12.1 & 12.2)**
		13.1	The Basics of Probability	**Section 13.1 in MyMathLab**	**Quiz 7 (12.3)**

CLASS	DATE	TEXT SECTIONS	TOPICS	HOMEWORK (due next class)	ASSESSMENTS
			p. 644 – 650, 652 – 655	**or in Textbook**	
		14.2	Measures of Central Tendency, *p. 714 – 715, 717 –723*	**Section 14.2 in MyMathLab or in Textbook**	
			Review for Exam 3		
		Sections 12.1 - 12.3, 13.1, & 14.2		**A.C.E. 13.1**	**Exam 3**
		Overflow/Review Portfolio Prep	**Review for Final**	**Portfolio**	**Self-Assessment Exam 3** **Self-Assessment Professionalism (Class Participation)**
		Cumulative Final Exam – Culminating Tasks			**Portfolio & Final Exam**

Goodwin College Policies and Services

This course adheres to all policies outlined in the Goodwin College catalog. General academic policies of Goodwin College may be found on the college web site at http://www.goodwin.edu/policies/ and in the college catalog at http://www.goodwin.edu/academics/catalogs.asp. Student services information may be found on the Goodwin College website at http://www.goodwin.edu/student-services/ and http://www.goodwin.edu/library/.