

**MAYLAND COMMUNITY COLLEGE**  
**Welcomes You To:**  
**Mat 101.10 Applied Mathematics I**  
3 Credit hours – 4 contact hours  
Spring 2007

**Course Description:**

This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study.

**Pre-requisites:** Mat 060

**Co-requisites:** None

**Instructor Information**

**Instructor:** Sandy Pierce  
**Office Location:** Room 243  
**Telephone Number:** 828-765-7351, ext 215  
**Faculty fax:** 828-765-2327  
**E-mail Address:** spierce@mayland.edu  
**Office Hours:** As posted - additional office hours are also available by appointment.

**Course Information**

**Meeting days and time:** January 8 through May 7, 2007  
Monday/Wednesday, 2:00 p.m. to 3:50 p.m. Room P206  
**Snow Schedule:** 2:30 to 3:50 pm  
**Required Text(s):** Akst, Geoffrey, Basic Mathematics Through Applications, 3<sup>rd</sup> Edition. Pearson/Addison Wesley, 2005.  
**Resource/LRC materials (if any):** N/A  
**Required supplies:** Scientific calculator

**Mayland Community College's General Education core courses will provide the essential body of knowledge and skills that enable all degree-level students to perform competently as employees and as contributing members of society.**

**The Learning Outcomes for the General Ed core courses are for students to:**

1. Improve communication in speaking and listening situations needed for college, personal, and work successes
2. Improve communication in writing and reading situations needed for college, personal, and work successes
3. Improve logical, critical, and creative thinking to evaluate evidence and reach a conclusion
4. Increase application of basic computer use skills
5. Increase application of fundamental math skills
6. Increase both independent and collaborative work skills
7. Increase exposure to the diversity of various world groups from both historical and contemporary contexts.

## Course Objectives/Competencies

1. Demonstrate skill in solving applications using appropriate arithmetic skills. Students shall identify a number's prime factors → LO 1, 2, 3, 4, 5
2. Demonstrate skill in solving applications using appropriate geometry skills. Students shall accurately identify geometric figures and solve work related problems that involve common figures → LO 1, 2, 3, 4, 5, 6
3. Solve applications involving measurement, ratio and proportion, exponents and roots, percents, decimals and fractions and solve proportions in practical work-related problems → LO 3, 4, 5, 6
4. Solve applications involving linear equations and formulas → LO 3, 4, 5, 6
5. Apply the common measurements units for length, area, capacity, and volume in the metric system and convert between metric units and carry out calculations that involve various measurement units → LO 3, 4, 5, 6
6. Demonstrate skill and understanding of statistics topics involving tables, draw bar graphs, circle graphs, line graphs, mean, median, and mode → LO 3, 4, 5, 6
7. Read a problem, figure out what the problem is asking you to find, decide which math operation to use and use your calculator to work problems appropriately and accurately.
8. Work more independently, confidently and collaboratively → LO 3, 4, 5, 6

### Attendance Policy/Tardiness/Make-Up Work:

Roll will be taken and you are expected to be in class each time it meets. You will be allowed one cut without grade penalty, but if you must miss a class you are responsible for obtaining notes, arranging for help on any material that you do not understand, and for turning any work due in a timely manner. Only personal religious holidays and absences which have been communicated to the instructor on or before the absence are excused beyond the one allowed cut. If students must miss classes due to weather or for some other excused reason such as a doctor's appointment or sickness, I will trade documented tutoring time for class time. This must be time with an assigned tutor, the math lab, or me.

**NOTE: Any student with 5 or more absences will be penalized 50 grade points for this class, exceptions made only at the discretion of the instructor. Being more than 10 minutes late for any class constitutes a tardy. Three tardies will constitute one absence.**

### Grading Criteria/Tests/Projects

The final grade will be determined as follows:

4 chapter tests @ 100 points each	400 points
Comprehensive final @ 150 points	150 points
Attendance @ $\approx$ 1.5 points per class	50 points
Homework	100 points
Lab activities	<u>100 points</u>
Total points	800 points

### Grading Scale

- A** = 800 to 720 points (90 – 100%)
- B** = 719 to 630 points (80 – 89%)
- C** = 629 to 550 points (70 to 79%)
- D** = 549 to 470 points (60 to 79%)
- F** = 469 or below (59% or less)

### **Inclement Weather Procedures:**

Students must use wisdom and discretion in case of inclement weather considering the geographic area in which we live. While this is college and students are expected to attend class, it is not advisable for students to risk bodily harm or property damage to attend. It is possible that day classes can be cancelled, but night classes will be held, or vice versa. It is necessary that you either call the school or listen to the radio stations that report school closings to determine whether or not class is being held on any days when the weather is uncertain.

### **Academic Standards/Student Expectations/Ethics:**

**ASSIGNMENTS:** All homework will be reviewed each day for the previous class. All homework assignments are due for grading within two classes after the material has been assigned and no later than the test on that material. After each chapter and just before each test, a practice quiz is assigned. This is an informal quiz and is due on the day of the test.

**TESTS:** There will be **no makeup tests** given except in extreme cases, and at my discretion. There will be one drop grade on chapter tests. **You may not drop the final;** however any student who maintains at least a 90% average on **all fiver** chapter tests may exempt the final. All work must be shown to receive partial credit on any assignment.

**NEATNESS COUNTS.** Please use only pencil or erasable pen.

**LAB ACTIVITIES:** Lab activities will be assigned from the text or from handouts. They will be graded on a 100 point scale. Labs are due by the next class meeting after they are assigned.

**LATE WORK: I will not accept any late work for any reason after April 26.**

**BEHAVIOR:** Students are expected to behave appropriately in class. Any excessive talking, profanity, leaving class or other inappropriate behavior will result in the student being asked to leave the class. A conference with student services will be required to return to class. Any one cheating on a test or quiz or presenting someone else's material as his or her own work (plagiarism) will be given a zero for the assignment and referred to the Academic Vice President for further disciplinary action. Cheating is defined as giving or receiving assistance.

**INCOMPLETES:** Incompletes will be granted **ONLY** in extreme circumstances and at my sole discretion. If an incomplete is granted, it is the student's responsibility to see that all aspects of the syllabus are completed prior to July 27, 2007. There will be no reminders sent or phone calls made to prompt the student to cure the incomplete. If the incomplete is not cured by the deadline above, the incomplete will automatically convert to an F for the course, and the entire course must be repeated.

**WITHDRAWAL DATES:** If you wish to audit this course, you must file a drop/add form with the registrar prior to January 12. If you cannot complete the requirements of this syllabus, you must withdraw from this class by filing a drop/add form with the registrar. Otherwise you will receive a grade of F for the course. You can unconditionally withdraw from any class without grade penalty prior to February 13. From February 14 through March 27, you can withdraw with a grade of WP or WF to be determined by the instructor. You may not withdraw from any class after March 27. Exceptions to this deadline will be made only in cases of extreme emergency (such as serious illness or family emergency). This is a school wide Mayland Community College policy.

**Disclaimer:** *While I have attempted to be as thorough as possible with this syllabus, course procedure may vary from this outline to meet the needs of this particular group. All dates contained in this syllabus are subject to change due to the weather and/or the discretion of the instructor.*

**Additional Information:**

**If a student has not been in contact with the instructor and has not attended class for a consecutive two-week period, an administrative withdrawal will be submitted by the instructor. The student cannot re-enter the class.**

**Any student requesting special accommodations for this course due to a disability should apply for services through the SOAR Office or the Counseling Center, which will document the disability. A counselor will then help determine which accommodations, if any, the student needs for success in this course.**

*"We are what we repeatedly do. Excellence, therefore, is not an act, it's a habit" -Aristotle*

## Course Outline

Date      Section      Assignment – every other odd problem, unless otherwise indicated

1/8	1.1 – 1 through 67, odd	
1/8	1.2 – 1 through 121, every other odd	
1/10	1.3 – 1 through 75, odd	
1/10	1.4 – 1 through 73, every other odd	
1/10	1.5 – 1 through 89, every other odd	
<b>1/15</b>	<b>Martin Luther King Day – Campus Closed</b>	
1/17	1.6 – 1 through 17, odd	
1/17	2.1 – 1 through 77, every other odd	
1/22	2.2 – 1 through 177 every other odd	
1/22	2.3 – 1 through 185, every other odd	
1/24	2.4 – 1 through 157, every other odd	
1/24	3.1 – 1 through 105, every other odd	
1/24	3.2 – 1 through 65, every other odd	
1/29	3.3 – 1 through 73, every other odd	
1/29	3.4 – 1 through 125, every other odd	
1/31	Review Chapters 1, 2 and 3	
2/5	Test on Chapters 1, 2 and 3	
2/7	4.1 – 1 through 77, every other odd	
2/7	4.2 – 1 through 77, every other odd	
2/12	4.3 – 1 through 77, every other odd	
2/12	9.1 – 1 through 77, every other odd	
2/14	9.2 – 1 through 81, every other odd	
2/14	9.3 – 1 through 19, odd	
2/19	Review Chapters 4 and 9	
2/21	Test on Chapters 4 and 9	
2/26	5.1 – 1 through 85, every other odd	
2/26	5.2 – 1 through 69, every other odd	
2/28	6.1 – 1 through 93, every other odd	
2/28	6.2 – 1 through 77, every other odd	
<b>3/5 – 3/9</b>	<b>– Spring Break – No Classes</b>	
3/12	6.3 – 1 through 41, every other odd	
3/14	Review Chapters 5 and 6	
4/19	Test on Chapters 5 and 6	
4/21	7.1 – 1 through 81, every other odd	
4/21	7.2 – 1 through 67, odd	
4/26	7.3 – 1 through 59, odd	
4/26	7.4 – 1 through 81, odd	
4/28	7.5 – 1 through 75, odd	
4/2	Review Chapter 7	
4/4	Test on Chapter 7	
<b>4/5</b>	<b>– Professional Development – No Classes</b>	
<b>4/6</b>	<b>– Good Friday – Campus Closed</b>	
4/9	8.1 – 1 through 15, odd	
4/11	8.2 – 1 through 15, odd	
4/11	10.1 – 1 through 57, odd	
4/11	10.2 – 1 through 53, odd	
4/16	11.1 – 1 through 20, all, 21 through 47, odd	
4/16	11.2 – 1 through 35, odd	

4/18 11.3 – 1 through 35, odd  
4/18 11.4 – 1 through 23, odd  
4/23 11.5 – 1 through 13, odd  
4/23 11.6 – 1 through 47, odd  
4/25 Review Chapters 8, 10 and 11  
4/30 Test on Chapter 8, 10 and 11  
5/2 Final Review  
5/7 Final Exam