

Las Positas College
Math 71 X/Y Applied Mathematics for Technicians Syllabus & Task Sheet

COMPLETE the following

Instructor: _____ **Class Time:** _____

Email: _____ **Phone:** _____

Office Hours: _____

Final Exam Date: _____ **Final Exam Time:** _____

Required Textbook: Carman, R. A., Saunders, H. M., Mathematics for the Trades, 8th Ed., Pearson/Prentice Hall 2008. ISB: 0-13-232102-5

Required Materials: Answer Sheets for Math X Lab tests (available in LPC bookstore)

Homework Assignments: As a minimum, you are required to do every other odd problem in the Section Exercises, as well as the Chapter Problem Sets at the end of each chapter. Each Chapter Summary provides a good review to prepare for chapter exams.

Course Description: In this *applied math course*, calculator techniques will be presented for whole number and decimal arithmetic problem-solving, fraction-decimal conversions, geometry, numerical trigonometry; conversions between the U.S. and metric systems; emphasis on application from technical fields. Course is offered as letter grade only.

Expected Course Outcomes: Upon completion of the course the student will be able to:

- demonstrate an understanding of significant digits and their relationship to measurements;
- demonstrate competence using a calculator to compute arithmetic operations involving measurements;
- demonstrate a knowledge of the U.S. and metric units of length, area, volume, mass, temperature and time;
- perform length, weight and capacity reductions and conversions between the U.S. and metric systems;
- perform numerical evaluations of formulas and expressions;
- solve linear equations using the addition and multiplication principles of equality;
- demonstrate a knowledge of ratios, proportions and percentages and their applications;
- demonstrate knowledge of geometric figures and their properties;
- perform elementary calculations involving numerical trigonometry;
- demonstrate an understanding of polar coordinates;
- use various measuring instruments accurately;
- apply the concepts learned to specific real-life applications from diverse technical fields.

Errata: See your instructor regarding any textbook errors.

Purpose: This Task Sheet is designed to help you keep track of your progress and grades. Your goal should be to take a **maximum of two semesters** to complete the entire Math 71 course. We suggest you write down your target test dates given in orientation in the “Target Date” columns. Once you have taken an exam, record your grade in the grade columns.

71 X (1.5 units)

Chapter	Target Date	My Grade(s)
1* Arithmetic of Whole Numbers		
2* Fractions		
3 Decimal Numbers		
4 Ratio, Proportion, Percent		
5* Measurement		
Final Chap. 1 - 5		

71 Y (1.5 units)

Chapter	Target Date	My Grade(s)
6 Pre-Algebra		
7 Basic Algebra		
8* Practical Plane Geometry		
9* Solid Figures		
10* Triangle Trigonometry		
Final Chap. 6-10		

*** Specials Notes/Omissions:**

- ***Chap. 1 & 2** Calculators are not allowed.
- ***Chap. 5** Approximate conversion factors for speed and volume are provided. Also provided are temperature conversion formulas.
- ***Chap. 8** The area and perimeter formulas are provided.
- ***Chap. 9** Formulas for lateral surface areas and volumes of solid figures are provided on the Chap. 9 Test. The table of volume unit conversions is also provided.
- ***Chap. 10** The Law of Sines and Cosines plus linear speed equations are provided on the test.

Additional Support:

Please see the following information for additional suggestions for how to be successful in this course!

Math 71 X/Y Applied Mathematics for Technicians Syllabus and Task Sheet

Is intended to be used in conjunction with the General Syllabus for Math X Lab.

N.B.: The course schedule in this handout may be altered during the semester – announcements will be made in class. See the instructor for details about any change.

Las Positas College
Math 71 X/Y Applied Math for Technicians Syllabus & Task Sheet (cont.)

Need Help Succeeding?

The Math X Lab Program provides you with an alternative way to learn mathematics. No one stands in front of the class lecturing to you about the material. As stated prior, attendance at your regular class time is required. However, for most students, time spent working during class hours is not enough time spent doing math to succeed! In general, for every hour of class, you should be spending a half hour to an hour on homework. There are many resources available to you, during and after class, to support you in your learning!

Extra Support Suggestions

- We suggest **reading the text** in each of the sections and **doing example problems** imbedded in the text after big concepts. Research has proved that the best way to learn is to do! Once you have read the section, work a significant number of problems in the Section Exercises, as well as in the Chapter Problem Sets at the end of each chapter. The answers to the all problems are available in the back of the book.
- The instructor and instructional assistant are available to assist you by tutoring, answering questions and grading tests. **Please do not hesitate to ask questions.** Your instructor is available outside of class during his or her office hours – ask them for their schedule. The Math X Lab and assistants are also here to support your learning needs whenever the Math X Lab is open.
- The **Integrated Learning Center** is a wonderful resource for all LPC students! The Math Department has provided free lab assistance because we believe that learning mathematics is easier with the help of your instructors and fellow students. ILC is located in Building 1200.
- **Free One-On-One Tutoring** is available through peer tutoring services offered in Building 1000. Every week your tutor will meet with you, discuss your areas of concern and assist you in understanding the material. We encourage you to sign up early!

The Math X Lab is a mastery-learning program. Therefore, you must show you have mastered the material in each chapter by scoring at least 84% or better on the exams before moving to the next chapter. There are supports in place to help you succeed – take advantage of all LPC has to offer!