Course: 14.01 Mathematics
Level: 11 (LLD class)
Credits: 5

Revised
2008

Mathematics III

Course Outline

I.   Course Description
Mathematics III is a required course for the Learning and Language
Disabled class. It is designed for secondary special education
students who have a basic grasp of mathematical computation but
require additional instruction for applying these skills as a wise
consumer. Instruction is provided using a variety of realistic,
consumer-oriented applications. The goal of Mathematics III is to
provide students with the tools they will need to function as
independent, employable, contributing citizens.

High Point Regional High School's curriculum and instruction are
aligned to the state's Core Curriculum Content Standards and address
the elimination of discrimination by narrowing the achievement gap, by
providing equity in the educational programs and be providing
opportunities for students to interact positively with others regardless of
race, creed, color, national origin, ancestry, age marital status,
affectional or sexual orientation, gender, religion, disability, or socio-
economical status.

II.   CCCS Addressed
   1. 4.1 Number and Numerical Operations – All students will
develop number sense and will perform standard numerical operations
and estimations on all types of numbers in a variety of ways.

   2. 4.2 Geometry and Measurement – All students will develop
spatial sense and the ability to use geometric properties, relationships,
and measurement to model, describe and analyze phenomena.

   3. 4.5 Mathematical Processes – All students will use
mathematical processes of problem solving, communication,
connections, reasoning, representations, and technology to solve
problems and communicate mathematical ideas.

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III. Goals and Objectives

Goal #1 – To understand and apply the mathematics involved in earning money.

 Objective – To compute weekly and annual wages.
 Objective – To compute wages when overtime is involved.
 Objective – To determine wages for jobs that involve piecework or tips.
 Objective – To compute annual salary.
 Objective - To determine salary in a pay period by using rounding.
 Objective – To use decimals and percents to compute commissions.
 Objective – To distinguish between gross pay and net pay.

Goal #2 – To understand and apply the mathematics involved in buying food.

 Objective – To read and compare prices.
 Objective – To change prices from cents to dollars and from dollars to cents.
 Objective – To compute the cost of a single item and multiple items.
 Objective – To compute change.
 Objective – To use the information on coupons and determine the cost of an item when a coupon is used.
 Objective – To compute and compare unit prices.

Goal #3 – To understand and apply the mathematics involved in shopping for clothes.

 Objective – To compute the cost of clothing, including sales tax.
 Objective – To determine the amount of money saved due to sale prices and discounts.
 Objective – To read catalog descriptions and order from a catalog.
 Objective – To find the amount of fabric needed to make clothing.
 Objective – To compute the balance of a charge account.
 Objective – To determine a payment schedule for a layaway plan.

Goal #4 – To understand and apply the mathematics involved in managing a household.

 Objective – To state and apply the renter's rule and the banker's rule to plan monthly rent or mortgage payments.
 Objective – To compute the cost of rent for one year.

Objective – To solve problems related to down payments, monthly payments, and total amounts paid for mortgages

Objective – To read utility meters and compute monthly utility expenses.

Objective – To solve word problems related to utility expenses.

Objective – To compute expenses related to mortgage insurance and homeowners insurance.

Goal #5 – To understand and apply the mathematics involved in buying and maintaining a car.

Objective – To compute the price of a car when financing arrangements are made.

Objective – To determine the cost of an automobile when trade-ins or rebates are involved.

Objective – To compute insurance premiums.

Objective – To solve problems related to average speed and driving time.

Objective – To compute fuel costs.

Objective – To compute costs associated with car repairs.

Goal #6 – To understand and apply the mathematics involved in working with food.

Objective – To calculate the number of calories consumed.

Objective – To use ratios and proportion to calculate fat calories and change recipe yields.

Objective – To read and interpret nutrition information found on food packages.

Objective – To find the number of calories your body uses when exercising.

Objective – To calculate the times food should begin cooking to be ready at a given time.

IV. Technology
Scientific Calculator

V. Text: Consumer Mathematics, Kathleen M. Harmeyer, American Guidance Service, Inc., 2001.

VI. Assessment
1. Homework based on   10 points
2. Participation and class work   10 points
3. Quizzes   50 points
4. Tests   100 points