Warren County School District

PLANNED INSTRUCTION

# COURSE DESCRIPTION

## Course Title: ~~Applied Math IV~~ Mathematics of Finance\_\_\_\_\_\_\_\_\_

**Course Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Course Description and Prerequisites: Mathematics of Finance is a Consumer Math course designed as the third year of the Occupational Sequence. It is also a math elective for seniors in the Career Sequence wishing to take a fourth year of math. This course deals with gross income and taxes, checking and saving accounts, budgeting and insurances, practical applications of statistics, discounts and markdowns, new and used car purchasing as well as leasing, credit cards and cash purchases, insurance and investments, housing costs and all types of loans. It is meant to give students everyday math skills needed to survive in the real world. Recommended average of 60% earned in both Integrated Algebra I and Integrated Algebra II or an average of at least 60% or more in Applied Algebra I, Applied Algebra II and Applied Geometry III.

Suggested Grade Level: \_\_\_\_\_\_12\_\_\_\_\_\_\_\_\_

**Length of Course:** \_\_\_\_One Semester \_\_X\_\_\_Two Semesters \_\_\_\_\_Other (Describe)\_\_\_\_\_\_\_\_\_\_

## Units of Credit: \_\_\_\_1\_\_\_\_\_\_ (Insert *NONE* if appropriate.)

PDE *Certification and Staffing Policies and Guidelines (CSPG)* Required Teacher Certification(s) (Insert certificate title and CSPG#) Mathematics 50\_\_\_\_\_\_\_\_\_\_\_\_

Certification verified by WCSD Human Resources Department:

\_X\_Yes \_\_\_\_No

Board Approved Textbooks, Software, Materials:

Title: Mathematics with Business Applications

Publisher: Glenco/McGraw Hill

ISBN #: 0 07 869251-2

Copyright Date: 2007

Date of WCSD Board Approval: November 13, 2007

BOARD APPROVAL:

Date Written:\_\_\_\_\_\_\_06-07\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Approved:\_\_\_\_\_\_May 14, 2007\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Implementation Year:\_\_\_\_\_2007-2008\_\_\_\_\_\_\_\_\_\_\_\_\_

Suggested Supplemental Materials: Scientific calculator, Graphing calculator, Software and Computers

Course Standards

PA Academic Standards:

2.1.11 Numbers, Number Systems and Number Relations

2.2.11 Computation and Estimation

2.3.11 Measurement and Estimation

2.5.11 Mathematical Problem Solving and Communication

2.8.11 Algebra and Functions

2.9.11 Geometry

* + 1. Reading Critically in All Content Areas

1.6.11 Speaking and Listening

WCSD Academic Standards: None

Industry or Other Standards: None

WCSD EXPECTATIONS

WCSD K-12 Expectations for instruction in writing, reading, mathematics and, technology have been developed and revised annually. The teacher will integrate all WCSD Expectations into this planned instruction

SPECIAL EDUCATION AND GIFTED REQUIREMENTS

The teacher shall make appropriate modifications to instruction and assessment based on a student’s Individual Education Plan (I.E.P.) or Gifted Individual Education Plan (G.I.E.P.).

SPECIFIC EDUCATIONAL OBJECTIVES/CORRESPONDING STANDARDS AND ELIGIBLE CONTENT WHERE APPLICABLE

(List Objectives, PA Standards #’s, Other Standards (see samples at end))

**Specific Educational Objectives to be Taught:**

Student will be able to obtain the skills necessary to survive in the real world.

I. Employment:

A. job application

B. work habits/environment

C. types of pay

1. hourly rate (overtime)

2. piece rate

3. commission

4. combination of above 3

D. taxes

1. state

2. local

3. federal

4. FICA

E. checking account

1. writing checks

2. reconciling checking account

F. filling out a W4 form

II. Budgeting:

A. mortgage/rent

B. utilities

C paying bills (how and where)

D. car purchase/lease

E. insurance

1. life

2. car

3. medical

F. filling out a tax form

IV. Best buys:

A. discounts

B. mark-ups

C. practical application of statistics (graphs, charts)

D. trip

1. different kinds of transportation (car, bus, train, plane, . . .)

2. motel costs/camping

3. food/misc.

E. Internet shopping (optional)

V. Savings and loans

A. interest

B. savings

C. loans/loan application

D. investments

E. credit cards

F. insurance

G. amortization

ASSESSMENTS

PSSA Assessment Anchors Addressed: The teacher must be knowledgeable of the PDE Assessment Anchors and/or Eligible Content and incorporate them into this planned instruction. Current assessment anchors can be found at pde@state.pa.us.

Formative Assessments: The teacher will develop and use standards-based assessments throughout the course.

Portfolio Assessment: \_\_\_\_ Yes \_\_\_X\_ No

District-wide Final Examination Required: \_\_X\_\_ Yes \_\_\_\_ No

Course Challenge Assessment: Course challenge assessment will be based on activities and exams that measure student proficiency as the course standards at 84%

# REQUIRED COURSE SEQUENCE AND TIMELINE

(Content must be tied to objectives)

### Days Content Sequence

45 days I. Employment

45 days II. Budgeting

45 days III. Best buys

45 days IV. Savings and Loans

180 days

**WRITING TEAM: Math Teachers**

# WCSD STUDENT DATA SYSTEM INFORMATION

1. Is there a required final examination? \_\_X\_\_ Yes \_\_\_\_ No

2. Does this course issue a mark/grade for the report card? \_\_X\_\_ Yes\_\_\_\_ No

3. Does this course issue a Pass/Fail mark? \_\_\_\_ Yes \_\_X\_\_ No

1. Is the course mark/grade part of the GPA calculation?

\_\_X\_\_ Yes \_\_\_\_ No

5. Is the course eligible for Honor Roll calculation? \_\_X\_\_ Yes \_\_\_\_ No

1. What is the academic weight of the course?

\_\_\_\_ No weight/Non credit \_\_X\_\_ Standard weight

\_\_\_\_ Enhanced weight (Describe)\_\_\_\_\_\_\_\_\_\_\_\_\_