#### BMG 54 Course Outline as of Fall 2010

### **CATALOG INFORMATION**

Dept and Nbr: BMG 54 Title: QUANT SKILLS - MATH

Full Title: Quantitative Skills/Math

Last Reviewed: 4/19/2010

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

#### **Catalog Description:**

Quantitative methods and their uses for solving organizational problems. Development of skills in mathematics, quantitative analytical tools, financial calculations and analysis, statistics and presentation of data in a managerial context.

# **Prerequisites/Corequisites:**

# **Recommended Preparation:**

Successful completion of standard 1st year high school algebra course.

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: Quantitative methods and their uses for solving organizational problems.

Development of skills in mathematics, quantitative analytical tools, financial calculations and analysis, statistics and presentation of data in a managerial context. (Grade Only)

Prerequisites/Corequisites:

Recommended: Successful completion of standard 1st year high school algebra course.

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

**AS Degree:** Effective: Area Inactive:

MC Math Competency Fall 1981 Fall 2009 Transfer Area Effective: Inactive:

CSU GE:

**Transfer Area IGETC:** Effective: Inactive:

**CSU Transfer:** Transferable Effective: Inactive: Fall 1981 Fall 2016

**UC Transfer:** Inactive: Effective:

CID:

### **Certificate/Major Applicable:**

Both Certificate and Major Applicable

### **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of the course, students will be able to:

- 1. Calculate fundamental math operations in a variety of common modes.
- 2. Design, manipulate, and solve basic equations.
- 3. Formulate and solve quantitative operations in the areas of purchasing, pricing, depreciation, and inventory management.
- 4. Analyze data, including financial statements.
- 5. Calculate and compare loans and investments.
- 6. Assemble, arrange, and calculate statistical data.

## **Topics and Scope:**

- A. Basic mathematics operations
  - 1. numerical operations
  - 2. solving equations
- B. Mathematics for business
  - 1. purchasing
  - 2. pricing
  - 3. inventory and overhead4. depreciation

  - 5. financial statement analysis and distribution of profits
- C. Financial mathematics
  - 1. simple interest and simple discount
  - compound interest
    amortizing a debt

  - 4. comparing investments
- D. Mathematics for presentation and analysis of information
  - 1. elementary statistics
  - 2. graphs

#### **Assignment:**

- 1. Problem solving exercises in all of the content areas
- 2. Weekly quizzes
- 3. 4 5 exams and a final

#### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing 0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems

Problem solving 10 - 20%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations 0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes, exams, and final

Exams 80 - 90%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category 0 - 0%

### **Representative Textbooks and Materials:**

Contemporary Mathematics for Business and Consumers, author Robert A. Brechner 5th ed. 2008, South-Western Cengage Learning.