MATH 0584 - MATH SUCCESS - OVERCOMING MATH ANXIETY

SECTION A

1. Division: Sciences & Mathematics
2. Subject Code: MATH
3. Course Number: 0584
4. Course Title: MATH SUCCESS - OVERCOMING MATH ANXIETY
5. Semester of First Offering: FALL 2013

SECTION B General Course Information

1.Units: 1.0 **Variable Units:** N/A
2.This Course is: Nondegree-Applicable Credit - Basic Skills
3A. Cross-List: **3B. Formerly:**

Course Format and Duration

4. Standard Term Hours per Week

Lecture/Discussion:	1
Lab:	
Activity:	
By Arrangement:	
Total Hours per Week:	1

5. Standard Term Total Semester Hours

Lecture/Discussion:	18
Lab:	
Activity:	
By Arrangement:	
Total Hours :	18

6. Minimum hours per week of independent work done outside the class: 2

Course Preparation - (Supplemental form B required)

7a. Prerequisite(s): (Course and/or other preparation/experience that is REQUIRED to be completed previous to enrollment in this course.)

7b. Co-requisite(s): (Courses and/or other preparation that is REQUIRED to be taken concurrently with this course.)

7c. Advisory: (MINIMUM preparation RECOMMENDED in order to be succesful in this course. Also known as "Course Advisory".)

Catalog Description And Other Catalog Information:

8. Repeatability: **Not Repeatable**

Please note: Repeatability does not refer to repeating courses because of substandard grades or a lapse of time since the student took the course. A course may be repeated only if the course content differs each time it is offered and the student who repeats it is gaining an expanded educational experience as stipulated in Title V.

- ☐ Skills or proficiencies are enhanced by supervised repetition and practice within class periods.
- ☐ Active participatory experience in individual study or group assignments is the basic means by which learning objectives are attained.
- ☐ Course content differs each time it is offered.

Explanation for above repeatability selection:

9a. Grading Option: Standard Grade

9b. Catalog Description:

Designed to assist students to recognize common fears and misconceptions of mathematics and develop personal strategies to overcome math and test anxiety. Specific study skills and strategies are discussed. Individual math learning styles are analyzed.

Course Outline Information

10. Student Performance Objectives: (Performance objectives for all credit courses must indicate that students will learn critical thinking and will be able to apply concepts at college level.Performance objectives must be related to items listed in Section 11.)

1) Explain how learning college math is different from learning other subjects and high school courses.
2) Assess individual math learning styles.
3) Analyze and create personal student math learning profiles and styles.
4) Recognize and explain math and test anxiety.
5) Create strategies and plans to overcome math and test anxiety.
6) Create self-help strategies to improve individual math study skills.

11. Course Content Outline: (Provides a comprehensive, sequential outline of the course content, including all major subject matter and the specific body of knowledge covered.)

I. Introduction
  A. Differences in math courses in college to high school math courses and other college courses
  B. Importance of learning math
  C. Skills required for success in math
  D. Importance of selecting the correct math course and selecting an instructor that suits student's learning style
  E. Preparation for a math course that will lead to success
II. Assess and use math learning strengths to develop effective strategies for success
  A. Factors that contribute to academic success in math
    1. Placement into math courses by college assessment
    2. Quality of math instruction
    3. Affective student characteristics
  B. Develop student Math Learning Profiles through various assessments and inventories
III. Understand math anxiety and develop strategies to overcome math anxiety
  A. Definition and causes of math anxiety
  B. Effects of math anxiety
  C. Negative and positive math experiences
  D. Strategies to overcome the anxiety
IV. Understand math test anxiety and develop math test-taking strategies
  A. Definition and causes of test anxiety
  B. Effects of anxiety on learning and testing
  C. Myths of test anxiety
  D. Strategies to overcome math test anxiety
V. Math study skills strategies and create individual plans to study
  A. Understand and improve the memory process
    1. Use individual learning styles to improve the memory process
    2. Memory techniques
  B. Improve listening and note-taking skills
  C. Improve reading, homework, and study techniques
  D. Improve test-taking skills
  E. Learn to motivate and take control of learning math

12. Typical Out-of-Class Assignments: (Credit courses **require** two hours of independent work outside of class for each lecture hour, less lab/activity classes. List type of assignments including library assignments.)

a. Reading Assignments: (Submit at least 2 examples.)

1) Read the assigned pages from the textbook and be prepared to discuss the answers to questions created for the reading assignments.

2) Read and follow directions as given on the student profile inventories.

b. Writing, Problem Solving or Performance: (Submit at least 2 examples)

1) Journals: Journal entries are ways to reflect on what students are studying and apply these concepts to their own life. It is also a way for the student and instructor to interact in a more personal way, one on one.
Sample: Describe what happens when you get anxious about math. If you do not get anxious about math, describe another situation in college that makes you anxious. If you are not anxious about anything in college, explain why.

2) Problem Solving: Each student will take the Learning Styles & Modalities Survey. Upon completion of this survey, each student will analyze and create an individual plan of action.

c. Other (Term projects, research papers, porfolios, etc.)

Portfolios: Each portfolio contains personal information that will aid students to overcome math anxiety. The portfolio will contain journal entries, learning profiles, answers to questions taken from reading assignments, notes and all pertinent information to overcoming math anxiety.

13. Required Materials:

a. All textbooks, resources and other materials used in this course are college level?

- ☑ Yes
- ☐ No

b. Representative college-level textbooks (for degree applicable courses) or other print materials:

Book 1:

Author:	Paul Nolting, Ph.D.
Title:	Winning at Math
Publisher:	Academic Success Press, Inc.
Date of Publication:	2008
Edition:	5th

c. Other materials and/or supplies required of students:

14.Check all Instructional methods used to present course content:

- ☑ Lecture
- ☑ Discussion Semminar
- ☐ Lab
- ☑ Directed Study
- ☑ Activity
- ☐ Distance Education (requires supplemental form)
- ☐ Work Experience
- ☐ Tutoring

Other:

Give detailed examples of teaching methodology that relate to the course performance objectives:

Activity:

Have students write three affirmations about themselves. (An Affirmation is a motivational statement about yourself that will motivate you to be strong and do well, no matter the circumstances. For example: "I am smart and can do what I desire to do.") In class, instruct the students to make a circle of chairs or desks and half of the students will be seated. Have the remaining students stand behind a sitting students. Students sitting will be asked to close their eyes. Instruct standing students to move around the circle and whisper an affirmation to the sitting student. When this is completed, have students switch places and continue. After the affirmation activity have students express how they felt when they heard the affirmations. The purpose of this activity is to motivate students that they are indeed worthy and can overcome their obstacles.

Activity:

When students examine their own tests they become more aware of the common mistakes that they make. These errors can be computational, conceptual or comprehension errors. Students can learn to analyze their test results and become more aware of their mistakes for better test outcomes. A simple class activity will allow them to do this. Have students bring in tests or test reviews completed in their math classes. Explain to them what computational, conceptual, and comprehension mistakes are. Take a simple math exam and give the students examples of each error. Use different colored highlighters to indicate what type of error they will encounter. For example, all blue marks indicate computational errors, yellow indicates concept errors, pink indicates comprehension or reading errors, etc. After the demonstration, have students examine their own tests or reviews. They can indicate by color the mistakes on the test or on a separate sheet of paper. Then have the students break into small groups and discuss their findings. This activity not only shows them what and why they have missed particular problems, but it helps them understand the errors they have made. It also gives them a feeling of success and control over their testing outcomes.

15. Methods of Assessing Student Learning
15a. Methods of Evaluation:

- ☐ Essay Exam
- ☐ Objective Exam
- ☑ Projects
- ☑ Class Discussion
- ☑ Reports
- ☑ Problem Solving Exam
- ☑ Skill Demonstration
- ☐ Other

15b. (All courses must provide for measurement of student performance in terms of stated student performance objectives, Area 10, and culminate in a formal recorded grade based on uniform standards. Submit at least 2 examples.)

1) Each student will be given several journal assignments/entries throughout the semester. These journal entries are reflections on what the students are studying. They will be asked to apply these concepts to their own lives. It is also a way for the instructor and student to interact on a more personal way, one on one.
The journal assignment will be due the next class day after it has been assigned.
Each journal entry is worth 10 points. The points are earned for completing the assignment. Your instructor will not grade them for content other than that you responded to the question.
Some journal topics will be the following:
Topic #1: What has been your experience in math classes? Use specific examples to strengthen your descriptions. Then, how have these experiences affected your attitude toward learning math?
Topic #2 On a scale of 10 to 1, (1 = very low anxiety and 10 = anxiety that keeps you from functioning normally), where are you? Why?
Topic #3: Describe what happens when you get anxious about math. If you do not get anxious about math, describe another situation in college that makes you anxious. If you are not anxious about anything in college, explain why.
Topic #4: What is your initial reaction when someone says "math test?" Does this reaction keep you from studying for the test as you should? If so, what can you do to overcome this?
Topic #5: Describe your routine for studying math. When do you study? Where? How long? What do you do when you study math?
Topic #6: What are your personal challenges to managing time on a weekly basis? What can you do to overcome them? Give specific concrete activities that you can do.

2) Students will be assigned to read specific chapters and answer assigned questions in the Wining at Math textbook. These written answers then will be analyzed in small or large group discussions or activities. Students will be evaluated for both aspects of the assignment. Written assignments will be graded for completion, quality and correct answers. It will make up 60% of the grade. The classroom discussion or activity will be assessed by listening to speaker, quality of contribution, and frequency of interaction. It will make up 40% of the grade.

SECTION C

1. Program Information:

- ☐ In an approved program
- ☐ Part of a new program
- ☑ Not part of an approved program

2. TOP Code Information

Program Title: Mathematical Skills 170200

3. Course SAM Code:

- ☐ A - Apprenticeship Course
- ☐ B - Advanced Occupational
- ☐ C - Clearly Occupational
- ☐ D - Possibly Occupational
- ☑ E - Non-Occupational

4. Faculty Minimum Qualifications/Degrees:

Mathematics

Comments:

SECTION D

General Education Information:

1. College Associate Degree GE Applicability:

2. CSU GE Applicability:

3. IGETC Applicability:

4. CAN :

5. LDTP:

SECTION E

1. Articulation Information: (Required for Transferable Courses Only)

- ☐ CSU Transferable
- ☐ UC Transferable
- ☐ CSU/UC Major Requirement.

If CSU/UC major requirement, list campus and major. (Note: Must be lower division)

2. List at least one community college and its comparable course. If requesting CSU and/or UC transferability also list a CSU/UC campus and comparable lower division course

American River College - Math 10, Developing Confidence in Math, 1 unit
(Nondegree-Applicable Basic Skills)
Sacramento City College - Math 80, Mathematics Study Skills, 1 unit
(Nondegree-Applicable Basic Skills)
West Los Angeles College - LrnSkil 15, Overcoming Math Anxiety, 3 units
(Nondegree-Applicable Basic Skills)

SECTION F

Planning and Resources: Please address the areas below:

1. Evidence of Need or Potential: recommendations of advisory committee, connection to existing or planned degrees/certificates, or regional/national developments, transfer university requirements.

This course is designed to help students that have math anxiety and difficulty passing math to be successful. They will learn strategies that lead to success in math. The course is a great resource for students that have math anxiety and need assistance in order to perform well in their required math courses. Students can take this course and their required math course concurrently. The information from both will be integrated together to provide valuable information for the student.

2. Appropriateness to Mission: connection to basic skills, transfer, career technical education, or lifelong learning; relationship

This course connects to basic skills and provides lifelong learning needed to succeed in mathematics.

3. Place in Program/Department: relationship to student learning outcomes identified by program, connection to general education, or articulation with other institutions.

This course connects to the mathematics departments' Student Learning Outcomes of creating and interpreting visual models and presentations of mathematics as well as effectively communicating mathematical information.

4. Availability of Faculty and Facilities: minimum qualifications to teach course, special training for instructors, or long-term physical impact of course.

Minimum qualifications for mathematics and knowledge of math anxiety information.

5. Potential Impact on Resources: impact on library, computer support, transportation, equipment, or other needs

None

SECTION G

1. Maximum Class Size (recommended): 25

2. If recommended class size is not standard, then provide rationale:

Small classes are needed to assist students on a one-to-one basis.