#### MATH 770 Course Outline as of Summer 2017

## **CATALOG INFORMATION**

Dept and Nbr: MATH 770 Title: SUPPLEMENTAL INSTRUCTION

Full Title: Supplemental Instruction: Math and Science

Last Reviewed: 10/25/2021

Units		Course Hours per Wee	e <b>k</b>	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	0	Lecture Scheduled	0	18	Lecture Scheduled	0
Minimum	0	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	10.00		Contact DHR	180.00
		Contact Total	10.00		Contact Total	180.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00 Total Student Learning Hours: 180.00

Title 5 Category: Non-Credit

Grading: Non-Credit Course

Repeatability: 27 - Exempt From Repeat Provisions

Also Listed As:

Formerly:

#### **Catalog Description:**

An open-entry, open-exit class for students who seek, through supplemental instruction and use of computers, to strengthen and reinforce mastery of skills developed in a referring course(s) including the following: Math 1A through Math 155, Physics 1 through Physics 43, Chemistry 1A through Chemistry 310, Engineering 6 through Engineering 45.

## **Prerequisites/Corequisites:**

### **Recommended Preparation:**

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

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

Description: An open-entry, open-exit class for students who seek, through supplemental instruction and use of computers, to strengthen and reinforce mastery of skills developed in a referring course(s) including the following: Math 1A through Math 155, Physics 1 through Physics 43, Chemistry 1A through Chemistry 310, Engineering 6 through Engineering 45. (Non-Credit Course)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment:

**Transfer Credit:** 

Repeatability: Exempt From Repeat Provisions

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

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

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

**CSU Transfer:** Effective: Inactive:

**UC Transfer:** Effective: Inactive:

CID:

## Certificate/Major Applicable:

Not Certificate/Major Applicable

## **COURSE CONTENT**

## **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

- 1. Use and apply computer software and online resources to solve problems in mathematics, engineering and science.
- 2. Demonstrate increased skill and knowledge in the subject area and/or courses for which students sought assistance.

## **Objectives:**

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

- 1. Effectively utilize computer software to research, analyze, explore and solve problems in mathematics, engineering and science.
- 2. Research topics from the mathematics, engineering and science curriculum by efficiently using various computer and internet resources.
- 3. Identify and use appropriate computer software to generate reports for mathematics, engineering and science classes.
- 4. Use online homework systems to practice problem solving in mathematics, engineering, and science.
- 5. Apply knowledge obtained through individualized instruction, computer research, and use of software applications to enhance learning in mathematics, engineering, and science courses.

# **Topics and Scope:**

Topics may include:

- I. Problem solving using mathematics software
  - A. Maple/Mathematica

- B. Excel
- C. MyMathLab
- D. DataDesk
- II. Problem solving using Internet resources
  - A. Mathematics resources
  - B. Engineering resources
  - C. Science resources
- III. Online homework systems
- IV. Concepts & applications from referring courses

### **Assignment:**

Supplemental work on referring instructors' course assignments

#### 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

Writing 0 - 0%

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

None

Problem solving 0 - 0%

**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.

None

Exams 0 - 0%

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

Improved knowledge in referring course material

Other Category 100 - 100%

# **Representative Textbooks and Materials:**

Students will use texts assigned in the referring class.