**Co-requisite(s)**: MTH-113 **Prerequisite(s)**: MTH-055 or equivalent skills **Co-requisite/Prerequisite**:

**Course description (indicate lab information)**: This course is designed to provide students the necessary skills to be successful in MTH 113 Modern College Mathematics. The curriculum will be geared towards the student's level of mathematical skill. Topics will be chosen from mathematical terminology, mathematics literacy, quantitative reasoning, logic, arithmetic, and properties of algebra.

**Course will be offered**: ☒ **Fall** ☒ **Spring** ☒ **Summer**

**Proposed Course Fee (if known):** $0

**Relationship to Curriculum: Developmental Course**

**Sem/yr course will first be offered**: Fall 2022  **Default Course Capacity:** 12

**Minimum Enrollment (per course)** 4

**Instructor Consent Required for Registration:** No

**Textbook: Math in Our World Corequisite Workbook, 4 ed. (Likely an RCBC version created for our students)**

**Reason for adding this course**: This course, as a corequisite, should serve as a better alternative to MTH-075, as a prerequisite, to MTH-113 as it is designed specifically for MTH-113. Also, by replacing MTH-075 in the sequence toward MTH-113, students will be able to register for MTH-113 as a college level course one semester earlier than previously.

# *Complete this table:*

|  |  |  |
| --- | --- | --- |
| Instructional Mode | **Number of Credits** | **Number of Contact Hours** |
| **Lecture** | 2 | 2 |
| **Laboratory** | Click or tap here to enter text. | Click or tap here to enter text. |
| **Studio/Performance** | Click or tap here to enter text. | Click or tap here to enter text. |
| **Clinical/Practicum/Co-Op/Internship/Field Study** | Click or tap here to enter text. | Click or tap here to enter text. |

**Credit Hours Distribution (i.e. 3/0/0):** 2/0/0

**Has this course been offered experimentally**? No

**If no**, **estimate initial enrollment**: 60

##### If yes, complete this table.

|  |  |  |  |
| --- | --- | --- | --- |
| Offering | Course number | Semester & Year | Enrollment |
| *F**irst:* | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| *Second:* | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

***If other colleges and universities offer this course, complete this table****.* ***Give New Jersey data, if available***:

|  |  |  |
| --- | --- | --- |
| College/University | Course number/name | Contacted about course? |
| Essex County College | MTH-093S Basic Skills for Modern Mathematics | No |
| Salem Community College | MTH-094 Contemporary Math Enhancement | No |
| Cococino CC | MAT 140 College Math With Algebra Review  \*This is a combination of both a college level and co-requisite course, 5 credits. | Yes |
| CC of Denver | MAT 092 Quant Lab | No |

**Course Learning Outcomes:**

|  |
| --- |
| Course Learning Outcomes |
| At the completion of this, students should be able to: |
| Interpret and write mathematical notations |
| Create tables and/or diagrams to make and defend logical arguments |
| Identify various algebraic structures such as sets, groups, etc. |
| Compute complex arithmetic operations |
| Compute and interpret probabilities |

**Core Course Content:**

|  |
| --- |
| Core Course Content |
| Mathematical Terminology |
| Mathematical Literacy |
| Quantitative Reasoning |
| Fundamentals of Logic |
| Arithmetic |
| Properties of Algebra |

**General Education Outcomes**

Please select the RCBC outcome(s) below that apply to this course. Students will:

*(Check all that apply.)*

**Written and Oral Communication**

☐ Logically and persuasively support their points of view or findings.

☐ Communicate meaningfully with a chosen audience while demonstrating critical thought.

☐ Conduct investigative research which demonstrates academic integrity, originality, depth of thought, and master of an approved style of source documentation.

**Quantitative Knowledge & Skills: Mathematics**

☐ Analyze data to solve problems utilizing appropriate mathematical concepts.

☐ Translate quantifiable problems into mathematical terms and solve these problems using mathematical or statistical operations.

☐ Logically solve problems using the appropriate mathematical technique.

**Scientific Knowledge & Reasoning: Science**

☐ Understand and employ the scientific method of inquiry to draw conclusions based on verifiable evidence.

☐ Explain the impact of scientific theories, discoveries, or technological changes on society.

☐ Demonstrate critical thinking skills in the analysis of scientific data.

**Society & Human Behavior: Social Science**

☐ Demonstrate a general knowledge of political, social and economic concepts and systems and their effects on society.

**Technological Competency or Information Literacy: Technology**

☐ Demonstrate competency in office productivity tools appropriate to continuing their education.

☐ Use critical thinking skills for computer-based access, analysis, and presentation of information.

☐ Exhibit competency in library online tools appropriate to accessing information in reference publications, periodicals, and bibliographies.

☐ Demonstrate the skills required to find, evaluate, and apply information to solve a problem.

**Humanistic Perspective: Humanities**

☐ *Art:* Demonstrate an understanding of a variety of renderings.

☐ *Art:* Identify the movement, period, and their effect on the culture.

☐ *Theatre & Music:* Be able to articulate and analyze works of the performing arts and their effect on historical or cultural perspective as well as the values of the society.

☐ *Philosophy:* Demonstrate an understanding of fundamental philosophical questions and the contributions of major philosophers to resolve them.

☐ *Foreign Language:* Be able to demonstrate listening, speaking, reading and writing skills of the target language consistent with American Council on the Teaching of Foreign Languages (ACTFL) proficiency standards for the level being studied.

☐ *Foreign Language:* Be able to demonstrate cultural norms necessary to communicate effectively in the target language.

☐ *Literature:* Recognize and assess the contributions of people from various nations and/or cultures.

☐ *Literature:* Analyze the changing significance of social constructions of religion, race, class, and/or gender in cultural artifacts (music, art, literature) throughout time.

**Historical Perspective: History**

☐ Demonstrate knowledge of the nature, origins, central events and significant institutions of major civilizations.

**Global & Cultural Awareness: Diversity**

☐ Be able to compare and contrast cultural norms from diverse populations.

☐ Be able to explain how communication and culture are interrelated.

☐ Be able to examine how multicultural societies and people help engender a richer understanding of diverse life experiences

**Ethical Reasoning & Action**

☐ Analyze and evaluate the strengths and weaknesses of different perspectives on an ethical issue or a situation.

☐ Take a position on an ethics issue or a situation and defend it.