# MATHEMATICS GENERAL (MAGN)

**MATHEMATICS** 

#### **CHOOSING YOUR FIRST MATHEMATICS COURSE**

It is important that you begin your mathematics sequence at the appropriate level for which you are qualified. You need to know your initial mathematics placement and exit requirement for your program. If you do not know your initial placement, contact Mary Stella Van Waes, the mathematics liaison. Following are the different options if you have been placed at, below, or above your program's mathematics exit requirement.

- If you have been placed at your program's exit requirement, then take that mathematics course as specified in the college catalog.
- If you have been placed below your program's exit requirement, then take that mathematics course and then progress through the mathematics sequence to the mathematics course listed as the exit requirement.
- If you have been placed above your program's exit requirement, then work with your academic advisor to find an appropriate course for your major and mathematics ability.

#### SUNY GENERAL EDUCATION

Students who successfully complete any course with the MATH subject code will fulfill the SUNY General Education requirement for Mathematics and Quantitative Reasoning.

Mathematics Pathways

Algebra: SKLS 091/MAGN 101/MATH 102/MATH 103

Calculus: MATH 147/MATH 161/MATH 162/MATH 261/MATH 262 OR

MATH 151/MATH 152

Quantitative Reasoning: SKLS 091/MAGN 107/MATH 127

Statistical Reasoning: SKLS 091/MAGN 101/MATH 123 OR SKLS 091/MAGN 107/MATH 123

The above information does not include mathematics electives. Unless otherwise noted, a student must complete a course with a C or better to meet the pre-requisite for the next course in the sequence. Any student who passes a math course with a C or better may not take a course lower in the sequence to receive mathematics credit. If a student elects to take a mathematics course as Pass/Not Pass, a grade of pass does not imply that a student is able to progress in the sequence. In order to progress in the sequence, the numeric grade will be used to determine if the student has met the prerequisite.

### **MATHEMATICS COURSE ELECTIVES**

MATH 123 Elementary Statistics: Prerequisite: MAGN 101 (C or better) or MAGN 106 (C or better) or MAGN 107 (C or better) or placement into MATH 102 or higher

MATH 141 Statistics: Prerequisite: MATH 102 (C or better) or placement into MATH 103 or higher

MATH 145 Discrete Mathematics: Prerequisite: MATH 102 (C or better) or placement into MATH 103 or higher

MATH 149 Elementary Linear Algebra: Prerequisite: MATH 103 (C or better) or placement into MATH 147 or higher

#### **Transfer/Placement Information**

Transfer credit: College mathematics courses taken at other institutions are evaluated and will be awarded transfer credit when appropriate.

## How students are initially placed in a mathematics course

All incoming students are required to take a mandatory placement exam.\* In addition to the result on the placement exam, other factors that may be considered include: high school grade point average, high school mathematics grades, examinations (regents, state, SAT, or ACT), the number of attempts necessary to successfully complete high school mathematics courses, and the time elapsed since a student's last mathematics course.

In some cases, college mathematics courses taken at other institutions and successfully transferred for credit may be considered in lieu of the placement exam.

#### How to find a student's mathematics placement/other questions

If a student's mathematics placement is needed, or if students or advisors have any other questions about mathematics placement, please contact the math liaison.

#### **Changes to Placement**

If a student feels their math placement is not correct, they may schedule a meeting with the math liaison during the first week of classes to have their placement reevaluated.

#### SKLS 091 - PRE-ALGEBRA

(see Skills Courses)

#### MAGN 101. Elementary Algebra. (3 Credits)

Topics include: Review of basic arithmetic skills. Properties of the real number system, terminology, and vocabulary; Solving linear equations and inequalities in one variable; Literal equations and applications of algebra; Integer exponents; Operations on Polynomials; Factoring; Operations on Rational expressions; Graphing linear equations. TI-30 required. Prerequisite: SKLS 091 or SKLS 092 (C or better) or equivalent. 3 credits (hybrid or lecture format), fall or spring semester. This course satisfies the Liberal Arts and Sciences requirement.

#### MAGN 106L. Real-World Mathematics. (3 Credits)

#### MAGN 107. Mathematical Literacy. (3 Credits)

This course focuses on mathematics for everyday life. It integrates fluency with numbers, proportional reasoning, data interpretation, algebraic reasoning, modeling, and communicating quantitative information. Mathematical concepts are investigated through group problems and class discussions based on real-life contexts of citizenship, personal finances, medical literacy, healthcare fields, and the environment. (TI-30SII calculator required). Students may not take MAGN 107 if they have earned a grade of C or better in MAGN 106. Prerequisite: SKLS 091 or SKLS 092 (C or better) or equivalent. 3 credits (online or lecture format) fall or spring semester. This course satisfies the Liberal Arts and Sciences requirement.

#### MAGN 130. Mathematical Literacy. (4 Credits)

This course focuses on mathematics for everyday life. It integrates fluency with numbers, proportional reasoning, data interpretation, algebraic reasoning, modeling, and communicating quantitative information. Mathematical concepts are investigated through group problems and class discussions based on real-life contexts of citizenship, personal finances, medical literacy, healthcare fields, and the environment. (TI-30II calculator required) Prerequisite: SKLS 091 (C or better) or equivalent, or placement into MAGN 101. 4 credits\* (4 lecture hours) \* These credits do NOT count toward the math/science requirements of the A.S., A.A.S., or A.A. degree.