Developmental, 100 and 200 level MATHEMATICS COURSES AND THEIR PREREQUISITES

MTH 20: Elementary Algebra   STUDENTS WHO ARE NOT MATH PROFICIENT MUST BE PLACED IN THIS COURSE

MTH 30: Intermediate Algebra   Mth 20 → **Mth 30**

MTH 35   Intermediate Algebra Recitation AND   Mth 20 (S grade) →(**Mth 35 + Mth 123**)
MTH 123:   College Algebra and Trigonometry

MTH 102: Math for Liberal Arts   Mth 20 → **Mth 102**

MTH 108: Medical Dosage   Mth 20 → **Mth 108**(Discontinued from Fall 2015)

MTh 113: Probability and Statistics   Mth 20 → **Mth 113**

MTH 121: Finite Mathematics   Mth 20 →(Mth 30 OR a grade of B or above in Mth 102 or Mth113)→ **Mth 121**

MTH 123: College Algebra
& Trigonometry
          (Mth 30 OR a grade of B or above in Mth 102 or Mth 113)→ **Mth 123**

     OR   Mth 20 (S grade) →(Mth 35 + **Mth 123**)

MTH 130: Precalculus

          Mth 123→ **Mth 130**

MTH 214: Statistics with Computers

          Mth 130 → **Mth214**

     OR   Mth 221 → **Mth 214**

MTH 217: Math Fundamental I &
MTH 218: Math Fundamental II

$$Mth\ 123 \rightarrow Mth\ 217th \rightarrow Mth\ 218$$

MTH 221: Business Calculus

$$Mth\ 121 \rightarrow Mth\ 221$$

OR

$$Mth\ 123 \rightarrow Mth\ 221$$

CSC/Mth 228: Discrete Mathematics

Pre requisites:: Mth 123, CSC 126 (Grade C required), CSC 211

CALCULUS SEQUENCE:

Mth 231+229, Mth 232, Mth 233

OR

Mth 230+229, Mth232, Mth 233

Mth 229: Calculus Computer Laboratory

Mth 230: Calculus I with Pre Calculus

Mth 231: Calculus I

Mth 232: Calculus II

Mth 233: Calculus III

Mth123 (grade of A)$\rightarrow$**Mth 231&Mth 229**$\rightarrow$**Mth232**$\rightarrow$**Mth 233**

OR   Mth 130$\rightarrow$**Mth 231&Mth 229**$\rightarrow$**Mth232**$\rightarrow$**Mth 233**

OR   Mth 123 (Grade B) $\rightarrow$ **Mth 230 & Mth 229**$\rightarrow$**Mth 232**$\rightarrow$**Mth 233**

There are three remedial (0 credit) mathematics courses:

a. Elementary Algebra: Mth 020, 4 hrs (**For students who are not CUNY Math proficient**)
   **Note: Depending on student's performance on the CUNY Math Proficiency/ COMPASS
   exam, a student is eligible to take this course either in CUNY START, or in the summer
   or Winter Immmersion Program or during the regular Fall/ Spring term in the
   Mathematics Department.**
See Chart 1 Placement of non proficient students (www.math.csi.cuny.edu; advising documents)

 A student becomes CUNY Math proficient after passing Mth 20.

**Mth20 is a prerequisite course for all science and mathematics courses including general
education science and math courses.**

b. Intermediate Algebra: Mth 30, 4hrs is a prerequisite course for Mth 123 which is required for
Business, Computer Science, Economics, Psychology BS, Science, Math, Engineering, SLS and
Technology majors.

c. Intermediate Algebra Recitation:. Mth 35, 2 hours. It is not a standalone course. Mth 123 is a
corequisite for this course. Better prepared students exiting Mth 20 with a grade of S or new
students who are proficient but do not qualify for Mth 123 can take this course with Mth 123 to
accelerate their progression.

1.) Business Majors:
   a. 2 year students: Need one math course: **Mth 121 or Mth 123 Or any one of Mth 130,Mth 230 ,
   Mth 231.**

 b. 4 yr students: Need two math courses..
   The possible sequences are:
           (i) Mth 121 - Mth 221

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   OR   (ii) Mth 123 - Mth 130

   OR   (iii) Mth 123 - Mth 221 (Need a waiver for Mth 221,)

   OR   (iv) Mth 130 – Mth 231

   OR   (v) Mth 231- Mth 232

 Note: Math dept recommends: Mth 121 - Mth 221 for Business students; Students with very good
math background should be placed in Calculus I, Mth231. But they must be prepared to take
Calculus I and Calculus II.

2.) <u>Economics BA</u> and <u>Economics B.S</u>. :

 Need <u>one</u> math course, preferably the highest mathematics course they qualify for such as Calculus 1. However, Mth 121 or Mth 123 are acceptable for the degree. There is a prereq of Mth 121/123 for some economics courses.

3a.) <u>Psychology BA</u>.:

 Need <u>one</u> math course, **<u>Mth 113</u>** or **<u>Mth 123</u>**
<u>From Fall 2015 the requirement is Mth 123</u>

3b .) <u>Psychology BS</u>.

Need <u>one</u> math course, **<u>Mth 123</u>**

4.) <u>Liberal Arts Majors:</u>

 Need <u>one</u> math course: Any 3 credit math course at 100 level or higher. Recommended courses are **<u>Mth 102</u> or <u>Mth 113 or Mth 123.</u>**
Students with good math background should consider taking **Mth 123 or Mth 130 or Mth 231**

5.) <u>Nursing Majors:</u>

<u>4 yrs</u>: Need <u>one</u> math courses. **<u>Mth 113</u>**

6.) <u>SLS Majors:</u> (Elementary School teachers)
Need <u>three</u> math courses:

a. **Mth 123**

b. **<u>Mth 217</u>**

c. **<u>Mth 218</u>**

All waivers to be granted by SLS coordinator.

7.) Sciences, Engineering, Computer Science:

Need Calculus sequence. Also several upper level courses are required for Chemistry,Physics, Engineering, Computer Science, etc. (see catalog)

Calculus Sequence: **Mth 229**

(**Mth 231**
OR
Mth 230 (PreCalclus with Calculus I)

Mth 232

Mth 233

Exceptions:
(i) **Biology** requires **Mth 229, (Mth 231 OR Mth 230)** and [**Mth 214** or **Bio 272 (Bio Statistics**)]

(ii) **Computer Science** additionally requires **CSC/Mth 228**

8) **2 yr Computer Technology Program:**

Need three math courses:

CSC/Mth 228

Mth 231

and   **Mth 229**

9) **2 yr Electrical Eng Technology programs:**

   Need **at least seven math credits from the courses Mth 123, 130, 229, 230, 231.**

10.)4 yr Medical Technology (BS) Program:

   Need: **Mth 214 or Bio 272**

NOTES:
   Mth 230 is not open to students who took Mth 130

   About repeating courses: If you receive an F in a course and then retake it and get a C or better, the original F will remain on transcript but will not be computed into the GPA. This can only be used for 16 credits for courses repeated at the same school.