

**LEHMAN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK
DEPARTMENT OF MATHEMATICS**

CURRICULUM CHANGE

1. **Type of change:** Experimental Course

2.

Department(s)	Mathematics
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial
Subject Area	Mathematics
Course Prefix & Number	MAT 108
Course Title	Trigonometry
Description	Unit Circle Trigonometry, Radians, Graphing Trigonometric Functions, Inverse Trigonometric functions, Trigonometric Identities, Laws of Sines and Cosines, and Applications
Pre/ Co Requisites	Placement by the Department of Mathematics
Credits	2
Hours	2
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc)	
General Education Component	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> Required</p> <p style="padding-left: 40px;"><input type="checkbox"/> English Composition</p> <p style="padding-left: 40px;"><input type="checkbox"/> Mathematics</p> <p style="padding-left: 40px;"><input type="checkbox"/> Science</p> <p><input type="checkbox"/> Flexible</p> <p style="padding-left: 40px;"><input type="checkbox"/> World Cultures</p> <p style="padding-left: 40px;"><input type="checkbox"/> US Experience in its Diversity</p> <p style="padding-left: 40px;"><input type="checkbox"/> Creative Expression</p> <p style="padding-left: 40px;"><input type="checkbox"/> Individual and Society</p> <p style="padding-left: 40px;"><input type="checkbox"/> Scientific World</p>

3. **Rationale:** The Department of Mathematics currently has no course offering students a thorough and rigorous treatment of trigonometry. MAT 108 fills this need.

4. **Learning Outcomes (By the end of the course students will be expected to):**

1. Use the unit circle to determine the values of trigonometric functions
2. Evaluate and Graph all six Trigonometric Functions
3. Work with Inverse Trigonometric functions: Arcsin, Arccos, Arctan
4. State and apply trigonometric identities
5. Apply the Law of Sines and the Law of Cosines
6. Solve real-world problems using Trigonometry

5. **Date of Departmental Approval:** March 22, 2018