

College/School: Yeshiva University, Graduate Programs in Arts & Sciences

Department: Mathematical Sciences

Program/Major: M.A. Program in Mathematical Sciences

Contact Name: Thomas Otway

Email: otway@yu.edu

Phone: (212) 960-5400 ext 6870

1. Please type or paste your program's/major's mission statement into the space below.

The mission of the Master of Arts program in Mathematics is to produce graduates who can apply the techniques of real-variable analysis, complex-variable analysis, general topology, and linear algebra to solve realistic problems in pure and applied mathematics.

2. Please list below each of your program's/major's goals and corresponding student learning objectives (SLOs).

<b>Program/Major Goals</b>	<b>SLOs</b>
1. Students will be able to derive analytic properties of abstract spaces	a. Students will be able to derive properties of Hilbert spaces
	b. Students will be able to derive properties of $L^p$ spaces
	c. Students will be able to understand the relations between abstractly defined spaces, e.g., Banach spaces, Hilbert spaces, and topological spaces
2. Students will be able to solve problems in the complex plane	a. Students will be able to determine convergence properties of complex-valued infinite series
	b. Students will be able to use conformal mapping to solve problems in optics and fluid dynamics

3. Students will be able to derive algebraic properties of abstract spaces.	Students will be able to derive properties of abstractly defined vector spaces
	Students will be able to solve problems in abstractly defined inner product spaces
4. Students will be able to solve analytic problems in topological spaces	Students will be able to solve continuity problems using topological spaces
	Students will be able to solve convergence problems in topological spaces