

# PY/MA 370 Mathematical Methods for the Physical Sciences I

formerly known as

## Topics in Mathematics with Applications in Chemistry

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**STC 244**

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**A Group?**



**Singularity?**



**Fourier Transform?**

Hi, Dr. Elizabeth?  
Yeah, uh... I accidentally took  
the Fourier transform of my cat...



Topics:

- Line and surface integrals, flux, Stokes' and Divergence Theorems
- Complex functions and complex integrals
- Fourier Series Fourier Transform
- Series solutions of ordinary differential equations
- Groups, Symmetry Groups of Molecules

**Prerequisites:** Physics II PY 212 and Calculus 3 MA 222 (or  
Mathematical Analysis IV MA 202).

**Mathematics Minors:** MA 370 can be use as a minor elective.