

MATH 445: The big picture

From the catalog:

MATH 445 Mathematics of Physics and Engineering II (4, FaSp)

Vector field theory; theorems of Gauss, Green, and Stokes; Fourier series and integrals; complex variables; linear partial differential equations; series solutions of ordinary differential equations.

Prerequisite: MATH 245.

Note:

Vector field theory: MATH 226 (next step: **MATH 434 and 435**)

Complex variables: **MATH 475 (also 520)**

Ordinary differential equations: MATH 225, 245, and **465**)

Series: MATH 126

We will *also* do some numerical methods.

Numerical methods: **MATH 458 (also 501, 502ab, 504ab)**

BUT

No special course on PDEs or Fourier analysis (in our math dept.)

Here, your only choice is **MATH 490** (read a book by yourself)

OBJECTIVE: to convince you to take more math classes.