### Numerical Solution of Partial Differential Equations

#### Contact Info:
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#### Office hours:
Tuesday 10 – 11 am and by appointment

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#### Academic Integrity Statement:
All Penn State Policies regarding ethics and honorable behavior apply to this course (see [http://www.psu.edu/ufs/policies/](http://www.psu.edu/ufs/policies/) for the details on Penn State Faculty Senate policies for students).

#### Short description:
Numerical PDEs is the study of algorithms for computing numerical solutions to PDE problems. We shall introduce and analyze numerical techniques and algorithms for a variety of basic problems, studying their efficient computer implementation, robustness and reliability.

#### Classroom:
The class will meet in 106 McAllister Bldg.

#### Prerequisites:
Classical numerical analysis very basic knowledge of computer programming (very little basic knowledge in any of the following computer languages: C, C++, FORTRAN, Java will be sufficient. Matlab or Mathematica may also be used.)

#### Grading:
There will be one take-home midterm exam (25%) a final project worth 30%, and homework assignments (including some computer assignments) worth 45%.

#### Homeworks:
Homework assignments will be due about every two to three weeks.

#### Attendance Policy:
I encourage you to attend every class.