Mathematics

MATH 442  **Intro Partial Diff Equations**  credit: 3 OR 4 hours.

(MATH 342) Introduces students to partial differential equations, emphasizing the wave, diffusion and potential (Laplace) equations. The focus is on understanding the physical meaning and mathematical properties of solutions of partial differential equations. Methods include fundamental solutions and transform methods for problems on the line, and separation of variables using orthogonal series for problems in regions with boundary. Convergence of Fourier series is covered in detail. 3 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 385 or MATH 386 or MATH 441.

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<th>Days</th>
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<td>Lecture-Discussion</td>
<td>C13</td>
<td>10:00 AM - 10:50 AM</td>
<td>MWF</td>
<td>140 - Henry Administration Bldg</td>
<td>Lee, Y</td>
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Credit Hours: 3 hours

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Credit Hours: 4 hours
Instructor Approval Required
Restricted to Graduate - Urbana-Champaign.