

*ISC 5939 - Advanced Graduate Seminar*  
**Numerical Models of Partial Differential Equations**  
Summer 2015

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<b>Instructor:</b>	John Burkardt email: <a href="mailto:jburkardt@fsu.edu">jburkardt@fsu.edu</a> office: 445 DSL
<b>Optional Text:</b>	Angelika Hoffman <i>Scientific Writing and Communication</i> Oxford University Press.
<b>Website:</b>	<a href="http://www.sc.fsu.edu/~jburkardt/classes/pde_2015/pde_2015.html">http://www.sc.fsu.edu/~jburkardt/classes/pde_2015/pde_2015.html</a>
<b>Time and Room:</b>	Monday/Wednesday, 2:00-2:50pm, 499 DSL

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**Course Description:** This course is intended to introduce the student to the variety of forms of communication common to scientific work.

Over the duration of the class, each student will be required to work on a large scientific document, which might take the form of a review or summary, a chapter of a dissertation, or an actual article suitable for submission to a journal. A first draft of this document will be reviewed by the instructor. A second draft will be submitted to anonymous referees who will make suggestions and criticisms. The final draft is due at the end of the course, at which time each student will also make a short oral presentation of their document.

Topics to be covered include the structure of a typical scientific paper, the purpose of the abstract, the issue of plagiarism, how publication indices are used to rate productivity, the preparation of a curriculum vitae, writing a resume in response to a job posting, how to apply for an academic job, how to apply for an industrial job, writing a grant proposal, preparing posters and presentations, creating a personal web page that can attract employers and collaborators, participating in conferences and workshops.

One class session will be devoted to mock interviews, in which students will be required to present a resume corresponding to a job of interest to them, and will be interviewed as to their suitability, skills, and knowledge about the company.

**Course Objectives:** Students completing the course will be able to:

- plan, write, and format a research paper;
- implement editorial corrections offered by a reviewer;
- create a web page that offers information about current research and employment interests;
- write a resume for a suitable job posting;

**Grading:** The student's grade for the course will be based upon:

- Class discussions - 15%
- Writing exercises - 15%
- Homework - 15%

- Research paper - 40%
- Final presentation - 15%

**University Attendance Policy:** Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

**Academic Honor Policy:** The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of student's academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to . . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University. (Florida State University Academic Honor Policy, found at <http://academichonor.fsu.edu/policy/policy.html>.)

**Americans with Disabilities Act** Students with disabilities needing academic accommodation should:

- register with and provide documentation to the Student Disability Resource Center; and
- bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the Student Disability Resource Center, [sdrc@admin.fsu.edu](mailto:sdrc@admin.fsu.edu), web page: <http://www.disabilitycenter.fsu.edu/>.

**Syllabus Change Policy** Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.