

## SYLLABUS AND COURSE INFORMATION FALL 2013

### MATH 546/CSCI546 – Numerical Analysis

**Room:** EDS135; **Day and Time:** W 6:00p-8:45p,

**Meets:** 8/26/2013 through 12/13/2013

**Instructor:** Dr. Nikolay Metodiev Sirakov

**Office:** Bin 322

**Office Hours:** T 12PM-2PM

**E-mail:** Nikolay.Sirakov@tamuc.edu

W 4:30PM-5:30PM

**Office Phone:** 903 886 5943

F 9AM-11PM

Additional by appointment

#### COURSE DESCRIPTION

**Text:** Applied Numerical Analysis Using Matlab, Lauren V. Fausett, 2<sup>nd</sup> Ed., Pearson Prentice Hall, 2008. ISBN: 0-13-239728-5

**Pre-requisite:** permission by the instructor; knowledge about DE may be of help

**Course Content:** Sections:10.1, 10.2.1-10.2.2-Fourier Methods; Fundamentals of Ordinary DE-12.1.1 12.2.4; Systems of Ordinary DE-13.1.1-13.1.4; Parabolic Partial DE, Heat Equation-15.1.1-15.1.4.

**Students Learning Outcomes (SLO):** The student will learn to interpolate data applying Fourier Transforms. Will study methods that approximate the solution of ordinary differential equation (ODE), System of ODE, and partial DE. The students will develop skills to apply the above methods and to program them by using MatLab functions. They will accumulate knowledge how to perform independent study and present this, also will develop skill and knowledge how to generalize theoretical problems and methods.

**Online materials:** [http://faculty.tamuc.edu/nsirakov/Teaching/Teaching\\_2013.html](http://faculty.tamuc.edu/nsirakov/Teaching/Teaching_2013.html)

#### COURSE EVALUATION-

##### Basis for Evaluation:

In-class exams	- 42%
HW/ Num. Methods in MatLab	- 20%
Short quizzes	- 16%
Comprehensive final exam	- 22% (may be given as a project)

**Grading Policy:** **A:** 100% - 90%

**B:** 89% - 80%

**C:** 79% - 70%

**D:** 69% - 60%

**F:** Less than 59 %

The professor reserves the rights to reward students for continuous hard work.

**Additional Performances:** In class check problems, Home Practice Problems, Extra Credit Problems

<b>Final Test Section:</b> 001	<b>Date:</b> Monday, December 9, 2013	<b>Time:</b> 6PM-8PM
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#### COURSE POLICIES

**In-class problems:** *are to be solved during the class period. No makeup is allowed.*

**Short quizzes:** *are to be solved independently during the class period. No makeup is allowed.*

**Tests:** *The two in-class tests will be given roughly at regular intervals. Students will be informed of the test dates around a week in advance. The test will take one class period and will be given at the scheduled times only. No opportunity will be given to take the test at earlier or later times except in cases of formal institutional excuses as mentioned above.*

**Makeup:** *Except in the case of a formal institutional excuse, no individual makeup test will be permitted.*

**Cheating:** test, quizzes, HW and ECP results will be canceled in case of cheating.

Students requesting accommodations for disabilities must go through the Academic Support Committee. For more information, please contact the Director of Disability Resources & Services, Halladay Student Services Bldg., Room 303D, 903 886 5835.

All students enrolled at the University shall follow the tents of common decency and acceptable behavior conducive to a positive learning environment (**See Student's Guide Handbook, Polices and Procedures, Conduct**).

About the library computer lab you may contact [Karen\\_Akins@tamu-commerce.edu](mailto:Karen_Akins@tamu-commerce.edu) or Ph: 903-886-5728