

**SYLLABUS AND COURSE INFORMATION Spring 2014**  
**CSCI546 – Numerical Analysis; Meets 1/20/2015 through 5/15/2015**  
**Wednesday 1:50p-4:30p Location: EDS135**

**Instructor:** Dr. Nikolay Metodiev Sirakov   **Office:** Bin 322  
**Office Hours:** W 5PM-6PM                   **E-mail:** Nikolay.Sirakov@tamuc.edu  
                  TH 11AM-1PM                   **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 Ordinary DE 12.1.1-12.2.4; Systems 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. They 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 their work, also the students will develop skill and knowledge how to generalize theoretical problems and methods.

**Online materials may be found at:** <http://faculty.tamuc.edu/nsirakov/Teaching/>

**COURSE EVALUATION-**

**Basis for Evaluation:**

In-class exams	- 42%
HW/ Num. Methods in MatLab	- 20%
Short quizzes	- 16%
Comprehensive final exam	- 22% (could 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> Wednesday, May 13, 2015 <b>Time:</b> 1PM-3PM
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**COURSE POLICIES**

**HW:** *are to be solved at home and turned on due time. No makeup is allowed.*

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

**Tests:** *The in-class tests will be given roughly at regular intervals. Students will be informed of the test dates a week in advance. The test will be given at the scheduled times only and will take a regular class period. 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 with Disabilities:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

**Office of Student Disability Resources and Services, Texas A&M University-Commerce, Gee Library, Room 132**  
**Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, [StudentDisabilityServices@tamuc.edu](mailto:StudentDisabilityServices@tamuc.edu)**

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