

MA 797V

Time: 11:45 - 1:00 TH

Place: HA 176

Instructor: Ralph Smith

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Email: rsmith@eos.ncsu.edu

Web: <http://www4.ncsu.edu/~rsmith/>

Text: Class notes

Computing: We will use Matlab and provided software

Grades: The gradescale is: 90-100 A-,A; 80-89 B-,B,B+; 70-79 C-,C,C+; 60-69 D-,D,D+; below 60: F. The coursework will consist exclusively of projects.

Course Topics:

- Model development including deterministic and stochastic models
- Numerical approximation techniques and convergence analysis
- Parameter estimation techniques
- Data collection techniques and experimental analysis
- Uncertainty in parameters
- Monte Carlo techniques to predict uncertainty
- Statistical and residual analysis
- Gaussian and Bayesian emulators

Academic Integrity and Disabilities Information: This is provided at the following web sites:

http://www.ncsu.edu/provost/academic_regulations/integrity/reg.htm

http://www2.ncsu.edu/ncsu/stud_affairs/counseling_center/dss/