

ECEN 615 – Methods of Electric Power Systems Analysis
Fall 2018 TR 2:20 -3:35pm ETB 1037

Instructor: Prof. Tom Overbye, 308C WEB, overbye@tamu.edu

Office Hours (tentative): Mondays 1-3 pm

Instructor Website: overbye.engr.tamu.edu

Course Website: <https://overbye.engr.tamu.edu/course-2/ecen615fa2018/>

Prerequisites: ECEN 460 or consent of instructor

Text: A. J. Wood, B. F. Wollenberg, G. B. Sheble, *Power Generation, Operation and Control*, Third Edition, Wiley, 2013, ISBN-13: 978-0471790556

TA: Iyke Idehen, iidehen@tamu.edu

TA Office Hours: Wednesday 4-6pm (tentative)

Course Syllabus

Approx. # of hours

| | |
|---|----|
| Introduction to Power Systems | 4 |
| Overview of Power System Modeling and Operation | 4 |
| Power Flow | 6 |
| Sparse Matrices in Power System Analysis | 6 |
| Sensitivity Analysis and Equivalent | 6 |
| Power System Data Analytics and Visualization | 3 |
| Optimal Power Flow and Power Markets | 6 |
| Power System State Estimation | 5 |
| Black start Analysis | 3 |
| Total | 43 |

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|---------------------------------|-----|
| Evaluation: Midterm Exam | 30% |
| Final exam | 40% |
| Homework and project | 30% |

Tentative Dates for Midterm: Thursday, October 18, In Class

Comprehensive Final Exam: Wednesday, December 13, 1 to 3 pm

Notesheets for Exams: All exams are closed-book, closed-notes. You may bring in one notesheet (8.5" by 11"), and may use standard calculators.

Grading

All grading in the course is based on a percentage with final grades determined based on this percentage. If your final average falls within the below ranges you are guaranteed to receive at least the letter grad indicated: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: 59 or lower

Americans with Disabilities Act (ADA)

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 believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <http://disability.tamu.edu>.

Academic Integrity

For additional information please visit: <http://aggiehonor.tamu.edu>

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”