ECG 741 COURSE SYLLABUS

Instructor: Dr. Y. Baghzouz Office Room # SEB-2167 Tel. # 895-0887 Fax # 895-4075 Email address: yahia.baghzouz@unlv.edu

References:

- 1. T. Gonen, *Electric Power Distribution System Engineering*, 2nd Edition, CRC PRESS, 2008
- 2. James J. Burke, *Power Distribution Engineering: Fundamentals and Applications*, Marcel Dekker Inc., 1994
- 3. A.J. Pansini, *Electrical Distribution Engineering*, Fairmont Press, 1992.
- 4. W.H. Hersting, Distribution System Modeling and Analysis, CRC Press, 2002.
- 5. H.L. Willis, Power Distribution Planning Reference Book, Marcel Dekker, Inc., 1997
- 6. IEEE Transactions on Power Delivery
- 7. Conference record of IEEE Power Engineering Society General Meeting

Course Content:

- 1) Distribution system planning and automation
- 2) Load characteristics
- 3) Distribution Transformers
- 4) Design of Substations, primary and secondary systems
- 5) Voltage drop and power loss calculations
- 6) Voltage regulation and capacitor application
- 7) Distribution system modeling and simulation
- 8) Distribution system protection
- 9) Distribution system reliability
- **10) Electric power quality**
- 11) Distributed generation and storage
- 12) Advanced topics

Computer Usage:

OpenDSS

Tests & Homework:

	Subject	Value
Midterm Exam	TBA	25 Points
Final Exam	TBA	25 Points
Individual Projects	TBA	25 Points
Homework Assignments	TBA	25 Points
Total		100 Points

Grading:

 $A\geq 85>B\geq 70>C\geq 60>D\geq 50>F$