❖ ECE_1701 (Fundamentals Of Electric Power Engineering)

Instructor : Jeungphill Hanne

❖ Agenda for today

1. SCUPI 2025 Spring Academic Calendar

- Academic Calendar : Midterms & Final etc.
- My Schedule : Office hours etc.

2. Course Introduction

- Course information
  - Subject, Text book, Lecture Hour, Office hour, Course website, etc.
- Course Objective & Scope, Course Learning Key Points
- Course Grading & Tentative Course Schedule

& After the break

3. Review on

Chap 8 (Thomas),Or Chap 10 (Svoboda)!

“Sinusoidal Steady-State Response, or Analysis ”

1. SCUPI 2025 Spring Academic Calendar

- **Academic Calendar : Midterms & Final etc.**

SCUPI Academic Calendar for 2024-2025 Spring

	Feb.	Mar.				Apr.				May					Jun.				Jul.					Aug.			
Monday	24	3	10	17	24	31	7	15	22	28	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
Tuesday	25	4	11	18	25	1	8	16	23	29	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26
Wednesday	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	19	26	2	9	16	23	30	6	13	20	27
Thursday	27	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	20	27	3	10	17	24	31	7	14	21	28
Friday	28	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	21	28	4	11	18	25	1	8	15	22	29
Saturday	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30
Sunday	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31
SCU Week	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**
SCU Term	2025 Spring Teaching Weeks																		Final Week		Summer Recess						

1st Midterm

2nd Midterm

Final

This schedule is preliminary!!

1. SCUPI 2025 Spring Academic Calendar

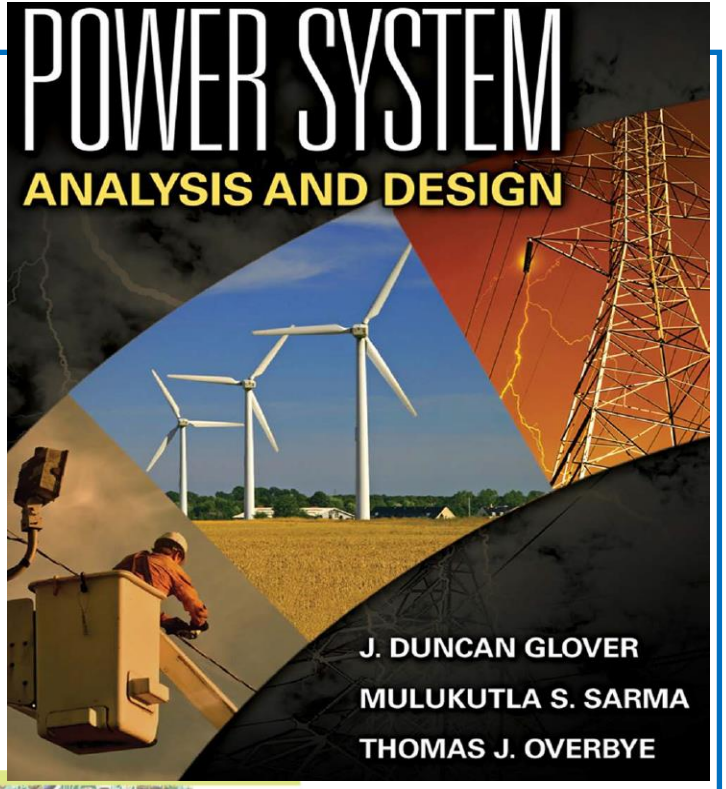
- **My Schedule : Office hours etc.**

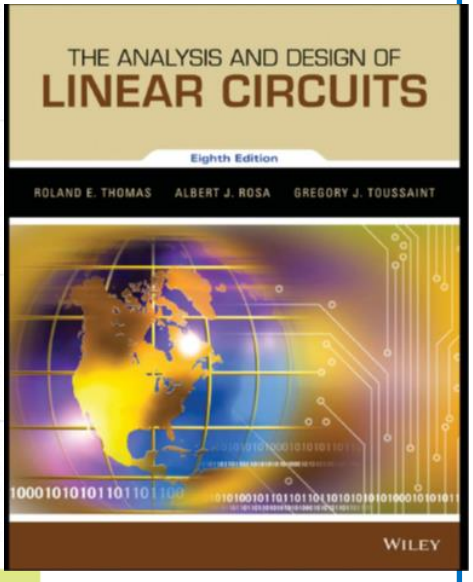
2024-2025 Spring Semester Course Schedule					
Class time	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
08:15-09:00	Physics 1 01 S-104		Physics 1 01 S-104		
09:10-09:55	Physics 1 01 S-104		Physics`1 01 S-104		
10:15-11:00	Office Hour Physics 1 N-412	Linear Control System S-507	Office Hour Power Engineering N-412	Linear Control System S-507	
11:10-11:55		Linear Control System S-507	Office Hour Linear Control N-412	Linear Control System S-507	
Lunch Break					
13:50-14:35	Funamentals of Electric Power Engineering S-104			Office Hour Physics 1 N-412	
14:45-15:30	Funamentals of Electric Power EngineeringS-104			Office Hour Power Engineering N-412	
15:40-16:25	Funamentals of Electric Power Engineering S-104			Office Hour Linear Control N-412	
16:45-17:30					
17:40-18:25					

*But, you can come to my office anytime when I am in my office ^^*

2. Course Introduction

- **Fundamentals Of Electric Power Engineering**
  - Fundamentals of Electrical Power Engineering and Design the Power systems
- **Text Book**
  - Power System Analysis and Design, 6th Edition
    J. D. Glover, M. S. Sarma, and T. J. Overbye,
    ISBN 978-1305632134, Cengage
  - **Reference**： Introduction of Electrical Circuits, 9th Ed.
    J.A Svoboda and R.C. Dorf, 2014 (国际学生版）
    ISBN 978-1-119-54657-3, WILEY
  - The Analysis and Design of Linear Circuits, 8th Edition,
    R. E. Thomas, A. J. Rosa, and G. J. Toussaint,
    ISBN: 978-1-119-23538-5, 2016 John Wiley & Sons
- **Lecture**
  - Instructor : Jeungphill Hanne, PhD
    jeungphill.hanne@scupi.cn
  - Time : Mon. (13:50-16:25) @ S104,SCUPI Building
  - Office Hour: Wed.(10:15-11:00) / Thr.(14:45-15:30)
    @ N412,SCUPI Building
- **TA :** Hanven Liu, - Office Hrs : To be announced.
- **Course Format :** Lecture
- **Course Grading**
  - HW+Quiz, 2 Midterm, 1 Final and Attitude etc.





2. Course Introduction

• Course Scope & Objective

- Scope & Objective & Scope: This is a first course in electric power engineering for electrical and computer engineers. The course provides the fundamental background to solve some common problems in electric power engineering, and to design power systems using engineering assumptions based on this background. The main objective is to cover topics in AC single phase and three phase power, transformers, transmission lines and electric machinery by integrating their knowledge of linear circuit analysis, electricity, and magnetism to these power systems topics. This course will also provide the prerequisite knowledge for the study of load flow, symmetrical components, fault analysis, stability etc.

- Topics (selected):

- AC Steady-State Power / Three-Phase Circuits
- Power Transformers
- Power Flows/ Power Transmission Lines
- Symmetrical , or Unsymmetrical Faults
- Transient Stability
- Power System Controls
- Power Distribution

• Course Grading :

- Grading : HW+ Quiz (15%), Midterm I (25%), Midterm II (25%), Final (27%) and Attitude(7% : Attendance, Focus, Engagement, Punctuality for HW, etc.)

→ Less than 60% attendance might be failed for the course!

Can be flexible!

• Tentative Course Schedule

Week	Fundamentals Of Electric Power Engineering	Topics	Assignment
Week 1 (2/24-3/2)	Introduction & Chap 8 (Thomas)	**Syllabus & Sinusoidal Steady-State Response**	
Week 2 (3/3-3/9)	Chap 11 (Svoboda & Dorf)	**AC Steady-State Power**	
Week 3 (3/10-3/16)	Chap 11 & Chap 12 (Svoboda & Dorf)	**AC Steady-State Power/ Three-Phase Circuits**	HW1
Week 4 (3/17-3/23)	Chap 12 (Svoboda & Dorf)	**Three-Phase Circuits**	HW2
Week 5 (3/24-3/30)	Chap 17 (Svoboda & Dorf)	**Two-Port and Three-Port Networks**	HW3
Week 6 (3/31-4/6)	Chap 3 (J. D. Glover)	**Power Transformers**	HW4
Week 7 (4/7-4/13)	Chap 4&5 (J. D. Glover) & **Mid Term 1**	**Transmission Line**	
Week 8 (4/14-4/20)	Chap 4&5 (J. D. Glover)	**Transmission Line**	HW5
Week 9 (4/21-4/27)	Chap 6 (J. D. Glover)	**Power Flows**	HW6
Week 10 (4/28-5/4)	Chap 7 (J. D. Glover)	**Symmetrical Faults**	
Week 11 (5/5-5/11)	Chap 7& 8 (J. D. Glover)	**Symmetrical Faults &Components**	HW7
Week 12 (5/12-5/18)	Chap 8 & 9 (J. D. Glover)	**Unsymmetrical Faults**	HW8
Week 13 (5/19-5/25)	Chap 10 (J. D. Glover) & **Mid Term 2**	**System Protection**	HW9
Week 14 (5/26-6/1)	Chap 11 (J. D. Glover)	**Transient Stability**	HW10
Week 15 (6/2-6/8)	Chap 12 (J. D. Glover)	**Power System Controls**	HW11
Week 16 (6/9-6/15)	Chap 13 (J. D. Glover)	**Transmission Lines: Transient Operation**	HW12
Week 17 (6/16-6/22)	Chap 14 (J. D. Glover)	**Power Distribution**	HW13
Week 18 (6/23-6/29)	Chap 14 (J. D. Glover) & **Review**	**Power Distribution & Review**	HW14
Week 19 (6/30-7/6)	**Final**		

Any question so far?

And let's move on Reviewing
Chap 8 (Thomas),Or Chap 10 (Svoboda)!
"Sinusoidal Steady-State Response,
or Analysis "