

# Syllabus

Switchgear

Fall 2022

Mondays 5-8pm

Instructor: Matt Groom

- Familiarity with the construction, installation, safe operation, modification, and maintenance of Low and Medium Voltage Switchgear.
- Students will also learn to read, interpret, and do field markups on Low and Medium Voltage SWGR prints.



<u>Class</u>	<u>Date</u>	<u>Topic</u>	<u>Handouts</u>
1	8/29	SWGR One-lines, ANSI #'s	GPO Dwgs, ANSI
2	9/12	ANSI vs UL Boards	SWGR vs SWBDs, Substations
3	9/19	LV SWGR Construction, Mod's	PZ4, AKD20, WL, DS
4	9/26	LV SWGR Install & Operation	F Pp, Bus Br, PZ4 IB
5	10/3	MV SWGR, SWGR Controls	G&T, DBr, WI, MtlCd
6	10/10	Substation Drawings, Digest	APL Dwgs, Digest
7	10/17	LV Circuit Breakers	OCP, Arc Chute, TCCs
8	10/24	PLC's and ThrowOver Schemes	PLC, ATO, PLC Dwg
9	10/31	Motor Control Centers, Pwr Cntrs	QUIZ, MCC Handout
10	11/7	Relaying and Protection	ABB, Relay types
11	11/14	NETA Testing of Switchgear	NETA, Gnd, Freq, TTs
12	11/21	Generators, ATS's, UPS's	Data Centers, Pwr Gen
13	11/28	Small topics, Potluck, Review	DTT's, Strtrs, Harmncs
14	12/5	Wrap up, Final Exam	Graded Final Exam

**Matt Groom, PE, CEM**

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Please let me know if you're going to be late/absent from class, so I know to hold handouts for you. Instructors can't excuse attendance; only the JATC administration can do that.