## Chem 2990 Chemistry Technician Seminar Spring, 2024

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## Objectives: Students will

1. Be introduced to terminology and methods unique to industrial laboratories.

- 2. Develop problem-solving skills encountered in day-to-day operations of analytical laboratories.
- 3. Become proficient in trouble-shooting and solving problems with standard methods of analysis.
- 4. Identify compendial sources for validated analytical methods.
- 5. Learn proper techniques of maintaining laboratory notebooks and electronic records.
- 6. Learn the importance of teamwork and sharing responsibilities in a laboratory setting.
- 7. Visit corporate and/or governmental laboratories (when possible).
- 8. Develop skills for finding and implementing official methods of analysis from a variety of sources.
- 9. Learn to prepare formal resumes appropriate for finding employment as chemistry technicians.

Week	Date	Lecture Topic:	Assignments:
1	9-Jan	Orientation; Roles of Chem Techs; Specific gravity	Specific Gravity Problems
2	16-Jan	Applications of refractive Index in industry	Refractive Index Problems
3	23-Jan	Concentration ratios: units, factors, definitions	Ratio Concentration Problems
4	30-Jan	Molarity and Normality	Molarity & Normality Problems
5	6-Feb	Dilutions	Dilutions Assignment
6	13-Feb	FCC Methods of Analysis for Food Ingredients	FCC Methods Assignment
7	20-Feb	USP Methods of Analysis for Drugs	USP Methods Assignment
8	27-Feb	EPA Methods of Analysis for Environement	None
9	5-Mar	Spring Break	
10	12-Mar	Guest Lecture: Dr. Greg Nielsen, WSU Career Services: preparing your professional file	Prepare your own resume
11	19-Mar	Petroleum Chemistry	Pet Chem Assignment
12	26-Mar	No class	
13	2-Apr	No Class	
14	5-Apr	Lab Visit #1 (Friday, 12:30-5:00pm)	Report your impressions of each lab.
15	12-Apr	Lab Visit #2 (Friday,12:30-5:00pm)	Report your impressions of each lab.