**Instrumental Analysis (CHE 431)**

| Potential Instructors* | Dr. Nadja Cech; nbcech@uncg.edu  
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| Prerequisites | CHE 331, CHE 333, CHE 205 or CHE 352 (either may be taken concurrently), PHY 212 or PHY 292 |
| Corequisites | CHEM (B.S.) and CHEM with concentration in BCHEM (B.S.): CHE 433 lab  
|  | Other majors: None |
| Sample Course Materials | Textbook: *Quantitative Chemical Analysis* by Daniel C. Harris |
| For Whom Planned | CHEM and BCHEM majors |
| Topical Outline§ | ▪ The Differentiating Characteristic  
|  | ▪ Calibration Curves  
|  | ▪ Experimental Design and Calibration Methods  
|  | ▪ Fundamentals of Spectrophotometry  
|  | ▪ Spectrophotometers  
|  | ▪ Atomic Spectroscopy  
|  | ▪ Activity  
|  | ▪ Electrodes and Potentiometry  
|  | ▪ Electroanalytical Techniques  
|  | ▪ Introduction to Analytical Separations  
|  | ▪ Gas Chromatography  
|  | ▪ Liquid Chromatography  
|  | ▪ Chromatographic Methods/CE  
|  | ▪ Mass Spectrometry |
| Notes | * To request a comprehensive syllabus, you may contact the instructor for your section directly.  
|  | § Subject to change |