## Quantitative Analysis (CHE 331)

| Potential Instructors* | Dr. Nadja Cech; nbcech@uncg.edu  
<table>
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<tr>
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<th>Dr. Norman Chiu; <a href="mailto:nhchiu@uncg.edu">nhchiu@uncg.edu</a></th>
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<td>Prerequisites</td>
<td>CHE 114 and CHE 115 lab</td>
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<td>Corequisites</td>
<td>CHE 333</td>
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| Sample Course Materials| Textbook: *Quantitative Chemical Analysis* by Daniel C. Harris  
|                       | Homework Assignments: Sapling Learning |
| For Whom Planned       | CHEM and BCHE majors              |
| Topical Outline§       | - The Analytical Process  
|                       | - Chemical Measurements  
|                       | - Experimental Error  
|                       | - Statistics for Chemical Analysis  
|                       | - Quality Assurance and Calibration Methods  
|                       | - Chemical Equilibrium (the thermodynamic equilibration constant for acid/base, precipitation, and complexation reactions)  
|                       | - Monoprotic Acid-Base Equilibria  
|                       | - Polyprotic Acid-Base Equilibria  
|                       | - Acid-Base Titrations  
|                       | - Fundamentals of Electrochemistry  
|                       | - Electrodes and Potentiometry  
|                       | - Fundamentals of Spectrophotometry  
|                       | - Atomic Spectroscopy  
|                       | - Mass Spectrometry  
|                       | - Introduction to Analytical Separations  
|                       | - Gas Chromatography  
|                       | - High Performance Liquid Chromatography |

**Notes**

* To request a comprehensive syllabus, you may contact the instructor for your section directly.  
§ Subject to change