Course Description
There is no prerequisite. The course will be an introduction to symmetry, group theory, and their applications to a variety of spectroscopic techniques. For the latter, the major emphasis will be on learning how to extract information from spectra of inorganic compounds, rather than on the theory of the techniques themselves, although the latter will be covered briefly. The rough course coverage is as follows:

1) Symmetry and the Point Groups  
2) Group Theory and Character Tables  
3) Introduction to Spectroscopy  
4) Vibrational Spectroscopy (IR and Raman)  
5) NMR Spectroscopy  
6) EPR Spectroscopy  
7) Electronic (UV/vis) spectroscopy  
8) Mössbauer Spectroscopy

Grades
Grades will (probably) be based on two exams (early October and November), and a final exam (40%).

Final Exam: 5.30-7.30 pm, Tuesday, 13th December, 2016.

Required Text
There is no required text. Handouts will be provided, supplemented by recommended reference texts listed below, and references to literature reviews and other sources.

"Physical Methods for Chemists" by R. S. Drago, 1st or 2nd editions.  
"Molecular Symmetry and Group Theory" by A. Vincent, any edition.  
"Structural Methods in Inorganic Chemistry" by E.A.V. Ebsworth, et al.  
"Introduction to Spectroscopy" by D.L. Pavia et al., any edition

Other Information
1. Honor code statement: see http://www.chem.ufl.edu/~itl/honor.html  
2. Students with disabilities: see http://www.chem.ufl.edu/~itl/disabilities.html  
3. Counseling and Health Care: see http://www.chem.ufl.edu/~itl/counseling.html