CHEMISTRY 199 - SPECIAL PROBLEMS CHEMISTRY 299W - SPECIAL PROBLEMS AND REPORT WRITING PROJECT INFORMATION SHEET

Chemistry 199 and 299W are variable credit courses offered on a Credit/No Credit basis designed to introduce freshman and sophomore students, with at least a 3.0 chemistry gpa, to chemistry research. A maximum of 6 credits each of 199 and 299W can apply to degree credit requirements. After a student has approval to register from a Faculty Supervisor, faculty add codes may be obtained in the Chemistry Advising Office, Bagley 303 or by emailing advisers@chem.washington.edu.

| Professor | Field | Required Background | Type of Work Involved |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B. Cossairt 404K CHB 543-4643 cossairt@chem. washington.edu | Inorganic and materials chemistry/nano- technology/synthesis | General chemistry and a strong interest in inorganic chemistry; minimum commitment of 3 quarters at 12 hours/week | Synthesis, reactivity studies and characterization (spectroscopy, electron microscopy, X-ray diffraction, electrochemistry) of inorganic molecules and materials |
| D. Ginger 213 BAG 685-2331 ginger@chem. washington.edu | Physical and materials chemistry/ nanotechnology | Desire to learn by working hard; minimum time commitment is 20 hours per week for at least 4 continuous quarters | COVID-19 update: We are currently offering only remote projects for undergrads. An interest in computer programming, especially Python, or a willingness to learn, would be an asset. Projects could range from solar cell modelling, to machine learning and big data analytics for image processing and analysis. |
| A. McCoy 482A BAG 543-7464 abmccoy@uw.edu | Physical/Computational/ Theoretical | A solid background in general chemistry and a desire to work hard and learn. | Students will study chemical reactions using a variety of computational approaches. Many of the systems we study are important in atmospheric and astrochemistry. |
| P. Rathod 192 BAG 221-6069 rathod@chem. washington.edu | Biorganic, genomics, microbiology | A very strong academic record: dedication to develop research skills; initiative and creativity. Early Honors students with long-term research interests will get high preference | Malaria biochemistry, pharmacology, and genomics in the Seattle lab, and molecular support for malaria field-based studies in India. |
| A. Theberge 225 BAG 685-2330 abt1@uw.edu | Analytical/Biological Chemistry Biomedical Science & Engineering | Strong motivation, desire to do collaborative research; minimum time commitment of 15 hours/week for 6 quarters | Our group develops microfluidic technology to study a wide variety of disease pathologies, as well as human-microbe interactions. We apply basic chemistry and biology concepts to our fluidic technologies in an effort to simplify and model complex biological systems. Research includes engineering/fabrication, computer aided design, fluid mechanics, surface chemistry, cell culture, and metabolomics. |
| F. Turecek 218 BAG 685-2041 turecek@chem. washington.edu | Analytical/organic | Strong motivation; willing to work in lab 12 hours per week for three quarters; through organic chem and CHEM 321; physical chemistry helpful | Development of mass spectrometric techniques; organic and bioorganic structural analysis; chemistry of transient radicals; atmospheric radicals |