

Course Name	Faculty Qualifications Needed	Related Disciplines	Acceptable Alternative Qualifications
CHEM 5000 Advanced Inorganic Chemistry I	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Inorganic Chemistry, Materials Chemistry, Organometallic Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Inorganic Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5010 Advanced Inorganic Chemistry II	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Inorganic Chemistry, Materials Chemistry, Organometallic Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Inorganic Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5110 Research	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Analytical Chemistry, Organic Chemistry, Inorganic Chemistry, Physical Chemistry, Biochemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Analytical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5120 Thesis Writing	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Analytical Chemistry, Organic Chemistry, Inorganic Chemistry, Physical Chemistry, Biochemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Analytical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5210 Advanced Organic Chemistry I	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Organic Chemistry, Organometallic Chemistry, Medicinal Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Organic Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.

CHEM 5220 Advanced Organic Chemistry II	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Organic Chemistry, Organometallic Chemistry, Medicinal Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Organic Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5310 Advanced Physical Chemistry I	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Physical Chemistry, Industrial Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Physical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5320 Advanced Physical Chemistry II	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Physical Chemistry, Industrial Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Physical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5360 Chemical Kinetics	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Physical Chemistry, Chemical Engineering, Industrial Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Physical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5410 Advanced Biochemistry I	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Biochemistry, Pharmacology, Biomedical Sciences	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Biochemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.

CHEM 5420 Advanced Biochemistry II	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Biochemistry, Pharmacology, Biomedical Sciences	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Biochemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5510 Advanced Analytical Chemistry	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Analytical Chemistry, Physical Chemistry, Chemical Engineering	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Analytical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 5600 Spectroscopic Methods in Chemistry	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Analytical Chemistry, Physical Chemistry, Material Science and Engineering	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Analytical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6005 Seminar I	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Industrial Chemistry, Physical Chemistry, Organic Chemistry, Inorganic Chemistry, Biochemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Industrial Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6006 Seminar II	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Industrial Chemistry, Physical Chemistry, Organic Chemistry, Inorganic Chemistry, Biochemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Industrial Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.

CHEM 6405 Special Topics in Analytical Chemistry	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Analytical Chemistry, Physical Chemistry, Chemical Engineering	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Analytical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6407 Special Topics in Inorganic Chemistry	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Inorganic Chemistry, Materials Chemistry, Organometallic Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Inorganic Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6408 Special Topics in Organic Chemistry	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Organic Chemistry, Organometallic Chemistry, Medicinal Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Organic Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6409 Special Topics in Physical Chemistry	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Physical Chemistry, Industrial Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Physical Chemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6200 Biochemistry of Cellular Signal Transduction	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Biochemistry, Molecular Biology, Cell Biology, Pharmacology, Biomedical Sciences	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Biochemistry, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.

CHEM 6500 Cancer Biochemistry and Biology	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Biochemistry, Cancer Biology, Pharmacology	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Cell Biology, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6800 Advanced Pharmacology	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Pharmacology, Biomedical Sciences, Medicinal Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or Pharmacology, relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.
CHEM 6406 Special Topics in Biochemistry	Earned Doctorate degree in Chemistry in the teaching discipline or a closely related discipline.	Biochemistry, Biomedical Sciences, Organic Chemistry	Acceptable alternative qualifications include substantial professional experience (e.g., publications, awards) in Chemistry or ..., relevant professional licensure/certifications, and notable scholarly work such as published articles or conference presentations in Chemistry related fields.