

Semester Map for *Chemistry (BSc. Degree)*

Program Contact Person: TBA

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
CHEM 1500-Chem. Bonding & Organic Chem. Lower Level Required Course (4,0,3) 2	CHEM 1510-Fundamentals of Chem. Lower Level Required Course (4,0,3) 1 2	CHEM 2100-Intro Analytical Chemistry Lower Level Required Course (3,0,3) 1 2	CHEM 2250-Fund. Physical Chemistry Lower Level Required Course (3,0,3) 1 2	CHEM 3060-Physical Chemistry 1 Upper Level Required Course (3,0,0) 1 5	CHEM 3070- Physical Chemistry 2 Upper Level Required Course (3,0,0) 1 5 8	CHEM 3100-Instru. Analysis Upper Level Required Course (3,0,0) 1 5	CHEM 3140-Applied Analytical Chemistry Upper Level Required Course (3,0,0) 1 5 8
BIOL 1110-Principles of Biology Outside Discipline (3,0,3) 1 2	CHEM 2120-Organic Chemistry Lower Level Required Course (3,0,3) 1 2	CHEM 2160-Structure, Bonding, and Spectroscopy Lower Level Required Course (3,0,0) 1	CHEM 2220-Organic Chemistry Lower Level Required Course (3,0,3) 1 2	CHEM 3220-Advan Organic Chemistry Upper Level Required Course (3,0,0) 1 5	CHEM 3230-Organic Spectroscopy Upper Level Required Course (3,0,0) 1 5 8	CHEM 3310-Inorganic Chemistry 1 Upper Level Required Course (3,0,0) 1 2	CHEM 3320-Inorganic Chemistry 2 Upper Level Required Course (0,0) 1 5 8
English 1100-Introduction to University Writing Outside Discipline (4,0,0) 5	CMNS 2290-Professional and Technical Writing Outside Discipline (3,0,0) 5	Computing (eg COMP 1000-Intro. to Information Technology) Outside Discipline (3,0,1) 1	MATH 2110- Calculus 3 Outside Discipline (3,1,0) 1	CHEM 3730-Intro to Biochemistry Upper Level Required Course (3,0,0) 1 2	CHEM 3080-Physical Chemistry Lab Upper Level Lab (0,0,4) 1 2 4	CHEM 3120-Instrumental Analysis Lab Upper Level Lab (0,0,4) 1 2	CHEM 3240-Organic Chemistry Lab Upper Level Lab (0,0, 4) 1 2 4
MATH 1130-Enriched Calculus 1 Outside Discipline (3,1,0) 1	Math 1230-Enriched Calculus 2 Outside Discipline (3,1,0) 1	PHYS 1200-Fundamentals of Physics 2 Outside Discipline (3,0,3) 2	MATH 2120-Linear Algebra Outside Discipline (3,1,0) 1	CHEM 3330-Inorganic Chemistry Lab Upper Level Lab (0,0,4) 1 2 4	CHEM 4400-Advanced Analytical Chemistry Lab Upper Level Lab (0,1,3) 1 2	CHEM 4070-Topics: Phys/Envir. Chem [Alt. CHEM 4900, 4220, 4320, 4600] Upper Level Required Course (3,0,0) 1 5 8	CHEM 4410-Advanced Inorganic Chem Lab [Alt. CHEM 4420, 4430, 4440] Upper Level Lab (0,1,3) 1 2 4
PHYS 1100-Fundamentals of Physics 1 Outside Discipline (3,0,3) 1	Course Title-TBD Lower Level elective course must be outside Science and English (3,0,0) 1 3 5	Course Title-TBD Lower Level elective course must be outside Science and English (3,0,0) 1 3 5	Course Title-TBD Lower Level elective course must be outside Science and English (3,0,0) 1 3 5	CHEM 3010-Aqueous Envir Chem [Alt. CHEM 3020, 3030, 4480] Upper Level Required (3,0,0) 1 5 8			

Emphasis on TRU University-wide Learning Outcomes

1 Enhancing Depth and Breadth of Knowledge	2 Enhancing Knowledge Acquisition & Application	3 Enhancing Creative Thinking & Expression	4 Enhancing Critical Thinking, Analysis, Problem- solving & Research	5 Enhancing Communication	6 Enhancing Teamwork & Leadership	7 Enhancing Social Responsibility & Ethical Behaviour	8 Enhancing Sustainability & Entrepreneurship	9 Enhancing Intercultural Understanding	10 Enhancing Lifelong Learning
---	--	---	---	----------------------------------	--	--	--	--	---------------------------------------

Lower Level from Within Discipline =	[Elective =	Course from Outside Discipline =	[Elective =
Upper Level from Within Discipline =	[Elective =	Course Based on Directed Study =	
Laboratory Course =	[Elective =	Course Based on Experiential Learning =	