

Student Name: _____ ID # _____

Advisor Name: _____ Anticipated Graduation Date: _____

CHEMISTRY MAJOR: LIFE SCIENCES EMPHASIS CHECKLIST (122 s.h.) 2025-26 Academic Calendar

1. Inquiry: Ways of Knowing – Core Requirements (40 s.h.*)

**University Core Requirements are modified for students who transfer in with 57 s.h. or more of initial transfer credit. See [Academic Calendar](#) for details.*

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
FOUNDATIONAL INQUIRIES (25 sem. hrs.)				Academic Writing Requirement ¹			
Academic Research & Writing				WAYS OF KNOWING (15 sem. hrs.)			
	ENGL _____	3	Choose two of ENGL 101, 102, 103, 104.	In addition to the courses on the left, students must take an additional 15 sem. hrs. from each of the following categories, <i>9 s.h. of which must be from outside of the student's major.</i>			
	ENGL _____	3					
Foundations				Aesthetic & Performance Inquiry			
	FNDN 101	1	Compulsory during the first semester of the first year for all new students unless they have a minimum 24 sem. hrs. initial transfer credit.			3	Choose 3 sem. hrs. from the Aesthetic & Performance Inquiry category on page two.
	FNDN 102	3	Normally taken before year three.	Cultural & Linguistic Inquiry			
	FNDN 201	3				3	Choose 3 sem. hrs. from the Cultural & Linguistic Inquiry category on page two.
Logical & Ethical Reasoning				Experiential & Embodied Inquiry			
	PHIL _____	3	Choose one of PHIL 100, 103, 105, 106, 109, or 210.			3	Choose 3 sem. hrs. from the Experiential & Embodied Inquiry category on page two.
Religious & Spiritual Thought				Historical & Archival Inquiry			
	RELS _____	3	Choose RELS 110 or 160. Recommended in 1st semester of the 1st year.			3	Choose 3 sem. hrs. from the Historical & Archival Inquiry category on page two.
	RELS 111	3		Quantitative & Computational Inquiry			
	RELS 112	3			**	**	Satisfied by CHEM 112.
Scientific Method & Lab Research				Social & Global Inquiry			
	**	**	Satisfied by CHEM 111.			3	Choose 3 sem. hrs. from the Social & Global Inquiry category on page two.

¹**Academic Writing Requirement:** students must take WRTG 100 (native English speakers) or WRTG 101 (non-native English speakers) in their first semester at TWU, unless exempt at the time of admission to the University. WRTG course credit may be included toward a degree program as elective credit.

NOTES:

- A total of 122 s.h. of credit, including a minimum of 42 s.h. of upper-level credit (24 s.h. in the major) is required to complete this degree. Students must have a minimum overall (cumulative) GPA of 2.0 to graduate.
- You must complete an [Application for Graduation](#) via the Student Portal and [submit a copy of your filled in program checklist\(s\)](#) (i.e. this document) to the Office of the Registrar by April 30 of the year prior to your completion. For more information on the graduation process, please visit twu.ca/graduation.

This program is offered under TWU's exempt status with the Degree Quality Assessment Board.

THIS CHECKLIST IS INTENDED TO ASSIST STUDENTS AND ADVISORS IN ENSURING THAT ALL REQUIREMENTS ARE MET. IT IS THE RESPONSIBILITY OF THE **STUDENT** TO MEET ALL REQUIREMENTS.

Ways of Knowing: Categories

Aesthetic & Performance Inquiry	ART 181, 182, 230, 250, 280; ENGL 207, 208, 310; HKIN 342; MCOM 211, 221, 231, 369; MUSI 110; PHIL 370; SAMC 111, 370; THTR 130, 161; any Music Ensembles; any Music (MUSA) Private Lessons.
Cultural & Linguistic Inquiry	ANTH 210, 395; EDUC 496; ENGL 334, 340, 482; GREE 235; HEBR 245; HIST 237; IDIS 201; POLS 237; RELS 235, 245; SOCI 395; any World Languages & Cultures course (CHIN, FREN, JAPA, RUSS, SPAN).
Experiential & Embodied Inquiry	ART 305, 306, 307; BIOL 316, 318, 362, 364, 409, 410; BIOT 200, 300, 400, 409, 410; BUSI 395, 396, 49x; CHEM 409, 410; CMPT 409, 410; EDUC 302, 303, 402, 403; GENV 131, 316, 318, 372, 373, 374, 375, 409, 410; HIST 310, 315, 316; HKIN 201, 202, 216, 235, 266, 336, 355, 455, 456, 457, 458, 459, 460; LING 398, 399; MATH 409, 410; MCOM 281, 391, 392, 393; NURS 213; POLS 395, 396; PSYC 322, 497, 498; SOCI 320, 411, 420; THTR 101, 102, 151, 152, 153, 154, 175, 210, 301, 302, 351, 352, 353, 354; any 1 sem. hr. HKIN Activity course; any Travel Study; any CCCU Global Ed course; any Au Sable course.
Historical & Archival Inquiry	ART 237, 238; ECON 306; GENV 312; HIST 107, 108, 135, 306, 339, 391; MUSI 131, 132; NURS 230; PHIL 203, 314, 421; POLS 391; PSYC 408; RELS 320, 351, 352, 475; SAMC 112; SOCI 391; THTR 331, 332.
Social & Global Inquiry	ANTH 101, 302; BUSI 311; ECON 311, 354; EDUC 345, 365; ENGL 348; GENV 111, 212, 322, 354; HKIN 325; LING 101, 210, 302; MCOM 111, 171, 251, 313, 315, 317, 372, 491; NURS 227; PHIL 208, 220, 310, 320; POLS 101, 211, 310, 312, 320, 493; PSYC 399; RELS 271, 272, 285, 381, 384, 386, 476; SOCI 101; THTR 348.

2. Required Chemistry Courses (44 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
	CHEM 111*	4	Includes a one s.h. lab (CHEM 198) as a co-requisite.		CHEM 384	3	Lab also required.
	CHEM 112*	4	Includes a one s.h. lab (CHEM 199) as a co-requisite.		CHEM 386	3	
	CHEM 221	3	Lab also required.		CHEM _____	3	Choose from CHEM 321, 322, 341, 342, 370, 372, 409/410, 431, 461, 469. (409/410 would satisfy the Experiential & Embodied Inquiry requirements)
	CHEM 222	3	Lab also required.		CHEM _____	3	
	CHEM 230	3			CHEM _____	3	
	CHEM 240	3	Lab also required.		CHEM _____	3	
	CHEM 357	3			CHEM _____	3	

Goal is ten Lab (L) courses. Seven required Chemistry courses have labs; choose an additional three from: 322, 341, 370, 431, 409/410.

*CHEM 111/112 may be substituted with either CHEM 103/112 or CHEM 103/104.

3. Ancillary Courses (26 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
	BIOL 113	4	Includes a one s.h. lab (BIOL 198) as a co-requisite.		MATH 124	3	
	BIOL 114	4	Includes a one s.h. lab (BIOL 199) as a co-requisite.		NATS 482	3	
	BIOL 223	3			PHYS 111	3	
	MATH 123	3			PHYS 112	3	

4. Elective Courses (12 s.h.)

Students are encouraged, but not required, to take elective classes that contribute to a concentration or a minor. If you choose to take a concentration or a minor, please attach the appropriate concentration/minor checklist available at twu.ca/advising.

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES

YEAR 1			YEAR 2			YEAR 3			YEAR 4		
✓	s.h.	Fall	✓	s.h.	Fall	✓	s.h.	Fall	✓	s.h.	Fall
	1	FNDN 101		3	Core ¹		3	PHIL ²		3	Core ¹
	3	RELS 110 or 160		3	CHEM 221 ³		3	Core ¹		3	Core ¹
	3	ENGL 103		3	PHYS 111 ³		3	CHEM 384 ³		3	CHEM 240 ³
	4	CHEM 103 or 111 ³		3	MATH 123		3	CHEM 432		3	CHEM 357 ³
	4	BIOL 113 ³		3	Elective ⁴		3	BIOL 223 ³		3	NATS 482
Semester Total: 15			Semester Total: 15			Semester Total: 15			Semester Total: 15		
YEAR 1			YEAR 2			YEAR 3			YEAR 4		
✓	s.h.	Spring	✓	s.h.	Spring	✓	s.h.	Spring	✓	s.h.	Spring
	3	FNDN 102		3	FNDN 201		3	RELS 112		3	Core ¹
	3	RELS 111		3	CHEM 222 ³		3	CHEM 321		3	CHEM 342
	3	ENGL 104		3	CHEM 230		3	CHEM 386		3	CHEM 461
	4	CHEM 104 or 112 ³		3	PHYS 112 ³		3	CHEM 431 ³		3	Elective ⁴
	4	BIOL 114 ³		3	MATH 124		3	Elective ⁴		3	Elective ⁴
Semester Total: 17			Semester Total: 15			Semester Total: 15			Semester Total: 15		

COURSE LEGEND

Core Courses

1. Core electives should be chosen as follows:

- ONE Aesthetic and Performance Inquiry
- ONE Cultural & Linguistic Inquiry
- ONE Experiential & Embodied Inquiry
- ONE Historical & Archival Inquiry
- ONE Social & Global Inquiry

2. Choose from: PHIL 100, 103, 105, 106, 109, or 210.

Major Courses

3. Includes co-requisite lab

Major + Core Courses

3. Includes co-requisite lab

Ancillary Courses

3. Includes co-requisite lab

Ancillary + Core Courses

Electives

4. Choose a 300- or 400-level elective.

Summer Sessions are encouraged to reduce semester load and/or repeat courses.

This is an example of what a 4-year degree plan might look like. It is not the official program checklist. In the case of any discrepancy between this program plan and the checklist, the checklist shall prevail. It is the student's responsibility to ensure they complete all program requirements as laid out in the approved checklist.

YEAR 1			YEAR 2			YEAR 3			YEAR 4			YEAR 5		
✓	s.h.	Fall	✓	s.h.	Fall	✓	s.h.	Fall	✓	s.h.	Fall	✓	s.h.	Fall
	1	FNDN 101		3	Core ¹		3	PHIL ²		3	Core ¹		3	CHEM 322 ³
	3	RELS 110 or 160		3	CHEM 221 ¹		3	CHEM 384 ³		3	Core ¹		3	CHEM 432
	3	ENGL 103		3	BIOL 223 ³		3	PHYS 111 ³		3	CHEM 240 ³		3	Elective ⁴
	4	CHEM 111 ³		3	MATH 105		3	MATH 123		3	CHEM 357 ³			
	4	BIOL 113 ³								3	NATS 482			
Semester Total: 15			Semester Total: 12			Semester Total: 12			Semester Total: 15			Semester Total: 9		
YEAR 1			YEAR 2			YEAR 3			YEAR 4			YEAR 5		
✓	s.h.	Spring	✓	s.h.	Spring	✓	s.h.	Spring	✓	s.h.	Spring	✓	s.h.	Fall
	3	FNDN 102		3	FNDN 201		3	RELS 112		3	Core ¹		3	Core ¹
	3	RELS 111		3	CHEM 222 ³		3	CHEM 386		3	CHEM 342		3	CHEM 321
	3	ENGL 104		3	CHEM 230		3	PHYS 112 ³		3	CHEM 461		3	Elective ⁴
	4	CHEM 112 ³		3	Elective		3	MATH 124		3	Elective ⁴		3	Elective ⁴
	4	BIOL 114 ³												
Semester Total: 17			Semester Total: 12			Semester Total: 12			Semester Total: 12			Semester Total: 12		

COURSE LEGEND

Core Courses

- Core electives should be chosen as follows:
ONE Aesthetic and Performance Inquiry
ONE Cultural & Linguistic Inquiry
ONE Historical & Archival Inquiry
ONE Social & Global Inquiry

- Choose from: PHIL 100, 103, 105, 106, 109, or 210.

Major Courses

- Includes co-requisite lab

Major + Core Courses

- Includes co-requisite lab

Ancillary Courses

- Includes co-requisite lab

Ancillary + Core Courses

Electives

- Choose a 300- or 400-level elective.

Summer Sessions are encouraged to reduce semester load and/or repeat courses.

This is an example of what a 5-year degree plan might look like. It is not the official program checklist. In the case of any discrepancy between this program plan and the checklist, the checklist shall prevail. It is the student's responsibility to ensure they complete all program requirements as laid out in the approved checklist.