

Student Name: _____

ID#: _____

Advisor Name: _____

Anticipated Graduation Date: _____

CHEMISTRY MAJOR - GRADUATE SCHOOL PREP PROGRAM CHECKLIST (122 s.h.) 2023-24 Academic Calendar

THIS CHECKLIST IS INTENDED TO ASSIST STUDENTS AND ADVISORS IN ENSURING THAT ALL REQUIREMENTS ARE MET. IT IS THE RESPONSIBILITY OF THE STUDENT TO ENSURE THAT ALL REQUIREMENTS FOR THE GRANTING OF A DEGREE HAVE BEEN MET.

1. Inquiry: Ways of Knowing - Core Requirements (37 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 (twu.ca/calendar).

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
	FOUNDATIONAL INQUIRIES (25 sem. hrs.)			<input type="checkbox"/>	Academic Writing Requirement ²		
	<i>Academic Research & Writing</i>				WAYS OF KNOWING (12 sem. hrs.)		
<input type="checkbox"/>	ENGL _____	3	Choose 2 courses (6 sem. hrs.) from ENGL 101, 102, 103, 104.	In addition to the courses on the left, students must take an additional 18 sem. hrs., selecting 3 sem. hrs. from each of the following six categories. *At least 9 sem. hrs. must be from outside of the student's major.			
<input type="checkbox"/>	ENGL _____	3					
	<i>Foundations</i>				<i>Aesthetic & Performance Inquiry</i>		
<input type="checkbox"/>	FNDN 101	1	Compulsory during the first semester of the first year. ¹	<input type="checkbox"/>	_____	3	Choose 3 sem. hrs. from the Aesthetic & Performance Inquiry category below.
<input type="checkbox"/>	FNDN 102	3	Normally taken before year 3.		<i>Cultural & Linguistic Inquiry</i>		
<input type="checkbox"/>	FNDN 201	3		<input type="checkbox"/>	_____	3	Choose 3 sem. hrs. from the Cultural & Linguistic Inquiry category below.
	<i>Logical & Ethical Reasoning</i>				<i>Experiential & Embodied Inquiry</i>		
<input type="checkbox"/>	PHIL _____	3	Choose one of PHIL 100, 103, 105, 106, 109, or 210.	**	**	**	Satisfied by Program Requirements.
	<i>Religious & Spiritual Thought</i>				<i>Historical & Archival Inquiry</i>		
<input type="checkbox"/>	RELS 110	3	Compulsory during the first semester of the first year.	<input type="checkbox"/>	_____	3	Choose 3 sem. hrs. from the Historical & Archival Inquiry category below.
<input type="checkbox"/>	RELS 111	3			<i>Quantitative & Computational Inquiry</i>		
<input type="checkbox"/>	RELS 112	3		**	**	**	Satisfied by Program Requirements.
	<i>Scientific Method & Lab Research</i>				<i>Social & Global Inquiry</i>		
**	**	**	Satisfied by Program Requirements.	<input type="checkbox"/>	_____	3	Choose 3 sem. hrs. from the Social & Global Inquiry category below.

¹FNDN 101 is compulsory during the first semester of the first year for all new students unless they have a minimum 24 sem. hrs. initial transfer credit.

²Academic 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.

Aesthetic & Performance Inquiry

Choose 3 semester hours from: ART 181, 182, 250; 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 Lessons.

Cultural & Linguistic Inquiry

Choose 3 semester hours from: 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).

Historical & Archival Inquiry

Choose 3 semester hours from: 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

Choose 3 semester hours from: ANTH 101, 302; BUSI 311; ECON 311, 354; EDUC 345, 365; ENGL 348; GENV 111, 212, 322, 354; 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 (47 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	CHEM 111*	3	Or CHEM 103/112 or 103/104.	<input type="checkbox"/>	CHEM 357	3	Lab also required.
<input type="checkbox"/>	CHEM 112*	3		<input type="checkbox"/>	CHEM 358	3	Lab also required.
<input type="checkbox"/>	CHEM 221	3	Lab also required.	<input type="checkbox"/>	CHEM 384	3	Lab also required.
<input type="checkbox"/>	CHEM 222	3	Lab also required.	<input type="checkbox"/>	CHEM 409/410	3	
<input type="checkbox"/>	CHEM 230	3		<input type="checkbox"/>	CHEM 431	3	Lab also required.
<input type="checkbox"/>	CHEM 240	3	Lab also required.	<input type="checkbox"/>	CHEM _____	3	Choose from CHEM 322, 342, 370, 432, 461, 469.
<input type="checkbox"/>	CHEM 321	3		<input type="checkbox"/>	CHEM _____	3	
<input type="checkbox"/>	CHEM 341	3	Lab also required.				

*Includes a 1 semester hour lab as a co-requisite. CHEM 198 is the co-requisite for 103 & 111, CHEM 199 the co-requisite for 104 & 112.

3. Ancillary Requirements (24 or 25 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	MATH 123	3		<input type="checkbox"/>	NATS 482	3	
<input type="checkbox"/>	MATH 124	3		<input type="checkbox"/>	PHYS 111	3	
<input type="checkbox"/>	MATH 223	3		<input type="checkbox"/>	PHYS 112	3	
<input type="checkbox"/>	_____	3	Choose from MATH 250, PHYS 220, or a 300- or 400-level MATH course.	<input type="checkbox"/>	PHYS 220 or 230	3	PHYS 220 may only be taken if MATH 250 or a 300/400 level MATH course is also taken.

4. Elective Courses (13-14 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.

✓	SUBJECT	COURSE#	S.H.	NOTES	✓	SUBJECT	COURSE#	S.H.	NOTES
<input type="checkbox"/>					<input type="checkbox"/>				
<input type="checkbox"/>					<input type="checkbox"/>				
<input type="checkbox"/>					<input type="checkbox"/>				
<input type="checkbox"/>					<input type="checkbox"/>				

NOTE: CMPT 140 suggested.

- **NOTE:** A total of 122 s.h. of credit, including a minimum of 42 s.h. (24 s.h. in the major) of upper-level credit is required for graduation. A minimum overall (cumulative) GPA of 2.00 is required for graduation.
- **NOTE:** In order to be eligible for graduation you must complete an Application for Graduation via the Student Portal and submit a completed checklist to the Office of the Registrar by April 30 of the year prior to your completion (there is no fee to apply for graduation). Once your complete application has been received, a degree audit will be completed for you. This audit will confirm which courses are still outstanding in order for you to complete your degree.

		YEAR 1
✓	s.h.	Fall
	1	FNDN 101
	3	RELS 110
	3	ENGL 103
	4	CHEM 111 ¹
	3	MATH 123
Semester Total: 14		

		YEAR 2
✓	s.h.	Fall
	3	Core ²
	3	PHIL ³
	3	CHEM 221 ¹
	3	PHYS 111 ¹
	3	MATH 223
Semester Total: 15		

		YEAR 3
✓	s.h.	Fall
	3	Core ²
	3	CHEM 322 ¹
	3	CHEM 341
	3	CHEM 432
	3	MATH 250
Semester Total: 15		

		YEAR 4
✓	s.h.	Fall
	3	Core ²
	3	CHEM 240 ¹
	3	CHEM 357 ¹
	3	CHEM 384 ¹
	1	CHEM 409
	3	NATS 482
Semester Total: 16		

		YEAR 1
✓	s.h.	Spring
	3	FNDN 102
	3	RELS 111
	3	ENGL 104
	4	CHEM 112 ¹
	3	MATH 124
Semester Total: 16		

		YEAR 2
✓	s.h.	Spring
	3	FNDN 201
	3	CHEM 222 ¹
	3	CHEM 230
	3	CHEM 461
	3	PHYS 112 ¹
Semester Total: 15		

		YEAR 3
✓	s.h.	Spring
	3	Core ²
	3	CHEM 321
	3	CHEM 370 ¹
	3	CHEM 431 ¹
	3	PHYS 220 or 230
Semester Total: 15		

		YEAR 4
✓	s.h.	Spring
	3	RELS 112
	2	CHEM 410
	3	CHEM 342
	3	CHEM 358 ¹
	3	CHEM 386
	3	Elective
Semester Total: 17		

COURSE LEGEND

Core Courses

2. Core electives should be chosen as follows:

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

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

Major Courses

1. Includes co-requisite lab

Major + Core Courses

Ancillary Courses

Ancillary + Core Courses

Electives

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		Fall		Fall		Fall		Fall	
	1	FNDN 101		3	PHIL ³	3	RELS 111 or 112	3	Core ²	3	Core ²
	3	RELS 110		3	CHEM 221 ¹	3	CHEM 322 ¹	3	CHEM 240 ¹	3	CHEM 384 ¹
	3	ENGL 103		3	PHYS 111 ¹	3	CHEM 341	3	CHEM 357 ¹	1	CHEM 409
	4	CHEM 111 ¹		3	MATH 223	3	CHEM 432	3	NATS 482	3	MATH 250
	3	MATH 123								3	Elective
		Semester Total: 14		Semester Total: 12		Semester Total: 12		Semester Total: 12		Semester Total: 13	
		YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
✓	s.h.	Spring		Spring		Spring		Spring		Fall	
	3	FNDN 102		3	FNDN 201	3	Core ²	3	RELS 111 or 112	3	Core ²
	3	ENGL 104		3	CHEM 222 ¹	3	CHEM 321	3	CHEM 342	3	CHEM 370 ¹
	4	CHEM 112 ¹		3	CHEM 230	3	CHEM 431 ¹	3	CHEM 358 ¹	3	CHEM 386 ¹
	3	MATH 124		3	CHEM 461	3	PHYS 220 or 230	3	Elective	3	CHEM 411
				3	PHYS 112 ¹						
		Semester Total: 13		Semester Total: 15		Semester Total: 12		Semester Total: 12		Semester Total: 12	

COURSE LEGEND

Core Courses

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

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

Major Courses

1. Includes co-requisite lab

Major + Core Courses

Ancillary Courses

Ancillary + Core Courses

Electives

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.