

Student Name: _____

ID#: _____

Advisor Name: _____

Anticipated Graduation Date: _____

BIOTECHNOLOGY HONOURS CHECKLIST (134 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		
	Academic Research & Writing				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					
	Foundations				Aesthetic & Performance Inquiry		
<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.		Cultural & Linguistic Inquiry		
<input type="checkbox"/>	FNDN 201	3		<input type="checkbox"/>	_____	3	Choose 3 sem. hrs. from the Cultural & Linguistic Inquiry category below.
	Logical & Ethical Reasoning				Experiential & Embodied Inquiry		
<input type="checkbox"/>	PHIL _____	3	Choose one of PHIL 100, 103, 105, 106, 109, or 210.	**	**	**	Satisfied by Program Requirements.
	Religious & Spiritual Thought				Historical & Archival Inquiry		
<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			Quantitative & Computational Inquiry		
<input type="checkbox"/>	RELS 112	3		**	**	**	Satisfied by Program Requirements.
	Scientific Method & Lab Research				Social & Global Inquiry		
**	**	**	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.

²**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.

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 Biology and Biotechnology Courses (57 - 59 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	BIOL 113 ^{a,b}	4		<input type="checkbox"/>	BIOL 372	3	
<input type="checkbox"/>	BIOL 114 ^{a,b}	4		<input type="checkbox"/>	BIOL 384	3	
<input type="checkbox"/>	BIOL 223	3	Taken in year two.	<input type="checkbox"/>	BIOL 386	3	
<input type="checkbox"/>	BIOL/BIOT 290	3		<input type="checkbox"/>	BIOL/BIOT 390	3	
<input type="checkbox"/>	BIOL 315	3		<input type="checkbox"/>	BIOL/BIOT 409/410	3	
<input type="checkbox"/>	BIOL 333	3		<input type="checkbox"/>	BIOL 423	3	
<input type="checkbox"/>	BIOL 334	3		<input type="checkbox"/>	BIOL 438	3	
<input type="checkbox"/>	BIOL 336	3		<input type="checkbox"/>	BIOL/BIOT 470	3	
<input type="checkbox"/>	BIOL 345	3		<input type="checkbox"/>	BIOL/BIOT 490	3	
<input type="checkbox"/>	BIOL 371	3					

^a Minimum grade of C required to progress to BIOL 223.

^b Includes a 1 semester hour lab as a co-requisite. BIOL 198 is the co-requisite for BIOL 113; BIOL 199 is the co-requisite for BIOL 114.

3. Required Internship (3 s.h.)

✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	BIOL/BIOT 200	3	Taken in Spring semester of year one.

4. Required Co-Ops (must complete two*)

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

*BIOT 300/450 may substitute one of the required co-ops.

5. Ancillary Courses (35 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	CHEM 111*	4		<input type="checkbox"/>	MATH 123	3	
<input type="checkbox"/>	CHEM 112*	4		<input type="checkbox"/>	MATH/STAT 203	3	
<input type="checkbox"/>	CHEM 221	3	Taken in year two.	<input type="checkbox"/>	NATS 481	3	
<input type="checkbox"/>	CHEM 222	3	Taken in year two.	<input type="checkbox"/>	PHYS 111	3	
<input type="checkbox"/>	CHEM 357	3		<input type="checkbox"/>	PHYS 112	3	
<input type="checkbox"/>	CHEM 358	3					

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

6. Elective Courses (0 - 2 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

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

- **NOTE:** All Biotechnology courses are cross listed as Biology courses, including Biotechnology practica.
- **NOTE:** A total of 134 s.h. of credit, including a minimum of 54 s.h. (36 s.h. in the major) of upper-level credit is required for graduation. A minimum GPA of 3.0 in all major courses combined as well as an overall (cumulative) GPA of 3.0 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 30th 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.

This program is offered under the written consent of the Minister of Advanced Education effective March 9, 2006, having undergone a quality assessment process and been found to meet the criteria established by the minister. Nevertheless, prospective students are responsible for satisfying themselves that the program and the degree will be appropriate to their needs (for example, acceptable to potential employers, professional licensing bodies, or other educational institutions).

		YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
✓	s.h.	Fall		Fall		Fall		Fall		Fall	
	1	FNDN 101		3	FNDN 201	3	Core ²	3	Core ²	3	BIOL ³
	3	RELS 110		3	Core ²	3	BIOL 371	3	BIOL ³	3	BIOL ³
	3	ENGL ¹		3	BIOL 223	3	BIOL 384	3	BIOL ³	1	BIOL 409
	4	BIOL 113		3	CHEM 221	3	BIOL ³	3	CHEM 357	3	NATS 481
	4	CHEM 111		3	MATH 123	3	PHYS 111				
		Semester Total: 15		Semester Total: 15		Semester Total: 15		Semester Total: 12		Semester Total: 10	
		YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
✓	s.h.	Spring		Spring		Spring		Spring		Spring	
	3	FNDN 102		3	Core ²	3	Core ²	3	BIOL ³	3	Core ²
	3	RELS 111 or 112		3	BIOL 290	3	BIOL 372	3	BIOL 470	3	BIOL ³
	3	ENGL ¹		3	BIOT 200	3	BIOL 386	3	CHEM 358	2	BIOL 410
	4	BIOL 114		3	CHEM 222	3	BIOL 423	3	Elective		
	4	CHEM 112		3	STAT 203	3	PHYS 112				
		Semester Total: 17		Semester Total: 15		Semester Total: 15		Semester Total: 12		Semester Total: 8	

COURSE LEGEND

Core Courses

1. Choose from: ENGL 101, 102, 103, 104
2. Core electives should be chosen as follows:
 - ONE Scientific Method & Lab Research
 - ONE Aesthetic and Performance Inquiry
 - ONE Historical & Archival Inquiry
 - ONE Quantitative & Computational Inquiry

Major Courses

3. Choose a 300- or 400-level BIOL course

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.