Student Name: _____   ID#: _____

Advisor Name: _____   Anticipated Graduation Date: _____

BIOLOGY HONOURS CHECKLIST (134 s.h.)
BIOCHEMISTRY AND MOLECULAR BIOLOGY EMPHASIS
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.)				☐	Academic Writing Requirement [2]		
Academic Research & Writing				**WAYS OF KNOWING (12 sem. hrs.)**			
☐	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.*			
☐	ENGL _____	3					
Foundations				*Aesthetic & Performance Inquiry*			
☐	FNDN 101	1	Compulsory during the first semester of the first year.[1]	☐	_____	3	Choose 3 sem. hrs. from the Aesthetic & Performance Inquiry category below.
☐	FNDN 102	3	Normally taken before year 3.	*Cultural & Linguistic Inquiry*			
☐	FNDN 201	3		☐	_____	3	Choose 3 sem. hrs. from the Cultural & Linguistic Inquiry category below.
Logical & Ethical Reasoning				*Experiential & Embodied Inquiry*			
☐	PHIL _____	3	Choose one of PHIL 100, 103, 105, 106, 109, or 210.	**	**	**	Satisfied by Program Requirements.
Religious & Spiritual Thought				*Historical & Archival Inquiry*			
☐	RELS 110	3	Compulsory during the first semester of the first year.	☐	_____	3	Choose 3 sem. hrs. from the Historical & Archival Inquiry category below.
☐	RELS 111	3		*Quantitative & Computational Inquiry*			
☐	RELS 112	3		**	**	**	Satisfied by Program Requirements.
Scientific Method & Lab Research				*Social & Global Inquiry*			
**	**	**	Satisfied by Program Requirements.	☐	_____	3	Choose 3 sem. hrs. from the Social & Global Inquiry category below.

[1]FNDN 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 Courses (37-39 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
☐	BIOL 113[a,c]	4	or (BIOL 103, 104 & 105)[a].	☐	BIOL 371	3	
☐	BIOL 114[a,c]	4	or (BIOL 103* & 114)[b].	☐	BIOL 372	3	
☐	BIOL 223	3		☐	BIOL 384	3	
☐	BIOL 281	3		☐	BIOL 386	3	
☐	BIOL _____	3	Choose from BIOL 312, 314, 315, 316, or 318.	☐	BIOL 409	1	
☐	BIOL _____	3	Choose from BIOL 308, 360, or 345.	☐	BIOL 410	2	
☐	BIOL _____	3	Choose from BIOL 333 or 334.				

[a] Minimum grade of C required to progress to BIOL 223.
[b] Minimum grade of B in BIOL 103 required to progress to BIOL 114.
[c] Includes a 1 semester hour lab as a co-requisite. BIOL198 is the co-requisite for BIOL113; BIOL199 is the co-requisite for BIOL114

3. Required Biochemistry & Molecular Biology Courses (12 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
☐	BIOL _____	3	Choose 2 courses from BIOL 333 or 334; 336, 423, 438, 470, 474, 475.	☐	BIOL _____	3	Choose 2 courses from BIOL 333 or 334; 336, 423, 438, 470, 474.
☐	BIOL _____	3		☐	BIOL _____	3	

4. Ancillary Requirements (47 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
☐	CHEM 111*	4	or CHEM 103*	☐	CHEM 357	3	
☐	CHEM 112*	4	or CHEM 104*	☐	CHEM 358	3	
☐	CHEM 221	3		☐	MATH 123	3	
☐	CHEM 222	3		☐	MATH 124	3	
☐	CHEM 230	3		☐	NATS 481	3	
☐	CHEM 240	3		☐	PHYS 111	3	
☐	CHEM 321	3		☐	PHYS 112	3	
☐	CHEM 322	3					

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

5. Elective Courses (0-1 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
☐					☐				
☐					☐				
☐					☐				
☐					☐				
☐					☐				
☐					☐				

➢ **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 overall (cumulative) GPA of 2.70 is required for graduation, and a GPA of 3.0 in Biology.

➢ **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.

B.Sc. Honours *Biochemistry & Molecular Biology* 5 Year Plan — 2023-2028

YEAR 1

✓	s.h.	Fall
	1	FNDN 101
	3	RELS 110
	3	ENGL 103
	4	BIOL 113
	4	CHEM 111

Semester Total: 15

✓	s.h.	Spring
	3	FNDN 102
	3	RELS 111
	3	ENGL 104
	4	BIOL 114
	4	CHEM 112

Semester Total: 17

YEAR 2

✓	s.h.	Fall
	3	FNDN 201
	3	Core[1]
	3	BIOL 223
	3	CHEM 221
	3	MATH 123

Semester Total: 15

✓	s.h.	Spring
	3	CHEM 240
	3	CHEM 222
	3	CHEM 230
	3	MATH 124

Semester Total: 12

YEAR 3

✓	s.h.	Fall
	3	BIOL 371
	3	BIOL 384
	3	BIOL[2]
	3	PHYS 111
	3	CHEM 322

Semester Total: 15

✓	s.h.	Spring
	3	Core[1]
	3	BIOL 372
	3	BIOL 386
	3	BIOL[2]
	3	PHYS 112

Semester Total: 15

YEAR 4

✓	s.h.	Fall
	3	Core[1]
	3	BIOL[2]
	3	BIOL[3]
	3	CHEM 357

Semester Total: 12

✓	s.h.	Spring
	3	Core[1]
	3	Core[1]
	3	BIOL[3]
	3	CHEM 358

Semester Total: 12

YEAR 5

✓	s.h.	Fall
	1	BIOL 409
	3	BIOL[2]
	3	BIOL[3]
	3	NATS 481

Semester Total: 10

✓	s.h.	Spring
	3	Core[1]
	2	BIOL 410
	3	BIOL[3]
	3	CHEM 321

Semester Total: 11

COURSE LEGEND

Core Courses

1. Core electives should be chosen as follows:
   ONE Logical & Ethical Reasoning
   ONE Aesthetic and Performance Inquiry
   ONE Cultural & Linguistic Inquiry
   ONE Historical & Archival Inquiry
   ONE Social & Global Inquiry

Major Courses

2. Choose a 300- or 400-level BIOL course.
3. Biochemistry and Molecular Biology. Choose from: BIOL 333, 336, 423, 438, 470, 474, 475.

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.