

Student Name: _____

ID# _____

Advisor Name: _____

Anticipated Graduation Date: _____

MULTIDISCIPLINARY MAJOR IN BIOTECHNOLOGY & CHEMISTRY CHECKLIST (122 s.h.) 2013-14 Academic Calendar

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

1. University Core Requirements (38 s.h.)^{* †}

* University Core Requirements are modified for students who transfer in with 57 s.h. or more of credit.

† Students may "double-count" a cross-listed core requirements course once. See <http://www.twu.ca/advising/> for more details.

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	English Language Writing Competency Requirement ¹			NATURAL SCIENCE (6)			
ENGLISH (6)						***	Included in program requirements.
<input type="checkbox"/>	ENGL 103	3	ENGL 103 and 104 are compulsory during the first year for all new full-time (12 s.h. or more) students. ²			***	
<input type="checkbox"/>	ENGL 104	3		PHILOSOPHY (3)			
ARTS, MEDIA + CULTURE (3)				<input type="checkbox"/>	PHIL ____	3	
<input type="checkbox"/>	_____	3	May be chosen from Art, Music, Theatre, or Arts, Media + Culture courses. ³	RELIGIOUS STUDIES (12)			
HISTORY (3)				<input type="checkbox"/>	RELS 101	3	Students may challenge the RELS 101 and/or 102 courses by writing an exam provided by the Religious Studies dept. ⁴
<input type="checkbox"/>	HIST ____	3		<input type="checkbox"/>	RELS 102	3	
HUMAN KINETICS (4)				<input type="checkbox"/>	RELS ____	3	Biblical-content course (middle digit 0-5)
<input type="checkbox"/>	HKIN 190	2		<input type="checkbox"/>	_____	3	Christianity and Culture or Inter-Cultural Religious Studies Course ⁵
<input type="checkbox"/>	HKIN ____	1	Activity course	SOCIETY & CULTURE (3)			
<input type="checkbox"/>	HKIN ____	1	Activity course	<input type="checkbox"/>	_____	3	See footnote 6.
INTERDISCIPLINARY STUDIES (3)				UNIVERSITY ORIENTATION (1)			
<input type="checkbox"/>	NATS 487	2		<input type="checkbox"/>	UNIV 101	1	Fall or Spring semester of first year. ⁷
<input type="checkbox"/>	NATS 490	1					

¹ Students must take WRTG 100 (native English speakers) or WRTG 101 (non-native English speakers) in their first semester at TWU, unless exempt when admitted to the University. WRTG course credit may be included toward a degree program as elective credit.

² Students for whom English is a second language may substitute ENGL 101 and 102 (6 s.h.) for ENGL 103 and 104, with ENGL 101 and 102 compulsory in the next two consecutive semesters following the successful completion of WRTG 101.

³ May include three 1-s.h. large theatre and music ensembles, but not small ensembles or music lessons.

⁴ A passing grade allows the student to replace RELS 101 and/or 102 with an alternative biblical-content course(s).

⁵ RELS course with a middle digit 6-9 or PHIL 210 or PHIL 310. If PHIL 210/310 is chosen, this will NOT also fulfill the Philosophy requirement.

⁶ Students may choose from Anthropology, Economics, Geography (excl. 121/131/320), Media + Communication, Modern Languages, Political Studies, Psychology, or Sociology.

⁷ UNIV 101 is compulsory during the first semester of the first year for all new students unless they have minimum 27 s.h. initial transfer credit.

2. Required Biology and Biotechnology Courses (33 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	BIOL 113 [†]	3	(Or BIOL 103, 104 & 105) [†]	<input type="checkbox"/>	BIOL 371	3	
<input type="checkbox"/>	BIOL 114 [†]	3		<input type="checkbox"/>	BIOL 372	3	
<input type="checkbox"/>	BIOL 223	3	Take in Year 2	<input type="checkbox"/>	BIOL/BIOT 390	3	
<input type="checkbox"/>	BIOL/BIOT 290	3		<input type="checkbox"/>	BIOL/BIOT 470	3	
<input type="checkbox"/>	BIOL ____	3	Choose BIOL 333 or 334.	<input type="checkbox"/>	BIOL/BIOT 490	3	
<input type="checkbox"/>	BIOL 336	3					

[†] A minimum of C in first year required to progress to BIOL 223.

3. Required Chemistry Courses (33 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	CHEM 111	3	Pref. take in Year 1 (Students may also take CHEM 103/104 or CHEM 103/112.)	<input type="checkbox"/>	CHEM 322	3	
<input type="checkbox"/>	CHEM 112	3		<input type="checkbox"/>	CHEM 357	3	
<input type="checkbox"/>	CHEM 221	3	Pref. take in Year 2	<input type="checkbox"/>	CHEM 358	3	
<input type="checkbox"/>	CHEM 222	3	Pref. take in Year 2	<input type="checkbox"/>	CHEM 384	3	
<input type="checkbox"/>	CHEM 230	3	Pref. take in Year 2	<input type="checkbox"/>	CHEM 386	3	
<input type="checkbox"/>	CHEM 321	3					

4. Required Internships (3 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	BIOL/BIOT 100	1	Taken in the Spring semester of Year 1.	<input type="checkbox"/>	BIOL/BIOT 200	2	In Industry during or after Year 2

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

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

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

6. Required Ancillary Courses (12 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
<input type="checkbox"/>	MATH 123	3		<input type="checkbox"/>	PHYS 111	3	
<input type="checkbox"/>	MATH ____	3	Choose either MATH 124 or MATH 102	<input type="checkbox"/>	PHYS 112	3	

7. Elective Courses (3 s.h.)

✓	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 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 2.50 is required for graduation, with a minimum 2.50 GPA in all required courses for the major.

➤ **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).