Plans of study for students who were admitted to a Biochemistry Plan between May 1, 2016 and May 1, 2018

Biochemistry – Major (Science) – Bachelor of Science (Honours)

BCHM-M-BSH

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 72.0 units as described below.

Program: The Plan, alone, or in combination with a Minor in another subject, and with sufficient electives to total 120.0 units, will lead to a Bachelor of Science (Honours) Degree.

1. **Core**	(57.0 units)		
A.	6.0 units	in	CHEM 112/6.0
B.	6.0 units	in	BIOL 102/3.0 and BIOL 103/3.0
C.	3.0 units	in	BCHM 218/3.0 or *MBIO 218/3.0*
D.	12.0 units	in	CHEM 211/3.0, CHEM 212/3.0, CHEM 222/3.0, CHEM 223/3.0
E.	15.0 units	in	BCHM 313/3.0, BCHM 315/3.0, BCHM 316/3.0, BCHM 317/6.0
F.	3.0 units	in	BCHM 441/3.0
G.	9.0 units	in	BCHM 410/3.0, BCHM 411/3.0, BCHM 432/3.0
H.	3.0 units	in	STAT 263/3.0 or BIOL 243/3.0 or STAM 200/3.0

2. **Option**	(3.0 units)		
A.	3.0 units	from	BCHM_List_A

3. **Supporting**	(12.0 units)		
A.	6.0 units	from	MATH 120/6.0; MATH 121/6.0; (MATH 123/3.0 and MATH 124/3.0); *MATH 122/6.0*
B.	6.0 units	from	PHYS 104/6.0; PHYS 106/3.0; PHYS 117/6.0 ; PHYS 118/6.0

4. **Additional Requirements**	

5**. Substitutions**	

6. **Notes**	
A.	Students who may wish later to change to a chemistry program should take one of PHYS 106/6.0 or PHYS 104/6.0; students who may wish later to change to a physics program should take PHYS 104/6.0.
B.	Students wishing to take upper-year BIOL courses as electives should take BIOL 205/3.0 and BIOL 206/3.0 as electives.
C.	Electives consisting of 3.0-6.0 units at the 300 level in any of ANAT; BIOL; CHEM; MICR; PHAR; PHGY with a laboratory component are recommended. Of these, CHEM 311/3.0; CHEM 398/3.0; CHEM 399/3.0 are strongly recommended.

Plans of study for students who were admitted to a Biochemistry Plan between May 1, 2016 and May 1, 2018

Biochemistry – Minor (Science)

BCHM-Z

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 48.0 units as described below.

Program: The Plan, in combination with a Major plan in another subject, and with sufficient electives, will lead to an Honours Bachelors Degree.

Biochemistry – General (Science) – Bachelor of Science

BCHM-G-BSC

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 48.0 units as described below.

Program: The Plan, with sufficient electives to total 90.0 units, will lead to a Bachelor of Science Degree.

1. **Core**	(42.0 units)		
A.	6.0 units	in	CHEM 112/6.0
B.	6.0 units	in	BIOL 102/3.0 and BIOL 103/3.0
C.	6.0 units	in	BIOL 205/3.0 and (BCHM 218/3.0 or *MBIO 218/3.0*)
D.	12.0 units	in	CHEM 211/3.0, CHEM 212/3.0, CHEM 222/3.0, CHEM 223/3.0
E.	12.0 units	in	BCHM 315/3.0, BCHM 316/3.0, BCHM 317/6.0

2. **Option**	(0.0 units)		

3. **Supporting**	(0.0 units)		

4. **Additional Requirements** (6.0 units)	
A.	Minimum of an additional 6.0 units in the physical and natural sciences or mathematics, from ASC_Science.

5**. Substitutions**	
A.	BCHM 310/9.0 and a further 3.0 units in the natural and physical sciences and mathematics may be substituted for **1.E.**

6. **Notes**	
A.	Students who may wish later to change to a chemistry program should take one of PHYS 106/6.0 or PHYS 104/6.0; students who may wish later to change to a physics program should take PHYS 104/6.0.
B.	Students wishing to take upper-year BIOL courses as electives should take BIOL 206/3.0 as an elective.

Plans of study for students who were admitted to a Biochemistry Plan between May 1, 2016 and May 1, 2018

Biochemistry – Specialization (Science) – Bachelor of Science (Honours)

BCHM-P-BSH

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 84.0 units as described below.

Program: The Plan, together with sufficient electives to total 120.0 units, will lead to a Bachelor of Science (Honours) Degree.

1. **Core**	(81.0 units)		
A.	6.0 units	in	CHEM 112/6.0
B.	6.0 units	in	BIOL 102/3.0 and BIOL 103/3.0
C.	6.0 units	from	PHYS 104/6.0; PHYS 106/6.0; PHYS 117/6.0 ; PHYS 118/6.0
D.	6.0 units	from	MATH 120/6.0; MATH 121/6.0; (MATH 123/3.0 and MATH 124/3.0); *MATH 122/6.0*
E.	3.0 units	in	BCHM 218/3.0 or *MBIO 218/3.0*
F.	12.0 units	in	CHEM 211/3.0, CHEM 212/3.0, CHEM 222/3.0, CHEM 223/3.0
G.	3.0 units	in	STAT 263/3.0 or BIOL 243/3.0 or STAM 200/3.0
H.	15.0 units	in	BCHM 313/3.0, BCHM 315/3.0, BCHM 316/3.0, BCHM 317/6.0
I.	18.0 units	in	BCHM 410/3.0, BCHM 411/3.0, BCHM 421/6.0, BCHM 422/6.0
J.	6.0 units	in	BCHM 432/3.0 and BCHM 442/3.0

2. **Option**	(3.0 units)		
A.	3.0 units	from	BCHM_Labs

3. **Supporting**	(0.0 units)		

4. **Additional Requirements**	

5**. Substitutions**	

6. **Notes**	
A.	Students who may wish later to change to a chemistry program should take one of PHYS 106/6.0 or PHYS 104/6.0; students who may wish later to change to a physics program should take PHYS 104/6.0.
B.	Students wishing to take upper-year BIOL courses as electives should take BIOL 205/3.0 and BIOL 206/3.0 as electives.

Plans of study for students who were admitted to a Biochemistry Plan after May 1, 2018

Biochemistry – Major (Science) – Bachelor of Science (Honours)

BCHM-M-BSH

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 72.0 units as described below.

Program: The Plan, alone, or in combination with a Minor in another subject, and with sufficient electives to total 120.0 units, will lead to a Bachelor of Science (Honours) Degree.

1. **Core**	(54.0 units)		
A.	6.0 units	in	CHEM 112/6.0
B.	6.0 units	in	BIOL 102/3.0 and BIOL 103/3.0
C.	3.0 units	in	BCHM 218/3.0
D.	12.0 units	in	CHEM 211/3.0, CHEM 212/3.0, CHEM 222/3.0, CHEM 223/3.0
E.	15.0 units	in	BCHM 313/3.0, BCHM 315/3.0, BCHM 316/3.0, BCHM 317/6.0
F.	3.0 units	in	BCHM 441/3.0
G.	6.0 units	from	BCHM 410/3.0 or BCHM 411/3.0 or BCHM 432/3.0
H.	3.0 units	in	BIOL 243/3.0 or STAM 200/3.0 or STAT 263/3.0

2. **Option**	(6.0 units)		
A.	6.0 units	from	BCHM_List_A

3. **Supporting**	(12.0 units)		
A.	6.0 units	from	MATH 120/6.0; MATH 121/6.0; (MATH 123/3.0 and MATH 124/3.0)
B.	6.0 units	from	PHYS 104/6.0; PHYS 106/3.0; PHYS 117/6.0 ;PHYS 118/6.0

4. **Additional Requirements**	

5**. Substitutions**	

6. **Notes**	
A.	Students who may wish later to change to a chemistry program should take one of PHYS 106/6.0 or PHYS 104/6.0; students who may wish later to change to a physics program should take PHYS 104/6.0.
B.	Students wishing to take upper-year BIOL courses as electives should take BIOL 205/3.0 and BIOL 206/3.0 as electives.
C.	Electives consisting of 3.0-6.0 units at the 300 level in any of ANAT; BIOL; CHEM; MICR; PHAR; PHGY with a laboratory component are recommended. Of these, CHEM 311/3.0; CHEM 398/3.0; CHEM 399/3.0 are strongly recommended.

Plans of study for students who were admitted to a Biochemistry Plan after May 1, 2018

Biochemistry – Minor (Science)

BCHM-Z

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 48.0 units as described below.

Program: The Plan, in combination with a Major plan in another subject, and with sufficient electives, will lead to an Honours Bachelors Degree.

Biochemistry – General (Science) – Bachelor of Science

BCHM-G-BSC

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 48.0 units as described below.

Program: The Plan, with sufficient electives to total 90.0 units, will lead to a Bachelor of Science Degree.

1. **Core**	(42.0 units)		
A.	6.0 units	in	CHEM 112/6.0
B.	6.0 units	in	BIOL 102/3.0 and BIOL 103/3.0
C.	6.0 units	in	BIOL 205/3.0 and BCHM 218/3.0
D.	12.0 units	in	CHEM 211/3.0, CHEM 212/3.0, CHEM 222/3.0, CHEM 223/3.0
E.	12.0 units	in	BCHM 315/3.0, BCHM 316/3.0, BCHM 317/6.0

2. **Option**	(0.0 units)		

3. **Supporting**	(0.0 units)		

4. **Additional Requirements** (6.0 units)	
A.	Minimum of an additional 6.0 units in the physical and natural sciences or mathematics, from ASC_Science.

5**. Substitutions**	
A.	BCHM 310/9.0 and a further 3.0 units in the natural and physical sciences and mathematics may be substituted for **1.E.**

6. **Notes**	
A.	Students who may wish later to change to a chemistry program should take one of PHYS 106/6.0 or PHYS 104/6.0; students who may wish later to change to a physics program should take PHYS 104/6.0.
B.	Students wishing to take upper-year BIOL courses as electives should take BIOL 206/3.0 as an elective.

Plans of study for students who were admitted to a Biochemistry Plan after May 1, 2018

Biochemistry – Specialization (Science) – Bachelor of Science (Honours)

BCHM-P-BSH

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 84.0 units as described below.

Program: The Plan, together with sufficient electives to total 120.0 units, will lead to a Bachelor of Science (Honours) Degree.

1. **Core**	(81.0 units)		
A.	6.0 units	in	CHEM 112/6.0
B.	6.0 units	in	BIOL 102/3.0 and BIOL 103/3.0
C.	6.0 units	from	PHYS 104/6.0; PHYS 106/6.0; PHYS 117/6.0 ;PHYS 118/6.0
D.	6.0 units	from	MATH 120/6.0; MATH 121/6.0; (MATH 123/3.0 and MATH 124/3.0)
E.	3.0 units	in	BCHM 218/3.0
F.	12.0 units	in	CHEM 211/3.0, CHEM 212/3.0, CHEM 222/3.0, CHEM 223/3.0
G.	3.0 units	in	BIOL 243/3.0 or STAM 200/3.0
H.	15.0 units	in	BCHM 313/3.0, BCHM 315/3.0, BCHM 316/3.0, BCHM 317/6.0
I.	18.0 units	in	BCHM 410/3.0, BCHM 411/3.0, BCHM 421/6.0, BCHM 422/6.0
J.	6.0 units	in	BCHM 432/3.0 and BCHM 442/3.0

2. **Option**	(3.0 units)		
A.	3.0 units	from	BCHM_List_A

3. **Supporting**	(0.0 units)		

4. **Additional Requirements**	

5**. Substitutions**	

6. **Notes**	
A.	Students who may wish later to change to a chemistry program should take one of PHYS 106/6.0 or PHYS 104/6.0; students who may wish later to change to a physics program should take PHYS 104/6.0.
B.	Students wishing to take upper-year BIOL courses as electives should take BIOL 205/3.0 and BIOL 206/3.0 as electives.
C.	Recommended to take a course from the BCHM_Labs Course List.

Biochemistry Course Lists

The following lists contain courses offered through other Departments. In accordance with Academic Regulation **2.5** (Access to Classes), students do not have enrolment priority in all of these courses. Access to these courses may only be made available during the Open Enrolment period, and then only if space permits.

ASC_Science
Natural and Physical Science Courses
ANAT;
ASTR;
BCHM;
BIOL;
BIOM;
BMED 270/3.0; BMED 370/3.0; *BMED 372/3.0; BMED 380/3.0*; BMED 381/3.0; BMED 383/3.0; BMED 384/3.0; BMED 470/3.0; *BMED 473/3.0*; BMED 480/3.0; *BMED 482/3.0*; BMED 483/3.0;
CANC;
CHEE 209/3.0;
CHEM;
CISC;
COGS;
COMM 162/3.0;
COMP;
CRSS;
DDHT;
ECON 250/3.0;
ENSC 201/3.0; ENSC 301/3.0; ENSC 307/3.0; ENSC 320/3.0; ENSC 407/3.0; ENSC 425/3.0; ENSC 471/3.0; ENSC 480/3.0; ENSC 481/3.0;
EPID;
GEOL;
GLPH 472/3.0;
GPHY_Physical;
GPHY_Tech/Methods;
HLTH 230/3.0; HLTH 331/3.0;
KNPE 125/3.0; KNPE 153/3.0; KNPE 225/3.0; KNPE 227/3.0; KNPE 251/3.0; KNPE 254/3.0; KNPE 255/3.0; KNPE 261/3.0; KNPE 327/3.0; KNPE 339/3.0; KNPE 354/3.0; KNPE 355/3.0; KNPE 425/3.0; *KNPE 427/3.0*; KNPE 429/3.0; KNPE 439/3.0; KNPE 450/3.0; KNPE 454/3.0; KNPE 455/3.0; KNPE 459/3.0; KNPE 493/3.0;
LISC;
MATH;
MICR;
NSCI;
NURS 323/3.0; NURS 324/3.0;
PATH;
PHAR;
PHGY;
PHYS;
POLS 385/3.0;
PSYC 100/6.0; PSYC 101/3.0; PSYC 103/3.0; PSYC 202/3.0; PSYC 203/3.0; PSYC 205/3.0; PSYC 215/3.0; PSYC 221/3.0; PSYC 271/3.0, PSYC 299/3.0; PSYC 301/3.0; PSYC 302/3.0; PSYC 450/3.0; *PSYC 475/3.0*; PSYC_Cluster_A;
REPD
SOCY 210/3.0; SOCY 211/3.0;
STAM; STAT

BCHM_Labs

Biochemistry Laboratory Courses

ANAT 309/3.0; ANAT 312/3.0; ANAT 315/3.0; ANAT 316/3.0; BIOL 300/3.0; *BIOL 302/3.0*; *BIOL 303/3.0*; BIOL 321/3.0; BIOL 323/3.0; BIOL 335/3.0; *BIOL 338/3.0*; BIOL 403/3.0; BIOL 404/3.0; CHEM 397/6.0; CHEM 398/3.0; CHEM 399/3.0; LISC 390/3.0; LISC 391/3.0; MICR 435/3.0; PHGY 355/3.0

BCHM_List_A

Options in the Biochemistry Major Plan

ANAT; CANC; CHEM; CRSS; DDHT; EPID; LISC; MICR; NSCI; PATH; PHAR; PHGY, REPD *excluding ANAT 270/3.0; BCHM 270/3.0; *CANC 497/3.0*; MICR 270/3.0; PHAR 270/3.0; PHGY 170/3.0; any course numbered 499.
BCHM 410/3.0; BCHM 411/3.0; BCHM 432/3.0; BCHM 482/3.0; BIOL 205/3.0; BIOL 206/3.0; BIOL 212/3.0; BIOM 300/3.0; BMED 370/3.0; BMED 373/3.0; *BMED 380/3.0*; BMED 381/3.0; BMED 470/3.0; *BMED 482/3.0*; HLTH 323/3.0; MATH 221/3.0; MATH 225/3.0; MATH 228/3.0; MATH 272/3.0; MATH 339/3.0; PHYS 206/3.0; PHYS 216/3.0; PHYS 242/3.0; PSYC 100/6.0; PSYC 205/3.0; PSYC 215/3.0; PSYC 235/6.0; PSYC 236/3.0; PSYC 251/3.0; PSYC 271/3.0; PSYC 323/3.0; PSYC 333/3.0; PSYC 353/3.0; PSYC 355/3.0; PSYC 370/3.0; PSYC 371/3.0; PSYC 420/3.0; PSYC 422/3.0; *PSYC 457/3.0*; PSYC 470/3.0; PSYC 471/3.0; PSYC 473/3.0.