

HARFORD COMMUNITY COLLEGE - CHEMISTRY A.S. DEGREE
TOWSON UNIVERSITY/ MB3 - BIOCHEMISTRY TRACK B.S. DEGREE

HARFORD COMMUNITY COLLEGE			TOWSON UNIVERSITY			
COURSE #	COURSE TITLE	CRS.	TU EQUIVALENCY	CORE	COMMENTS	COURSE ID#
				1.	Towson Seminar	
ENG 101	College Composition	3	ENGL 102	2.	English Composition	2348
MATH 109	Precalculus Mathematics	4	MATH 119	3.	Mathematics	4381
CIS 102	Intro. Information Sciences	3	CIS 115***	4.	Creativity & Creative Development	1184***
**GH	Arts & Humanities (GH)	3	Depends on choice.			
**GB	GenEd - Behavioral/Social Science (GB)	3	Depends on choice.	6.	Social & Behavioral Sciences	
CHEM 111	General Chemistry I	4	CHEM 110 <i>OR</i> CHEM 131 <i>AND</i> CHEM 131L	7.	Biological & Physical Science w/Lab	1041 13097 13098
CHEM 112	General Chemistry II A	4	CHEM 111 <i>OR</i> CHEM 132 <i>AND</i> CHEM 132L	8.	Biological & Physical Science	1042 13099 13100
				9.	Advanced Writing Seminar	
**GB	GenEd - Behavioral/Social Science (GB)	3	Depends on choice.	10.	Metropolitan Perspectives	
GB, GH, or GI	HCC General Education Elective (GB)(GH)(GI)	3	Depends on choice.	11.	The United States as a Nation	
ENG 109	Research Writing	3	ENGL 152***	12.	Global Perspectives	2352***
**GH	Arts & Humanities (GH)	3	Depends on choice.	13.	Diversity & Difference	
				14.	Ethical Issues & Perspectives	
Total CORE in Transfer		36				
MATH 203	Calculus I (must be completed at HCC)	4	MATH 273			4407
MATH 204 Or MATH 216	Calculus II Or Introduction to Statistics (GM)	4	MATH 274 Or MATH 231			4408 4393
PHYS 101	Introductory Physics I	4	PHYS 211			6800
PHYS 102	Introductory Physics II	4	PHYS 212			6801
CHEM 207	Organic Chemistry I	4	CHEM 331	Transfers as lower level credit.		10134
CHEM 208	Organic Chemistry II	4	CHEM 332	Transfers as lower level credit.		10135
BIO 120	General Biology	4	BIOL 201			666
	Physical Education Elective	1	PHEA TLL			10564
	Physical Education Fitness Elective	1	PHEA TLL			10564
Program Requirements at Harford		30				
Total Harford Program Requirements		66				
Total Credits in Transfer		64				

** Harford Community College students must complete one 3 credit diversity course which appears on the "Approved List" in the HCC catalog.

***Requires Course Directive for Core placement.

64 credit transfer maximum. **9** Core Curriculum units to be completed at Towson: **1, 9 and 14.**

- If PHYS 203/204 is substituted for PHYS 101/102 at Harford Community College, MATH 203 and 204 must also be completed at HCC.

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Major Requirements to be completed at Towson (33 Units)

BIOL 309	Genetics	(4)
BIOL 409	Molecular Biology	(4)
CHEM 210	Analytical Chemistry	(5)
CHEM 345	Principles of Physical Chemistry	(3)
CHEM 351	Intro Biochemistry	(3)
CHEM 356	Biochemistry Lab	(2)
CHEM 357	Biochemistry II	(3)
CHEM 372	Intermediate Laboratory I	(1)
MBBB 301	Intro to Bioinformatics	(4)
MBBB 493	Seminar in Bioethics	(1)

Complete a minimum of 3 units from the following:

BIOL491	Elective in Independent Research	
BIOL 492	Independent Research	
CHEM 491	Independent Research in Chemistry	(3)
COSC 495	Independent Study in Computer Science	
ELECTIVE	Approved Upper-level elective	

Total Credits to B.S. Degree (120)

Harford Chemistry A.S. Degree	64
Completion of Core at TU	9
Completion of Major Requirements	33
General Electives at TU	10
Upper level Electives	4