

HARFORD COMMUNITY COLLEGE - PHYSICS A.S. DEGREE
TOWSON UNIVERSITY PHYSICS B.S. DEGREE

May 28, 2010

HARFORD COMMUNITY COLLEGE			TOWSON UNIVERSITY			
COURSE #	COURSE TITLE	CRS.	TU EQUIVALENCY	GenEd	COMMENTS	COURSE ID#
ENG 101	College Composition	3	ENGL 102	IA		2348
CIS 102	Introduction to Information Science	3	CIS 115	IB		11642
MATH 203	Calculus I	4	MATH 273	IC		4407
				ID	Advanced Upper-Level Writing Course Creativity & Creative Development	
				IE		
CHEM 111	General Chemistry I	4	CHEM 110	IIA		1041
CHEM 112	General Chemistry II	4	CHEM 111	IIA		1042
*GH	Arts & Humanities	3		IIB1		
				IIB3	Contemporary Issues	
*GH	Arts & Humanities	3		IIC1	Equivalency depends on student choice.	
*GB	Behavioral/Social Science	3		IIC2	Equivalency depends on student choice.	
*GB	Behavioral/Social Science	3		IIC2	Equivalency depends on student choice.	
				IIC3	Cultural Plurality & Diversity	
	General Elective	3		IID	Equivalency depends on student choice.	
	TOTAL GenEds	33				
MATH 204	Calculus II	4	MATH 274			4408
MATH 206	Calculus III	4	MATH 275			4409
MATH 217	Linear Algebra	4	MATH 265			4403
MATH 208	Elementary Differential Equations	3	MATH 374		Content equivalent - transfers as lower-level credit.	10493
PHYS 203	General Physics I	3	PHYS 241			6805
PHYS 204	General Physics II	4	PHYS 242			6806
PHYS 205	General Physics III	4	PHYS 243			6807
	CIS/CSI Elective	3-4	COSC/CIS		Equivalency depends on student choice.	
	Physical Education Elective	1	PHEA TLL			10564
	Physical Education/Fitness Elective	1	PHEA TLL			10564
	PROGRAM REQUIREMENTS	31-32				
	Total Harford Program Requirements	64-65				
	TOTAL CREDITS IN TRANSFER	64				

- 64 credit transfer maximum.
- GenEds to be completed at Towson (12 Units): I.D, I.E, II.B.3, and II.C.3.

*HCC students must complete one 3-credit Diversity course. It is recommended students select a course from the approved list on Diversity courses found in the HCC catalog.

Major Requirements to be completed at Towson**Core Requirements for all tracks (18 Units)**

PHYS 185	Introductory Seminar in Physics	(1)
PHYS 307	Intro Mathematical Physics	(3)
PHYS 311	Modern Physics I	(3)
PHYS 341	Intermediate Physics Lab I	(3)
PHYS 351	Mechanics I	(4)
PHYS 354	Electricity and Magnetism I	(4)

General Physics Track**Advanced General Physics Requirements (30-32 Units)**

PHYS 270	Computers in Physics	(4)
PHYS 312	Modern Physics II	(3)
PHYS 342	Intermediate Physics Lab II	(3)
PHYS 455	Quantum Mechanics	(3)
PHYS 385	Physics Seminar	(1)
PHYS 495	Capstone Projects in Physics	(4)
PHYS 352	Thermodynamics and Kinetic Theory	(3)
PHYS 457	Solid State Physics	(3)
OR		
PHYS 459	Nuclear Physics	(3)
PHYS xxx	Upper Level Physics Elective	(3-4)

Total Credits to B.S. Degree (124-126)

Harford Physics A.S. Degree	64
Completion of GenEd at TU	12
Physics Core Requirements	18
Completion of Major Requirements at TU	30-32

Applied Physics Track**Advanced Applied Physics Requirements (29-31 Units)**

PHYS 270	Computers in Physics	(4)
PHYS 312	Modern Physics II	(3)
PHYS 335	Basic Electronics	(4)
PHYS 342	Intermediate Physics Lab II	(3)
PHYS 361	Optics Fundamentals	(4)
PHYS 385	Physics Seminar	(1)
PHYS 495	Capstone Project in Physics	(4)

Two Upper-Level Physics Electives one of which must be at the 400-level. (6-8)

Total Credits to B.S. Degree (123-126)

Harford Physics A.S. Degree	64
Completion of GenEd at TU	12
Physics Core Requirements	18
Completion of Major Requirements at TU	29-31

Astrophysics Track**Astrophysics Track Advanced Physics Requirements (26 Units)**

ASTR 161	General Astronomy I	(4)
ASTR 162	General Astronomy II	(4)
ASTR 303	Astrophysical Techniques	(3)
ASTR 331	Introduction to Astrophysics	(3)
ASTR 423	Particle Astrophysics	(3)
ASTR 470	Special Topics in Astrophysics	(3)
ASTR 495	Capstone Project in Astrophysics	(3)
PHYS 455	Quantum Mechanics	(3)

Total Credits to B.S. Degree (120)

Harford Physics A.S. Degree	64
Completion of GenEd at TU	12
Physics Core Requirements	18
Completion of Major Requirements at TU	26