NORTHERN ARIZONA UNIVERSITY
College of Engineering, Forestry & Natural Sciences

Bachelor of Science
Physics & Astronomy (Merged Major)
2010-2011 Undergraduate Catalog

Degree Progression Plan

Freshman Year							
1st term				**2nd term**			
PHY 161	University Physics I	4		PHY 262	University Physics II	3	
MAT 136	Calculus I (SCI: SAS) *	4		PHY 262L	University Physics II Lab	1	
DIV	Diversity	3		MAT 137	Calculus II (FNRQ) *	4	
LS	Liberal Studies	3		ENG 105	Critical Reading and Writing (FNRQ)	4	
PHY 103	First Year Seminar	1		*LS*	Liberal Studies	3	
	Total units	15			Total units	15	

Sophomore Year							
3rd term				**4th term**			
AST 280	Intro Astrophysics	3		PHY 264	Electronics for Science Students	3	
PHY 263	University Physics III	3		PHY 265	Introduction to Computational Physics	3	
MAT 238	Calculus III *	4		PHY 361	Modern Physics	3	
LS	Liberal Studies **	4		MAT 239	Differential Equations *	3	
GE	General Elective	1		*LS*	Liberal Studies	3	
	Total units	15			Total units	15	

Junior Year							
5th term				**6th term**			
PHY 321	Mechanics I	3		PHY 331	Electricity & Magnetism I	3	
PHY 301	Methods of Analytical Physics	3		PHY 333W	Advanced Lab	3	
AST 301/301L or AST 391	Observational Astronomy or Astrophysics: Stars	3-4		AST 390 or AST 392	Astrophysics: The Solar System or Astrophysics: Galaxies & Cosmology	3	
LS	Liberal Studies	3		*LS*	Liberal Studies	3	
DIV	Diversity	3		*GE*	General Elective	3	
	Total units	15-16			Total units	15	

Senior Year							
7th term				**8th term**			
PHY 471	Quantum Physics	3		PHY 441	Thermal & Statistical Physics	3	
CAP	Capstone Course ***	3		*LS*	Liberal Studies	3	
AST 301/301L or AST 391	Observational Astronomy or Astrophysics: Stars	3-4		*LS*	Liberal Studies	3	
PHY 332	Electricity & Magnetism II	3		*GE*	General Elective	3	
GE	General Elective	2		*GE*	General Elective	3	
	Total units	14-15			Total units	15	

Liberal Studies Distribution blocks

AHI (6 units)	SPW (6 units)	CU (6 units)	Science (7 units)	Additional 3 units to reach 35 total
			MAT 136 (4)	

Revised 4/30/2010

PROGRAM INFORMATION

A minimum of 120 units are required for this degree.

Be aware that some courses (especially 300 & 400 level courses) are only offered once a year (fall only or spring only). These courses may be pre-requisites for future courses. Check with your department for a current course rotation.

* MAT 136, MAT 137, MAT 238, & MAT 239 are not required for this degree, but are pre-requisites for other courses.

**Chemistry is the recommended course for the SCI: LAB Block

*** Capstone Course includes one of the following:

- 3 units of PHY 498C or
- 1 unit of PHY 498C and 2 units of PHY 485C.

Advanced Physics and Astronomy courses are usually offered only once per year; 300 level astronomy courses are usually offered once every other year. Typical sequencing is as follows:

Every fall semester: AST 280, PHY 301, PHY 321, PHY 332, PHY 471, PHY 498C, plus electives.
Every spring semester: PHY 264, PHY 265, PHY 331, PHY 361, PHY 333W, and PHY 441.
Fall of even-numbered years: AST 301/301L
Fall of odd-numbered years: AST 391
Spring of even-numbered years: AST 392
Spring of odd-numbered years: AST 390

You may not count more than one grade below a C in a physics or astronomy course toward the major requirements for this degree.

GENERAL INFORMATION

- This degree progression plan is to be used in conjunction with the academic catalog and degree progress report.
- Students should see an academic advisor regularly to confirm their academic progress.
- Students must see an academic advisor before enrollment for the 7th term in preparation for graduation.
- Many courses have pre-requisites. Please check the academic catalog for pre-requisite and placement information.
- Submit graduation application during 7th term.
- Honors students complete different requirements to meet NAU's liberal studies program. Students should consult an Honors Program advisor for complete information on fulfilling Honors Liberal Studies requirements.
- All students are required to complete at least 120 total units which includes:
    - 35 units of liberal studies courses: http://www4.nau.edu/aio/LScourselist.htm
    - 6 units of diversity courses: (3 units in Global & 3 units in Ethnic): http://www4.nau.edu/aio/DiversityCourseList.htm
    - 30 units of upper division courses (300-400 level), 18 of these units must be taken at NAU

- English placement: http://testing.nau.edu/exams/placement.html
- Math placement: http://www.cefns.nau.edu/Academic/Math/studentInformation/Placement/Placement.shtml

CONTACT INFORMATION

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