

# Bachelor of Science in Education in Physics: Secondary Education

# NAUTeach

2010-2011 Undergraduate Catalog

# **Degree Progression Plan**

Freshman Year						
1 <sup>st</sup> term			2 <sup>nd</sup> 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	
ENG 105	Critical Reading and Writing (FNRQ)	4	MAT 137	Calculus II (FNRQ)	4	
TSM 101	Step 1: Inquiry Approaches to Teaching	1	TSM 102	Step 2: Inquiry-Based Lesson Design	1	
PHY 103	First Year Seminar	1	LS/DIV	Liberal Studies/Diversity***	3	
			LS	Liberal Studies*	3	
	Total units	14		Total units	15	

Sophomore Year						
3 <sup>rd</sup> term			4 <sup>th</sup> term			
PHY 263	University Physics III	3	PHY 264	Electronics for Science Students	3	
MAT 238	Calculus III****	4	ME	Major Elective **	3-4	
ME	Major Elective **	3-5	TSM 350	Classroom Interactions	3	
TSM 300	Knowing & Learning	3	LS/DIV	Liberal Studies/Diversity ***	3	
GE	General Elective	3	GE	General Elective	3	
Apply to NAUTeach Program						
Total units		16-18		Total units	15-16	

Junior Year							
5 <sup>th</sup> term			6 <sup>th</sup> term			•	
ME	Major Elective **	1-3	PHY 361	Modern Physics	3		
PHI 359	Philosophy of Science (AHI)	3	PHY 333W	Advanced Lab	3	•	
BME 300	Intro to Structured English Immersion	3	ME	Major Elective **	4- 5		
LS	Liberal Studies	3	TSM 404	Research Methods	3		
BIO 100	Principles of Biology (SCI:SAS)	3	LS	Liberal Studies	3		
			Attempt AEPA P	Physics Subject Knowledge Test			
Total units		13-15		Total units	16-1	7	

Senior Year							
7 <sup>th</sup> term				8 <sup>th</sup> term			
AST 180 or	Introduction to Astronomy or	3		TSM 495C	Apprentice Teaching	12	
AST 183	Life in the Universe (SCI:LAB)						
AST 181 or AST 184L	Astronomy Lab (SCI: LAB)	1		TSM 496C	Seminar	1	
BME 437	SEI Methods in Secondary Schools	3					
TSN 450	Project-Based Instruction	3					
LS	Liberal Studies	3					
GE	General Elective	3					
Apply for Appr	Apply for Apprentice Teaching					•	
Total units		16			Total units	13	

Total: 120

## Liberal Studies Distribution blocks

AHI (6 units)	SPW (6 units)	CU (6 units)	Science (7 units)	Additional 3 units
PHI 359	*		MAT 136 (4)	to reach 35 total
			AST 180 or 184 &	BIO 100 (3)
			AST 181 or 184L (4)	·

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#### PROGRAM INFORMATION

A minimum of 120 units are required for this degree. No more than one D is allowed in the major & emphasis requirements.

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.

\* PSY 101 (SPW) recommended.

- \*\* Major electives include selecting either the chemistry or math emphasis (14 units)
  - Chemistry: term 3 CHM 151, 151L, term 4 CHM 152, 152L, term 5 CHM 295, and term 6 CHM 230, 230L
  - Mathematics: MAT 226, STA 270 or STA 275;

MAT 185; MAT 401 or 402; MAT 365 or 320W plus two units of general electives.

\*\*\* Take a Liberal Studies course that also satisfies a diversity requirement.

\*\*\*\*MAT 238 is not a major requirement but is a prerequisite for PHY 361

#### **NAUTeach Program Admission:**

In order to take NAUTeach courses beyond TSM 300, you must be admitted to the NAUTeach Program. Program acceptance is required before enrolling in TSM 350. Admission requirements are as follows:

- Completion of TSM 101 and 102 with a grade of C or better.
- Enrollment in TSM 300 Knowing and Learning.
- Copy of fingerprint clearance card OR verification of application for fingerprint card.
- Completion of 30 units of coursework which includes:
  - o a grade of at least B for the English foundation requirement (ENG 105 or ENG 101 & 102). If you don't receive a 3.0, you may complete an additional English writing course, at the 200 level or above, with at least a B, to meet this requirement.
  - o a grade of at least C for the Mathematics foundation requirement (MAT 125, 136, or equivalent).
  - o completion of at least three units of content major work.
- A minimum grade point average of 2.5 in all content major course work.
- A declared science or mathematics B.S.Ed. major.
- Completion of the NAUTeach program application form.

You must have a grade point average of at least 2.5 in all of your NAU coursework in order to graduate. See catalog for additional information regarding application for Apprentice Teaching.

### **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 7<sup>th</sup> 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 7<sup>th</sup> 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: <a href="http://www4.nau.edu/aio/LScourselist.htm">http://www4.nau.edu/aio/LScourselist.htm</a>
  - 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: <a href="http://testing.nau.edu/exams/placement.html">http://testing.nau.edu/exams/placement.html</a>
- Math placement: <a href="http://www.cefns.nau.edu/Academic/Math/studentInformation/Placement/Placement.shtml">http://www.cefns.nau.edu/Academic/Math/studentInformation/Placement/Placement.shtml</a>

#### **CONTACT INFORMATION**

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