The University Of Toledo
Undergraduate Program Requirement Revision

Contact Person*: Steven Federman  
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* denotes required fields

Present

Supply all information asked for in this column. (Supply core, research intensive and transfer module info if applicable)

College*: Coll Nat Sci and Mathematics
Dept/Academic Unit*: Physics
Program Code*: sm-phys-0a
*Program Name: Physics BA
Minimum number of credit hours for completion:

List all courses which comprise the certificate or degree:

Identify term offered (summer/fall/spring):

Identify delivery method (Online/in class/off campus):

Proposed Effective Term*: 201240  
e.g. 201140 for 2011 Fall

Proposed

Fill in appropriate blanks only where entry differs from first column.

College: --Select a College--
Dept/Academic Unit: --Select a Department--
Program Code:
Program Name
Minimum number of credit hours for completion:

List all courses which comprise the certificate or degree:

Identify term offered (summer/fall/spring):

Identify delivery method (Online/in class/off campus):

Program Approval:

Department Chairperson:

College Curriculum Authority or Chair:

College Dean:

Faculty Senate Academic Program Committee:

Office of the Provost:

Submit Program Requirement Revision

Administrative Use Only

Effective Date: 
CIP Code: 
Scales Taxonomy: 
Program Code: 
Instructional Level:

3/12/2012

The University Of Toledo

PROGRAM REQUIREMENT REVISION

Please list the proposed program structure. Attach additional pages as necessary.

**College:** NSM  **Dept/Academic Unit:** Physics and Astronomy  
**Contact Person:** Steven Federman  **Phone:** x2652  
**Email:** steven.federman@utoledo.edu

**Program Name:** Physics BA

**Program Level:** Undergraduate

**Changes and Reason for Changes (Less than 1500 words or 5000 bytes):**
The primary reason for the changes is the new credit requirements of the College of Natural Sciences and Mathematics, which raises the required major & related credits to 58 credits for a BA.

The specific changes include:
- Increasing the number of required credits from Physics and Astronomy courses from 25 to 34, of which these credits consist of 9 credits at the 3000 and 4000 level
- Increasing the number of required credits from in related fields within NSM from 18 to 24
**Program: Physics B.A.**

1. **Physics Major Courses**
   - PHYS2130 or 2070 – Physics I or Gen. Physics I 5
   - PHYS2140 or 2080/2100 – Physics II or Gen. Physics II 5
   - PHYS3180 – Intermediate Lab 3
   - PHYS3310 – Quantum Physics I 3
   - PHYS3320 – Quantum Physics II 3
   - PHYS3410 – Thermal Physics 3
   - PHYS3610 or 4620 – Optics and Lasers or Lasers 3

   *Other 3000 and 4000 level Courses* 9 (was 6)

   **TOTAL** 34

2. **Related Non-P&A Courses**
   - MATH 1830 or 1850 or 1920 – Calculus I 4
   - MATH 1840 or 1860 or 1930 – Calculus II 4
   - *MATH 2850 or 2950 – Multivariable Calculus (new)* 4

   *Other NSM Courses in BIOL, CHEM, or ES* 12 (was 10)

   **TOTAL** 24