

The University Of Toledo

Undergraduate Program Requirement Revision

ORIGINAL

* denotes required fields

Contact Person*: Steven Federman Phone: 530-2652 (xxx - xxxx) Email: steven.federman@utoledo

Present

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

College*: Coll Nat Sci and Mathematics

Dept/Academic Unit*: Physics

Program Code*: sm-asty-ba

*Program Name: Astronomy BA

Minimum number of credit hours for completion:

List all courses which comprise the certificate or degree:

Astronomy Major Courses
 ASTR2010 - Solar System
 Astronomy
 ASTR2020 - Stars,
 Galaxies, and the
 Universe

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:

Astronomy Major Courses
 ASTR2010 - Solar System
 Astronomy
 ASTR2020 - Stars,
 Galaxies, and the
 Universe

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 :

Date 2012.03.12

Date 3-23-12

Date Kristine A. Hakecht 4/3/12

Date

Date

Date

Submit Program Requirement Revision**Administrative Use Only**

Effective Date:

(YYYY/MM/DD)

CIP Code:

Subsidy Taxonomy:

Program Code:

Instructional Level:

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: Astronomy 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 34 to 37, to satisfy prerequisites for later courses
- Increasing the number of required credits from in related fields within NSM from 18 to 24

Program: Astronomy B.A.

1. Astronomy Major Courses

ASTR2010 – Solar System Astronomy	3
ASTR2020 – Stars, Galaxies, and the Universe	3
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
<i>PHYS3320 – Quantum Physics II (new)</i>	3
PHYS3610 or 4620 – Optics and Lasers or Lasers	3
ASTR4810 – Astronomy I	3
ASTR4820 – Astronomy II	3
ASTR4880 – Astrophysical Measurements	3
TOTAL	37

2. Related Non-P&A Courses

MATH 1830 or 1850 or 1920 – Calculus I	4
MATH 1840 or 1860 or 1930 – Calculus II	4
<i>MATH 2850 or 2950 – Multivariable Calculus (new)</i>	4
<i>Other NSM Courses in BIOL, CHEM, or ES</i>	<i>12 (was 10)</i>
TOTAL	24