

Fiscal Unit/Academic Org	Physics - D0684
Administering College/Academic Group	Mathematical And Physical Sci
Co-administering College/Academic Group	
Semester Conversion Designation	Converted with minimal changes to program goals and/or curricular requirements (e.g., sub-plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content)
Current Program/Plan Name	Physics
Proposed Program/Plan Name	Physics
Program/Plan Code Abbreviation	PHYSICS-BS
Current Degree Title	Bachelor of Science

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		86	57.3	57	0.3
Required credit hours offered by the unit	Minimum	40	26.7	29	2.3
	Maximum	64	42.7	45	2.3
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum	45	30.0	26	0.0
Required prerequisite credit hours not included above	Minimum	46	30.7	28	2.7
	Maximum	49	32.7	28	2.7

Explain any change in credit hours if the difference is more than 4 semester credit hours between the values listed in columns B and C for any row in the above table

There is a small decrease in the maximum amount of required prerequisite hours from 32.7 to 28. One change here is the reduction in hours for the CSE prereq from 2.7 semester hours under quarters to 2 semester hours. Also, we reduced the amount of required upper division prerequisite hours in Math in our advanced Physics option. These students usually have the best Math preparation, and we would rather let them decide which Math courses to use to complement their Physics training. The advanced Physics option now has 9 credit hours that the students can use to devote toward free electives.

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

- Undergraduate Physics majors acquire a basic mastery of fundamental areas of physics, from classical mechanics, through electricity and magnetism, and finally to modern physics including quantum mechanics and relativity.
- Undergraduate Physics majors develop powerful analytical and problem solving skills in areas involving both physics and mathematics.
- Undergraduate Physics majors acquire a basic mastery of experimental physics.
- Undergraduate Physics majors acquire a basic mastery of data reduction and error analysis.
- Undergraduate Physics majors effectively communicate their physical understanding both professionally and colloquially (orally and in writing).
- Undergraduate majors are apprised of and encouraged to participate in academic research, industrial research and/or outreach activities which are consistent with their interest, ability and postgraduate plans.
- Undergraduate majors acquire expertise relevant to their chosen program option.

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? Yes

Summarize how the program's current quarter-based assessment practices will be modified, if necessary, to fit the semester calendar.

For our assessment, we use a variety of direct and indirect methods, none of which depend upon whether the program is run under quarters or semesters. As a result, we do not anticipate any changes to our assessment practices under the semester system.

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- physicsMajorAttachment2.pdf: Items for #2 above
(Program Proposal. Owner: Hughes, Richard E)
- courseListingAndConversion.pdf: Item for #3 above
(Curricular Map(s). Owner: Hughes, Richard E)
- Physics BS cover letter.doc: Letter from NMS Division
(Other Supporting Documentation. Owner: Andereck, Claude David)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Hughes, Richard E	10/11/2010 09:34 PM	Submitted for Approval
Revision Requested	Hughes, Richard E	10/18/2010 11:47 AM	Unit Approval
Submitted	Hughes, Richard E	10/21/2010 11:12 AM	Submitted for Approval
Approved	Hughes, Richard E	10/26/2010 10:35 AM	Unit Approval
Approved	Andereck, Claude David	10/28/2010 10:59 AM	College Approval
Pending Approval	Jenkins, Mary Ellen Bigler Meyers, Catherine Anne Vankeerbergen, Bernadette Chantal Hanlin, Deborah Kay	10/28/2010 10:59 AM	ASCCAO Approval