

Part I. Curriculum Proposal Cover Sheet (see above)

Part II. Description of Curriculum Change

1. Catalog description

Note: The revised catalog description applies to the Department's "Bachelor of Arts – Physics" program in the appropriate form. This includes both the description about the program and the list of courses and credits for the revised program.

Bachelor of Arts – Physics

following specifications:

Mathematics: MATH 125

Natural Science: PHYS 131-141 and 132-142

Liberal Studies Electives: 3cr, MATH 126, no courses with PHYS

prefix

Major:

25

Required Courses:

PHYS 131	Physics I-C Lecture	*cr (1)
PHYS 132	Physics II-C Lecture	*cr (1)
PHYS 141	Physics I-C Lab	*cr (1)
PHYS 142	Physics II-C Lab	*cr (1)

PHYS 231	Electronics	4cr
PHYS 331	Modern Physics	3cr
PHYS 350	Intermediate Experimental Physics I	3cr
PHYS 441	Classical Mechanics	3cr
PHYS 451	Electricity and Magnetism	3cr
PHYS 461	Quantum Mechanics I	3cr

Controlled Electives:

Two additional PHYS majors course 6cr

Other Requirements: (1)

25-31

COSC 110	Problem Solving and Structured Programming	3cr
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**2 (a) Comparison of current and proposed program.
Bachelor of Arts – Physics**

Old Program

New Program

Liberal Studies: As outlined in Liberal Studies section with the following specifications: 50

Liberal Studies: As outlined in Liberal Studies section with the following specifications: 48

Liberal Studies Electives: 4cr, MATH 124, no courses with PHYS prefix

Liberal Studies Electives: 3cr, MATH 126, no courses with PHYS prefix

Major: Required Courses: 28

Major: Required Courses: 25

PHYS 131 Physics I-C Lecture *cr (1)

PHYS 131 Physics I-C Lecture *cr (1)

PHYS 132 Physics II-C Lecture *cr (1)

PHYS 132 Physics II-C Lecture *cr (1)

PHYS 141 Physics III-C Lecture *cr (1)

PHYS 141 Physics III-C Lecture *cr (1)

2 (b) List of all associated course changes

Course Proposals Associated with Program Revisions

New #	Old #	Title	New Format	Old Format	Revision
PHYS 441	N/A	Classical Mechanics	3c-01-3cr	N/A	New Course
PHYS 451	N/A	Electricity & Magnetism	3c-01-3cr	N/A	New Course
PHYS 461	PHYS 473	Quantum Mechanics I	3c-01-3cr	4c-01-4cr	Revised
	PHYS 222	Mechanics I		2c-01-2cr	Deleted
	PHYS 223	Mechanics II		2c-01-2cr	Deleted
	PHYS 322	Electricity & Magnetism I		2c-01-2cr	Deleted
	PHYS 323	Electricity & Magnetism II		2c-01-2cr	Deleted
	PHYS 351	Intermediate Experimental Physics II		0c-6l-3cr	Deleted

3. Need for the changes

From the physics departments' student assessment plan, it has become clear that the students do not make broad connections between the various sub-disciplines in our program.

level of Electricity and Magnetism with topics including Electrostatic, Electric Fields in Matter, Magnetostatics, Magnetic Fields in Matter, Electrodynamics, Electromagnetic Waves, Potential and Fields.

PHYS 461/561 Quantum Mechanics I