

## PHYSICS CERTIFICATION

Name \_\_\_\_\_ Date \_\_\_\_\_ Class Yr \_\_\_\_\_ HUB \_\_\_\_\_  
 Phone \_\_\_\_\_ Email \_\_\_\_\_ Adviser \_\_\_\_\_  
 Semester/Yr Planning to Student Teach \_\_\_\_\_  
 (Example Spring 2006)

**NOTE: Major requirements and certification requirements may differ somewhat. Seek degree completion advice in your major department.**

### SPECIALIZATION REQUIREMENTS

Course No.	Course Title	Completed	Grade	Need
<b>Ten Courses, including 4 core courses:</b>				
*PHYS 131 and 132	Introductory Physics	<input type="checkbox"/>	_____	<input type="checkbox"/>
OR	OR			
*PHYS 141 and 142	Physics for the Life Sciences	<input type="checkbox"/>	_____	<input type="checkbox"/>
*PHYS 211	Vibrations, Waves, and Optics	<input type="checkbox"/>	_____	<input type="checkbox"/>
*PHYS 212	Medical and Radiation Physics	<input type="checkbox"/>	_____	<input type="checkbox"/>
<b>*4 electives with at least two at 300 level or above:</b>				
PHYS 213	Analog and Digital Electronics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 282	Introduction to Theoretical Physics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 306	Intro to Astrophysics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 311	Dynamics & Chaos	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 312	Electrodynamics and Plasmas	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 313	Microcomputer Interfacing	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 314	Energy and Environmental Physics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 315-316	Health Physics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 317	Nuclear and Health Physics Lab	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 361A	Thermodynamics & Stat Mech	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 361B	Optics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 392	Physics Seminar	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 406	Adv. Astrophysics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 412	Laboratory and Space Plasmas	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 431	Quantum Mechanics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 432	Topics in Theoretical Physics	<input type="checkbox"/>	_____	<input type="checkbox"/>
PHYS 550	Independent Research	<input type="checkbox"/>	_____	<input type="checkbox"/>
<b>*Two Research Courses (Required)</b>				
PHYS 491and 492	Senior Research Seminar	<input type="checkbox"/>	_____	<input type="checkbox"/>
OR	OR			
PHYS 491and 492H	Senior Research Seminar	<input type="checkbox"/>	_____	<input type="checkbox"/>

**Corequisite courses for physics certification. These requirements can be satisfied by taking courses at Dickinson or another institution of higher education, approved independent study, competency testing, or satisfactory A.P. test scores. They should be completed early in your time at Dickinson.**

\*Math 161 Calculus I  
 \*Math 162 Calculus II  
 \*Phys 282 OR Calculus III

(revised 2-14-05)