Trial course number should be 394.

FORMAT 1

Submit original with signatures + 1 copy + electronic copy to UAF Governance.

See http://www.uaf.edu/uafgov/faculty/cd for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	Physics	**College/School**	CNSM
Prepared by	C. P. Price	**Phone**	x6106
Email Contact	cpprice@alaska.edu	**Faculty Contact**	C. P. Price

1. ACTION DESIRED (CHECK ONE): Trial Course [X] New Course [ ]

F394
X

2. COURSE IDENTIFICATION: Dept [PHYS] Course # [393] No. of Credits [2]

Justify upper/lower division status & number of credits:	The prerequisites for this course include PHYS 301 and PHYS 341. This course will meet for twenty-eight hours.

10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

PHYS 393 "Thermal Physics" (2 credits)
Classical macroscopic thermodynamics; systems and states, equations of state, the first and second laws of thermodynamics and their consequences, entropy, enthalpy, Helmholtz and Gibbs functions, equilibrium, Maxwell's relations. *Prerequisites: PHYS F212X, F220, F301, F341; or permission of instructor. (2+0)*

11. COURSE CLASSIFICATIONS: (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities		S = Social Sciences	

Will this course be used to fulfill a requirement for the baccalaureate core?	YES		NO	X

IF YES, check which core requirements it could be used to fulfill:

12. COURSE REPEATABILITY:

Is this course repeatable for credit?	YES		NO	X

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).	

18. ESTIMATED IMPACT

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

Signature, Chair, UAF Faculty Senate Curriculum Review Committee

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

		Date	
Signature, Chair, Program/Department of:			
		Date	
Signature, Chair, College/School Curriculum Council for:			
		Date	
Signature, Dean, College/School of:			

Thermal Physics

PHYSICS 393 – Spring 2013

Syllabus

Instructor: TBD

Office Hours: TBD

Class meets: 9:15 - 10:15am, Monday, 3:45 – 4:45 pm Thursday

Credits: 2 credits.

Prerequisites: PHYS F212X, PHYS F220, PHYS F301, PHYS F341; or permission of instructor.

Text: Equilibrium Thermodynamics, by Adkins, Cambridge, 2nd ed., ISBN 978-0521274609

Topics: Classical macroscopic thermodynamics; systems and states, equations of state, the first and second laws of thermodynamics and their consequences, entropy, enthalpy, Helmholtz and Gibbs

isothermal changes, have been introduced to the concept of entropy, be able to understand and carry out

Legendre transformations among the thermodynamic potentials, and have the grounding in classical thermodynamics necessary for the study of the statistical mechanics

Special Needs: The Office of Disability Services implements the Americans with Disabilities Act