CLARION UNIVERSITY OF PENNSYLVANIA College of Arts and Sciences

DEGREE: B.S. Physics Condensed Matter Concentration Physics

Nam	ie		Т	Fransfer:*	
Clar	ion II)		**	
Entr	ance.	Date	(CUP:	
Prog	ram I	Entry Date	_		
Adv	isor_		_		
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		L EDUCATION REQUIREMENTS – 48 CREDITS			
I.		ERAL EDUCATION SKILLS – 15 CREDITS CR. G	R. V.	REQUIREMENTS IN MAJOR: (46 - 64 Credits)	CR. GR
		English Composition (3 credits)	<u> </u>	REQUIRED IN PHYSICS (41 credits)	<u> </u>
		Eng 111: Writing II		A. Required for BS Physics (26 credits)	
	R	Eng 111: Writing II Mathematics Competency (3 credits)		PH 258 Introductory Physics I (Lec)	3
	ъ.	· ·		PH 268 Introductory Physics I (Lab)	<u>1</u>
	C.	Freshman Inquiry Seminar (3 credits)		PH 259 Introductory Physics II (Lec)	3
	С.	INQ 100:		PH 269 Introductory Physics II (Lab)	<u></u>
		1100.		PH 351 Mechanics: Dynamics	<u>1</u> —
	D.	Credits to total 15 in Category I, selected from at least tw		PH 352 Electricity & Magnetism	3
	υ.			PH 352 Electricity & Magnetishi PH 353 Modern Physics I	1
		following: Academic Support, Communication, Comput	ier		3 —
		Information Science, Elementary Foreign Language, Eng	311SH ·	PH 354 Optics	3 —
		Composition, Logic, Mathematics, and Speech Commun	ication	PH 371 Experimental Physics I	3 —
				PH 372 Experimental Physics II	2
				PH 461 Seminar	1 —
II.	LIB	ERAL KNOWLEDGE - 27 CREDITS		B. Condensed Matter Concentration (15 credits)	
		Physical & Biological Science (9 credits)		PH 355 Modern Physics II	3
		selected from at least two of the following: Biology, Che	emistry.	PH 356 Thermodynamics	3
		Earth Sci., Mathematics.	,	PH 357 Condensed Matter Physics I	3
		:		PH 358 Condensed Matter Physics II	3
				PH ¹	$\frac{\frac{3}{3}}{\frac{3}{3}} = \frac{\frac{3}{3}}{\frac{3}{3}} = \frac{\frac{3}{3}}{\frac{3}} = \frac{\frac{3}{3}}{\frac{3}{3}} = \frac{3}{3} = \frac{\frac{3}{3}}{\frac{3}{3}} = \frac{\frac{3}{3}}{\frac{3}{3}} = \frac{\frac{3}{3}}{$
	_			¹ To be selected from 300 and 400 level PH courses and PH	254
	В.	Social & Behavioral Science (9 credits)	_	~ ~	
		Selected from at least two of the following: Art, English		C. Required Supplemental Courses $(5 - 23 \text{ credits})^2$	
		and Literature, Humanities, Intermediate Foreign Langua	age and	MATH 270 Calculus I	4
		Culture, Music, Philosophy, Speech and Theatre		MATH 271 Calculus II	4 4 3 3 1 3
		:		MATH 272 Calculus III	<u>4</u>
				MATH 350 Differential Equations	3
				CHEM 153 General Chemistry I (Lec)	3
				CHEM 163 General Chemistry I (Lab)	1
	C.	Arts & Humanities (9 credits)		CHEM 154 General Chemistry II (Lec)	3
		Selected from at least two of the following: Art, English	,	CHEM 164 General Chemistry II (Lab)	1
		Language and Literature, Humanities, Intermediate Forei	ign		
		Language and Cultures, Music, Philosophy, Speech and		² For credits counted in General Education check off require	
				but do not count the credits. Credits to General Education in	
				following manner: 3 credits in I.B, 3 credits in I.D, 9 credits	s in II.A, and
		;		3 credits in IV.	
Ш	HEA	ALTH AND PERSONAL PERFORMANCE – 3 CREDIT	s vi	FREE ELECTIVES	
111.	A.	Health and Wellness (2 credits)	V1.	THE DESCRIPTION	CR. GR.
	11.	: 2		Credits to total 120 credits for graduation.	<u>en</u> . <u>en</u> .
	B.	Personal Performance (1 course and 1 credit)		:	
	٥.	:		:	
		· ———			
IV.	GEN	N. ED. ELECTIVES – 3 CREDITS		;	
	Cred	lits to total 48 from Gen. Ed. Excluding credits in physics	major. Up	::	
		to 1 credit from Category III.B allowed.			
		;			
FI.A	GS -	Record below– courses used to meet Gen. Ed. requiremen	ts:	CC Describeles.	
· LA	JD -	Quantitative Reasoning (Q)	FLA	AGS – Record below:	
		Second Values (S)		Writing Intensive (V	V)
-		First Year Values (V)		Writing Intensive (V	V)
				Information Literacy	
				information Entrac	, \ */

UNIVERSITY POLICIES RELATING TO ACADEMIC REQUIREMENTS

- A student is obligated by those requirements which are in effect at the time of his/her matriculation, but if he/she changes majors, he/she is obligated by the requirements in effect at the time of the change. If a student has been out of school for more than two years and is readmitted, he/she is treated as a new student for requirement purposes.
- A minimum of 120 credits must be presented for graduation, of which at least 45 of the last 64 credits must have been earned in residence.
- No more than 2 credits of Personal Performance (III.B.) may be counted for graduation.
- Upon presentation of form DD 214, the university grants a maximum of 4 credits in Health and Physical Education for active military service of 6 months or more. Credit is normally given for HPE 111 (2 credits) and 2 HPE activity courses of 1 credit each.
- Maximum loads: students with a QPA of 3.0, 21 hours; students in good standing, 18 hours; students on probation, 15 hours. To be in good academic standing, undergraduate students must maintain a minimum quality point average of 2.00 for both semester and cumulative averages.
- After a student has earned a minimum of 30 semester hours of credit and if he/she is in good academic standing, he/she may schedule a maximum of six courses or 18 credits for Credit-No-Record. One such course may be taken each semester. Courses in a student's major may not be taken on a Credit-No-Record basis.
- Course credits not to exceed 18 semester hours may be earned by departmental examination at Clarion. Application should be made in the Office of Academic Affairs.
- A maximum of 60 credits may be earned through the College-Level Examination Program (C.L.E.P.). Students
 may also earn credit and advanced standing through the Advanced Placement Program of the College Entrance
 Examination Board (C.E.E.B.). Detailed information about both programs may be obtained in the Office of
 Academic Affairs.
- All candidates for an undergraduate degree must be in good academic standing (i.e., have a cumulative QPA of 2.00)
- Students may earn two undergraduate degrees (B.A., B.S., BSED, BSBA), simultaneously or in sequence, by completion of 30 approved credit hours beyond those taken for one degree.
- Students may take a double major by satisfying the major requirements of the two programs within a single degree. For example, one may take a B.A. with majors in English and Speech Communication. Ordinarily a double major (two majors within one degree) can be effected in 128 hours, but it is not possible to take two majors in different degree programs (e.g., B.A. in English and BSED in Communication Arts) unless the 30 hour requirement for a second degree, referred to in the preceding statement, is satisfied.
- Students may obtain teacher certification in conjunction with many degrees by completing the required course
 work in professional education. For more information, contact the Dean of Arts and Sciences or the Dean of
 Education and Human Services. With careful course selection, ordinarily no more than 120 credits will be
 required.