CLARION UNIVERSITY OF PENNSYLVANIA College of Arts and Sciences

DEGREE: B.S. Physics Concentration in Astrophysics

Name			Transfer:*	
Cla	ion II)	**	
Entrance Date			CUP:	
Program Entry DateAdvisor				·
Adv	isor _			·
GEI Plea	NERA se ref lished LIBE A. B.	EDUCATION REQUIREMENTS – 48 CREDITS er to the approved list of Gen Ed courses that appears in the class schedule. RAL EDUCATION SKILLS – 12 CREDITS CR. GR. English Composition (3 credits) Eng 110: Writing II 3	V. REQUIREMENTS IN MAJOR: (70 – 72 credits) A. REQUIRED IN PHYSICS (38-39 credits) PH 258: Introductory Physics I (Lec) PH 268: Introductory Physics I (Lab) PH 259: Introductory Physics II (Lec) PH 269: Introductory Physics II (Lab) PH 301: Astrophysics I PH 302: Astrophysics II PH 351: Mechanics: Dynamics PH 352: Electricity & Magnetism PH 353: Modern Physics I PH 354: Optics PH 355: Modern Physics II PH 356: Thermodynamics	CR. GR 3
II.		Communication. :::::::::::::::::::::::::::::::::::	PH 371: Experimental Physics I PH 461: Seminar PH: * * To be selected from 300-level and 400-level physic B. REQUIRED SUPPLEMENTAL COURSES (3 - 10 cre MATH 270: Calculus I MATH 271: Calculus II MATH 272: Calculus III MATH 350: Differential Equations CHEM 153: General Chemistry I (Lec) CHEM 163: General Chemistry I (Lab) CHEM 154: General Chemistry II (Lec) CHEM 164: General Chemistry II (Lab) ES 201: Stellar Astronomy	3
III.		Arts & Humanities (9 credits) Selected from at least two of the following: Art, English Language and Literature, Humanities, Intermediate Foreign Language and Cultures, Music, Philosophy, Speech and Theater.	C. ADDITIONAL REQUIRED COURSES (4 - 9 credits To be selected from biology, chemistry, earth scienc computer science. ES 200: Solar System Astronomy ES 150: Physical Geology with Lab CPSC 201: Survey of Comp. Sci. Tools VII. FREE ELECTIVES	e, mathematics, and \[\frac{3}{4} & \ldots & \ldots \] \[\frac{4}{3} & \ldots & \ldots \] \[\frac{CR}{} & \text{GR}. \]
	B.	Personal Performance (I course and I credit) :		
IV.	Cı	IERAL. EDUCATION. ELECTIVES redits to total 48 from Gen. Ed. excluding credits in Physics major. Up to 1 credit from Category III.B allowed. :		
FLA	.GS - I	Record below— courses used to meet Gen. Ed. requirements: First Year Values (V) Quantitative Reasoning (Q) Second Values (S)	FLAGS – Record below:	ntensive (MA)
			Writing	ntensive (W) Intensive (W) ion Literacy

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 30 of the last 60 credits must have been earned in residence.
- No more than 2 credits of Personal Performance (III.B) by 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 NFSS 111 (2 credits) and 2 activity hours of 1 credit each.
- Maximum loads: Students with a GPA of 3.0, 21 hours; students in good standing*, 18 hours; students on probation, 15 hours.
 - * To be in good standing, undergraduate students must maintain a minimum cumulative grade point average of 2.0.
- 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 of 18 credit hours for Credit/No Record. One such course may be taken each semester.
 Courses in the 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.
- All candidates for an undergraduate degree must be in good academic standing (i.e., have a cumulative GPA of 2.0).
- Students may earn two degrees (B.A., B.S., BSED, BSBA), simultaneously or in sequence, by completion of 30 approved credits hours beyond those taken for one degree.
- Students may take a double major by satisfying the major requirements of two programs within a single degree. Ordinarily a double major (two majors within one degree) can be effected in 120 hours, but it is not possible to take two majors in different degree programs (e.g., B.S. in Biology and BSED in Biology) 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 the College of Arts, Education and Sciences, or the Director
 of Education. With careful course selection, ordinarily no more than 120 credits will be required.

Academic Policy information can be found on the Registrar's web page at the following link: http://www.clarion.edu/academics/registrars-office/academic-policies/index.html