

## COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN PHYSICS MAJOR-PROGRAM YEAR 2018-2019

		1 <sup>ST</sup> YEAR		
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER
				SEMESTER
TROY 1101	1	ENG 1102/04	3	SELECT COURSES THAT HAVE NOT BEEN
ENG 1101/03	3	PHY 2262/LAB	3/1	COMPLETED FROM PREVIOUS 2
MTH 1125	4	MTH 1126	4	SEMESTERS OR
AREA III SCI/LAB COURSE	3/1	FREE ELEC	1	COURSES SUCH AS PREREQUISITE
(CHM 1142/LAB DR)				COURSES OR COURSES TO BE RETAKEN
AREA IV HIS COURSE	3	TOTAL	4.4	
TOTAL	15	TOTAL	14	
		2 <sup>ND</sup> YEAR	LIDC	CLIAAAED
fall semester	HRS	SPRING SEMESTER	HRS	SUMMER
PHY 2263/LAB	3/1	AREA IV SS COURSE	3	SEMESTER SELECT COURSES THAT
REQ MAJOR ELECTIVE (PHY	3/1	PHY 3310/LAB	3/1	HAVE NOT BEEN COMPLETED FROM
3359/LAB DR)	3/ 1	TTT JJTO/ LAD	3/1	PREVIOUS 2
REQ MAJOR ELECTIVE	4	AREA II LIT COURSE	3	SEMESTERS OR COURSES SUCH AS
CS 2250	3	MINOR COURSE	3	PREREQUISITE COURSES OR COURSES
		FREE ELEC	3	TO BE RETAKEN
TOTAL	15	TOTAL	16	
		3 <sup>RD</sup> YEAR		
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER
				SEMESTER
PHY 3325	0	DEO MAIOD ELECTIVE		
1111 3323	3	REQ MAJOR ELECTIVE	3	SELECT COURSES THAT HAVE NOT BEEN
		(PHY 4446 DR)		HAVE NOT BEEN COMPLETED FROM
PHY 4445	3	(PHY 4446 DR) Free elec	3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR
PHY 4445 Area IV SS Course	3	(PHY 4446 DR) FREE ELEC MINOR COURSE	3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE	3 3 3	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE	3 3 3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE	3 3 3 3	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE	3 3 3 3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE	3 3 3	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL	3 3 3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE TOTAL	3 3 3 3 15	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR	3 3 3 3 15	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE	3 3 3 3	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL	3 3 3 3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE  TOTAL  FALL SEMESTER	3 3 3 3 15	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER	3 3 3 3 15 HRS	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE TOTAL	3 3 3 3 15	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER  REQ MAJOR ELECTIVE	3 3 3 3 15	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN  SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE  TOTAL  FALL SEMESTER  PHY 4420	3 3 3 3 15 HRS	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER  REQ MAJOR ELECTIVE (PHY 4438 OR PHY 4440)	3 3 3 3 15 HRS	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN  SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE  TOTAL  FALL SEMESTER  PHY 4420  PHY 4435	3 3 3 3 15 HRS	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER  REQ MAJOR ELECTIVE (PHY 4438 OR PHY 4440) AREA II HUM/FINE ARTS	3 3 3 3 15 HRS	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN  SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE  TOTAL  FALL SEMESTER  PHY 4420  PHY 4435 AREA II FINE ARTS COURSE	3 3 3 3 15 HRS 3	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER  REQ MAJOR ELECTIVE (PHY 4438 OR PHY 4440) AREA II HUM/FINE ARTS MINOR COURSE	3 3 3 3 15 HRS 3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN  SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE  TOTAL  FALL SEMESTER  PHY 4420  PHY 4435 AREA II FINE ARTS COURSE AREA IV SS COURSE	3 3 3 3 15 HRS 3 3	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER  REQ MAJOR ELECTIVE (PHY 4438 OR PHY 4440) AREA II HUM/FINE ARTS MINOR COURSE FREE ELEC	3 3 3 3 15 HRS 3 3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN  SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE  TOTAL  FALL SEMESTER  PHY 4420  PHY 4435 AREA II FINE ARTS COURSE AREA IV SS COURSE MINOR COURSE FILE YOUR INTENT TO GRADUATE	3 3 3 3 15 HRS 3	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER  REQ MAJOR ELECTIVE (PHY 4438 OR PHY 4440) AREA II HUM/FINE ARTS MINOR COURSE	3 3 3 3 15 HRS 3	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN  SUMMER SEMESTER  SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES
PHY 4445 AREA IV SS COURSE REQ MAJ ELECTIVE MINOR COURSE  TOTAL  FALL SEMESTER  PHY 4420  PHY 4435 AREA II FINE ARTS COURSE AREA IV SS COURSE MINOR COURSE FILE YOUR INTENT TO GRADUATE TOTAL	3 3 3 3 15 HRS 3 3 3 3 15	(PHY 4446 DR) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL  4 <sup>TH</sup> YEAR SPRING SEMESTER  REQ MAJOR ELECTIVE (PHY 4438 OR PHY 4440) AREA II HUM/FINE ARTS MINOR COURSE FREE ELEC FREE ELEC	3 3 3 3 15 HRS 3 3 3 2 14	HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN  SEMESTER  SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES



## COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN PHYSICS MAJOR-PROGRAM YEAR 2018-2019

COMPLETE ALL REQUIREMENTS (54 HOURS)

AREA I

MINIMUM GRADE OF "C" REQUIRED

ENG 1101 COMP AND MODERN ENGLISH I 3 HOURS ENG 1102 COMP AND MODERN ENGLISH II 3 HOURS

AREA II

TAKE ANY 1000-2000 LEVEL COURSE IN LITERATURE 3 HOURS

TAKE ANY 1000-2000 LEVEL COURSE WITH AN EXPANDED HISTORICAL
AND CULTURAL SCOPE IN FINE ARTS, INCLUDING THE DISCIPLINES OF

6 HOURS

9 HOURS

TAKE ANY TWO 1000-2000 LEVEL COURSES WITH AN EXPANDED
HISTORICAL AND CULTURAL SCOPE IN THE HUMANITIES/FINE ARTS
DISCIPLINES, INCLUDING ENGLISH, FOREIGN LANGUAGES, RELIGION,
PHILOSOPHY, CLASSICS, THEATRE, MUSIC, DANCE, COMMUNICATION,

SIGN LANGUAGE, INTERDISCIPLINARY STUDIES, OR OTHER HUMANITIES/FINE ARTS AREAS.

ART, MUSIC, THEATRE, FILM, OR OTHER FINE ARTS AREA.

NOTE: A SEQUENCE IN LITERATURE OR HISTORY IS REQUIRED. WHEN SELECTING COURSEWORK IN AREAS II OR IV, PLEASE CONSIDER THIS REQUIREMENT.

AREA III

MTH 1125 CALCULUS I
MINIMUM GRADE OF "C" REQUIRED

4 HOURS

PHY 2262/L262 PHYSICS I WITH CALCULUS/LAB

TAKE ANY ONE 1000-2000 LEVEL SCIENCE CLASSES (CLASS
AND CORRESPONDING LAB BOTH REQUIRED) FROM THE FOLLOWING SCIENCE
DISCIPLINES: BIOLOGY, CHEMISTRY, PHYSICS, PHYSICAL SCIENCE, OR OTHER

BIO 2229/L229, CHM 1115/L115, CHM 1142/L142, CHM 1143/L143, CHM 2242/L242, PHY 2252/L252, PHY 2253/L253, PHY 2262/L262, PHY 2263/L263, SCI 2233/L233,

SCIENCE AREAS. SELECT 2: BIO-1100/L100, BIO 1101/L101, BIO 2202/L202,

SCI 2234/L234. (CHM 1142/LAB DR) DR DENOTES DEPARTMENTAL RECOMMENDATION.

AREA IV

TAKE ANY 1000-2000 LEVEL COURSE WITH A PRIMARY FOCUS IN HISTORY. 3 HOURS

TAKE ANY THREE 1000-2000 LEVEL COURSES FROM THE FOLLOWING SOCIAL SCIENCE DISCIPLINES: ANTHROPOLOGY, BUSINESS, CRIMINAL JUSTICE, ECONOMICS, GEOGRAPHY, HISTORY, HUMAN SERVICES, LEADERSHIP, INTERDISCIPLINARY STUDIES, NURSING, POLITICAL SCIENCE, PSYCHOLOGY, RELIGION, SOCIAL WORK, SOCIOLOGY, OR OTHER SOCIAL SCIENCE AREAS.

NOTE: A SEQUENCE IN LITERATURE OR HISTORY IS REQUIRED. WHEN SELECTING COURSEWORK IN AREAS II OR IV, PLEASE CONSIDER THIS REQUIREMENT.

AREA V

TAKE THE FOLLOWING COURSES:
TROY 1101 UNIVERSITY ORIENTATION

TROY 1101 UNIVERSITY ORIENTATION 1 HOUR
CS 2250 COMPUTER SCIENCE I 3 HOURS
MTH 1126 CALCULUS II 4 HOURS

EVERY REASONABLE ATTEMPT TO ENSURE ACCURACY HAS BEEN MADE. SOME COURSES (SUCH AS DEVELOPMENTAL OR PRE-REQUISITE COURSES) ARE NOT REFLECTED IN THIS DEGREE MAP. COMPLETION OF DEGREE REQUIREMENTS IS BASED ON THE SPECIFIC CATALOG YEAR FOR EACH STUDENTA MINIMUM OF 120 HOURS IS REQUIRED FOR ALL BACCALUREATE DEGREE PROGRAMS.AT LEAST 25% OF THE CREDIT HOURS REQUIRED FOR THE DEGREE MUST BE COMPLETED IN RESIDENCY WITH TROY UNIVERSITY.AT LEAST 12 SEMESTER HOURS OF RESIDENCY MUST BE COMPLETED IN EACH MAJOR FIELD(S) OF STUDY.A MINIMUM GPA OF 2.0 OVERALL AND IN THE MAJOR IS REQUIRED TO GRADUATE.NOTE: PLEASE CONSULT THE COLLEGE OF ARTS AND SCIENCES OR CURRENT CATALOG FOR OTHER REQUIREMENTS NOT COVERED IN THIS DOCUMENT.NOTES: A SEQUENCE IN LITERATURE OR HISTORY IS REQUIRED. PLEASE CONSIDER THIS REQUIREMENT. WHEN SELECTING COURSE WORK IN AREAS II OR IV.



## COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN PHYSICS MAJOR-PROGRAM YEAR 2018-2019

PHYSICS MAJOR 2.0 GPA REQUIRED	(37 HOURS)
PHY 3310/L310 MODERN PHYSICS/LAB PHY 3325 THERMODYNAMICS PHY 4420 MECHANICS PHY 4435 ELECTRICITY & MAGNETISM	3/1 HOURS 3/1 HOURS 3 HOURS 3 HOURS 3 HOURS 3 HOURS
MAJOR ELECTIVES:	
TAKE AN ADDITIONAL 17 HOURS FROM THE FOLLOWING: MTH 2227 (4), MTH 3364 (3), PHY 3320 (3), PHY 3321 (3), PHY 3359/L359 (3/1), PHY 4438 (3), PHY 4440 (3), PHY 4446 (3), PHY 4460 (3), PHY 4470 (3), PHY 4475 (3), PHY 4478 (3), PHY 4482 (3), PHY 4483 (1), PHY 4484 (1), PHY 4485 (1) PHY 4495 (3), PHY 4491 (1-4), PHY 4492 (1-4), PHY 4493 (1-4), OR PHY 4494 (1-4)	17 HOURS
MINOR REQUIREMENT	(18 HOURS)
AT LEAST ONE 18 SEMESTER HOUR MINOR IS REQUIRED COMPLETE THIS DEGREE PROGRAM. ADDITIONAL MAJORS ARE ALSO ACCEPTABLE.	18 HOURS
FREE ELECTIVES REQUIREMENT	
TAKE 11 SEMESTER HOURS OF FREE ELECTIVE CREDIT.	11 HOURS