

COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN PHYSICS MAJOR-PROGRAM YEAR 2017-2018

		1 ST YEAR		
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER
TALE SEIVESTER	1110	STIGING SEINESTEIC	1110	SEMESTER
TROY 1101	1	ENG 1102/04	3	SELECT COURSES THAT
ENG 1101/03	3	PHY 2262/LAB	3/1	HAVE NOT BEEN COMPLETED FROM
MTH 1125	4	MTH 1126	4	PREVIOUS 2 SEMESTERS OR
AREA III SCI/LAB COURSE	3/1	AREA III SCI/LAB (CHM	3/1	COURSES SUCH AS
AREA III SCI/ LAB COOKSL	3/ 1	1142/LAB DR)	3/ 1	PREREQUISITE COURSES OR COURSES
AREA IV HIS COURSE	3	11427 LND DIQ		TO BE RETAKEN
TOTAL	15	TOTAL	15	
TOTAL	13	2 ND YEAR	13	
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER
TALL SUMESTER	1113	STRING SEMESTER	IIKS	SEMESTER
PHY 2263/LAB	3/1	AREA IV SS COURSE	3	SELECT COURSES THAT
REQ MAJOR ELECTIVE (PHY	3/1	PHY 3310/LAB	3/1	HAVE NOT BEEN COMPLETED FROM
3359/LAB DR)	3/1	1111 3310/ L/LD	3/ 1	PREVIOUS 2 SEMESTERS OR
MTH 2227	4	AREA II LIT COURSE	3	COURSES SUCH AS
CS 2250	3	MINOR COURSE	3	PREREQUISITE COURSES OR COURSES
C3 2230	3	FREE ELEC	3	TO BE RETAKEN
TOTAL	15	TOTAL	16	
TOTAL	13	3 RD YEAR	10	
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER
TALL SLIVESTER	11103	STRING SEMESTER	11103	SEMESTER
PHY 4420	3	REO MAIOR ELECTIVE	3	SELECT COURSES THAT
PHY 4420	3	REQ MAJOR ELECTIVE	3	
	40	(PHY 4438 OR PHY 4440)		SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2
PHY 4435	3	(PHY 4438 OR PHY 4440) FREE ELEC	3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS
PHY 4435 AREA IV SS COURSE	3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE	3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES
PHY 4435 AREA IV SS COURSE MTH 3364	3 3 3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE	3 3 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE	3 3 3 3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE	3 3 3 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES
PHY 4435 AREA IV SS COURSE MTH 3364	3 3 3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL	3 3 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL	3 3 3 3 15	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR	3 3 3 3 15	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE	3 3 3 3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL	3 3 3 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL FALL SEMESTER	3 3 3 3 15	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER	3 3 3 3 15	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SUMMER SEMESTER SELECT COURSES THAT
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL	3 3 3 3 15	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER REQ MAJOR ELECTIVE	3 3 3 3 15 HRS	SELECT COURSES THAT 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
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL FALL SEMESTER PHY 3325	3 3 3 3 15 HRS	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER REQ MAJOR ELECTIVE (PHY 4446 DR)	3 3 3 3 15 HRS	SELECT COURSES THAT 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 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL FALL SEMESTER	3 3 3 3 15 HRS	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER REQ MAJOR ELECTIVE	3 3 3 3 15 HRS	SELECT COURSES THAT 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 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL FALL SEMESTER PHY 3325 PHY4445	3 3 3 3 15 HRS 3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER REQ MAJOR ELECTIVE (PHY 4446 DR) AREA II HUM/FINE ARTS MINOR COURSE	3 3 3 3 15 HRS 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SUMMER SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL FALL SEMESTER PHY 3325 PHY4445 AREA II FINE ARTS COURSE	3 3 3 3 15 HRS 3 3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER REQ MAJOR ELECTIVE (PHY 4446 DR) AREA II HUM/FINE ARTS MINOR COURSE FREE ELECTIVE	3 3 3 3 15 HRS 3 3 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SUMMER SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE
PHY 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL FALL SEMESTER PHY 3325 PHY4445 AREA II FINE ARTS COURSE AREA IV SS COURSE MINOR COURSE FILE YOUR INTENT TO GRADUATE	3 3 3 3 15 HRS 3 3 3 3	(PHY 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER REQ MAJOR ELECTIVE (PHY 4446 DR) AREA II HUM/FINE ARTS MINOR COURSE	3 3 3 3 15 HRS 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SUMMER SEMESTER SOR 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 4435 AREA IV SS COURSE MTH 3364 MINOR COURSE TOTAL FALL SEMESTER PHY 3325 PHY4445 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 4438 OR PHY 4440) FREE ELEC MINOR COURSE AREA II HUM/FA COURSE MINOR COURSE TOTAL 4 TH YEAR SPRING SEMESTER REQ MAJOR ELECTIVE (PHY 4446 DR) AREA II HUM/FINE ARTS MINOR COURSE FREE ELECTIVE FREE ELECTIVE	3 3 3 3 15 HRS 3 3 3 2 14	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SUMMER SEMESTER SOR COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES



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COMPLETE ALL REQUIREMENTS (54 HOURS)

DR DENOTES A DEPARTMENTAL RECOMMENDED COURSE

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

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

TAKE ANY TWO 1000-2000 LEVEL COURSES WITH AN EXPANDED

HISTORICAL AND CULTURAL SCOPE IN THE HUMANITIES/FINE ARTS

6 HOURS

DISCIPLINES, INCLUDING ENGLISH, FOREIGN LANGUAGES, RELIGION, PHILOSOPHY, CLASSICS, THEATRE, MUSIC, DANCE, COMMUNICATION, SIGN LANGUAGE, INTERDISCIPLINARY STUDIES, OR OTHER HUMANITIES/FINE ARTS AREAS.

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

8 HOURS

9 HOURS

TAKE ANY TWO 1000-2000 LEVEL SCIENCE CLASSES (CLASS AND CORRESPONDING LAB BOTH REQUIRED) FROM THE FOLLOWING SCIENCE DISCIPLINES: BIOLOGY, CHEMISTRY, PHYSICS, PHYSICAL SCIENCE, OR OTHER SCIENCE AREAS. SELECT 2: BIO-1100/L100, BIO 1101/L101, BIO 2202/L202, 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,

SCI 2234/L234.

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 1 HOUR
CS 2250 COMPUTER SCIENCE I 3 HOURS
MTH 1126 CALCULUS II 4 HOURS

PHY 2262/L262 PHYSICS I WITH CALCULUS/LAB 3/1 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 BACCALAREATE 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.



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PHYSICS MAJOR 2.0 GPA REQUIRED	(37 HOURS)
TAKE THE FOLLOWING COURSES: MTH 2227 CALCULUS III MTH 3364 VECTOR CALCULUS PHY 2263/L263 PHYSICS II WITH CALCULUS/LAB PHY 3310/L310 MODERN PHYSICS/LAB PHY 3325 THERMODYNAMICS PHY 4420 MECHANICS PHY 4435 ELECTRICITY & MAGNETISM PHY 4445 QUANTUM MECHANICS I	4 HOURS 3 HOURS 3/1 HOURS 3/1 HOURS 3 HOURS 3 HOURS 3 HOURS 3 HOURS
MAJOR ELECTIVES:	
TAKE AN ADDITIONAL TEN HOURS FROM THE FOLLOWING: 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 4480 (3), PHY 4482 (3), PHY 4495 (3), PHY 4491 (3), PHY 4492 (3), PHY 4493 (3), OR PHY 4494 (3)	10 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	(11 HOURS)
TAKE 11 SEMESTER HOURS OF FREE ELECTIVE CREDIT.	11 HOURS