ANT 3310	(3)	Cultural Anthropology
ANT 3311	(3)	Physical Anthropology

Select at least 12 hos of additional 3000/4000-level anthropology courses as approveryl your faculty adviser.

ARCH	IVAL S	TUDIES MINOR (18 HOURS)
HIS 3360	(3)	Introduction to Archives: Theory and Issues
HIS 3362	(3)	Archival Methods and Practice
HIS 4472	(3)	Records Management
HIS 4473	(3)	Archives Practicum
4000 level:	es from	the follong including at least one at the
	65 110111	the following including at least one at the
GEO/HIS3316	(3)	History of Alabama
GEO/SOC4406	(3)	Urbanism
HIS 4405	(3)	Old South
HIS 4406	(3)	New South
HIS/POL 4441	(3)	American Constitutional Develop.
HIS 1170	(3)	Oral History

- HIS 4470(3)Oral HistoryHIS 4471(3)Local History
- MGT 4471 (3) Organizational Development
- MGT 4474 (3) Business and Society
- POL 4421 (3) Introduction to Public Administration
- SOC 4433 (3) The Community

Select one botany course

BIO 4448 BIO L448 BIO 4471	(3) (1) (3)	Mammalogy Mammalogy Lab Parasitology	Select 12 hours (i below. At least o categories.	three cour ne course	rses w iab s) from the three categories e muber taken from each of the three
BIO L471	(1)	Parasitology Lab	Zaalaav		
Select one ecolo lab:	gy/ei ro nm	ental course with its corresponding	Zoology BIO 3307 BIO L307	(3) (1)	Invertebrate Zoology Invertebrate Zoology Lab
BIO 4413	(3)	Limnology	BIO 4405	(2)	Entomology
BIO L413	(1)	Limnology Lab	BIO L405	(2)	Entomology Lab
BIO 4416	(3)	Microbial Ecology			
BIO L416	(1)	Microbial Ecology Lab	Botany		
BIO 4421	(3)	Population Ecology	BIO 3325	(3)	Plant Form and Function
BIO L421	(1)	Population Ecology Lab	BIO L325	(1)	Plant Form and Function Lab
BIO 4479	(3)	Environmental Assessment	BIO 3326	(3)	Plant Diversity
BIO L479	(1)	Environmental Assessment Lab	BIO L326	(1)	Plant Diversity Lab
Select one p	hvsiology	//cell/meodular course with its	Ecology		
corresponding lab			BIO 4413	(3)	Limnology
BIO 3347	(3)	Human Anatomy and Physiology I	BIO L413	(3)	Limnology Lab
BIO L347	(1)	Human Anatomy and Physiology I	BIO 4479	(3)	Environmental Assessment
		Lab	BIO L479	(1)	Environmental Assessment Lab
BIO 3348	(3)	Human Anatomy and Physiology II	MB 4406	(1)	Marsh Ecology
BIO L348	(1)	Human Anatomy and Physiology II Lab		(-)	Marsh Ecology
BIO 3382	(3)	Immunology	Select an addition	nal eight	hours of adviser-approved BIO or MB
BIO L382	(1)	Immunology Lab	courses.	•	
BIO 3386	(3)	Hematology			
BIO L386	(1)	Hematology Lab	Medical Technolo	av Conce	entration:
BIO 4414	(3)	Food Microbiology		••	lete 2392 mester hours on the Troy
BIO L414	(1)	Food Microbiology Lab	Campus prior to a	applving fo	or an internship.
BIO 4430	(3)	Applied Genetics		11 5 5	
BIO L430	(1)	Applied Genetics Lab	Lectures and their	r correspo	onding labs must be taken together.
BIO 4433	(3)	Embryology	BIO 3347	(3)	Human Anatomy and Physiology I
BIO L433	(1)	Embryology Lab	BIO L347	(1)	Human Anatomy and Physiology I
BIO 4451	(3)	Toxicology			Lab
BIO L451	(1)	Toxicology Lab	BIO 3348	(3)	Human Anatomy and Physiology II
BIO 4478	(3)	Cell Biology	BIO L348	(1)	Human Anatomy and Physiology II
BIO L478	(1)	Cell Biology Lab			Lab
BIO 4480	(3)	Histology	BIO 3372	(3)	Microbiology
BIO L480	(1)	Histology Lab	BIO L372	(1)	Microbiology Lab
BIO 4482		Molecular Biology	BIO 3382	(3)	Immunology
BIO L482	(3)	Mulecular biology	BIO L382	(1)	Immunology Lab

Select 16 additional semester hourses with labs) from Select one course with its corresponding lab: the four above categories (botany, zoology, ecology, BIO 3386 environmental, and physiologell/molecular). Guided BIO L386

Hematology (3)

(1) Hematology Lab

(3) Parasitology

(1) Parasitology Lab

up to six credits. However, ethtwo course sequences of BIO 4491/4492 and BIO 4493/4494 may not be taken for more than six addition to the above coursescinding core courses, students credits regardless ofhe mix. The 16 hours chosen should be must complete 33 semester hours of hospital internship MT 4400-based on the student's future plans (employment, graduate schell, 13 courses. or professional school).

Ecology and Field Biology Concentration:			
BIO	4420	(4)	Field Vertebrate Zoology
BIO	4421	(3)	Population Ecology
BIO	L421	(1)	Population Ecology Lab
BIO	4425	(4)	Field Botany

environmental, and physiologyell/molecular). Guided BIO L386 Independent Research (BIO 4491/4492) or Guided Independent 0 4471

Study (BIO 4493/4494) may be taken up to six of these credits. BIO L471 BIO 4491 and 4493 may be mixed and taken in any sequence for

BIOLOGY, PREPROFESSIONAL MAJOR (55 HOURS)

Specialized General St.4(L(t)1.9(Geni)-)6.s .0Tw [(In addition)6.7(to)6.7

CHM L142	(1)	General Chemistry I Lab
MTH 1125	(4)	Calculus I

Area V	Requirer	nent\$20	Hours)
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BIO 1101	(3)	Organismal Biology
BIO L101	(1)	Organismal Biology Lab
CHM 1143	(3)	General Chemistry II
CHM L143	(1)	General Chemistry II Lab
IS 2241	(3)	Computer Concepts and Applications
TROY 1101	(1)	University Orientation

Select one sequence (physics sequence not required for medical technology concentration):

PHY 2252	(3)	General Physics I
PHY L252	(1)	General Physics I Lab
PHY 2253	(3)	General Physics II
PHY L253	(1)	General Physics II Lab
or		
PHY 2262	(3)	Physics I with Calculus
PHY L262	(1)	Physics I with Calculus Lab
PHY 2263	(3)	Physics II with Calculus
PHY L263	(1)	Physics II with Calculus Lab

Requirements for the major

Lectures and their corresponding labs must be taken together.

		0 0
BIO 2229	(3)	General Ecology
BIO L229	(1)	General Ecology Lab
BIO 3320	(3)	Genetics
BIO L320	(1)	Genetics Lab
BIO 3372	(3)	Microbiology
BIQ L372	(1)	Microbiology Lab 1000日27年1936月月)= 30002年4月1990日5年1月19日日 41.2533n
BIO HUMAAN T	ene: 64	\$0000827983078)=\$000224\$4100085481006548
PIO (1) To 01 19	2220

BIO (1) Tc .01 J8 2229

CHM L445	(1)	Instrumental Analysis Lab
MTH 1126	(4)	Calculus II
Select three hour	rs of cher	nistry electives:
CHM 3352	(3)	Biochemistry
CHM L352	(1)	Biochemistry Lab
CHM L382	(1)	Physical Chemistry II Lab
CHM 4400	(3)	Special Topics
CHM 4403	(3)	Advanced Organic Chemistry
CHM L444	(1)	Advanced Inorganic Chemistry Lab
CHM 4491/2	(1-3)	Guided Independent Research
CHM 4493/4	(1-3)	Guided Independent Study
CHM 4499	(1)	Senior Research Seminar

	CHEMIST	RY MINOR (20 HOURS)
CHM 1142	(3)	General Chemistry I
CHM L142	(1)	General Chemistry I Lab
CHM 1143	(3)	General Chemistry II
CHM L143	(1)	General Chemistry II Lab
CHM 3342	(3)	Organic Chemistry I
CHM L342	(1)	Organic Chemistry I Lab
CHM 3343	(3)	Organic Chemistry II
CHM L343	(1)	Organic Chemistry II Lab

Select four additional hours of weathreed chemistry courses, such as

CHM 2242/L242	AnalyticaChemistry and lab
CHM 3352 / L352	Biochemistry and Lab

Note: The chemistry minor requires 20 hours in addition to the hours required for a major in anothescipline. For example, the biology major requires Organic Chemistry II and lab, so a student majoring in biology would need to select eight, not four, additional hours of advanced chemistry courses.

CHEMISTRY PROGRAM (51 HOURS)

SCI 3335 (3) Physical Geology Specialized General Studies Requirements SCI 3336 (3) Principles of Astronomy Area III SCI 3336 (3) Principles of Astronomy MTH Sci 3336 (3) General Ecology Specialized General Studies Requirements Biology Concentration: Select a four hour course/lab combination from the following: (Students must complete an eight sequence in themistry or Biol 3247 Mantomy & Physiology I BIO 1247 (1) Anatomy & Physiology I CHM 1142 (3) General Chemistry I BIO 1247 (1) Anatomy & Physiology II Lab PHY 2252 (3) General Physics I Lab BIO 1347 (1) Anatomy & Physiology II Lab PHY 1252 (1) General Physics I Lab BIO 1347 (1) Anatomy & Physiology II Lab PHY 1252 (3) General Studies action of this catalog. Select one zoology courseitwcorresponding lab (four hours). Select anation of this catalog. Ana V Requirements Select one zoology courseitwcorresponding lab (four hours). Select anation chemistry II Chemistry Unitation CHM 1343 (1) Organic Chemistry II Chemistry Lab General Chemistry II Lab<	PHY L410	(1)	Modern Physics Lab	CON	IPUTER SCIE	NCE PROGRAM (48 HOURS)
SCI 3336 (1) Privskal beology Lab Area III Sci 3336 (3) Privskal beology Lab MTH 1125 (4) Calculus I, in ileu of MTH 1110 Select one of the following concentration: Sublex four hour course/lab combination from the following: (Students must complete an elphtr sequence in chemistry or Physicolagy II ab BIO 2229 (3) General Ecology Lab CHM 1142 (3) General Chemistry I BIO 3147 (3) Anatomy & Physiology I Lab PHY 2522 (3) General Chemistry I BIO 1344 (3) Anatomy & Physiology I Lab PHY 2522 (3) General Physics I ab BIO 1372 (3) Microbiology Lab Select remaining Area III courses shown in the General Studies section of this catalog. Select one botary coursethrecorresponding lab (four hours). CS 2250 (3) Computer Science I CHM 242 (3) Analytcal Chemistry Lab CHM 1143 (3) General Chemistry II CHM 242 (3) Analytcal Chemistry I CHM 1143 (3) General Chemistry II CHM 242 (1) Analytcal Chemistry I CHM 1143 (3) General Chemistry II CHM 24	SCI 3335	(3)	Physical Geology			· · · ·
Sci 3:30 (3) Principles of Astronomy MTH 1125 (4) Calculus I, in lieu of MTH 1110 Select one of the following: concentration: Select a four hour course/lab combination from the following: BIO 2229 (3) General Ecology physics. Also see Area V Requirements. BIO 3347 (1) Anatomy & Physiology I Lab CHM 1142 (3) General Chemistry I BIO 3348 (3) Anatomy & Physiology I Lab PHY 2252 (3) General Physics I Lab BIO 3348 (1) Anatomy & Physiology I Lab Select remaining Area III courses shown in the General Studies socion of this catalog. Select one botany coursetivcorresponding lab (four hours). Area V Requirements Select one zoology coursetivcorresponding lab (four hours). Area V Requirements Select one zoology coursetivcorresponding lab (four hours). Area V Requirements CHM 1242 (1) Analytal Chemistry Lab CS 2250 (3) Computer Science I CHM 242 (1) Analytal Chemistry Lab CHM 1443 (1) General Physics I Lab CHM 1432 (1) Organic Chemistry II D CHM 1443 (1) General Chemistry II	SCI L335	(1)	Physical Geology Lab	•	General Studie	es Requirements
Select one of the following concentration: Biology Concentration: Computer Science I Microbiology Lab Biology Concentration: Concentration: Chinic Chemistry Lab Chinic Science Chemistry Lab Chinic Chemistry Lab	SCI 3336	(3)	Principles of Astronomy			
Biology Concentration: Select at our nour consentation from the following: (Students must complete a light) sequence in the themsity of pCHM 1142 Select at our nour consentation from the following: (Students must complete a light) sequence in the themsity of pCHM 1142 General Chemistry I BIO 3229 (1) General Ecology Lab CHM 1142 General Chemistry I BIO 3347 (3) Anatomy & Physiology II PHY 2252 (3) General Physics I BIO 3348 (3) Anatomy & Physiology II PHY 2252 (3) General Physics I BIO 3349 (3) Anatomy & Physiology II PHY 2252 (3) General Physics I BIO 3327 (1) Microbiology Bio Select remaining Area III courses shown in the General Studies Select one zoology coursethxcorresponding lab (four hours). CS 2250 (3) Computer Science I CHM 1242 (1) Analytical Chemistry I TROY 1101 (1) University Orientation CHM 1243 (3) Organic Chemistry II CHM 1243 (3) General Chemistry II CHM 1343 (1) Organic Chemistry II CHM 1343 (3) General Physics II				MIH 112	25 (4)	Calculus I, in lieu of MTH 1110
BIO 2229 (i) General Ecology Lab physics: Also see Area V Requirements;) model BIO 3347 (i) Anatomy & Physiology IL CHM 142 (i) General Chemistry IL BIO 3347 (i) Anatomy & Physiology IL CHM 142 (i) General Chemistry IL BIO 3348 (i) Anatomy & Physiology IL CHM 142 (i) General Physics ILab BIO 3348 (i) Anatomy & Physiology IL CHM 142 (i) General Physics ILab BIO 3348 (i) Anatomy & Physiology IL CHM 142 (i) General Physics ILab BIO 3372 (i) Microbiology Lab Select one botary courselfwcorresponding lab (four hours). CS 2250 (i) Computer Science I Chemistry Concentration TROY 1101 (i) University Orientation CHM 143 CHM 143 (i) General Chemistry I CHM 242 (i) Analytal Chemistry I CHM 143 (i) General Chemistry I CHM 143 (i) General Chemistry I CHM 143 (i) General Chemistry I CHM 143 CHM 143 (i) General Chemistry I CHM 143 CHM 143 General		-	concentrations:	Select a four	r hour course/la	ab combination from the following:
BIO 1229 (1) General Cology Lab CHM 1142 (3) General Chemistry I BIO 3347 (3) Anatomy & Physiology II PHY 2252 (3) General Physics I Lab BIO 1348 (3) Anatomy & Physiology II Lab PHY 2252 (3) General Physics I Lab BIO 3372 (3) Marcobiology Select remaining Area III courses shown in the General Studies BIO 1372 (1) Microbiology Lab section of this catalog. Select one zoology coursethecorresponding lab (four hours). Area V Requirements Select one zoology coursethecorresponding lab (four hours). Area V Requirements CHM 1242 (3) Analybal Chemistry I CHM 2432 (3) Analybal Chemistry Lab CHM 1443 (1) Organic Chemistry II CHM 331 (1) Organic Chemistry II CHM 343 (3) Preprice Chemistry II CHM 1432 (1) General Physics II Lab CHM 1432 (1) General Physics II Lab CHM 343 (3) Preprice Chemistry II CHM 343 (3) Preprice Chemistry II CHM 1445 (1)<				(Students m	ust complete a	n eightur sequence in chemistry or
BIO 3347 (3) Anatomy & Physiology IL ab CHM L142 (1) General Physics I Lab BIO 3348 (3) Anatomy & Physiology IL ab PHY 252 (3) General Physics I Lab BIO 3348 (1) Anatomy & Physiology IL ab PHY 252 (3) General Physics I Lab BIO 3372 (3) Microbiology Lab Salect remaining Area III courses shown in the General Studies section of this catalog. Select one botary courselfwcorresponding lab (four hours). CS 2250 (3) Computer Science I Chemistry Concentration: CS 2250 (3) Computer Science I Chemistry Concentration: CS 2250 (3) Computer Science I CHM 1242 (3) Analybcal Chemistry Lab CHM 11123 (4) Calculus II CHM 242 (3) Analybcal Chemistry Lab CHM 1143 (3) General Chemistry II CHM 243 (1) Organic Chemistry II CHM 1143 (3) General Chemistry II CHM 1332 (3) Organic Chemistry I CHM 1143 (3) General Physics II Chemistry II CHM 243 (3) Physical Chemistry II Lab CHM 1143 (3)						
BIO 1347 (1) Anatomy & Physiology II Lab PHY 252 (3) General Physics I BIO 3348 (3) Anatomy & Physiology II Lab PHY L252 (1) General Physics I Lab BIO 1372 (3) Microbiology Lab Select remaining Area III courses shown in the General Studies section of this catalog. Select one botary coursethwcorresponding lab (four hours). Area V Requirements Select one botary coursethwcorresponding lab (four hours). Area V Requirements Chemistry Concentration: Crapanic Chemistry Lab MTH 128 (4) Calculus II Chemistry Concentration: TROY 1101 (1) University Orientation CHM 1242 (3) Analytca Chemistry II Select a four hour course/lab combistion from the following: CHM 3343 (3) Organic Chemistry II CHM 143 (3) General Chemistry II CHM 1433 (1) Organic Chemistry II CHM 143 (3) General Physics II CHM 1433 (1) Physical Chemistry II CHM 143 (3) General Physics II CHM 338 (3) Physical Chemistry II CS 3225 (3) Computer Science II CHM 3382				-		•
BIO 3348 (3) Anatomy & Physiology II PHY L252 (1) General Physics I Lab BIO 1348 (1) Anatomy & Physiology II Select remaining Area III courses shown in the General Studies sector of this catalog. BIO 3372 (3) Microbiology Lab Select remaining Area III courses shown in the General Studies sector of this catalog. Select one botary coursethwcorresponding lab (four hours). CS 2250 (3) Computer Science I Chemistry Concentration CS 2250 (3) Computer Science I CHM 242 (1) Analytcal Chemistry I Select a four hour course/Iab combination from the following: CHM 343 (3) Organic Chemistry II Lab CHM 1143 (1) General Chemistry II CHM 332 (3) Biochemistry Lab CHM L143 (1) General Chemistry II Lab CHM 332 (3) Physical Chemistry II PHY 2253 (3) General Physics II Lab CHM 332 (3) Physical Chemistry II CS 3230 (3) Foundations of Computer Science II CHM 332 (3) Physical Chemistry II CS 3310 General Physics II CS 3320 CHM 4443 (3) Advanced Io						
BIO 1348 (1) Anatomy & Physiology II Lab BIO 3372 (3) Microbiology Lab Select remaining Area III courses shown in the General Studies section of this catalog. Select one botany coursetimecorresponding lab (four hours). Area V Requirements Caclulus II Chemistry Concentration: Analycal Chemistry Lab Mitro 110 University Orientation CHM 2342 (3) Analycal Chemistry Lab Select a four hour course/lab combination from the following: (Students must complete an eight sequence in chemistry or physics 2) CHM 2342 (3) Organic Chemistry II Lab Select a four hour course/lab combination from the following: (Students must complete an eight sequence in chemistry or physics 2) CHM 333 (3) Organic Chemistry II Lab CHM 1143 (3) General Chemistry II CHM 333 (3) Organic Chemistry II Lab CHM 1143 General Chemistry II Lab CHM 1143 General Physics II CHM 333 (3) Physical Chemistry II Lab CS 3320 Gonputer Science II Foundations of Computer Science CHM 334 (1) Physical Chemistry II Lab CS 3320 Gonputer Science II Software Engineering I CHM 333 (3) Advanced Incognic Chemistry II	BIO L347			PHY 2252		•
BIO 3372 (3) Microbiology Lab Select memaining Area III courses shown in the General Studies section of this catalog. BIO L372 (1) Microbiology Lab section of this catalog. Select one botary courset/wcorresponding lab (four hours). CS 2250 (3) Computer Science I Chemistry Concentration: CS 2250 (3) Computer Science I Microbiology CHM 2242 (3) Analytcal Chemistry Lab Status III. Computer Science I Microbiology CHM 2342 (3) Analytcal Chemistry Lab Status III. Computer Science I Computer Science I CHM 2342 (3) Analytcal Chemistry II Select a four hour course/lab combination from the following: ChM 1143 (1) General Chemistry II CHM 2342 (3) Biochemistry Lab CHM 1143 (1) General Chemistry II CHM 1143 (1) General Chemistry II CHM 1143 (1) General Chemistry II CS 2256 (3) Computer Science II CHM 3342 (3) Physical Chemistry II CS 3323 (3) Foundations of Computer Science CHM 3342 (3) Physical Chemistry II CS 3323 (3)	BIO 3348		, , ,	PHY L252	(1)	General Physics I Lab
BIO L372 (1) Microbiology Lab section of this catalog. Select one botany courset/twcorresponding lab (four hours). Area V Requirements Select one zoology courset/twcorresponding lab (four hours). CS 2250 (3) Computer Science I Chemistry Concentration: TROY 1101 (1) University Orientation CHM 1242 (3) Analybcal Chemistry Lab Select a four hour course/lab combination from the following: CHM 3343 (3) Organic Chemistry ILab CHM 1443 (3) General Chemistry II CHM 3352 (3) Biochemistry Lab PHY 2253 (3) General Physics II Lab CHM 3381 (3) Prysical Chemistry I Lab PHY 2253 (3) General Physics II Lab CHM 3382 (3) Physical Chemistry II CS 3323 (3) Data Structures CHM 4444 (1) Advanced Inorganic Chemistry CS 3323 (3) Data Structures CHM 4444 (3) Advanced Inorganic Chemistry CS 3323 (3) Data Structures CHM 4444 (3) Advanced Inorganic Chemistry CS 3326 (3) Software Engineering I CHM 44445	BIO L348	(1)	Anatomy & Physiology II Lab			
Select one botany courset/wcorresponding lab (four hours). Area V Requirements Select one zoology courset/wcorresponding lab (four hours). Area V Requirements Select one zoology courset/wcorresponding lab (four hours). MTH 1126 (4) Calculus II Chemistry Concentration: TROY 1101 University Orientation CHM 2242 (3) Analycal Chemistry Lab Select a four hour course/lab combination from the following: CHM 1242 (1) Analycal Chemistry Lab Chemistry Concentration: Chemistry Chemistry II CHM 3343 (1) Organic Chemistry II Chemistry II Chemistry II Chemistry II CHM 1343 (1) Organic Chemistry I PHY 2253 (3) General Chemistry II Lab CHM 3342 (1) Physical Chemistry I PHY 2253 (3) Foundations of Computer Science II CHM 3362 (1) Physical Chemistry II CS 3320 (3) Analysis of Algorithms CHM 3362 (2) Physical Chemistry II CS 3322 (3) Software Engineering I CHM 343 (3) Advanced Inorganic Chemistry ICS 3332 (3) Data Computer Science II CHM 4445 (3)	BIO 3372	(3)				ours as shown in the General Studies
Area V Requirements Select one zoology coursethcorresponding lab (four hours). CS 2250 (3) Computer Science I MTH 1126 (4) Calculus II Uneversity Orientation ChM 2242 (3) Analytcal Chemistry CHM 1242 (1) Analytcal Chemistry Lab (HM 2343 (3) Organic Chemistry IL HM 3343 (3) Organic Chemistry II CHM 3343 (1) Organic Chemistry II CHM 3352 (3) Biochemistry Lab (HM 3382 (3) Biochemistry Lab CHM 1143 (3) General Chemistry II Lab CHM 1332 (1) Physical Chemistry I CHM 1333 (3) Physical Chemistry I Lab CHM 1143 (3) General Chemistry II Lab General Chemistry II Lab Select a minimum of eight semesthours of coursework from the following: CHM 3382 (3) Physical Chemistry II Lab Required Courses Computer Science II CS 3310 (3) Foundations of Computer Science II CS 3323 (3) Data Structures Select a minimum of eight semesthours of coursework from the following: CHM 3382 (3) Physical Chemistry II CHM 4443 (3) Advanced longranic Chemistry CHM 4444 (1) Advanced longranic Chemistry CHM 4444 (1) Advanced longranic Chemistry Lab CHM 4445 (3) Instrumental Analysis CHM 4445 (3) Instrumental Analysis CHM 4445 (3) Instrumental Analysis CS 3370 (3) Nature of Programming Languages Physics Concentration: CS 3370 (3) Nature of Programming Languages Organization and Architectures of Computer Select woof the following: CS 3320 (3) Data Structures CS 3370 (3) Nature of Programming Languages Physics Concentration: CS 3370 (3) Nature of Programming Languages Physics Concentration: CS 3370 (3) Nature of Programming Languages Organization and Machitectures CS 3370 (3) Nature of Programming Languages Physics Concentration: CS 3320 (3) Disterse Mathematics Select woof the following: CS 3320 (3) Departing Systems MTH 2210 (3) Applied Statistics MTH 2210 (3) Applied Statistics MTH 2210 (3) Applied Statistics MTH 22	BIO L372	(1)	Microbiology Lab	section of th	is catalog.	
Select one zoology coursetitwcorresponding lab (four hours). CS 2250 (3) Computer Science I MTH 1126 (4) Calculus II Chemistry Concentration: TROY 1101 University Orientation CHM 2242 (3) Analytzal Chemistry Lab Select a four hour course/lab combination from the following: (Students must complete an eligbur sequence in chemistry or physics. Also see Area III.) CHM 3343 (1) Organic Chemistry II Lab CHM 1143 (3) General Chemistry II Lab CHM 3352 (1) Biochemistry Lab CHM 1143 (3) General Physics II CHM 3381 (1) Physical Chemistry II CS 3310 (1) General Physics II Lab CHM 3382 (1) Physical Chemistry II Lab CS 3310 (3) Foundations of Computer Science II CHM 3382 (1) Physical Chemistry II Lab CS 3320 (3) Conceptd Object-Oriented CHM 4403 (3) Advanced Inorganic Chemistry Lab CS 3326 (3) Conceptd Object-Oriented CHM 4445 (1) Instrumental Analysis Lab CS 3370 (3) Nature of Programming Languages CHM 4445 (1) Instrumental Analysis La	Select one botany	/coursethv	vcorresponding lab (four hours).			
Chemistry Concentration: MTH 1126 (4) Calculus II ChM 2242 (3) Analytal Chemistry Lab TROY 1101 (1) University Orientation CHM 2242 (1) Analytal Chemistry Lab Select a four hour course/lab combination from the following: CHM 1343 (3) Organic Chemistry II Lab CHM 1143 (3) General Chemistry II Lab CHM 3352 (3) Biochemistry Lab CHM 1143 (3) General Chemistry II Lab CHM 3361 (3) Physical Chemistry I PHY 2253 (3) General Physics II CHM 3381 (3) Physical Chemistry I Example CS 3323 (3) Data Structures Select a minimum of eight semethours of coursework from the following: CS 3323 (3) Data Structures Canputer Science II CHM 3382 (3) Physical Chemistry II Lab CS 3323 (3) Data Structures Canputer Science II CHM 4445 (3) Advanced forganic Chemistry CHM 4444 (3) Advanced Iorganic Chemistry Lab CS 3370 (3) Foundations of Computer CHM 4445 (1) Instrumental Analysis Lab CS 3370 (3) Nature of Programming I CHM 4445 (3) Instrumental Analysis CS 4420 (3) Introduction to Computer ChM 4445 (3) Optics lab CS 4445 (3)						
Chemistry Concentration:TROY 1101 (1)University OrientationCHM 2242 (3)Analytical ChemistrySelect a four hour course/lab combination from the following: (Students must complete an eligbur sequence in chemistry or physics: Also see Area III.)CHM 343 (3)Organic Chemistry II LabCHM 1143 (3)General Chemistry II LabCHM 3352 (3)Biochemistry LabCHM 1143 (3)General Chemistry II LabCHM 3352 (1)Biochemistry LabPHY 2253 (3)General Physics IICHM 1381 (1)Physical Chemistry I LabPHY 2253 (1)General Physics II LabCHM 1381 (1)Physical Chemistry II LabComputer Science IICHM 382 (2)Physical Chemistry II LabCS 3323 (3)Data StructuresCHM 382 (1)Physical Chemistry II LabCS 3323 (3)Data StructuresCHM 4403 (3)Advanced organic Chemistry LabCS 3323 (3)Data StructuresCHM 4444 (1)Advanced Inorganic Chemistry LabCS 3360 (3)Concept6 Object-Oriented ProgramingICHM 4444 (1)Advanced Modern PhysicsCS 3370 (3)Nature of ProgramingICHM 1445 (3)Instrumental Analysis LabCS 3372 (3)Nature of ProgramingICHM 1445 (3)OpticsCS 4445 (3)Introduction to Computer Organization and Architectures ProgramingICHM 4459 (3)OpticsCS 4445 (3)Introduction to Database Systems ProgrammingPHY 4459 (3)Optics labCS 3371 (3)Business Systems Programming PHY 4430 (3)PHY 4459 (3)Computer Science I COMPUTER SCIENCE MINOR (18 HOURS)C	Select one zoolog	jy cours e tl	wcorresponding lab (four hours).	CS 2250		
CHM 2242(1)Analytal ChemistrySelect a four hour course/lab combination from the following:CHM 242(1)Analytal Chemistry LabSelect a four hour course/lab combination from the following:CHM 343(1)Organic Chemistry IICHM 1143(3)General Chemistry IICHM 3352(3)Biochemistry IDCHM 1143(1)General Chemistry IICHM 3352(3)Biochemistry IDCHM 1143(1)General Physics IICHM 1331(3)Physical Chemistry IPHY 2253(3)General Physics IICHM 1381(1)Physical Chemistry II LabPHY 2253(3)General Physics IICHM 3382(3)Physical Chemistry II LabCS 3320(3)Data StructuresCHM 4444(3)Advanced Iorganic Chemistry LabCS 3329(3)Analysis of AlgorithmsCHM 4444(3)Advanced Iorganic Chemistry LabCS 3320(3)Conceptof Object-OrientedCHM 4444(1)Advanced Iorganic Chemistry LabCS 3370(3)Nature of Programming Languages and the TheoryCHM 4445(3)Instrumental Analysis LabCS 3372(3)Nature of Programming Languages and the TheoryCHM 4445(3)OpticsCS 4445(3)Advanced Modern PhysicsCS 4445(3)CHM 445(3)OpticsCS 4445(3)Advanced Modern PhysicsCS 4445(3)PHY 4420(3)Beletromagnetic FieldsMTH 2210(3)Applied StatisticsPHY 4430(3)<				MTH 1126		Calculus II
CHM 2242 (3) Analytical Chemistry Lab Select a four hour course/lab combination from the following: (Students must complete an eightur sequence in chemistry or physics. Also see Area III.) CHM 1242 (1) Organic Chemistry III Lab CHM 1143 (3) General Chemistry II CHM 3352 (3) Biochemistry Lab CHM 1143 (3) General Chemistry II CHM 3381 (3) Physical Chemistry I Lab CHM 1143 (1) General Physics II CHM 3381 (3) Physical Chemistry I Lab CHM 1143 (1) General Physics II Select a minimum of eight semestiours of coursework from the following: CS 3323 (3) Computer Science II CHM 3382 (3) Physical Chemistry II Lab CS 3323 (3) Data Structures CHM 3382 (3) Physical Chemistry II Lab CS 3323 (3) Software Engineering I CHM 3444 (1) Advanced Organic Chemistry C CS 3323 (3) Data Structures CHM 4444 (3) Advanced Inorganic Chemistry Lab CS 3326 (3) Introduction to Computer CHM 4444 (1) Advanced Inorganic Chemistry Lab CS 3365 (3) <td>Chemistry Conce</td> <td>ntration</td> <td></td> <td>TROY 1101</td> <td>(1)</td> <td>University Orientation</td>	Chemistry Conce	ntration		TROY 1101	(1)	University Orientation
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Select eight hours of upper levely hysics or chemistry courses approved by the academic adviser.Select two of the following: CS 3320Business Systems ProgrammingCOMPUTER SCIENCE MINOR (18 HOURS)CS 3325(3)Operations ResearchCS 2250(3)Computer Science ICS 3331(3)Fundamentals of Artificial IntelligenceCS 2255(3)Computer Science IICS 3361(3)Concepts of Objected Oriented Programming IISelect 12 semester hours of competieence courses with at least one course being at the 4000 level.CS 4401(3)Advance@trificial IntelligenceCS 4447(3)Systems Analysis and Design CS 4451CS 4451(3)Computer Sciencing and Design			-	MTH 2210	(3)	••
approved by the academic adviser.Concerns of computer Science ICS 3320(3)Business Systems ProgrammingCS 2250(3)Computer Science ICS 3325(3)Operations ResearchCS 2255(3)Computer Science IICS 3361(3)Fundamentals of Artificial IntelligenceSelect 12 semester hours of competizience courses with at least one course being at the 4000 level.CS 4401(3)Advance&rtificial IntelligenceCS 4447(3)Systems Analysis and DesignCS 4451(3)Computer Security and Reliability		(0)		MTH 2215	(3)	Applied Discrete Mathematics
approved by the academic adviser.CS 3320(3)Business Systems ProgrammingCOMPUTER SCIENCE MINOR (18 HOURS)CS 3325(3)Operations ResearchCS 2250(3)Computer Science ICS 3331(3)Fundamentals of Artificial IntelligenceCS 2255(3)Computer Science IICS 3361(3)Concepts of Objected Oriented Programming IISelect 12 semester hours of compsteence courses with at least one course being at the 4000 level.CS 4401(3)Advance&Irtificial IntelligenceCS 4447(3)Systems Analysis and Design CS 4451CS 4451(3)Computer Security and Reliability	Select eight hou	rs of upp	er lev el hysics or chemistry courses	Select two o	f the following:	
COMPUTER SCIENCE MINOR (18 HOURS)CS 3325(3)Operations ResearchCS 2250(3)Computer Science ICS 3331(3)Fundamentals of Artificial IntelligenceCS 2255(3)Computer Science IICS 3361(3)Concepts of Objected Oriented Programming IISelect 12 semester hours of compsteence courses with at least one course being at the 4000 level.CS 4401(3)Advance&Irtificial IntelligenceCS 4447(3)Web Based Software Development CS 4451CS 4451(3)Computer Security and Reliability	approved by the a	academic	adviser.		•	
COMPUTER SCIENCE MINOR (18 HOURS) CS 2250CS 3331(3)Fundamentals of Artificial IntelligenceCS 2250(3)Computer Science ICS 3361(3)Concepts of Objected Oriented Programming IICS 2255(3)Computer Science IICS 3361(3)Concepts of Objected Oriented Programming IISelect 12 semester hours of comp stee nce courses with at least one course being at the 4000 level.CS 4401(3)Advance@rtificial IntelligenceCS 4447(3)Web Based Software Development CS 4451CS 4451(3)Computer Security and Reliability						
CS 2250(3)Computer Science IIntelligenceCS 2255(3)Computer Science IICS 3361(3)Concepts of Objected Oriented Programming IISelect 12 semester hours of comp stee nce courses with at least one course being at the 4000 level.CS 4401(3)Advance&irtificial IntelligenceCS 4443(3)Web Based Software Development CS 4447(3)Systems Analysis and Design CS 4451Systems Analysis and Reliability	COMPL	JTER SCI	IENCE MINOR (18 HOURS)			•
CS 2255(3)Computer Science IICS 3361(3)Concepts of Objected Oriented Programming IISelect 12 semester hours of comp steie nce courses with at least one course being at the 4000 level.CS 4401(3)Advance&Irtificial IntelligenceCS 4443(3)Web Based Software Development CS 4447(3)Systems Analysis and DesignCS 4451(3)Computer Security and Reliability				00000	(0)	Intelligence
Select 12 semester hours of comp state nce courses with at least one course being at the 4000 level.CS 4443(3)Web Based Software DevelopmentCS 4447(3)Systems Analysis and DesignCS 4451(3)Computer Security and Reliability			-			Programming II
one course being at the 4000 level.CS 4443(3)Web Based Software DevelopmentCS 4447(3)Systems Analysis and DesignCS 4451(3)Computer Security and Reliability	Select 12 semest	er houre /	of competitience courses with at loost			
CS 4447 (3) Systems Analysis and Design CS 4451 (3) Computer Security and Reliability				CS 4443	(3)	•
	site couldo sollig					
CS 4461 (3) Software Engineering II						
				CS 4461	(3)	Software Engineering II

CS 4462	(3)	Special Topics in Object-Oriented Technology	
CS 4495	(3)	Special Topics in Computer Science	
COM		CIENCE, APPLIED MAJOR 36 HOURS)	
Specialized Ge	neral Stuc	lies Requirements	
Area III			
MTH 2201	(3)	Business Calculus	
Select addition Studies section		I requirements as shown in the General talog.	
Area V Require	ments		
IS 2241	(3)	Computer Concepts and Applications	
MTH 2215	(3)	Applied Discrete Mathematics	
TROY 1101	(1)	University Orientation	
Major Requiren	nents		
CS 2250	(3)	Computer Science I	
CS 2255	(3)	Computer Science II	
CS 2265	(3)	Advanced Programming I	
CS 3330	(3)	Data Structures and Algorithms	
CS 4420	(3)	Introduction to Database Systems	
CS 4443	(3)	Web-Based Software Development	
CS 4445	(3)	Data Communications and	
		Networking	
CS 4447	(3)	Systems Analysis and Design	
CS 4448	(3)	Operating Systems	
Select three of the following:			
CS 3320	(3)	Business Systems Programming	
CS 3332	(3)	Software Engineering I	
CS 3347	(3)	Advanced Programming II	
CS 4449	(3)	Applied Networking	
CS 4451	(3)	Computer Security	
CS 4495	(3)	Special Topics in Computer Science	

COMPUTER SCIENCE A.S. DEGREE (60 HOURS)

Associate of Science Degree

See the academic regulations sector this cate for additional information regarding associate degrees.

General Studies Requirements

Area I		
ENG 1101	(3)	Composition and Modern
		English I
ENG 1102	(3)	Composition and Modern
		English II
Area II		
Select one o	f the following:	:
ENG 2205	(3)	World Literature before 1660
ENG 2206	(3)	World Literature after 1660
ENG 2211	(3)	American Literature before 1875
ENG 2212	(3)	American Literature after 1875

Select A or B b	elow:		ENG 4488	(3)	Seminar in Professional Writing
 A. 12 additional hours of advanced or upper-level criminal justice courses, as appved by the adviser, 				(2)	Portfolio Design
or			ENG 4490	(3)	Professional Writing Internship
B. Homeland	Security C	Concentitizan. Select 12 additional hours approved by the adviser:	Select an addit ENG 3320	tional four ((3)	courses: Introduction to Linguistics
CJ 3335	•		ENG 3351	(3)	Creative Writing I
CJ 3335	(3)	Private and Public Security	ENG 3352	(3)	Creative Writing II
014405	(0)	Administration	ENG 4400	(3)	Selected Topics
CJ 4435	(3)	Grant Writing	ENG 4405	(3)	History of the English Language
CJ 4440	(3)	Terrorism	ENG 4419	(3)	Advanced Writing
CJ 4470	(3)	Criminal Justice Issues in Homelan Security	d	ENCUS	
CJ 4472	(3)	Cyber Crime			H MINOR (18 HOURS)
CJ 4488	(3)	Internship (limit 1)	ENG 3341	(3)	Advanced Grammar
POL 3364	(3)	State and Local Politics	- ·		
POL 4422	(3)	Public Policy Making	Select one seq	-	
		, ,	ENG 2211	(3)	American Literature before 1875
CRI		STICE MINOR (18 HOURS)	ENG 2212	(3)	American Literature after 1875
			or		
CJ 1101	(3)	Introduction to Criminal Justice	ENG 2244	(3)	British Literature before 1785
			ENG 2245	(3)	British Literature after 1785
		s of upplewel criminal justice courses		()	
as approved by	the advise	er.	Select an addit	tional nine	hours upper division English courses.
FARTH A	ND SPAC	E STUDIES MINOR (18 HOURS)			
SCI 3335		× /			REATIVE WRITING (18 HOURS)
	(3)	Physical Geology	ENG 3351	(3)	Introduction to Creative Writing
SCI L335	(1)	Physical Geology Lab			
SCI 3336	(3)	Astronomy	Select an addit	tional 15 ho	ours from the following:
SCI 3340	(3)	Marine Science	ENG 3352	(3)	Advanced Creative Writing I
SCI L340	(1)	Marine Science Lab	ENG 3353	(3)	Advanced Creative Writing I
SCI 3350	(3)	Weather and Climate	ENG 3354	(3)	Advanced Nonfiction Writing
SCI L350	(1)	Weather and Science Lab	ENG 3355	(3)	Verse Writing
SCI 4403	(3)	Conservation	ENG 3356	(3)	Forms and Theory of Fiction
			ENG 4420	(3)	Selected Topics in Creative Writing
	ENGLISH	H MAJOR (36 HOURS)	ENG 4427	(3)	Contemporary American Literature
			ENG 4489	(3)	Internship
Area V Require					
ENG 2211	(3)	American Literature before 1875	ENGL	ISH MINOF	R, PROFESSIONAL WRITING
ENG 2212	(3)	American Literature after 1875			ASIS (18 HOURS)
ENG 2244	(3)	British Literature before 1785	ENG 2260		Introduction to Technical and
ENG 2245	(3)	British Literature after 1785	2200	(3)	Professional Writing
IS 2241	(3)	Computer Concepts and	ENG 3345	(3)	Technical and Professional Editing
		Applications	ENG 3365	(3)	Advanced Technical and
TROY 1101	(1)	University Orientation	LING 0000	(3)	Professional Writing
Major Requiren			ENG 3366	(3)	Professional Document Design
ENG 3341	(3)	Advanced Grammar			J
ENG 4495	(3)	Senior Seminar	Select an addit	tional six h	ours from the following:
			ENG 3320	(3)	Introduction to Linguistics
Select an addit	ional 30 hc	ours of uppdevision courses, at least	ENG 3351	(3)	Creative Writing I
		000 level or above.	ENG 3352	(3)	Creative Writing I
			ENG 4400		Selected Topics
Professional W	riting Empl	hasis [.]		(3)	•
			ENG 4405	(3)	History of the English Language
Writing Employ	sis In addi	ery Campusy select the Professional tion tENG 3341, the following courses	ENG 4419	(3)	Advanced Writing
are required:	5.5. III auul		ENG 4488	(3)	Seminar in Professional Writing
ENG 2260	(3)	Introduction to Technical and Pro-		(0)	Portfolio Design
2110 2200	(0)	fessional Writing	ENG 4490	(3)	Professional Writing Internship
ENG 3345	(3)	Technical and Professional Editing			
ENG 3365	(3)	Advanced Technical and			
	. /	Professional Writing			
ENG 3366	(3)	Professional Document Design			

ENG 3366 (3) Professional Document Design

ENGLIS		IGUAGE ARTS PROGRAM 39 HOURS)	BIO 4479 BIO L479	(3) (1)	Environmental Assessment Environmental Assessment Lab
Students seeking Alabama teaclovertification should complete the English major and the requirecourses for language arts, in addition to selecting education assecond major. Students should consult their advisers concerning certification requirements.		BIO 4420 ₁ cr8u511(V4IO)24	(4) Assesn2	Field Vertebrate Zoology (combined lecture and lab) BIO L479	
Specialized Gene	ral Studie	es Requirements			
See the general information.	studies	section of this catalog for addition	nal		
Area II					
COM 2241	(3)	Fundamentals of Speech			
DRA 2200	(2)	Introduction to Drama			
ENG 2205	(3)	World Literature before 1660			
ENG 2206	(3)	World Literature after 1660			
Select one of the	followina	:			
ART 1133	(2)	Visual Arts			
MUS 1131	(2)	Music Appreciation			
	onto				
Area V Requirem ENG 2211		American Literature before 1875			
ENG 2211	(3) (3)	American Literature after 1875			
ENG 2244	(3)	British Literature before 1785			
ENG 2244 ENG 2245	(3)	British Literature after 1785			
IS 2241	(3)	Computer Concepts and Apps.			
COM 1101	(3)	Introduction to Communication			
TROY 1101	(1)	University Orientation			
	forlow				
Required Courses					
COM 3342 COM 4441	(3)	Argumentation and Debate			
	(2)	Oral Interpretation			
DRA 2211 DRA 2245	(1)	Theatre for Youth			
DRA 3301	(1)	Stagecraft Lab Acting I			
DRA 3301 DRA 4451	(2) (3)	Directing I			
ENG 3341	(3)	Advanced Grammar			
ENG 3371	(3)	Literature for Young Adults			
ENG 4405	(3)	History of the English Language			
ENG 4478	(3)	Theory and Practice of Composition	·.		
	(0)	Writing and Learning Across the Curriculum			
JRN 3326	(3)	Advising Student Publications			
Select 12 hours		division glish electives, six of which			
must be at the 4 creative writing	4000 lev	el, three of which may be upper-le	vel		
ENVIRONME	ENTAL S	CIENCE MINOR (18-20 HOURS)			
BIO 2202	(3)	Principles of Environmental Science	à		
BIO L202	(1)	Principles of Environmental Science			
BIO 3328	(3)	Environmental Pollution and Con-			
BIO L328	(1)	Environmental Pollution and Con-			

BIO 4451(3)ToxicologyBIO L451(1)Toxicology LabBIO 4452(3)Industrial HygieneBIO L452(1)Industrial Hygiene Lab

		ore (32 semester hours):	SCI L233
BIO 2202	(3)	Principles of Environmental Science	e SCI 2234
BIO L202	(1)	Principles of Environmental Scienc Lab	e
BIO 3328	(3)	Environmental Pollution and Control	
BIO L328	(1)	Environmental Pollution and Control Lab	
BIO 4413	(3)	Limnology	
BIO L413	(1)	Limnology Lab	
BIO 4451	(3)	Toxicology	
BIO L451	(1)	Toxicology Lab	
BIO 4452	(3)	Industrial Hygiene	
BIO L452	(1)	Industrial Hygiene Lab	
BIO 4479	(3)	Environmental Assessment	
BIO L479	(1)	Environmental Assessment Lab	

Select eight hours of advisepproved upper-level courses in biology, chemistry or mathematics.

BIO 4488/4489/4490 (1-8) Internship in Environmental Science

GENERAL EDUCATION A.A. DEGREE (60 HOURS)

Associate of Arts Degree

See the academic regulations **sector** this cateor for additional information regarding associate degrees.

General Studies Requirements

Area I		
ENG 1101	(3)	Composition and Modern English I
ENG 1102	(3)	Composition and Modern English II

Area II

Select one of the following:				
ART 1133	(2)	Visual Arts		
DRA 2200	(2)	Introduction to Drama		
MUS 1131	(2)	Music Appreciation		

Select one of the following:

ENG 2205	(3)	World Literature before 1660
ENG 2206	(3)	World Literature after 1660
ENG 2211	(3)	American Literature before 1875
ENG 2212	(3)	American Literature after 1875
ENG 2244	(3)	British Literature before 1785
ENG 2245	(3)	British Literature after 1785

Select six hours of one foreign language.

Area III

Select one of the following:			
MTH 1110	(3)	Finite Mathematics	
MTH 1112	(3)	Pre-calculus Algebra	

Select one science course and corresponding lab:

BIO 1100	(3)	Principles of Biology
BIO L100	(1)	Principles of Biology Lab
SCI 2233	(3)	Physical Science

- (1) Physical Science Lab
- (3) Earth and Space Science

BIO 1100	(3)	Principles of Biology
BIO L100	(1)	Principles of Biology Lab
SCI 2233	(3)	Physical Science
SCI L233	(1)	Physical Science Lab
SCI 2234	(3)	Earth and Space Science
SCI L234	(1)	Earth and Space Science Lab

Area IV

Select one of the	following:	
HIS 1101	(3)	Western Civilization I
HIS 1102	(3)	Western Civilization II
HIS 1111	(3)	U.S. to 1877
HIS 1112	(3)	U.S. since 1877
HIS 1122	(3)	World History to 1500
HIS 1123	(3)	World History from 1500
Area V		
IS 2241	(3)	Computer Concepts and
	. ,	Applications
TROY 1101	(1)	University Orientation

Additional requirements

Select any minor or an of concentration.

Select additional free electives to complete a total of 60 hours.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

HISTORY MAJOR (36 HOURS)

Select one emphasis below:

American/Latin American Emphasis: Specialized General Studies Requirements Area IV Select a six hour sequence in wester

LEADERSHIP STUDIES MINOR (18 HOURS)			CHM L143	(1)	General Chemistry II Lab
LDR 1100	(3)	Introduction to Leadership		(')	
LDR 2200	(3)	Tools for Leaders	Select one sea	uence (pł	hysicqueence not required for medical
LDR 3300	(3)	Leadership Theory	technology cond		
LDR 4400	(3)	Leadership Seminar	PHY 2252	(3)	General Physics I
LDI 4400	(3)	Leadership Serninar	PHY L252	(1)	General Physics I Lab
Select at least	t an additior	aix hours from the following:	PHY 2253	(3)	General Physics II
AS 3312	(3)	Air Force Leadership Studies I	PHY L253	(1)	General Physics II Lab
AS 3313	(3)	Air Force Leadership Studies II	or		
COM 3326	(3)	Conflict Management	PHY 2262	(3)	Physics I with Calculus
COM 3345	(3)	Group Discussion and Leadership	PHY L262	(1)	Physics I with Calculus Lab
COM 4426	(3)	Organizational Communication	PHY 2263	(3)	Physics II with Calculus
SED 4400	(3)	Secondary Classroom Management	PHY L263	(1)	Physics II with Calculus Lab
HIS 3304	(3)	Military History of the United States	6		
HIS 3315	(3)	Vietnam War	Requirements for	or the Prog	gram
HIS 3318	(3)	History of American Women	Lectures and co	orrespondi	ng labsust be taken together.
IDS 2200	(3)	Interdisciplinary Studies	BIO 2220	(3)	Principles of Cell Biology
LDR 4402	(2)	Leadership Field Experiences	BIO L220	(1)	Principles of Cell Biology Lab
LDR 4403	(1)	Contemporary Issues in Leadership	BIO 2229	(3)	General Ecology
LDR 4444	(3-6)	Leadership Internship	BIO L229	(1)	General Ecology Lab
LDR 4450	(1-6)	Leadership Service Learning	BIO 3320	(3)	Genetics
LDR 4493-94	(1-3)	Guided Independent Study	BIO L320	(1)	Genetics Lab
MGT 3371	(3)	Principles of Management and	CHM 3342	(3)	Organic Chemistry I
		Organizational Behavior	CHM L342	(1)	Organic Chemistry I Lab
MGT 3375	(3)	Human Resources Management	CHM 3343	(3)	Organic Chemistry II
MGT 4472	(3)	Organizational Behavior	CHM L343	(1)	Organic Chemistry II Lab
MSL 2201	(2)	Individual Leadership Studies	MTH 2210	(3)	Applied Statistics
MSL 2202	(2)	Leadership and Teamwork			
MSL 2204	(2)	Leadership Lab	Troy University	Courses:	
PHI 2204	(3)	Ethics and the Modern World	BIO 3307	(3)	Invertebrate Zoology
POL 3340	(3)	U.S. Government – Executive Branch	BIO L307	(1)	Invertebrate Zoology Lab
POL 3364	(3)	State and Local Politics			
POL 4421	(3)	Introduction to Public	Select three a	additional	upper del adviser-approved biology
		Administration	taken together.	I). Lectur	es athreir corresponding labs must be
PSY 4410	(3)	Business and Industrial Psycholog	ly		
SOC 3301	(3)	Social Change in the Information	Douphin Island	Saalah	(DISL)Courses (16 semester hours).
	(-)	Age			duriting summer term. Students are
SOC 3310	(3)	Minorities in U.S. Social Structure	required to take		
SS 4498	(3)	Social Science Theory			

MARINE BIOLOGY PROGRAM (55 HOURS)

Students must take coursesbath Troy University and Dauphin Island Sea Lab.

Specialized General Studies Requirements

Area III		
BIO 1100	(3)	Principles of Biology
BIO L100	(1)	Principles of Biology Lab
CHM 1142	(3)	General Chemistry I
CHM L142	(1)	General Chemistry I Lab
MTH 1125	(4)	Calculus I
Area V Require	ements	
Area V Require IS 2241	ements (3)	Computer Concepts and Apps.
•		Computer Concepts and Apps. University Orientation
IS 2241	(3)	
IS 2241 TROY 1101	(3) (1)	University Orientation
IS 2241 TROY 1101 BIO 1101	(3) (1) (3)	University Orientation Organismal Biology

MATHEMATICS MAJOR (38 HOURS)

Specialized G	eneral Stud	dies Requirements
Area III		
BIO 1100	(3)	Principles of Biology
	(1)	D · · · · · · · · ·

BIO L100 (1) Principles of Biology Lab

MTH 1125 (4) Calculus I

Select a four hour course/lab combination from the following:

- CHM 1142 (3) General Chemistry I
- CHM L142 (1) General Chemistry I Lab
- PHY 2252 (3) General Ph

Area V Require	ements	
IS 2241	(3)	ComputeConcepts and Applica- tions
TROY 1101	(1)	University Orientation
POL 2241	(3)	American National Government or placement in POL 2240
POL 2260	(3)	World Politics
Major Requirer	nents	
POL 3300	(3)	Foundations of Political Science
POL 3330	(3)	Political Theory
Select one of the	he followii	ng concentrations:
American Politi	ics Conce	entration:
Select 15 hours		
POL 3340	(3)	U.S. Government – Executive Branch
POL 3341	(3)	U.S. Government – Legislative Branch
POL 3342	(3)	U.S. Government – Judicial Branch
POL 3343	(3)	American Political Processes
POL 3355	(3)	Southern Politics
POL 3364	(3)	State and Local Politics

	()	
POL 4422	(3)	Public Policy Making
POI 4423	(3)	American Foreign Policy to 1920

POL 4423	(3)	American Foreign Policy to 1920
POL 4424	(3)	Contemporary American Foreign
		Policy
POL 4420	(3)	Constitutional Law

POL 4471 (3) Intergovernmental Relations

Select an additional 15 hours of upper-level (3000-4000) political science courses, as approved your academic adviser.

International Politics Concentration:

POL 3351	(3)	International Relations	
POL 4410	(3)	International Political Economy	
POL 4433	(3)	Comparative Government POL	44
POL 4740	(3) an		
POL 4740	(3) Polit		
POL 4762	(3)	PoliticsofSoutrasn (sic :)]TJ /T4 Tw [(POL 4.26 TD 0 Tc 0 Tw ()Tj 0 -1.5333 TD .0006 Tc .0027 Tw [(Select -	an)1
science courses, a	as approvl	ngdyour academic adviser.	

PublicAd(m)532(i)114(nistm)532rautiction:

Geography Concentration:

GEO 3300	(3)	Principles of Physical Geography
GEO 3301	(3)	Principles of Cultural Geography

Select at least 18 hours of **atilia** at 3000/4000-level courses as approved by your faculty adviser:

Leadership Concentration:

LDR 1100(3)Introduction to LeadershipLDR 4400(3)Leadership Seminar**Requires approval of the director of the Institute of LeadershipDevelopment

Select an additional 18 hours from the following:

AS 3312 (3) Air Force Leadership Studies I

AS 3313 (3) Air Force Leadership Studies II

COM 3345 331-D .0O 0 Tc (.016.riscussuctiand.3()6.6(Leadersh3()]TJ 0 -1.2533 TD 0 Tc .0033 TwHISLDR13341J -3220()-3746.7((3))ition

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*Rirelopms (3) Introdor400-1ySC0056.Dr400-1alipg.3()]TJ 0 -1.26 TD 0 Tc 0 Tw ()Tj /TT8 1 Tf 0 -1.2533 TD .0004 Tc 290

GEM 3310	(3)	Land Surveying Practice
GEM L310	(1)	BoundarRetracement Seminar
GEM 3330	(3)	Advanced Measurement Analysis
GEM L330	(1)	Advanced Measurement Analysis
		Lab
GEM 3366	(3)	Photogrammetry and Remote Sensing
GEM L366	(1)	Photogrammetry and Remote Sensing Lab
GEM 3370	(3)	Geodesy & Geodetics
GEM L370	(1)	Geodesy & Geodetics Lab
GEM 3379	(3)	Introduction to Least Squares Adjustment
GEM L379	(1)	Introduction to Least Squares Adjustment Lab
GEM 3390	(3)	Introduction to GIS
GEM L390	(1)	Introduction to GIS Lab
GEM 3391	(3)	Applications of GIS
GEM L391	(1)	Applications of GIS Lab
GEM 4405	(3)	Route & Construction Surveying
GEM L405	(1)	Route & Construction Surveying Lab
GEM 4407	(3)	Land Development
GEM L407	(1)	Land Development Lab
GEM 4409	(3)	Hydrology
GEM L409	(1)	Hydrology Lab
GEM 4410	(3)	Introduction to Global Positions
GEM L410	(1)	Introduction to Global Positions Lab
GEM 4490	(1)	Geomatics Capstone
Select two hou	urs below:	
GEM 4499	(2)	Geomatics/GIS Projects
or		
GEM 3395	(1)	Cooperative Work Experience I, and
GEM 4496	(1)	Cooperative Work Experience II

GEM 3395 (1) GEM 4496 (1) Cooperative Work Experience II