Student:			

Advisor:	

Bachelor of Science in Environmental Science – Analytical Track
2014-2016 Catalog

	2014-	2016 Calai	Ug		
	<b>UST Core Requirements (4</b>	(3 hours)		Total Hours Complete	Total Hours Needed
Theology (9 credit hours) – must take in order THEO 1301/3301 – Intro to the Sacred Scriptures ( THEO 2301/3311 – Teachings of the Catholic Chur THEO 3349 – Christ and the Moral Life (THEO 230	PHIL 1311 or 1315/3315) ch (THEO 1301/3301)	6)	Transferring 30-59 hours: Theology – 6-9 hours Theology 6-9 hours Theology 6-9 hours Theology 6-9 hours Theology 6-9 hours		
Philosophy (9 credit hours) – must take in ord Systematic Sequence PHIL 1311 – Phil of the Human Person	<b>er:</b> Historical S	Sequence	Philosophy – 6-9 hours Synthesis – 3 hours Total must be 18 hours		
PHIL 2314 – Ethics (PHIL 1311) PHIL 3313 – Metaphysics (PHIL 2314)	PHIL 2316/3316 – PHIL 3317– Moder	Medieval Philoson Philosophy (Pl	ophy (PHIL 1315/3315) HIL 2316/3316)		
Synthesis Course (3 credit hours) – choose of Philosophy Synthesis Pre-Req: PHIL 2314 or PHIL 2316/3316  Theology and Catholic Studies Synthesis Pre-Reqs: PHIL 2314 or CS 3320 – Re-Connecting Catholicism with the Sciences	or PHIL 2316/3316; THEO 2301/3301; THEO PHIL 4340 – Phenomenology and Existentialis	O 3349 (May also be sm	taken as a Co-Req) THEO 3345 – Theology of St. Thomas Aquinas		
PHIL 3314 – Business Ethics PHIL 3318 – Bioethics PHIL 3319 – Philosophy of the Mind PHIL 3336 – Political Philosophy PHIL 3350 – Contemporary Logic PHIL 4312 – Philosophy of Knowledge PHIL 4312 – Philosophy of Mr. Albert PHIL 4324 – Faith and Reason PHIL 4335 – Philosophy of Art and Beauty PHIL 4335 – Analytical Philosophy PHIL 4337 – Philosophy of History and Culture	PHIL 4350 – Philosophy of Law: Tradition of N PHIL 4352 – Philosophy of Seiner PHIL 4354 – Philosophy of Seiner PHIL 4360 – Philosophy of War and Peace PHIL 4362 – Philosophy of Woman PHIL 4366 – Philosophical Themes in Literatur PHIL 4366 – Philosophical Themes in Literatur PHIL 4361 – John Henry Newman THEO 3322 – Theology of Creation THEO 3327 – Re-Connecting Catholicism with THEO 3336 – Christian Spirituality	re	THEO 3363 – Church History I THEO 3364 – Church History II THEO 4324 – Christian Ethics and the Law THEO 4325 – Faith and the Moral Development THEO 4334 – Social Justice and the Church THEO 4339 – Celtic Spirituality THEO 4336 – American Catholic Heritage THEO 4347 – Fathers of the Church THEO 4360 – John Henry Newman THEO 4374 – Modern Challenges to Christianity		
English (9 credit hours) – must take in order: ENGL 1341 – The Classical Tradition: Literature & ENGL 1342 – The Middle Ages: Literature & Comp ENGL 2312 – The Modern World: Literature & Com	osition II (ENGL 1341)		Students with English transfer credit: 3 hours – take ENGL 1341, 1342 6 hours – take ENGL 3312		
History (6 credit hours): HIST 1335 – World Community I HIST 1336 – World Community II	OR		3 – United States to 1877 4 – United States since 1877		
Social & Behavioral Sciences (6 credit hours) Choose two courses from the following: ECON 1331 – Principles of Macroeconomics ECON 1332 – Principles of Microeconomics	: OR	Choose	B. Behavioral Sciences (3 credit hours) one course from the list on the left  + mmunication (3 credit hours)		
GEOG 2332 – World Regional Geography INST 1351 – Intro to International Studies SOCI 1331 – Principles of Sociology POSC 2331 – American & Texas Government I POSC 2332 – American & Texas Government II PSYC 1332 – General Psychology	0.4000	Choose ( CC CC	one course from the following: DMM 1331 – Public Speaking DMM 2332 – Persuasion and Argumentation GMT 3320 – Business Communication		
PSYC 3339 – Human Growth & Development (PSY Natural Sciences (8 credit hours):  Choose two lecture/laboratory courses from the following BIOL 1351/1151 – Intro to Population Biology & Evc BIOL 1352/1152 – Intro to Cell & Molecular Biology/	ng: lution/lab		Sciences (4 credit hours) one natural science course from the list on the left		
BIOL 2445 – Human Anatomy & Physiology I BIOL 2446 – Human Anatomy & Physiology II (BIOL CHEM 1341/1141 – General Chemistry II/lab CHEM 1342/1142 – General Chemistry II/lab (CHE ENSC 1343/1143 – Science of the Human Environn ENSC 1344/1144 – Science of the Earth Environme ENSC 1345/1145 – Intro to Watershed Science/lab GEOL 1341/1141 – Physical Geology/lab GEOL 1342/1142 – Historical Geology/lab PHYS 1331/1111 – General Physics II/lab PHYS 1332/1112 – General Physics II/lab (PHYS 1) PHYS 1323/1123 – Solar System Astronomy/lab	OR . 2445) M. 1341/1141) nent/lab nt/lab	(6 credi Choose to must be options for Japanes	and Classical Language t hours) we sequential courses in one language. Courses completed in the approved order. Choose language om Arabic, French, German, Irish, Italian, e, Mandarin Chinese, Russian Spanish, and l) Greek or Latin	3	
PHYS 1324/1124 – Stellar & Galactic Astronomy/lal PHYS 2331/2111 – University Physics I/lab (MATH PHYS 2332/2112 – University Physics II/lab (MATH	1431) 1432; PHYS 2331/2111)				
Mathematics (3 credit hours) – choose one cou MATH 1331 – Pre-calculus MATH 1351 – Finite Mathematics MATH 1431 – Calculus I MATH 1353 – Math for Econ & Business	•	MATH 23 MATH 24	32 – Elem Statistics for Econ & Business 330 – Intro to Statistics for Nursing 34 – Applied Statistical Concepts 50 – Biostatistics I (6 hours math or science)		
Fine Arts (3 credit hours) – choose one course ARTHS 1350 – Introduction to the Visual Arts ARTHS 2351 – Survey of Art I ARTHS 2352 – Survey of Art II ARTHS 3351 – Survey of Art II ARTHS 3352 – Survey of Art II DRAM 1330 – Introduction to the Theatre DRAM 2340 – Story of Theatre I	from the following:	DRAM 33 DRAM 33 MUSC 13 MUSC 33 MUSC 33	341 – Story of Theatre II 340 – Theatre History I 341 – Theatre History II 331 – Introduction to Music 341 – Survey of History & Literature I 342 – Survey of History & Literature II 342 – Survey of History & Literature III		
Freshman Symposium (1 credit hour) – requir UNIV 1111 – Freshman Symposium	ed for all entering freshmen		· · · ·		

Bachelor of Science in Environmental Science – Analytical Track Major Requirements (74 credit hours)	Total Hours Complete	Total Hours Needed
Environmental Science/Geology (4 credit hours)		
Choose one introductory course and corresponding lab from the following:  ENSC 1344/1144 – Science of the Earth Environment		
GEOL 1341/1141 – Physical Geology		
ENSC 1345/1145 – Watershed Science		
Additional Environmental Science/Geology (6 credit hours)		
Choose two courses from the following:  GEOL 3351 – Oceanic and Atmospheric Science		
ENSC 3330 – Energy for the Future (ENSC 1344/1144 or permission of the department chair)		
ENSC 3360 – Coastal Ecology		
Environmental Science Internship (1 credit hours):		
ENSC 4191 –Internship in Environmental Science  Choose one Option (Capstone or Thesis) in Environmental Science (3 credit hours)		
Capstone Option:		
ENSC 4398 – Capstone Seminar in Environmental Science & Studies		
Thesis Option:		
ENSC 3161 – Research Proposal (pre-req (ENSC 3351, MATH 3332, & department consent)		
ENSC 4162 – Research: Data Acquisition and Analysis (ENSC 3161 & Department Consent) ENSC 4171 – Research: Thesis Writing (ENSC 4162 & department consent)		
Methods in Environmental Science/Environmental Studies (3 credit hours):		
ENSC 3300 – Field Studies in Ecology and Environmental Science		
Additional Methods in Environmental Science/Environmental Studies (6 credit hours)		
Choose two methods courses from the following:		
ENSC 3351 – Urban Environmental Investigations ENVR 3355 – Introduction to GIS (ENSC 1344, 1144)		
ENVR 4356 – Advanced Topics in GIS (ENVR 3355)		
Environmental Electives (6 credit hours)		
Choose two courses from the following, at least one of which must be ENVR or ENSC:		
ENVR 2346 – Authentic Development and Sustainability		
ENVR/ENGL 3319 – Nature and the Environment in Literature (pre-req 9 hours of English core) ENVR 4353 – Environment Policy & Law (ENSC 1343/1143 & 1344/1144, junior or senior standing)		
BIOL 3331 – Ecology (pre-reg BIOL 1351, 1151, 1352, 1152, BIOL 3321 – Genetics, CHEM 1341,1141, 1342, 1142)		
CHEM 4354 – Environmental Chemistry (pre-req CHEM 1341, 1342, 3343/3143 – Quantitative Analysis)		
GEOG 3333 – Urban Geography		
GEOG 4330 – Geography of Natural Resources HIST 4353 – Environmental Thought in America (junior status)		
POSC 3354 – Emergency Preparedness (pre-req POSC 2331/2332 – American and Texas Government I & II)		
POSC 3371 – Introduction to Public Administration (pre-reg POSC 2331/2332 – American and Texas Government I & II)		
ECON 3351 – Environment and Natural Resource Economics (pre-req ECON 1332 – Microeconomics)		
Or other courses with permission of the Department Chair.		
Chemistry (24 credit hours): (THESE REQUIREMENTS COMPLETE A MINOR IN CHEMISTRY):  CHEM 1341/1141 – General Chemistry I and laboratory		
CHEM 1342/1142 – General Chemistry II and laboratory (CHEM 1341, 1141)		
CHEM 2343/2143 – Organic Chemistry I and laboratory (CHEM 1341, 1141, 1342, 1142)		
CHEM 2344/2144 – Organic Chemistry II and laboratory (CHEM 1341, 1141, 1342, 1142, 2343, 2143)		
CHEM 3343/3143 – Quantitative Analysis and laboratory (CHEM 1341,1342)		
CHEM 4354/4154 – Environmental Chemistry and laboratory (1341, 1342, 3343, 3143)  Biology (14 credit hours):		
BIOL 1351 – Introduction to Population Biology and Evolution		
BIOL 1151 – Introduction to Biology Practicum		
BIOL 1352 – Introduction to Cell and Molecular Biology		
BIOL 1152 – Basic Lab Techniques in Biology		
BIOL 3321 – Genetics (BIOL 1351, 1151, 1342, 1142,CHEM 1341,1141, 1342, 1142) BIOL 3331 – Ecology (BIOL 1351, 1151, 1342, 1142, 3321, CHEM 1341,1141, 1342, 1142)		
Mathematics (4 credit hours):		
MATH 1431 – Calculus I		
Synthesis Course (3 credit hours):		
Choose one of the following:  THEO 2322: Thosplant of Creation (are the DIIII 1211 of 1215 of 1214 of 1215 of 1214 of 1215 of		
THEO 3322 – Theology of Creation (pre-req: PHIL 1311 or 1315 or 3315, 2314 or 2316 or 3316, THEO 1301 or 3301 and 2301 or 3311, co-req THEO 3349)  CS 3320 – Re-Connecting Catholicism with the Sciences (pre-req: PHIL 1311 or 1315 or 3315, 2314 or 2316 or 3316, THEO 1301 or 3301 and 2301 or 3311, co-req THEO 3349)		
Or another synthesis course in THEO/PHIL/CS with permission of the Department Chair.		
Other Environmental Science/Studies Major Requirements:		
•All students must complete 40 hours of environmental service		
Recommended Coursework: MATH 1432 – Calculus II ; PHYS 2331/2111 & 2332/2112 – University Physics I and II		
Electives to reach the 126 credit hour minimum for graduation (9 credit hours)		
Total Required	126	
(hours transferred)		
hrs complete + hrs ip + hrs core + hrs major + hrs minor + hrs other +	hrs elec	tives = 126+