

AC – 1 ACADEMIC COURSES

UNDERGRADUATE COURSES

2) To count as **sustainability-focused**, the course title or description must indicate a primary and explicit focus on sustainability. The course title or description does not have to use the term “sustainability” to count as sustainability- focused *if the primary and explicit focus of the course is on the interdependence of ecological and social/economic systems or a major sustainability challenge.*

- 1) **ARC 2233. Principles of Environmental Systems (5)**
 - a) Introduction of how to achieve high environmental performances and high level of comfort for the occupants through a sustainable, effective and integrated design process. The course’s practice focuses on small-scale buildings (residential, educational, etc.)
 - b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22454.pdf
- 2) **ARC 4183. Environmental Systems. (8)**
 - a) This course is equally driven by the growing realization of the need for more sustainable architecture, the concepts of which can be traced back to architectural principles first stated by Vitruvius in The Ten Books on Architecture, written in 26 BC.
 - b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_34787.pdf
- 3) **ARC 4246. Systems Studio. (4)**
 - a) This undergraduate systems studio seeks to embed issues of ecological literacy and resilience into a traditional studio setting through the comprehensive integration of advanced performance metrics and design pedagogy. The studio will pursue these critical topics in parallel, with the goal of fully exploring the oft-misunderstood relationship between architectural sustainability and aesthetics.
 - b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_23420.pdf
- 4) **URP 4123. Sustainable Community Development. (2)**
 - a) This course is a seminar on the main challenges involved in the global planning and developing of sustainable cities and regions. Issues covered include land use, transportation, energy, water, climate issues, waste/pollution, housing, infrastructure, food security, environmental economics and social equity
 - b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_33206.pdf
- 5) **ECO 4273. Environmental and Resource Economics. (1)**
 - a) Economic principles applied to natural resource and environmental problems; relationship of market and nonmarket forces to environmental quality and demands for natural resources; and development of tools for policy analysis
 - b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_22759.pdf
- 6) **BBL 3033. Mexican Americans in the Southwest. (7)**
 - a) [from course objectives] Understand the ways in which sociohistorical and cultural forces have shaped our understanding of Mexicans and Anglos in the creation of Texas and the Southwest. Understand the social, political, and cultural forces that have shaped and given meaning to Mexican American or Chicano/a identities. Understand Chicano experiences in the Southwest beginning with the 1840 to contemporary times.
 - b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_19931.pdf
- 7) **BBL 2003. Language, Culture, and Society. (4)**

- a) [from course description] In particular, we are interested in how language shapes social relations in South Texas, but also the role of languages in an increasingly diverse, interconnected, and multilingual world.
 - b) [from course objectives] articulate ways in which sociolinguistics can inform the everyday practice of social justice.
 - c) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_34392.pdf
- 8) BBL 3043. Social Psychological Considerations in Mexican American Communities. (1)**
- a) A cross-cultural and social psychological study of human development, interethnic communication, stereotyping, learning styles, or other topics relevant to the bicultural setting
 - b) <http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu alstudies/#courseinventory>
- 9) BBL 3403. Cultural and Linguistic Equity for Schooling. (8)**
- a) Examination of sociolinguistic and sociocultural principles central to culturally diverse settings, including the classroom. Topics include educational equity, segregated schooling, the achievement gap, hegemony, and social dominance theory. Various pedagogical practices will be explored to identify culturally inclusive responses. Field experience required
 - b) <http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu alstudies/#courseinventory>
- 10) MAS 2013. Introduction to Chicano(a) Studies. (5)**
- a) An introduction to the field of Chicano(a) studies from its inception to the present. Chicano(a) studies and scholarship are explored through multidisciplinary concepts, theory, and methodologies, providing differing interpretations of the Chicano and Chicana experience in the United States.
 - b) [Taken from course objectives] Students will demonstrate multicultural competence and understand the need for civic engagement in the context of local, regional, national and global spheres.
 - c) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_17592.pdf
- 11) MAS 2023. Latino Cultural Expressions. (8)**
- a) An introductory overview of Hispanic visual, performing, and folk arts from their origins in the Iberian Peninsula, through the later blending of cultures and their parallelism during revolutionary periods, to contemporary Latino expressions in the United States.
 - b) [from course objectives] Articulate core concepts such as historical memory, identity, rasquachismo, domesticana, cultural citizenship, colonization, imperialism, hegemony, reclaiming indigeneity, hybridity, authenticity, pan-ethnic, intercultural. Borderlands, diaspora, mestizaje, resistance, cultural nationalism, cultural appropriation, and oppositional consciousness—in relation to Latina/o cultural production by applying them correctly in class activities, quizzes, class discussions, and written work.
 - c) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_12815.pdf
- 12) MAS 2033. Multiculturalism in the Southwest**
- a) A panoramic study of the concept of culture and the social dynamics of exchange among those ethnic groups that determine the multicultural milieu of the Southwest.

Examination of cultural **differences** and similarities among all peoples of the region and the role of multiculturalism in politics, education, economics, religion, and everyday life.

- b) [http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory](http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory)

13) MAS 3003. Musical Mestizaje.

- a) Designed to examine Mexican American experience at the borders where the cultural form of music becomes a way of expressing cultural contact, tension, conflict as well as accommodation and resistance. Music becomes a site of excavating issues of inheritance as well as understanding the dynamics of creative expression. Course reflects historical and social contexts to engage the cultural production of the genres and themes of music found in Mexican American communities.

- b) [http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory](http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory)

14) MAS 3013. Chicana/o Queer Communities, Identities and Theories.

- a) Through an intersectional lens that addresses gender and sexuality in conjunction with race and class, this course examines concepts of identity, community, and belonging for and by Mexican American lesbian, bisexual, transgender, intersex and queer communities. Topics may include language, migration, history, health, family and kinship

- b) [http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory](http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory)

15) MAS 3023. Historical Legacies: Chicanas/os in Education.

- a) This course presents key texts that are central to the study of Chicanas/os in education. This course critically examines the historical legacies and contemporary experiences of Chicana/o children and youth in U.S. educational institutions. The course will present various theoretical perspectives that problematize the pervasive history of educational inequality and patterns of academic attainment and achievement throughout the educational pipeline. Special attention will be given to the pervasive history of segregation, tracking, language oppression, and assimilationist ideologies and practices, as well as the current struggles for educational justice in Chicana/o schools and communities.

- b) [http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory](http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory)

16) MAS 3043. Social Psychological Considerations in Mexican American Communities. (1)

- a) A cross-cultural and social psychological study of human development, interethnic communication, stereotyping, learning styles, or other topics relevant to the bicultural setting.

- b) [http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory](http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory)

17) MAS 3413. Mexican American Family. (2)

- a) This course offers an examination of the social status of Mexican Americans and their relationship to the dominant society. Issues may include the position of Mexican Americans in economic, political, and status hierarchies and the major factors limiting mobility within these systems.

- b) [http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory](http://catalog.utsa.edu/undergraduate/educationhumandevlopment/biculturalbilingu
alstudies/#courseinventory)

18) EDU 2103. Social Foundations for Education in a Diverse U.S. Society. (7)

- a) Students will explore the relationship between school and a diverse U.S. society. They will explore the need for an educational philosophy suited for educating a diverse population; the role of ethnicity, gender, and class in the historical construction of schooling as it is today, the interactive effects of culture and economics upon and within schools, and the politics of education.
- b) [taken from course goals] Identify political economic processes and structures affecting public education relevant to gender, race ethnicity, language, and class. Understand the relationship between schooling, ideology, and political economy as it related to diverse populations. Identify relevant relationships between school and the social construction of race and ethnicity.

- c) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_10688.pdf

19) IDS 2013. Introduction to Learning and Teaching in a Culturally Diverse Society. (5)

- a) Introductory course for all prospective teachers. This course is designed to help students understand the complexity of K–12 teaching in our contemporary society. Students will examine the history, policies and practices that have shaped schooling in the United States. Contemporary dilemmas of equity, the achievement gap, and other marginalizing practices will be considered to better understand the culture of schooling and classrooms, and the complex role of the teacher. Emphasis will be on, but not limited to, students as learners, curriculum standards and assessment, effective teaching practices for diverse learners, professionalism, and the sociopolitical challenges confronting today’s teachers
- b) [from course objectives] Come to a complex understanding of privilege and marginalization through reflecting on, and coming to a deeper understanding, their personal experiences with privilege marginalization.

- c) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_18143.pdf

20) IDS 2113. Society and Social Issues (8)

- a) This course explores contemporary social issues resulting from modern globalization and transnationalism from diverse disciplinary perspectives. Students investigate data and relate scholarship to understand the nature of global changes, as well as their impact on the world's people and global societies. Personal and social responsibility in relation to social issues will be explored through a variety of global, national, regional, and community-based topics. Students will be expected to synthesize disciplinary studies and demonstrate their connections of global issues to local contexts through written, oral, and visual representations.

- b) [http://catalog.utsa.edu/undergraduate/educationhumandevlopment/interdisciplinary/
earningteaching/#courseinventory](http://catalog.utsa.edu/undergraduate/educationhumandevlopment/interdisciplinary/
earningteaching/#courseinventory)

21) IDS 3013. Diversity, Equity, and the Social Sciences. (8)

- a) This course offers learners opportunities to explore issues of diversity and equity by examining the social construction of race, class, sex, sexuality and other markers that may cause social oppression. Students will be invited to engage in in-depth inquiry about knowledge production and identity construction within the dominant discourse, as well as in critical reflection on social transformation practices in schools and communities.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_14967.pdf

22) HTH 4543. Environmental Health and Safety. (8)

a) Intensive coverage of the aspects of a human being's health and safety in a changing environment. Considers applicable factors of ecology, including problems related to water, waste, pesticides, foods, radiation, population, and other aspects of the total ecosystem, as well as personal and occupational safety within these parameters.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_13281.pdf

23) HTH 2133. School Health. (3-0) 3 Credit Hours.

a) This course is designed to provide teacher certification students with the opportunity to gain developmentally appropriate knowledge and skills in health and environmental safety. It will address health-related issues in personal, interpersonal, and community settings and creating a safe teaching environment.

b) <https://catalog.utsa.edu/undergraduate/educationhumandevlopment/healthkinesiology/#courseinventory>

24) HTH 2513. Personal Health. (5)

a) Emphasizes the concept of mind, body, and spirit as necessary components of total well-being; principles of preventive health; and self-responsibility for personal health behaviors.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_10323.pdf

25) HTH 2601. Field-Based Skills in Community Health and Preventive Services. (5)

a) This course introduces students to practices and skills that are commonly used in community health and preventive health services. These include health screening skills and skills for communicating and interpreting screening results

26) HTH 3013. Survey of Human Nutrition. (8)

a) An overview approach to understanding the principles of nutrition and their effect on health and fitness. Emphasis on major nutritional issues throughout the human life cycle; self-evaluation of diet and fitness habits

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_11267.pdf

27) HTH 3043. Principles of Weight Management. (2)

a) An in-depth study of the field of prevention and management of obesity. This course provides practical application of nutritional, psychological, and physical activity principles that help individuals manage their own weight and is suitable for students in health, kinesiology, psychology, biology, counseling, or others

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_22539.pdf

28) HTH 3303. Physical Activity and Health. (2)

a) The course provides a survey of the health-related effects and social-cultural and behavioral determinants of physical activity and exercise. Biological/physiological mechanisms for adaptations to physical activity are also addressed.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_16141.pdf

29) HTH 3513. Community Health. (3)

a) Study of community health problems and the function and organization of public, private, and voluntary health agencies, application of health theories and models and program planning methods. Directed field experience is required.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_18440.pdf

30) HTH 3523. Worksite Health Promotion.

- a) Organization, administration, and supervision of health programs in the community, school, business, or industry setting. Application of health theories, models and program planning methods is required. Directed field experience is required.

31) HTH 3533. Drugs and Health. (2)

- a) Study of the use and abuse of drugs and other substances. Examines addiction, dependence, tolerance, motivation for use, and effects of substance abuse on health and society. Application of theories and models for program development, implementation and evaluation.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_31016.pdf

32) HTH 3543. Growth and Development. (8)

- a) Physical, social, and psychological development throughout the lifespan. Implications for health professionals at all stages of development (prenatal to death) are addressed.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_20345.pdf

33) HTH 3553. Emotional Wellness. (6)

- a) Practical application of techniques for shaping healthier emotional behavior; emphasis on personality, stress management, and fulfilling relationships.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201930_36203.pdf

34) HTH 3563. Child and Adolescent Health Promotion. (3)

- a) Designed for students who are interested in promoting the health of youth, as well as those students pursuing academic training in education and community health. The primary goal of this course is to improve the health literacy of teachers and health promotion specialists through understanding and application of evidence-based child and adolescent health promotion concepts.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_23208.pdf

35) HTH 4503. Human Disease and Epidemiology. (8)

- a) An in-depth look at the etiology, prevention, and treatment of chronic and contagious diseases afflicting humans and epidemiological methods

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_17778.pdf

36) HTH 4513. Consumer Health. (5)

- a) Study of the consumer's selection of health products and services; health frauds, scams and quackery; and the acquisition of basic knowledge for making responsible decisions when selecting professional, complementary, or alternative health care services and products.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_10325.pdf

37) HTH 4523. Understanding Human Sexuality. (2)

- a) An in-depth study of human sexuality, including psychosocial, cultural and physical aspects. Application of theories and models for program development, implementation and evaluation.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_27264.pdf

38) HTH 4533. Nutrition and Health. (3)

- a) An in-depth examination of the principles of nutrition and their effects on health and fitness. Emphasis on critical thinking and translation of nutritional knowledge to real-world settings. Includes self-evaluation of diet and fitness habits.

- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_19795.pdf
- 39) **HTH 4543. Environmental Health and Safety. (8)**
- a) Intensive coverage of the aspects of a human being's health and safety in a changing environment. Considers applicable factors of ecology, including problems related to water, waste, pesticides, foods, radiation, population, and other aspects of the total ecosystem, as well as personal and occupational safety within these parameters.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_13281.pdf
- 40) **KIN 2211. First Aid and CPR. (5)**
- a) A study of basic first aid procedures, cardiopulmonary resuscitation (CPR), automated external defibrillation (AED), and blood borne pathogens. Upon successful completion of this course students will be able to sit for national certification in first aid and CPR.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_20025.pdf
- 41) **KIN 4973. Wellness Counseling.**
- a) Students will learn and apply counseling techniques to promote the adoption of health-promoting lifestyle behaviors in diverse populations. Basic counseling theories will be introduced.
- b) <https://catalog.utsa.edu/undergraduate/educationhumandevlopment/healthkinesiology/#courseinventory>
- 42) **NDT 3313. Applied Food Science. (3)**
- a) Concepts related to the chemical, physical, sensory, and nutritional properties of food in menu planning, food preparation, and recipe modification.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_16207.pdf
- 43) **NDT 3323. Nutrition and Health Assessment. (2)**
- a) Methods, tools, and interpretation of data in assessing the nutritional status of individuals including dietary, anthropometric, biochemical, and clinical assessment, as well as other measurements of health in individuals and the community.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_27282.pdf
- 44) **NDT 3333. Nutrition Counseling and Education. (2)**
- a) Discussion of theories of learning and behavior modification, models and techniques, communication skills, evaluation methods, and cultural competence in nutrition counseling and education; and application of concepts to facilitate behavioral change
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_27283.pdf
- 45) **NDT 3343. Nutrition in the Life Span. (2)**
- a) Nutritional needs during various stages of the lifecycle as influenced by physiologic, cultural, and environmental factors.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_28273.pdf
- 46) **NDT 3413. Advanced Human Nutrition. (3)**
- a) Advanced discussion of nutrient structure, function and interaction, metabolic pathways, and regulation and integration of metabolism.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_17756.pdf
- 47) **NDT 4091. Community Service Practicum. (3)**
- a) Application of learned strategies in meaningful community service through collaborative tasks performed at various community programs. Service learning activities are aimed at

enriching the life experiences of students through civic responsibility and community outreach.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_17349.pdf

48) **NDT 4323. Medical Nutrition Therapy I. (3)**

a) Pathophysiology and the application of the nutritional care process in the treatment of simple human diseases and conditions, part 1.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_20667.pdf

49) **NDT 4333. Community Nutrition. (3)**

a) Nutrition-related issues in public health, various community resources, agencies, and programs involved in health promotion and disease prevention.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_17155.pdf

50) **NDT 4343. Nutrition in Disease Prevention and Health Promotion. (2)**

a) An evidence-based analysis as it relates to diet/nutrition in the prevention of chronic diseases; and fundamental concepts in the promotion of health among individuals and groups.

b) <https://catalog.utsa.edu/undergraduate/educationhumandevlopment/healthkinesiology/#courseinventory>

51) **NDT 4353. Medical Nutrition Therapy II. (2)**

a) Continuation of Advanced Medical Nutrition I; and review of the pathophysiology and the application of the nutritional care process in the treatment of more complex human disease and conditions.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201720_28276.pdf

52) **NDT 4363. Current Issues in Nutrition. (2)**

a) In-depth discussion and analysis of emerging trends, concepts, and controversies in nutritional sciences, including application of evidence-based principles in the discussion

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201720_28277.pdf

53) **SOC 1043. Introduction to Public Health. (7)**

a) Introduces students to the discipline of public health. It will cover a variety of disciplines to the basic tenets of public health. The course will provide a history of public health, an introduction to the five core disciplines (Epidemiology, Biostatistics, Environmental Health, Social and Behavioral Health, and Health Policy & Management). The course will also cover the role of public health in a global society.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_15293.pdf

54) **SOC 4083. Behavioral Epidemiology. (5)**

a) Provides the student with basic knowledge about epidemiological applications in a behavioral area. It covers behavioral and social environmental issues related to disease etiology, premature morbidity and mortality patterns. Provides an overview of the epidemiology of specific health-related behaviors, the relationships between these behaviors and health outcomes, and available evidence for the effectiveness and appropriateness of various approaches to modification of these behaviors.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_17010.pdf

55) **WS 2023. Introduction to LGBTQ Studies.**

a) This interdisciplinary course introduces concepts and theories within LGBTQ Studies. Topics include issues related to lesbian, gay, bisexual, transgender, and queer

communities. The central focus is to examine, challenge, and destabilize normative conceptualizations and representations of gender and sexuality. This class emphasizes different aspects of LGBTQ studies including history, queer theory, popular culture, media, and literature. Course work centers on complicating notions of queer identity through intersections of race, class, gender, and globalization.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_29558.pdf

56) WS 4863. Feminism and Globalization.

a) Theoretical, historical, and empirical analysis of how current processes of globalization are transforming the actual conditions of women's lives, labor, gender ideologies, and politics in complex and contradictory ways. Topics include feminist exploration of colonialism, capitalism, economic restructuring policies, and resistance in consumer and environmental movements.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_27458.pdf

57) EGR 1343. The Impact of Modern Technologies on Society. (1)

a) This course is designed to inform students of the social impact of modern technologies. The course explores the issues faced by society as technology becomes an integral part of human life. The course prepares students to think critically, practically, creatively and responsibly about technological and sociological challenges, and encourages them to examine solutions of their own. The course also explores and discusses the socio-technological interplay.

b) <https://catalog.utsa.edu/undergraduate/engineering/#courseinventory>

58) CE 2633. Environmental Engineering. (5)

a) Principles, analysis, and design related to environmental monitoring, protection, and remediation systems. Topics include environmental quality and legislation, modeling, water treatment, wastewater treatment, solid and hazardous waste management, air and noise pollution, and radioactive waste management.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_10464.pdf

59) CE 4303. Hydrometeorology.

a) The main objective of this course is to familiarize the student with topics related to local and global distribution of freshwater. Conceptualizations of the water balance/budget are developed using principles of physical hydrology and meteorology. Emphasis will be on recent research and modern methods for data analysis and modeling. Real-life events and phenomena will be discussed. In addition to the text, material will be presented from other sources. Guest instructors will give presentations on some case studies.

b) <https://catalog.utsa.edu/undergraduate/engineering/civilenvironmentalengineering/#courseinventory>

60) CE 4603. Water Resources Engineering. (8)

a) Analysis and design of surface and subsurface water resource facilities. Design of water supply, wastewater collection, and storm water systems.

b) <https://catalog.utsa.edu/undergraduate/engineering/civilenvironmentalengineering/#courseinventory>

61) CE 4613. Environmental Chemistry.

a) This course explores the chemistry of the environment, the chemistry underlying environmental problems and solutions to environmental problems. Emphasis is placed on

thermodynamics and kinetics of reaction cycles; sources, sinks and transport of chemical species; and quantitation of chemical species. Examples are selected from the chemistry of natural and contaminated air, water, and soil.

b) <https://catalog.utsa.edu/undergraduate/engineering/civilenvironmentalengineering/#courseinventory>

62) CE 4633. Water and Wastewater Treatment. (5)

a) The application of chemical, biochemical, and physical processes to water treatment, wastewater treatment, and pollution control.

b) <https://catalog.utsa.edu/undergraduate/engineering/civilenvironmentalengineering/#courseinventory>

63) CE 4723. Hydraulic Systems Design.

a) Analysis and design of water resource systems; dam and reservoir design for recharge, flood control, and water supply and demand forecasting, optimization of multi-objective systems, and allocations planning and management.

b) <https://catalog.utsa.edu/undergraduate/engineering/civilenvironmentalengineering/#courseinventory>

64) CE 4733. Applied Hydrology. (2)

a) Technical elective course. Hydrologic cycle, precipitation, hydrologic abstractions, surface runoff; unit hydrographs; synthetic hydrographs; peak discharge relationships; flood frequency analysis; flood and reservoir routing; and groundwater hydrology.

b) <https://catalog.utsa.edu/undergraduate/engineering/civilenvironmentalengineering/#courseinventory>

65) BBL 2023. Mexican American Culture.

a) [from course objectives] Through course readings, discussions, films/videos, and assignments, students will gain operational knowledge of course content to critically discuss: (a) concepts of culture, cultural adaptation, and cultural outcomes, (b) Mexican American culture, including beliefs, practices, and products, (c) United States mainstream culture and class, and (d) demonstrate socio-cultural analysis through an autoethnographic essay.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_14287.pdf

66) ME 4593. Alternative Energy Sources.

a) Solar, nuclear, wind, hydrogen, and geothermal energy sources. Resources, production, utilization, economics, sustainability, and environmental considerations.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_26193.pdf

67) ANT 2033. Introduction to Biological Anthropology. (8)

a) A comprehensive evaluation of human biological diversity and its origins. Topics include anatomy, genetics, primate biology, and the human fossil record. Students will gain critical understanding of key theoretical and methodological issues in this anthropological sub-discipline.

68) ANT 2043. Introduction to Archaeology. (8)

a) This course presents archaeological approaches to understanding human cultures of the past. Students receive instruction in general anthropological concepts and specific archaeological methods and theories. Particular case studies are presented to illustrate

several aspects of archaeological practice, and to show how archaeologists develop their understandings of cultural variation and change.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22048.pdf

69) ANT 2053. Introduction to Cultural Anthropology. (7)

a) This course offers students the opportunity to examine cross-cultural variation in contemporary societies around the world in an anthropological context. It emphasizes ethnographic descriptions to highlight cultural variability in economics, social structures, and ideologies.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_25031.pdf

70) ANT 2063. Language, Thought, and Culture. (7)

a) This course surveys anthropological approaches to the cross-cultural study of language, emphasizing linkages among language, expressive culture, systems of belief and value, and the production of cultural meaning. The effects of social context upon speech are examined as are relations of inequality and power that shape linguistic interaction. Instruction is also given in the fundamentals of descriptive linguistics.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_10513.pdf

71) ANT 3013. Evolutionary Medicine.

a) This course incorporates principles from evolutionary theory into our understanding of various diseases common to human populations both past and present. Topics include the evolutionary origins and histories of common infectious diseases; the evolution of virulence and antimicrobial resistance; vaccine development and controversies; comparative immunology; the origins of allergy, asthma, and autoimmune disorders; and the evolutionary biology of stress and mental health. The course focuses on health analyses at the population level and discusses how evolutionary theory can lead to better prevention and treatment regimens.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

72) ANT 3133. Ritual and Symbol. (1)

a) An examination of rituals—highly stereotyped, stylized, and repetitive acts usually taking place in carefully selected locations and marked by use of material items. Students will be offered a cross-cultural examination of ritual activity from various cultural regions. Attention is also given to the theoretical frames that contribute to a holistic understanding of ritual practice.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_24390.pdf

73) ANT 3153. Indians of the Great Plains.

a) An examination of the fundamental cultural transformation and flourishing of Native American societies of the Great Plains following the introduction of the horse. Attention is also given to the subsequent retrenchment under the imposition of Anglo-American dominance, and the recent emergence of new forms of cultural expression within tribal and urban areas.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

74) ANT 3203. Native North Americans. (1)

a) Survey of Native North American cultures from ancient times to the present. Emphasis will be placed on cultural responses to colonialism and European/American intrusion as well as contemporary issues confronting native North Americans in the present day.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32624.pdf

75) ANT 3223. Anthropology and the Environment. (1)

a) Human adaptation to the environment and interaction with it, comparing simple and complex societies in various environmental contexts. (Formerly titled "Cultural Ecology").

76) ANT 3253. Archaeology of South America. (1)

a) The origins and development of the native cultures of South America, and their relationships to the cultural areas of Central America and the Caribbean. Emphasis on the variety of cultural forms and cultural evolution. The roles of demography, subsistence systems, militarism, religion, and other factors in the rise of South American cultures may be discussed.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32623.pdf

77) ANT 3263. Archaeology of North America. (2)

a) Survey of prehistoric cultures in North America from earliest times to historic contact. May include discussion of Ice Age mammoth hunters, Eastern mound-building cultures, Southwestern pueblo cultures, and Plains bison hunters. Chronology, sites, settlement and subsistence patterns, and recent research issues may be considered.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_21712.pdf

78) ANT 3273. Civilizations of Mexico. (2)

a) Examination of the development of the ancient civilizations of Mexico and Central America: Olmec, Teotihuacan, Toltec, Aztec, and Zapotec, among others. Insights will be drawn from archaeological data, art, hieroglyphic writing, ethnohistoric accounts, and Colonial Period documents. (Formerly titled "Ancient Civilizations of Mesoamerica").

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_21987.pdf

79) ANT 3303. Nature and Culture in Greater Amazonia. (1)

a) This course examines the historical and contemporary situations of the indigenous peoples of lowland South America, focusing specifically on the Amazon Basin. Consideration will be given to classical ethnographic monographs as well as accounts of the political and ecological challenges that currently face the inhabitants of Greater Amazonia.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

80) ANT 3333. Human Adaptability. (2)

a) Examines the biological variability of living populations; includes genetics, anatomy, demography, and change within a physical anthropology framework. (Formerly titled "Physical Anthropology of Human Populations.").

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

81) ANT 3343. The Contemporary Pacific.

a) This course examines the geography, prehistory, colonial contact and contemporary society in the Pacific Islands. Drawing on case studies from Hawaii to Papua New Guinea, emphasis is placed on ethnography and the contribution of the area to anthropological thought.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

82) ANT 3363. Indians of Mesoamerica.

a) Survey of the indigenous peoples of Mexico and Central America, including Maya, Zapotec, Mixtec, and Nahuatl (Aztec) cultures, from before the Spanish conquest to the

present. The course emphasizes interactions between native peoples and the Spanish colonial and modern national regimes and processes of culture change.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

83) ANT 3383. Folklore and Folklife.

a) Examines vernacular arts, crafts, and customs and their function in the maintenance of group identity. National, regional, ethnic, and occupational traditions are investigated. Attention is given to texts such as legends, myths, and ballads, as well as folk performance, clothing, architecture, and foodways.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

84) ANT 3393. Anthropology of Frontiers and Borderlands.

a) This course asks the questions: what are frontiers and borderlands? How do they matter in our understanding of belonging and being human across time and space? We will use ethnographic and/or archaeological texts to consider how geopolitical, linguistic, and other cultural frontiers and borderlands shape what it means to belong and to be human

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

85) ANT 3503. Human Origins. (2)

a) The fossil record of human emergence and comparative studies of human evolution. Evolution of social organization, technology, and language development to the end of the Ice Age.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_34316.pdf

86) ANT 3523. Medical Anthropology. (2)

a) This course explores primary concepts and research questions in medical anthropology by looking at how humans experience and understand health, illness, and healing. Theoretical and methodological approaches will be considered using case studies, with an emphasis on the potential that medical anthropologists have to improve health and wellbeing.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

87) ANT 3563. Anthropology of Complementary and Alternative Medicine. (2)

a) This course examines the concepts of health and healing across cultures with an emphasis on non-biomedical healing systems. It explores historical and ethnographic case studies of afflictions and the cross-cultural, non-conventional modalities for treatment and healing. Additionally the course surveys the cultural strategies and complexities of the role of the healer in various cultures.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

88) ANT 3603. Sex, Gender, and Culture. (2)

a) Examination of the biological and cultural sources of differences between men and women.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

89) ANT 3663. Hunters and Gatherers - Past and Present.

a) Hunter-gatherer societies are frequently referred to in discussions of what it means to be human. Their knowledge of the environment and capacity for sharing have long captured our imagination. This course examines the lifeways of hunters and gatherers from around the world in both ethnographic and archaeological contexts. It considers examples of

societies from the Arctic to Tropical Rainforests and explores such research topics as hunter-gatherer sharing, mobility, subsistence, and warfare among others.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

90) ANT 3693. Research in Health and the Environment.

a) Offers the opportunity for research and service-based learning in topics of health and the environment. May be repeated for credit with advisor's permission, but not more than 6 semester credit hours will apply to a bachelor's degree.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

91) ANT 3696. Research in Health and the Environment.

a) Offers the opportunity for research and service-based learning in topics of health and the environment. May be repeated for credit with advisor's permission, but not more than 6 semester credit hours will apply to a bachelor's degree.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

92) ANT 3713. Anthropology of Material Culture. (1)

a) This course surveys the role of material culture in human social systems of the past and present. Archaeological, historical, and ethnographic case studies are used to illustrate how the material world is variously woven into the fabric of culture. (Formerly titled "Material Culture Systems").

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

93) ANT 3723. Ancient Civilizations.

a) Cross-cultural exploration of the development of ancient civilizations and their social, economic, and political institutions, using archaeological remains, ancient art, and ancient writing. The course compares ancient civilizations of Mesoamerica, South America, Africa, and Asia. (Formerly titled "Ancient Complex Society").

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

94) ANT 3733. Political and Legal Anthropology. (2)

a) Comparative political and legal systems; forms of authority, legitimacy, and power. Major trends in anthropological thought are explored with emphasis on the political uses of myth, symbol, and ritual. Law and judicial processes are examined in Western and non-Western societies.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

95) ANT 3743. The Anthropology of Cyber Cultures.

a) This course focuses on the cultural and historical dimensions of cyberspace. Consideration will be given to a variety of topics that may include virtual worlds and gaming, online communities, social networking, the political economy of information as well as cross-cultural theories of identity, location, and space as these apply to cyber cultures.

b) <https://catalog.utsa.edu/undergraduate/liberalfinearts/anthropology/#courseinventory>

96) ANT 3833. Indians of Texas.

a) Ethnological survey of the Indian populations of Texas from the early historic period to the present.

97) ANT 3843. Introduction to Primate Diversity. (2)

a) This course offers a broad survey of the social behavior and ecology of the living primates. It begins with a survey of primate taxonomy, drawing distinctions among prosimians,

monkeys, and apes. The course concludes with consideration of what the study of nonhuman primates can tell us about human evolution.

98) ANT 3853. Modern Ape Behavior, Ecology, and Cognition. (1)

- a) Modern apes show considerable diversity in their behavioral and morphological adaptations. This course focuses on the major theoretical approaches to understanding the biological variation within this primate group. The question of whether great apes exhibit culture is also discussed.

99) ANT 3863. The Evolution of Human Nature. (1)

- a) A central concept in the evolution of human behavior is the idea that our brains, like our bodies, have been shaped by natural selection. The extent to which this factor influences the diverse behavior of modern humans is a topic of considerable debate. This course takes a critical look at different attempts to explain human behavior based on adaptive design.

100) ANT 3873. Food, Culture, and Society. (1)

- a) This course explores the relationship between food and culture in diverse societies by examining food, food practices, and production, as well as the meanings associated with food. Topics include issues of identity, class, food habits, global food systems, and world hunger.

101) ANT 3883. Death and Dying. (3)

- a) Cross-cultural approaches to death, dying, and bereavement with a focus on either contemporary or prehistoric cultures depending on instructor's emphasis. When exploring contemporary cultures, attention will be given to the emotional, social and ethical issues of dying, and the social organization of death and dying. When exploring prehistoric groups, attention will be given to conceptualizing death through diverse funerary practices, body treatment of the deceased, and religious principles involved with death. In both cases, the course seeks to provide a comparative understanding of death and its wider social implications.

102) ANT 3893. Primate Ecology. (1)

- a) Nonhuman primates in their natural habitats, including biogeography, feeding and ranging behavior, structure and social organization of groups in relation to environment, and primates as members of communities.

103) ANT 3963. The Evolution of Sex. (1)

- a) Why is there sex? This course explores the evolution of sexual reproduction as an alternative to asexual cloning that is found in most organisms. We will explore why sexual reproduction evolved, its costs and benefits, and the diversity of sexual strategies across all kingdoms of life. It concludes by examining the sexual behavior of humans and our closest primate relatives. Topics will include sexual selection, mating systems, same-sex behavior, and the evolution of monogamy.

104) ANT 4013. Maya Civilization. (2)

- a) Examination of the development of Maya civilization in Mexico and Central America. Insights will be drawn from archaeological data, art, hieroglyphic writing, ethnohistoric accounts, and Colonial Period documents.

105) ANT 4113. Archaeology of Texas. (1)

- a) Detailed review of prehistoric and historic aboriginal cultures of Texas and adjacent areas; current trends in Texas archaeology; examination of artifacts; and field trips to local prehistoric sites.
- 106) **ANT 4123. Archaeology of the American Southwest. (1)**
- a) Consideration of the prehistoric cultures in the American Southwest and northern Mexico from the earliest occupations to European contact. Paleo-Indian, Archaic, Mogollon, Anasazi, and Hohokam occupations are reviewed with a consideration of recent research directions and theory.
- 107) **ANT 4233. Conservation of Primates in Global Perspective. (1)**
- a) Analysis of the conservation status of the world's nonhuman primates, and the specific threats to their survival. Includes examination of issues relating to the anthropology of conservation, such as human-nonhuman primate resource competition, anthropogenic habitat alteration related to land use and development, and efforts to achieve community-based conservation.
- 108) **ANT 4263. Anthropology of Globalization and Development.**
- a) Anthropological perspectives on the nature, causes, and consequences of social and cultural change, with an emphasis on how local cultures are shaped by and resist the process of globalization and development. (Formerly titled "Social and Cultural Change").
- 109) **ANT 4273. The Anthropology of Oil. (1)**
- a) This course explores the social, cultural, and political-economic significance of oil, the most important industrial commodity of the world. Case studies will be drawn from books, articles, and films that describe the importance of oil at the level of its production, distribution, and consumption in the United States and around the world.
- 110) **ANT 4303. Water, Sustainability, and Health.**
- a) Drawing on environmental and medical anthropology, this course explores how anthropologists study issues related to water, sustainability, and health and how these are shaped by political, economic, and ecologic factors over time. This course introduces students to several of the key theoretical frameworks through which anthropologists examine struggles around water and the human consequences of water scarcity.
- 111) **ANT 4333. Ecology and Evolution of Human Diseases.**
- a) Ecological, evolutionary, and biocultural aspects of human disease. Topics include the ecology of infectious/parasitic disease pathogens and their human hosts, the evolution of human host-pathogen interactions, the impact of cultural and demographic change in human populations, and the effects of global environmental change on human disease patterns. Generally offered: Spring.
- 112) **GES 3003. Global Sustainability. (2)**
- a) This course introduces the student to the concepts, principles, and practices of sustainability in the context of physical and human geography. It focuses on key knowledge areas including environmental and ecosystem change; water, food, and energy resources; urban and economic development; social equity; and cultural preservation. The course will help the student respond to critical global challenges such as climate change, natural disasters, food shortages, environmental degradation, and social inequalities.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_34241.pdf

- 113) **GES 3413. Geography of the Middle East and North Africa. (1)**
a) An analysis of the states spanning the Maghreb from Morocco to Libya; Egypt; and the Middle East from Turkey and the Arabian Peninsula to Pakistan. Examination of the region's physical and social geography and its political and economic dynamics from early history to modern times.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32602.pdf
- 114) **GES 3423. Geopolitics of Russia and Eurasia.**
a) Multidisciplinary introduction and regional study of the Russian Federation and the Eurasian realm, including the Caucasus, Central Asian nations, Afghanistan, and Mongolia. Both the geography and the politics of this area will be analyzed. Historical and contemporary geopolitical topics include nation-building, regional civilizations, revolution, terrorism, the 19th-century "Great Game," the rise of the USSR, and the current transition of the Russian Federation to an uncertain future.
- 115) **GES 3433. The Geography and Politics of the Asian Rim. (2)**
a) An analysis of the states spanning from the Indian subcontinent through Indo-China to Japan and China. Examination of their physical and social geographies and the regional political dynamics prevalent in the modern era. Selected themes will include population dynamics, cultural hearths, immigration patterns, economic development, and regional integration.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_21205.pdf
- 116) **GES 1023. World Regional Geography. (7)**
d) Study of the world's regions, focusing on salient physical, cultural, economic, and political characteristics, including physiography, climate, natural resources, population, economic structure and development, globalization, urban growth, cultural institutions, and political structure. Regions include North America, Latin America, Europe, Middle East/North Africa, Sub-Saharan Africa, South Asia, Japan, China and East Asia, the Russian Federation, and Australasia.
e) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_21192.pdf
- 117) **GES 3463. Geography of Tourism.**
a) Introduces the principles and practices of global tourism, including its geographic diversity and the connections between tourist origins and destinations. Discusses the economic importance and dimensions of tourism and the social, economic, and environmental impacts it has on host societies.
- 118) **GES 3513. Urban Geography.**
a) A geographic examination of the environmental settings and impacts, history, structure, growth, area of influence, economic base, social structure, and culture of cities. Topics may include the physiography and climate of cities, preindustrial and industrial cities in history, factors that influence the growth and decline of cities, urbanization, the rise of global cities, the imagined city, cities as urban service centers, urban cultural diversity, social area analysis, and urban cultural conflicts. Focus of the course may be local, national, or international.
- 119) **GES 3523. Introduction to Urban Planning.**
a) An introduction to urban public policy, urban dynamics, selected problems of cities, and the role of the master planning process in their management and solution. Issues and

themes may include, urban growth and sustainability; municipal and regional government including zoning and subdivision regulations; planning and law; energy and waste management; historic preservation and urban design; and relationships between transportation and land use.

- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_34239.pdf
- 120) **GES 3533. Geography of Local Economic Activity.**
- a) Investigates the location of agricultural, industrial, retail and service activities, and transportation flows at the scale of town and community, through relevant theories and models. Includes case studies of agricultural land use around cities, the community economic base, global impacts on the local economy, and central place principles of threshold, range, primacy, and hierarchy. Students will apply these concepts and models to local communities.
- 121) **GES 3543. Behavioral Geography.**
- a) Study of human spatial perception and behavior as a function of the social, built, and natural environments. Topics include the formation of beliefs and attitudes toward places and peoples; how humans lay claim to and defend proximal spaces and territories; perception of the physical environment; the diffusion of technologies, ideas, people, and diseases over space; and the causes and effects of contemporary human migrations. Students will directly observe human personal space defense in the field, and present their observations in written and/or verbal form.
- 122) **GES 3563. Urban Development: Politics, Planning and Power. (2)**
- a) An opportunity to pursue a political, economic, and geographic analysis of the dynamics of growth and change in the modern metropolis, focusing on the problems and conflicts stemming from urban growth and stagnation. Topics examined may include uneven development, planning, industrial development policy, taxation, and intergovernmental rivalry. Case studies may be drawn from the Austin-San Antonio region as well as from societies other than the United States.
- 123) **GES 3613. Conservation of Resources. (2)**
- a) A survey of natural resources, environmental policies, global consumption patterns, and the competing values that affect them. Topics include agriculture, water resources, air pollution, waste disposal, land management, wildlife preservation, habitat conservation, biodiversity, energy production, urban sprawl, economic growth, and other selected components of built and natural systems.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_32395.pdf
- 124) **GES 3623. Geography of Natural Hazards. (2)**
- a) This course introduces students to the geophysical phenomena that are the root causes of natural disasters, as well as the social institutions and human geographies that exacerbate them. Hazards covered in this class may include earthquakes, tsunamis, volcanic eruptions, hurricanes, tornados, floods, drought, wildfire, and global climate.
- 125) **GES 3633. Geography of Globalization and Development. (2)**
- a) Survey and analysis of economic growth and social change in different parts of the world, with an emphasis on less-developed countries. Topics may include defining development, modernization and neo-liberalism, structuralism and post-development, major theories

of development and underdevelopment, poverty and inequality, sustainable and grassroots development, cultural globalization, and hyper-urbanization.

126) GES 3643. Political Geography. (1)

- a) Investigates the role of the political state in society and the evolution of state organization from classical times to the present. Topics may include centrifugal and centripetal forces, geopolitics, territorial morphology, boundaries, core areas, emerging supranationalism, and the spatial and political problematics associated with the globalization of capitalist exchange.

127) GES 3653. Gender and Cities: An Introduction to Feminist Geography.

- a) The course studies the role of women in the spatial organization of society. Topics may include analysis of gendered spaces, the importance of gender relations in shaping physical, social, and built environments, and the spatial-economic consequences of gender-based policies. In addition to the role of gender, this course explores the roles of race, religion, disability, and sexual orientation in shaping the urban environment.

128) GES 3663. Urban Sustainability in Global Context.

- a) This course explores the challenges of achieving environmentally and socially sustainable communities, neighborhoods, and cities. It investigates how and in what contexts we can move towards urban ecological integrity, economic security, empowerment, social responsibility and social well-being as exemplified by sustainable communities globally. Students will be introduced to the concepts, theories, tools, and techniques of this vibrant, emerging field.

129) GES 3673. Space and Identity Crisis in the Postmodern Era. (2)

- a) This course examines the growing crisis of personal and collective identity as a consequence of the globalization of capitalist exchange. The human need for 'belonging' to different social communities at different spatial, social, and cultural levels is challenged by rapid changes in economic production, technology and the corresponding integration with formerly external areas. Common manifestations of these processes are expressed through supranationalism (EC, NAFTA, etc.), gentrification, 'anti-immigrationism', the renewal of recently tainted racial, ethnic, and gender conceptions, amongst others. This course reveals the systemic underpinnings to growing sectarian strife at the local and international level.

130) GES 3713. Weather and Climate. (1)

- a) Analysis of the elements and causes of daily weather, climatic classifications, and climate change. Study of world distributions and components of climate, air pressure, precipitation, air masses, optical phenomena, and wave cyclones. Regional attention to weather patterns, including tornadoes and hurricanes.

131) GES 3723. Physiography. (1)

- a) This course provides a study of landforms, the description and interpretation of relief features of the surface of the earth, and the processes and materials that form and change them over time. Students will be introduced to the impacts of human intervention in landscape-shaping processes. Emphasis will be placed on the landforms of a selected region, such as the Southwestern United States.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_22928.pdf

132) GES 3733. Urban and Regional Analysis. (1)

- a) Applied models of urban and regional growth, structure, interaction, influence, and inequality over space, with emphasis on the United States. The course introduces the student to theories and concepts of urban and regional development, stressing practical skills for analyzing social, political, economic, and demographic characteristics of the urban scene, with an emphasis on sustainable development.
- 133) GES 3743. Biogeography. (2)**
- a) The study of the distribution of species and ecosystems in geographic space and over time. Topics may include the prehistoric and historic diffusion of plant and animal species, the global distribution of flora, fauna and soils, the impacts of plants and animals on settlement and globalization, and the consequences of human activity for the biosphere.
- 134) GES 3753. Climate Change. (2)**
- a) Examines changes in climatic systems over both short and long time periods, their physical and human causes, and their impacts on physical and ecological systems. Discusses past, present, and future changes in climatic conditions and the methods used to evaluate changes in temperature, precipitation, and other climatic indicators.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_21207.pdf
- 135) GES 2623. Human Geography. (3)**
- f) An introduction to the study of human patterns and behaviors across the globe. Topics include population and migration; language, religion, gender, and ethnicity; political geography; development; economic geography; urban patterns; and resource issues. May apply towards the Core Curriculum requirement in Social and Behavioral Sciences.
- g) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_21199.pdf
- 136) GES 3113. Geography of the United States and Canada. (3)**
- h) Study of selected geographic aspects of the major regions of the United States and Canada, emphasizing current social and economic issues in these regions. From a contextualizing treatment of the continent's physical geographies, the course proceeds to the social geographies of the major ethnic groups, showing how the historical management and appropriation of space has been integral to determining the character of the contemporary social hierarchy at the national level.
- i) https://bluebook.utsa.edu/Syllabi/Syllabus_201930_36987.pdf
- 137) GES 3123. Geography of Latin America. (3)**
- j) Beginning with basic aspects of the physical environment, the course examines the social geographies of pre-colonial and colonial Latin America. The structural factors of Latin American economies and cultural institutions are then examined. Emphasis is on their spatial manifestations and their role in producing a Latin America often termed "underdeveloped." The emerging role of Latin America in the democratic world order of the post-1990s is also examined.
- k) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_21201.pdf
- 138) GES 3133. Geography of Europe (2)**
- l) Survey of the European culture area, including Western Europe, Eastern Europe, and the Baltics. Discussion of historical, urban, political, ethnic, and economic forces shaping the 21st-century geography of Europe, including the European Union and the Russian Federation.
- m) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32390.pdf

- 139) **GES 3143. Geography of Mexico. (2)**
n) Investigation of Mexico's physical and social geography, including climatic and geomorphologic influences, the historical imprint of the Amerindians and the Spanish, population growth and migration, urbanization, political reform, social and cultural change, agriculture and industry, trade liberalization and the impact of NAFTA.
o) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32600.pdf
- 140) **GES 3153. Geography of Texas. (1)**
p) A topical and regional examination of the physical, historical, cultural, and economic patterns of the state. Includes demographic characteristics, agriculture, mining, manufacturing, and selected urban areas. The role of historical and political forces in creating social inequities in contemporary Texas are examined in detail, including environmental degradation, rural health, higher education, and patterns of wealth and economic growth. May include a field trip to the nonmetropolitan hinterland of San Antonio.
q) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_22923.pdf
- 141) **GES 3166. Physical and Cultural Geography of the American Southwest.**
r) An immersion in the geography of the U.S. Southwest. Includes both classroom and field components. Illustrates how the principles of physical and cultural geography play out in landscapes of the Southwest. Students will visit sites, keep field logs, and make student presentations. The one-week field portion includes travel in vans to areas that may include West Texas and New Mexico in addition to adjacent Colorado, Arizona, and Utah. Students will stay in campgrounds and walk into historic and natural sites.
- 142) **GES 3213. Cultural Geography. (2)**
s) A thematic exploration of the nature and distribution of human culture hearths, population, folk culture, popular culture, agriculture, industrialization, languages, and religion. Topics are defined and examined in the context of their manifestations and influences as regions, cultural diffusion, ecology, cultural interaction, and landscapes.
t) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_21202.pdf
- 143) **GES 3443. Medical Geography. (5)**
u) The human ecology of health and disease. Topics may include analysis of the cultural/environmental interactions that explain world patterns of disease; the diffusion and treatment of infectious disease; maps and GIS in medical geography; the ecology of non-communicable diseases; and health care promotion and delivery.
v) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_21301.pdf
- 144) **GES 3453. Population Geography.**
w) Study of the spatial dimensions of population distribution, growth, and mobility. Includes the historical and modern reasons for global patterns of population, changes in birth and death rates over time, and levels of development as explained by the demographic transition and population policies. Special attention will be given to human migration theories, models, and case studies at the intra-urban, internal, and international levels. Global issues related to population growth and movement such as political conflict and governance, disease, and immigration policy will be covered.
- 145) **GES 2613. Physical Geography. (7)**

- x) Study of the earth's major landforms and climatic patterns, the processes giving rise to these patterns, and their relationship to human activity. Includes the geomorphology of volcanoes, glaciers, coral reefs, mountains, caves, dunes, and plate tectonics; weather and climate; and the relationship of these agents to physical and human landscapes.
- y) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22919.pdf
- 146) **GLA 1013. U.S. in the Global Arena. (6)**
- a) This course assists students in understanding the context in which United States interacts with the rest of the world and the mutual effects of that relationship. It traces the history and evolution of the United States' involvement in global affairs and why and how what happens in the world matters for the U.S. and vice-versa. Issues to be discussed may include globalization, low politics, international banking, multinationals, health issues, the environment, terrorism, security, food, technology, international communication, and other intermestic issues.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_17109.pdf
- 147) **GLA 2603. Introduction to Global Affairs. (6)**
- a) This course introduces students to the study of global affairs. Among others, it will cover topics such as conflict and security, international organization(s) and order, economic development, international aid and trade, transnationalism, human rights, as well as the environment. These topics are introduced to illustrate past and current theoretical approaches and themes in the study of global affairs. As such, the course provides an overview of the intellectual development of the subfield and defines its subject matters.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22961.pdf
- 148) **GLA 3033. International Governance. (5)**
- a) International law, organizations, regimes, hierarchies, and norms such as sovereignty govern the international system. These factors help create a world order that limits armed conflict, regulates the world economy, advances environmental protection, and sets human rights standards. This course explains theories of international governance, and compares these perspectives to the analysis of political scientists on the past record and likely future of world order.
- 149) **GLA 3043. International Human Rights. (1)**
- a) This course explores the philosophical and political meaning of fundamental human rights; cases of human rights violations (such as genocide in the Holocaust, Rwanda, Kosovo, and Cambodia; the death penalty; female genital mutilation; violations of workers' rights; and torture); and the role that states, international organizations and individuals can play in ending human rights abuses. Course readings may include contemporary theories of human rights and case studies on the enforcement of rights around the world.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_34122.pdf
- 150) **GLA 3233. Theories of International Justice. (1)**
- a) This course explores the nature of justice in a globalized political world. It raises questions such as whether a single standard of justice (e.g., human rights) can legitimately be applied to all cultures across the world, and examines the nature of our obligations to individuals in other countries given the economic and political interdependency of all

peoples. Some attention may also be given to particular topics such as immigration policy and the use of foreign military intervention for humanitarian purposes.

- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32404.pdf
- 151) **GLA 3483. International Political Economy. (1)**
- a) This course is an introduction to the institutions and policies that govern international economic relations. Students will study the development of the international economic system as well as controversies over money, trade, and governance.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_24409.pdf
- 152) **GLA 3533. The United Nations. (1)**
- a) The course introduces students to the organization's history, structure, operations, and role in the international system. It examines the historical context of the UN's founding and its functions, processes of institutional reform and change, as well as the successes and failures of the organization, in order to understand the UN's role in contemporary world politics. Topics may include the integration of new issues beyond its traditional focus on peace and security, as well as of new actors, such as nongovernmental organizations and multinational enterprises.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_24227.pdf
- 153) **GLA 3543. Diplomacy. (1)**
- a) The course explores the impact of modern diplomacy on global affairs through the conduct of foreign policy and external representation. It highlights the historical and theoretical settings of international negotiations, treaties, alliances, agreements, and the practical ways in which foreign policy is implemented. Topics may include classical diplomacy, international business diplomacy, public diplomacy, multilateral diplomacy, and case studies that examine the complexity and build skills for dealing with global issues.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_21211.pdf
- 154) **GLA 3563. Current Issues in World Politics. (3)**
- a) An examination of the issues that divide the people of the world. The structure of contemporary world problems will be studied and possible strategies for the reduction of international conflict will be assessed. Topics may include nuclear proliferation, world hunger, revolution and intervention, transnational enterprises, competing ideologies of international relations, and global ecology.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_20372.pdf
- 155) **GLA 3613. Nationalism and Identity Politics in a Globalizing World. (1)**
- a) The course traces the evolution of national politics in the context of globalization. It explores the concepts of culture, identity, nation, nationalism, citizenship, and cosmopolitanism in motion as a relationship between state and society, majorities and minorities, migrants and citizens, and localism and globalism. The course spans case studies and thematic analyses in a global perspective. Topics may include politics in divided societies, states and regions, ethnic conflict, secession, nationalism and war, radical-right populism, post-nationalism, diaspora, and multiculturalism, among others.
- 156) **GLA 3633. Political Economy. (2)**
- a) The political, legal, and ethical context of modern commercial society is explored through the evolution of conceptions of the economy, the individual, and the state. Topics may

include the institutional foundations of market societies, ethical and legal impact of business practices, comparisons of national economic policies, the interaction of modern government and economic activity, and the impact of markets on concepts of public and private life.

- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_20373.pdf
- 157) **GLA 3763. Globalization. (1)**
- a) This course examines normative and empirical issues in globalization debates, such as the role of states and nonstate actors, the emergence of global civil society, patterns of international development, the influence of international integration on security, health, violence, and intercultural toleration, and the status of institutions for global justice.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201830_36992.pdf
- 158) **GLA 3783. Democracy and World Politics. (1)**
- a) This course examines theories of democratic transition and focuses on the problematics of democratic change throughout the world. Case studies may include political change after the end of the Cold War in the former Communist states, democratic transitions in Latin America, patterns of change in sub-Saharan Africa, the Middle East, and south Asia.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_22973.pdf
- 159) **GLA 4133. Conflict, Law, and Security in Global Affairs.**
- a) This course offers students an opportunity to closely examine the causes, dynamics, and dilemmas associated with conflict on the modern global stage. Issues under discussion may include intra- and interstate conflicts; nationalism and conflict; economic, social, and political costs and implications of conflict; national and international approaches to conflict resolution, reconstruction, and development; human rights principles and questions of international law and justice; debates about humanitarian interventions; population displacements; the range of security concerns and responses by government actors and institutions; and the viability of nation states in protecting individuals, groups, and institutions of governance.
- 160) **GLA 4163. Model UN.**
- a) The course introduces students to the United Nations and the world of Model UN. The class will discuss the organization's history, structure, operations, and role in the international system. Applying this knowledge in educational simulation, the class will engage students in modelling the UN. This will include hosting a Model UN as well as competing nationally as delegates. As such, the class will solidify substantial knowledge on the UN as well as provide logistical project management skills.
- 161) **LAS 2013. Latin American Foundations. (1)**
- a) This course is designed as an introduction to important debates about Latin American history, politics, society and culture. In this course, we will analyze general and specific questions regarding pre-Hispanic cultures, colonial legacies, cultural heritages, political developments and societal challenges facing the region. The structure of this course is primarily chronological but also thematic and inter-disciplinary, involving anthropological, historical, cultural, and political studies about Latin America.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_21186.pdf
- 162) **POL 1133. Texas Politics and Society. (8)**

- a) This course involves the analysis of Texas government institutions, political behavior, civic engagement and their political and philosophical foundations. Topics may include discussions of the Texas and U.S. Constitutions; the role of state in the federal system; the diverse demographic, economic, and cultural bases of state politics; elections, interest groups, and elites; and legislative, executive, judicial, urban, and county politics. Considerable time is devoted to thinking about how these components fit together, and how they shape the nature and importance of citizenship and civic engagement in Texas.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_23855.pdf
- 163) POL 1213. Civil Rights in Texas and America. (3)**
- a) This course presents the central elements of traditional introductory political science courses on Texas politics using an alternative, contextual method that teaches students to understand broader political and legal subjects through the lens of civil rights issues and struggles.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_18630.pdf
- 164) POL 2403. Mexican American Politics. (1)**
- a) The study of Mexican American and other Latino/a group participation in the American experience. Topics include Mexican American and Latinos/as in the electoral process, political and economic institutions, political behavior and opinion, civil rights, representation, social movements, and contemporary public policy debates
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_23053.pdf
- 165) POL 2503. Introduction to Political Theory. (3)**
- a) An examination of fundamental concepts in political science such as justice, democracy, obligation, freedom, and equality.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_22991.pdf
- 166) POL 2513. Politics and the Administrative Process. (2)**
- a) The role of bureaucratic agencies in the formulation and implementation of public policy. Organization theory and administration in the public sector. While the approach of the course is comparative, special emphasis is placed on bureaucracy in the United States.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_20378.pdf
- 167) POL 2533. Introduction to Political Science. (4)**
- a) An introduction to the discipline of political science, with particular emphasis devoted to its development from 1880 to the present. Topics may include types of political institutions, uses of political science, participation by political scientists in public affairs or public policy, and career options available to political science majors.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_17121.pdf
- 168) POL 2623. Law and Society. (5)**
- a) An examination of the nature of law, its role in sociopolitical systems, and the institutional components of legal systems. Theories and systems of law examined may include natural, constitutional, common, civil, customary, socialist, and theocratic law. May employ a comparative or historical framework for understanding the variety of institutional arrangements through which systems of law are implemented.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201830_37161.pdf
- 169) POL 2633. Comparative Politics. (1)**

- a) A comparative examination of the diverse forms, goals, styles, and practices of government in democratic and authoritarian states. Several major polities will be studied in detail.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32417.pdf
- 170) POL 3013. The American Legal Process. (5)**
- a) An introduction to how the United States legal system is organized and functions. A broad overview of the system and its actors is combined with a focus on particular areas of the law such as domestic relations, personal injury liability litigation, criminal procedure, and alternative dispute resolution.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32419.pdf
- 171) POL 3033. International Governance. (5)**
- a) International law, organizations, regimes, hierarchies, and norms such as sovereignty govern the international system. These factors help create a world order that limits armed conflict, regulates the world economy, advances environmental protection, and sets human rights standards. This course explains theories of international governance, and compares these perspectives to the analysis of political scientists on the past record and likely future of world order.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_22274.pdf
- 172) POL 3043. International Human Rights. (1)**
- a) This course explores the philosophical and political meaning of fundamental human rights; cases of human rights violations (such as genocide in the Holocaust, Rwanda, Kosovo, and Cambodia; the death penalty; female genital mutilation; violations of workers' rights; and torture); and the role that states, international organizations and individuals can play in ending human rights abuses. Course readings may include contemporary theories of human rights and case studies on the enforcement of rights around the world.
- 173) POL 3103. Contemporary Theories of Justice.**
- a) An exploration of competing contemporary accounts of the political, economic, and cultural components of a just society. Some of the following theories will be discussed: libertarianism, liberalism, socialism, Marxism, communitarianism, multiculturalism, feminism, critical race perspectives, and environmentalism. (Formerly titled "Political Ideology.").
- 174) POL 3113. American Political Thought.**
- a) Consideration of American political thought with an emphasis on primary sources. Readings may include the works of Winthrop, Madison, Hamilton, Jefferson, Tocqueville, Calhoun, Lincoln, Melville, Twain, Douglass, DuBois, Addams, Croly, Wilson, Roosevelt, MLK, Malcolm X, and other diverse works of a political, philosophical, or literary nature
- 175) POL 3173. Justice and Social Policy.**
- a) This course examines social policies relating to the family, education, health care, old age, poverty, and other issues from a normative or social justice perspective. Questions that this course addresses may include: What role, if any, should the state play in the family? What should be the goals of a just education system? Should the United States support universal health care? What responsibility, if any, does society have toward the poor?

- 176) **POL 3183. Women in Politics. (1)**
a) An examination of the roles and forms of participation of women in contemporary American politics. Topics may include the fight for civil rights and equality; media portrayals of women in politics; women as candidates and as voters; women as elected officials, activists, and political professionals; and women in the military, including theories of gender and war.
- 177) **POL 3203. African American Political Thought. (1)**
a) This course examines the political thought of African Americans from the ante-bellum era to the present. May include the works of Frederick Douglass, Booker T. Washington, W.E.B. Dubois, Ida B. Wells, Marcus Garvey, Richard Wright, Ralph Ellison, Martin Luther King, Jr., Malcolm X, Angela Davis, Cornell West, Shelby Steele, Clarence Thomas, Lani Guinier, Eldridge Cleaver, Barack Obama, and others.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_22994.pdf
- 178) **POL 3223. Judicial Politics. (2)**
a) Topics may include political behavior of the major participants in the judicial process; the development of judicial institutions and processes; the political and administrative context of the judicial process; judicial-executive and judicial-legislative relations; and the impact of judicial decisions.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_33555.pdf
- 179) **POL 3244. Mass Media and Public Opinion. (2)**
a) Explores the acquisition of political attitudes, the role of the mass media in society and politics, and the relationship between political attitudes and values, the mass media, and public policy.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_21220.pdf
- 180) **POL 3253. Participation and American National Elections.**
a) An introduction to fundamentals of American electoral politics. Topics will include psychological, sociological and economic models of participation, the presidential primary process, the effectiveness of presidential and congressional campaigns on the vote, psychological/sociological and economic models of the presidential and congressional vote, the incumbency advantage in congressional elections, spending in congressional elections, candidate entry, and comparison of House and Senate elections.
- 181) **POL 3283. The American Presidency. (2)**
a) The U.S. president's role in the American political system. Topics may include the constitutional framework and historical development of presidential powers, presidential personality, and legislative, foreign policy, and war-making powers.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_32422.pdf
- 182) **POL 3293. Political Movements. (1)**
a) This course examines the origins, mobilizing tactics, and goals of political movements. Movements that may be investigated are the movements of labor, students, women, blacks, environmentalists, and others.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_22423.pdf
- 183) **POL 3303. Race, Ethnicity and Public Policy.**

- a) The objective of this course is to familiarize students with a range of discourses to understand the complexities of racial and ethnic inequalities in the United States as well as the history and current state of racial and ethnic politics. The course examines the politics and experiences of several groups, such as African Americans, Hispanics, American Indians, and Asian Americans. It also reviews the wide range of public policy issues as they affect, and are affected by, racial and ethnic considerations.
- 184) POL 3313. The Supreme Court. (2)**
- a) This course examines the U.S. Supreme Court as a political and legal institution. Topics may include the colonial and English antecedents to the Supreme Court, its constitutional origins in the framing and ratification debates, major episodes in its development from the early republic to the present, its role within the federal judiciary, its impact on party politics and political culture, and its relationship to Congress, the executive branch, and the state courts.
- 185) POL 3323. Constitutional Law I. (3)**
- a) An examination of constitutional questions arising from the institutional features of American government, including electoral processes, separation of powers, and federalism. Emphasizes judicial opinions and other primary sources. May be organized chronologically or topically.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_15488.pdf
- 186) POL 3333. Constitutional Law II. (2)**
- a) An examination of constitutional questions arising from the protection of rights and liberties in the American political system. Topics may include religious liberty, free speech, voting, property rights, due process, equal protection, and rights of the accused. Emphasizes judicial opinions and other primary sources. May be organized chronologically or topically.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_30114.pdf
- 187) POL 3353. Leadership and Elites.**
- a) An examination of national political executives in parliamentary and presidential democracies and in authoritarian states. Topics examined may include the selection process, decision making, leadership and bureaucracy, executive-legislative relations, and neocorporatism.
- 188) POL 3363. Political Parties and Interest Groups. (1)**
- a) An examination of the purpose of political parties in the political process. Interest groups and their roles in government and public policy.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_21222.pdf
- 189) POL 3373. The Legislative Process.**
- a) An examination of the functions, structures, and politics of legislatures and their relationships to their constituencies and other branches of government.
- 190) POL 3483. International Political Economy. (1)**
- a) This course is an introduction to the institutions and policies that govern international economic relations. Students will study the development of the international economic system as well as controversies over money, trade, and governance.
- 191) POL 3553. The Welfare State in Comparative Perspective. (2)**

- a) History and development of social policies in modern societies. Policy areas covered may include pensions, health care, income maintenance, housing, education, training, and child care
- 192) POL 3643. Justice among Nations.**
- a) An examination of different theories of justice between states and/or the citizens of different states. Topics may include just war theory; cosmopolitan and anti-cosmopolitan debates; theories of human rights and the challenges to them; multiculturalism; diverse religious or cultural views on justice in world affairs. May be repeated for credit when topics vary.
- 193) POL 3813. Politics of Federal Justice Policy Making. (1)**
- a) This course examines the intersections of politics and legal institutions of the federal government. Consideration will be given to major historical and political developments mainly associated with policy decisions of the federal executive and the federal judiciary in carrying out constitutional and statutory obligations in civil and criminal enforcement, adjudication, and punishment. Special emphasis will be given to how federal justice policies are formed, implemented, and evaluated by presidents, Congress, and the federal courts in policy areas such as civil rights, privacy and surveillance, interstate and international criminal organizations, investigative practices, prosecutorial effectiveness, and civil and criminal penalties/sanctions.
- 194) POL 3823. Politics of Congressional Elections. (1)**
- a) An introduction to the politics of congressional elections. Topics include determinants of national election outcomes, campaigning for Congress, strategic behavior, primary elections, the incumbency advantage, money in congressional elections, Senate versus House comparisons, and representation.
- 195) POL 3843. Campaign and Election Law. (2)**
- a) This course examines the laws that govern elections in the United States. Topics include the constitutional and legal issues arising from campaign finance regulations, political party organization, election administration, and redistricting as well as the constitutional and statutory protection of voting rights. The course may also consider these issues in comparative perspective.
- 196) POL 3853. Immigration Law. (3)**
- a) Examines the legal framework of immigration and citizenship in the United States. Topics include the history and development of immigration and citizenship policy, the constitutional and international law foundations of immigration regulation, the structure and operation of federal institutions that regulate immigration, the role of state and local governments in enforcing immigration policy, and the legal processes that adjudicate immigration cases.
- 197) PAL 3113. Minorities and the Law. (2)**
- a) This course examines the litigation, case law, legislation, and legal literature associated with African Americans and Mexican Americans in the United States.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22976.pdf
- 198) PSY 2503. Developmental Psychology. (8)**
- a) Problems, methods, major theories, and results in the study of the psychological development of the individual from the prenatal period to old age.

- 199) **PSY 3053. Cross-Cultural Psychology. (5)**
a) An examination of the role of culture in the development and validation of psychological theories. Critical discussion of the application of theories of human behavior developed in the United States and Western Europe to other cultural groups, including ethnic minority subgroups. Topics may include identity formation, cognitive and personality development, social and organizational behavior, intergroup relations, psychological assessment, and mental health.
- 200) **PSY 3203. Industrial and Organizational Psychology. (4)**
a) The role of psychology in industry. Applications of psychological knowledge to industrial problems such as personnel selection, employee motivation and satisfaction, and the influence of organizations on behavior.
- 201) **PSY 3563. Couple and Family Psychology. (2)**
a) This course will focus on psychological research on relationships, processes and factors within couples and families. Demographic status and changes in American couples and families and how these changes relate to changes in racial/ethnic changes and diversity are considered. Psychological models of couples and families will be discussed. Understanding family structure, relationship processes and factors that are related to health and well-being of individual couple and family members that are related to successful and healthy couples and family relationships are discussed.
- 202) **PSY 4193. Relationships. (8)**
a) A consideration of the psychological processes that underlie the development and maintenance of social relationships. Emphasis on motivational and cognitive factors that mediate social interaction and communication. Special attention may be given to friendships, romantic relationships, successful marriages, and distressed relationships.
- 203) **SOC 2013. Social Problems. (8)**
a) Examines major contemporary social problems and their causes and consequences. Topics may include poverty, racism, sexism, deviance and crime, drug and alcohol dependence, the urban crisis, overpopulation, and war. May be applied toward the Core Curriculum requirement in Social and Behavioral Sciences.
- 204) **SOC 3043. Race and Ethnic Relations. (8)**
a) Examines the dominant-subordinate relations in world societies, with major emphasis on the United States. Models of assimilation, colonial and class society, and consequences for minority and majority populations may be examined.
- 205) **SOC 3053. Deviance and Difference. (2)**
a) Analyzes the forms of deviance and consideration of social/political trends toward difference. An examination of theories may include: biological, analytic, labeling, functionalist, culture conflict, radical, and poststructuralist.
- 206) **SOC 3063. Collective Behavior. (3)**
a) Focuses on case studies and associated theory dealing with various forms of collective behavior ranging from spontaneous events to organized mass movements.
- 207) **SOC 3083. Social Change and Development.**
a) Presents principal models and theories of social transformation applied to examples of societal change. Topics may include consideration of master trends such as

rationalization, industrialization, and bureaucratization, and the expansion and contraction of global interconnectedness.

- 208) **SOC 3093. Religion and Society. (4)**
a) Focuses on religious institutions and movements in the United States with comparative data from other countries. Topics may include the relationship of religious institutions to social stratification, economic institutions, and political and social change.
- 209) **SOC 3113. Criminology. (8)**
a) Examines the nature, prevalence, and impact of different types of legal violations, including street crime, organized crime, political crime, and white-collar crime. Includes treatment of social and legal responses to crime. Generally offered: Fall, Spring, Summer.
- 210) **SOC 3163. Families in Society. (7)**
a) Examines the modern family, structures and functions, variant patterns and the influence of the broader society in producing family change. Contemporary and continuing issues are covered in the context of theory and research. Topics may include variability in childhood socialization, family violence, changing gender roles, marriage, divorce and remarriage, alternative family structures, and the aging family.
- 211) **SOC 3193. The Sociology of Work and Occupations. (4)**
a) Explores occupational structures in selected societies; the relationship between occupations and economic rewards, lifestyles, and worldview; and determinants of work satisfaction.
- 212) **SOC 3213. Medical Sociology. (7)**
a) Examines social factors in the cause and distribution of disease; relationships between patients and medical professionals; the contribution of lay belief to health, illness, treatment, and recovery; the organization of health-care delivery; and the disparities in the distribution of medical resources. Generally offered: Spring.
- 213) **SOC 3223. Population Dynamics and Demographic Techniques. (6)**
a) Introduces the common methods, techniques, and models employed by demographers. Topics may include demographic data sources, introduction to life table techniques; construction, standardization, and decomposition of rates; measures of concentration and diversity; and population growth projections. Students will become familiar with microcomputer programs for demographic analysis.
- 214) **SOC 3253. The Individual and Society. (4)**
a) Examines the major theories dealing with the effects of culture and social structure on the development and functioning of the personality and the self.
- 215) **SOC 3263. Latinas in U.S. Society. (2)**
a) Focuses on women of Latino descent in the United States with a comparative emphasis on the experiences of Texas Latinas relative to those residing elsewhere in the Southwest. Topics may include: historical presence in the Southwest; patriarchy and familialism; labor and employment issues; immigration and border issues; political involvement and feminist vision; artistic, cultural and intellectual expression.
- 216) **SOC 3283. Poverty. (2)**
a) Examines the causes and consequences of poverty in the United States and selected other societies. An examination of social programs designed to combat poverty.
- 217) **SOC 3413. Sociology of the Mexican American Community. (1)**

- a) Focuses on contemporary issues regarding Mexican American communities. Topics of discussion include family structure, gender roles, border issues and political power. Comparison with other minorities and the majority group will allow discussion of variant community patterns.
- 218) SOC 3433. Mexican Immigration and U.S. Society.**
- a) Focuses on the growth and development of the Mexican population in the United States and controversies around Mexican immigration, both legal and undocumented. Uses a sociological perspective to present a historical analysis of Mexican migration to the United States, theoretical explanations of migrations, and the social implications of these issues.
- 219) SOC 3503. Sociology of Education.**
- a) Explores education as an institution that affects and is affected by the larger social structure. Topics may include the role of schools in society; connections between schooling, stratification and the economy; gender and ethnic differences in achievement; and social and cultural contexts of learning.
- 220) SOC 4023. Violence and Society. (3)**
- a) Examines and assesses the major social science perspectives and theories that attempt to explain why violence occurs in society.
- 221) SOC 4043. Global Health. (8)**
- a) Covers the field of global health, particularly the serious health problems facing developing world populations. The course begins with an introduction to the global burden of disease and then examines the complex social, economic, political, environmental, and biological factors that structure the origins, consequences and possible treatments of disease. Provides an introductory survey of the basic issues and initiatives in contemporary international public health, and develops student awareness of the socioeconomic and cultural complexity of health problems in developing nations.
- 222) SOC 4053. Health Care System. (7)**
- a) Covers the complexities of health care organization and finance and presents a general overview of how the U.S. health care systems work and how the major components within the system fit together. Covers basic structures and operations of the U.S. health system—from its historical origins and resources, to its individual services, cost, and quality.
- 223) SOC 4433. Culture and Society. (2)**
- a) Explores the social significance of cultural production, including the relationships between art, consciousness, the economy, and history. Themes examined may include the social production of art, art and ideology, the problem of artistic reception, and art movements and cultural resistance. Topics include art and culture in minority social movements, the relation between high and low culture, and cultural conflict over art
- 224) CRJ 1113. The American Criminal Justice System. (5)**
- a) Philosophy and history of criminal justice in America; examination of criminal justice agencies operating as an interacting system: police and security agencies, courts, and corrections. May be applied toward the Core Curriculum requirement in Social and Behavioral Sciences.
- 225) CRJ 2813. Introduction to Courts and the Legal System. (5)**

- a) Examines state and federal American court systems, their powers, remedies, limitations, and procedures; and the contributions of courts to governance.
- 226) CRJ 3563. Juvenile Justice. (6)**
- a) Examination of the history of adolescence and the development of the juvenile justice system. An in-depth study of police, courts and corrections as applied to youth. Consideration of youth as both offenders and victims. Topics include child abuse, youth gangs, waiver/transfer of youth to the adult court and juvenile offending.
- 227) CRJ 3573. Restorative Justice. (8)**
- a) Provides students with a detailed study of the principles and practices of restorative justice aimed at creating a just peace within a community, a just public order for the community, vindication for victims and opportunities for accountability and restoration to offenders
- 228) CRJ 4403. Race, Ethnicity, and Criminal Justice. (2)**
- a) This course examines experiences of racial and ethnic groups in the criminal justice system. Topics include: the nature and extent of overrepresentation by racial and ethnic minorities as justice system clients, culture-specific crime and victimization patterns, research evidence and theoretical explanations for these patterns.
- 229) CRJ 4603. Institutional Corrections. (5)**
- a) This course introduces students to theory and research in the areas of institutional corrections and penology. Topics include the history of the use of incarceration in the United States, the influence of sentencing philosophies and practices on incarceration, the organization and management of prisons, and critical issues related to prison staff and inmates.
- 230) PAD 1113. Public Administration in American Society. (5)**
- a) This functions as the general introductory course in public administration. The management of government bureaucracies including organization, human resources, career systems, and financing is discussed. There is a discussion of the role of bureaucracies in modern society in the formulation and implementation of public policy.
- 231) PAD 3023. Introduction to Urban Management and Policy. (3)**
- a) This course will introduce students to the basic concepts of the management of urban municipalities. Topics to be covered may include leadership in urban settings; organizational structure and change; delivery of urban services, particularly in a diverse urban environment; and policy issues in urban settings.
- 232) PAD 3053. Urban Economic Development.**
- a) This course examines the factors contributing to the economic growth or decline of U.S. cities or regions and the role of local government in shaping economic development policies and economic change. It reviews the impact of public sector incentives and the outcomes of public-private partnerships through case studies of a variety of urban areas.
- 233) PAD 3133. Politics and Policies of San Antonio and South Texas. (3)**
- a) The San Antonio area has been shaped and built by an array of decisions, public and private. This course will examine the history and development of the area and the political, social, and economic forces that have defined the local policymaking process by city, county, and special purpose governments. Topics may include fiscal policy, public investment policies, urban revitalization, and transportation.

- 234) **PAD 3143. Urban and Regional Planning. (1)**
a) This course will explore the fundamental concepts of urban and regional planning, including various planning tools and social and political issues related to planning. A wide variety of topics will be covered, including physical planning, transportation, housing, land use, urban redevelopment, and historic preservation. The course will tackle planning both as a community process and a professional activity. The evolution of planning concepts within the framework of the American political structure will be addressed.
- 235) **BIO 3283. Principles of Ecology. (5)**
a) A study of the interaction of organisms with their environment, with focus on ecological principles, adaptations of organisms, environmental pollution, and principles of conservation.
- 236) **BIO 3292. Principles of Ecology Laboratory. (5)**
a) A field-oriented course emphasizing modern ecological techniques, including examinations of plant and animal populations and measurement of selected chemical and physical parameters.
- 237) **BIO 3323. Evolution. (4)**
a) A discussion of theories and possible mechanisms for evolutionary changes at various levels of organization.
- 238) **BIO 3333. Plants and Society. (2)**
a) The importance of plants and plant-derived products to human health and wellbeing through the provision of food, pharmaceuticals, and other important natural products.
- 239) **BIO 3613. The Biology of Aging.**
a) The biological principles of human life and health; changes that occur with aging and their implications for the lives of students and their families.
- 240) **BIO 4033. Conservation Biology. (3)**
a) The class topics will include studying the nature of the biosphere, threats to its integrity, and ecologically sound responses to these threats. Also included will be the origin and preservation of biotic diversity, how the rich variety of plant and animal life around us arose, how it has been maintained by natural processes, and how we can prevent its destruction.
- 241) **BIO 4043. Desert Biology. (3)**
a) A study of the deserts of the world with an emphasis on U.S. deserts. Adaptations of plants and animals and their responses to desert conditions, as well as examinations of desert climatic patterns, geology, and natural history.
- 242) **BIO 4053. Wildlife Biology. (2)**
a) An introduction to wildlife biology and management including ecological principles dealing with ecosystems, natural communities, and populations. The importance of animal behavior, the availability of food, cover, wildlife diseases, predators, hunting, and trapping will be included. Field studies will allow students to observe and apply classroom topics.
- 243) **BIO 4643. Medicinal Plants. (2)**
a) Ethnobotanical, biochemical and pharmacological aspects of some of our most important plant-derived drugs
- 244) **CS 1023. Cultural Implications of the Information Society.**

- a) This course offers an examination of the modern information society and the influences of technological advances on society and culture. The emphasis is on information and its management from ethical, social, and legal perspectives. Students will make extensive use of the World Wide Web.
- 245) **ES 1003. Survey Topics in Environmental Studies.**
- a) A broad based survey course intended to provide a comprehensive introduction to the multidisciplinary field of environmental studies. This course examines the ecological, social and political-economic aspects of contemporary environmental issues from an interdisciplinary perspective.
- 246) **ES 1111. Environmental Botany Laboratory. (5)**
- a) Laboratory studies to accompany Environmental Botany Lecture. Selected laboratories pertaining to the structure and function of plants.
- 247) **ES 1113. Environmental Botany. (5)**
- a) Study of structure and function of plant cells, tissues, and organs. Includes an evolutionary survey and life histories of the following representative groups: algae, fungi, mosses, liverworts, ferns, and seed producing organisms. Plant reproductive and functional interactions with their environment and with humans.
- 248) **ES 1121. Environmental Zoology Laboratory. (5)**
- a) Laboratory studies to accompany Environmental Zoology Lecture. Selected laboratories pertaining to the taxonomy, molecular biology, and ecology of animals.
- 249) **ES 1123. Environmental Zoology. (5)**
- a) Study of the principles of taxonomy, molecular biology, and ecology as they relate to animal form and function, diversity, behavior, and evolution.
- 250) **ES 1211. Environmental Geology Laboratory. (5)**
- a) Laboratory studies to accompany Environmental Geology Lecture. Selected laboratories pertaining to urban and regional land use planning.
- 251) **ES 1213. Environmental Geology. (5)**
- a) The earth as a habitat. Interrelationships between humans and the environment. Geologic factors in urban and regional land use planning. May apply toward the Core Curriculum requirement in Life and Physical Sciences.
- 252) **ES 1314. Environmental Statistics. (5)**
- a) Collection, analysis, presentation and interpretation of environmental data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing.
- 253) **ES 2013. Introduction to Environmental Science I. (5)**
- a) An introduction to the scientific principles, concepts, and methodologies needed to understand the interactions of the biotic component of the natural world, to identify and analyze environmental problems within the biotic component of natural world, risk assessment of these environmental problems, and to examine alternate solutions. General attention is given to the biotic concepts of growth, processes, and changes occurring in ecosystems and social structures.
- 254) **ES 2021. Introduction to Environmental Science I Laboratory. (8)**
- a) Qualitative and quantitative methods in the study of biotic environmental systems.
- 255) **ES 2023. Introduction to Environmental Science II. (5)**

- a) An introduction to the scientific principles, concepts, and methodologies needed to understand the interactions of the abiotic component of the natural world, to identify and analyze environmental problems within the abiotic component of the natural world, risk assessment of these environmental problems, and to promote environmental sustainability. General attention is given to the abiotic environmental factors including natural hazards, pollution processes, energy resources, sustainability, and changes occurring in ecosystems.
- 256) **ES 2031. Introduction to Environmental Science II Laboratory. (5)**
- a) Qualitative and quantitative methods in the study of abiotic environmental systems.
- 257) **ES 2113. Fundamentals of Geographic Information Systems (GIS). (5)**
- a) This course will serve as a basic introduction to the concepts and techniques of utilizing a Geographic Information System (GIS) to study and model environmental issues. In lecture and laboratory, students will study methods of querying, analyzing, creating and displaying GIS data utilizing industry standard software. Students will also be introduced to using the Global Positioning System (GPS) as a means for creating GIS data.
- 258) **ES 3033. Environmental Ecology. (5)**
- a) Examination of the interactions of biotic and abiotic systems, including interactions of plants, animals, and the environment.
- 259) **ES 3042. Environmental Ecology Laboratory. (5)**
- a) A field-oriented course emphasizing modern ecological techniques, including examinations of plant and animal populations and measurement of selected chemical and physical parameters.
- 260) **ES 3053. Environmental Remediation. (2)**
- a) This course will focus on the fundamentals associated with environmental remediation in relation to the overall environmental quality and protection. Topics covered include contaminant fate and transport; physical, chemical, and biological processes/characteristics of the air, soil, and water; remediation/restoration methods; environmental monitoring; environmental assessments; environmental regulations; and water/wastewater treatment.
- 261) **ES 3061. Environmental Remediation Laboratory.**
- a) This laboratory and field-based course will provide hands-on experience in environmental remediation that will focus on regulatory aspects of assessing environmental contamination, technologies/strategies used to remediate, and current literature research investigations into remediation.
- 262) **ES 3103. Environmental Microbiology. (2)**
- a) This course will survey environmental microbiology and will emphasize microbial interactions in terrestrial and aquatic environments as well as the fate of microbial pathogens. Topics covered include microbial environments, detection of bacteria and their activities in the environment, microbial biogeochemical cycling, bioremediation of organic and inorganic pollutants, and water quality.
- 263) **ES 3121. Introduction to Soils Laboratory. (4)**
- a) Laboratory exercise and field trips designed to develop student competency in soil description, analysis, and assessment.
- 264) **ES 3123. Introduction to Soils. (4)**

- a) A study of soil properties and processes and relationships to land use, plant growth, environmental quality, and society.
- 265) **ES 3133. Oceanography. (2)**
- a) Description of the oceans. Emphasis on relations of biology, chemistry, geology, and physics in marine environments. Examination of relationships and interactions at macro and micro scales in the ocean. Field trips may be required.
- 266) **ES 3141. Watershed Processes Laboratory. (3)**
- a) Laboratory exercises and field trips designed to develop an understanding of watershed processes, watershed assessment, and watershed management.
- 267) **ES 3143. Watershed Processes. (3)**
- a) This course focuses on watershed processes, watershed assessment, and watershed management.
- 268) **ES 3153. Environmental Chemistry.**
- a) This course explores the chemistry of the environment, the chemistry underlying environmental problems and solutions to environmental problems. Emphasis is placed on thermodynamics and kinetics of reaction cycles; sources, sinks and transport of chemical species; and quantitation of chemical species. Examples are selected from the chemistry of natural and contaminated air, water, and soil.
- 269) **ES 3203. Environmental Law. (5)**
- a) Present-day environmental enabling acts and regulations will be covered, with emphasis on federal acts, such as the National Environmental Policy Act, Clean Water Act, Resource Conservation and Recovery Act, and associated regulations.
- 270) **ES 3213. Biology of Flowering Plants. (2)**
- a) A study of the wildflowers of Texas emphasizing identification of the more common wildflowers, as well as family characteristics, flower anatomy, plant morphology, and plant-collecting techniques will be included. Lecture, laboratory, and fieldwork will be included as part of the course.
- 271) **ES 3223. Woody Plants. (3)**
- a) A study of the woody plants emphasizing the characteristics of family, genus, and species. Includes identification of the common woody plants. Leaf, stem, and flower morphology, anatomy, and collecting techniques. Lecture, laboratory, and fieldwork will be included as part of the course.
- 272) **ES 4023. Aquatic Ecology. (3)**
- a) Study of aquatic ecosystems including streams, wetlands, and lakes. Topics include watershed processes, biological communities, physical habitats, nutrient cycling, energy flow, and management issues. The course culminates with individual research projects focused on local watersheds. Field trips may be required.
- 273) **ES 4103. Global Change. (4)**
- a) Changes in the global distribution of plants and animals and the causes of the changes will be examined. Factors that are apparently coupled to changes in these distributions will be examined including, but not limited to, atmospheric composition change and temperature change. Additionally, examination of the impact of humans and their activities on the environment: their effect on aquatic, marine, and terrestrial plant, animal, and human resources.

- 274) **ES 4111. Field Biology Laboratory. (3)**
a) A field-oriented course offering the opportunity for practical experience observing, collecting, and identifying Texas plants and animals.
- 275) **ES 4113. Field Biology. (3)**
a) A study of the natural history of plants and animals in their native environment. Techniques for the identification of birds, mammals, reptiles, amphibians, insects, and the dominant flowering plants will be discussed.
- 276) **ES 4123. Desert Biology. (3)**
a) An introduction to wildlife biology and management including ecological principles dealing with ecosystems, natural communities, and populations. The importance of animal behavior, the availability of food, cover, wildlife diseases, predators, hunting, and trapping will be included. Field studies will allow students to observe and apply classroom topics.
- 277) **ES 4133. Natural Resource Policy and Administration. (2)**
a) Factors in evolution of forest, range, wildlife and related natural resources administration and policies in the United States; policy components; policy formation implementation, administration and change processes; introduction to criteria for evaluating effectiveness of policies and administration.
- 278) **ES 4143. Environmental Geomorphology.**
a) Examination of landforms on the Earth's surface and landscape-forming processes. Field trips may be required.
- 279) **ES 4153. Introduction to Sustainability. (1)**
a) This course will examine the major environmental issues and trends happening in modern society from a scientific and practical perspective, including biodiversity, population, food and water resources, climate change, energy, public health, and the overall forecast for the environment for the next several decades.
- 280) **ES 4163. Renewable Energy. (1)**
a) This course is an introduction to energy systems and renewable energy resources, with a scientific examination of the energy field and an emphasis on alternate energy sources and their technology and application.
- 281) **ES 4173. Waste Water Treatment.**
a) The application of chemical, biochemical, and physical processes to water treatment, wastewater treatment, and pollution control.
- 282) **ES 4183. Environmental Toxicology. (3)**
a) Examination of advanced or specialized hazardous or toxic waste treatment methods. Emphasis will be on physical, chemical, and biological processes in treatment and processing of hazardous wastes materials.
- 283) **ES 4193. Planning and Response to Environmental Disasters.**
a) Mitigation of preparation for, response to, and recovery from environmental disasters.
- 284) **ES 4203. Environmental Assessment. (2)**
a) This course evaluates the framework of an impact assessment and details regarding the environment (air, water, soil), its pollutants (atmospheric, noise, water, solid waste), their impacts (physical, social, economic), relevant regulations, and pollution minimization or

management strategies. Students use this information to review and comment on an existing Environmental Impact Statement (EIS).

285) ES 4213. Conservation Biology. (3)

- a) The class topics will include studying the nature of the biosphere, threats to its integrity, and ecologically sound responses to these threats. Also included will be the origin and preservation of biotic diversity, how the rich variety of plant and animal life around us arose, how it has been maintained by natural processes, and how we can prevent its destruction.

286) ES 4233. Restoration Ecology. (2)

- a) Applies ecological principles to the restoration of disturbed terrestrial, wetland, and aquatic ecosystems. Includes the restoration of soils and waterways, of flora and fauna, and of natural ecological processes such as plant succession and nutrient cycling.

287) ES 4243. Wildlife Management. (2)

- a) An introduction to wildlife biology and management including ecological principles dealing with ecosystems, natural communities, and populations. The importance of animal behavior, the availability of food, cover, wildlife diseases, predators, hunting, and trapping will be included. Field studies will allow students to observe and apply classroom.

288) ES 4253. Sources, Fate, and Transport of Chemicals in the Environment. (3)

- a) Sources of chemicals in the environment. Processes regulating fate and transport of metals, organics, nutrients, salts, pathogens, and radionuclides in the environment.

289) GEO 1013. The Third Planet. (8)

- a) Evolution of ideas concerning the earth's origin, structure, and age; social impact of recognizing the antiquity of the planet and humankind's brief presence; examination of how the distribution of planetary resources influenced the rise and clash of civilizations. May not be applied to a major in geology.

290) GEO 1103. Physical Geology. (5)

- a) This course is intended for geology majors and minors as well as others interested in the geologic sciences. It constitutes an introduction to the geology major and skillsets needed by the practicing geologist including; mineral and rock identification, microscopy, deep time, outcrop descriptions, and mapping. The course includes an introduction to the theory of plate tectonics and its relation to the Earth's internal structure, surface features, hydrosphere, earthquakes, and volcanism. One or more field trips may be required.

291) GEO 1111. Physical Geology Laboratory. (5)

- a) Relation of the earth's present processes to its resources, structure, and internal composition. Field and laboratory study of minerals, rocks, maps, and aerial and satellite photos. Field trips may be required. (Formerly titled "Introduction to Earth Systems Laboratory.")

292) GEO 1123. Life Through Time. (8)

- a) A study of the origin and evolution of life on Earth including major events from the beginning of the Earth and solar system to the present, as well as the interaction of life with the lithosphere, atmosphere, and hydrosphere. This course will explore the fossil record, sedimentary rocks, plate tectonics, evolution, and climate change.

293) GEO 1131. Life Through Time Laboratory. (5)

- a) Laboratory and field study of minerals, rocks, fossils, sequences of rocks, and mapping for the interpretation of life through time and the interpretation of Earth history. This course is intended and required for Geological Science majors and minors and will introduce students to many concepts covered in upper level courses. Field trips may be required.
- 294) **GEO 3013. Fundamentals of Plate Tectonics. (1)**
- a) This course introduces the student to the mechanics of lithospheric plate motion and the physical phenomena driving the motion. The relationships between plate tectonics, mantle convection, and geomagnetism are explored, as well as common structures associated with plate boundaries. Mathematical models are introduced and used to describe plate motion on a sphere. Historical development of plate tectonic theory is also covered.
- 295) **GEO 3163. Oceanography. (7)**
- a) General oceanography, with emphasis on marine geology and especially the continental margins. An optional field trip may be offered.
- 296) **GEO 3173. Polar Regions and Climate Change. (1)**
- a) This course covers properties, areal distribution, seasonal change and climatic change of the major constituents of the Polar Regions: the large ice sheets of Greenland and Antarctica; seasonal snow cover in the high and mid latitudes; sea ice covers in the Arctic, Southern Ocean and other seas; mountain glaciers from the tropics to the polar regions; and permafrost in the high latitude land areas of the Northern Hemisphere. How to examine these constituents will be presented with illustrative examples of monitoring of climate-induced changes in the Polar Regions using remote sensing and field investigations of processes and properties. Applications discussed will include: snow and ice covers as agents of geological change; snow and ice impacts as water resources in Asia and western North America, and global environmental impact through for example, effects on the earth's radiation budget, and contributions to sea level change. Human impacts covered will include effects of ice covers of rivers and sea ice such as on petroleum extraction, transportation and navigation, frost and freezing damage to crops, and hazards of blizzards and avalanches.
- 297) **GEO 3383. General Geophysics. (3)**
- a) This course examines the interrelated geology and physics of the Earth's interior as deduced from earthquake seismology, gravity and magnetic fields, and the application of geophysical methods to the exploration of near-surface cultural and natural resources. Topics in archeological, environmental, and engineering geophysics will be explored through the methods of refraction seismology, electrical resistivity, electromagnetic induction, microgravity, and ground penetrating radar. Field trips may be required.
- 298) **GEO 3393. Introduction to Isotope Geochemistry. (2)**
- a) The course includes a review of theories of nuclear structure, stability of nucleus, nucleosynthesis and origin of elements, and introduces both radiogenic and stable isotope geochemistry. Topics include radioactive decay schemes for tritium-helium, U-Pb, Rb-Sr, Sm-Nd, K-Ar, and U-Th-Pb-He systems; isotopic fractionations of stable isotopes of C, H, O, N, and S; and application of radiogenic and stable isotopes to petrology, evolution of the crust and mantle, geochronology, geothermometry, archaeology, ecology, hydrology, and paleoclimatic interpretation.

- 299) **GEO 4013. Volcanology. (3)**
a) A survey of volcanoes and volcanic processes, including historically important volcanic eruptions and the prediction and mitigation of volcanic hazards. Field trips may be required.
- 300) **GEO 4063. Advanced Environmental Geology. (2)**
a) An analysis of human interaction with geologic systems; the risks and effects of natural geologic hazards such as volcanic eruptions, earthquakes, and floods. Topics will include the effects of human activity on natural systems such as groundwater quality and recharge, river systems, coastal hazards, energy resources, and climate change. The meaning of "sustainability" as a long-term concept and tools to assess and work with Earth systems to avoid endangering human life and property are also topics that are applied and addressed. [GEO 4063](#) is a writing intensive course and project management skills are utilized in working on geologic investigations and solutions for resource management and in analyzing and mitigating natural hazard events.
- 301) **GEO 4113. Geomorphology. (3)**
a) Examination of landforms on the Earth's surface and landscape-forming processes. Field trips may be required.
- 302) **GEO 4121. Geomorphology Laboratory. (1)**
a) Interpretation of landforms and their formative processes from maps, aerial photographs, and calculations. Field trips may be required.
- 303) **GEO 4623. Groundwater Hydrogeology. (2)**
a) Hydrologic cycle and the occurrence and movement of groundwater. Recharge and discharge of aquifers; water quality; exploration and development of ground-water supplies. Field trips may be required.
- 304) **AST 1033. Exploration of the Solar System. (6)**
a) A descriptive course of modern studies of the solar system, including a survey of the properties of the planets and smaller bodies (asteroids and comets) and current theories of the origin of planetary systems. Topics include results from the latest satellite, robotic, and human exploration of space, origin of life in the solar system, existence of other planetary systems, possibilities of space colonization, and the search for extraterrestrial life (techniques and possibilities of communication with other intelligences).
- 305) **PHY 4703. Renewable Energy: Solar Energy Convertors.**
a) Topics include physics of photovoltaic cells, semiconductors, solar energy convertors, thin film solar cells, nanostructures for solar energy conversion, dye-sensitized photovoltaic cells, fuels from water and sunlight, strategies for high efficiency.
- 306) **IDS 2413. Earth Systems Science. (8)**
a) This course provides a look at the Earth system as a whole. Emphasis will be on the interrelationships between biological, geological, hydrological, climatological, and human systems on local, continental and global scales. The interactions between the hydrosphere, atmosphere, biosphere, cryosphere, and lithosphere that together make up the Earth system will be studied. This interdisciplinary view of our planet highlights the manner in which all systems of the Earth control or influence each other.
b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_12093.pdf
- 307) **IDS 3211. Inquiry in Earth Systems Science. (8)**

- a) Course familiarizes students with laboratory and field tools, techniques, and safety issues and allows them to form a better understanding of major topics in Earth systems science, especially in the areas of hydrology, soils, atmosphere, land cover, and GPS. Students will participate in scientific inquiry investigations of the Earth's systems and components.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_17946.pdf
- 308) IDS 3224. Earth Systems Science Investigations. (8)**
- a) Integrated online lecture and laboratory course that provides a look at the Earth system as a whole. Emphasis will be on the interrelationships between biological, geological, hydrological, and human systems on local, continental and global scales. The interactions between the hydrosphere, atmosphere, biosphere, and lithosphere that together make up the Earth system will be studied. This interdisciplinary view of our planet highlights the manner in which all systems of the Earth influence each other.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_14069.pdf
- 309) AAS 2113. African American Culture, Leadership and Social Issues. (6)**
- a) This course examines topics related to twentieth-century African American culture, leadership, and social experiences. The focus of this course includes emphasis on civic engagement, leadership, and/or cultural expression (i.e., music, performance arts, film, visual arts) that informs collective identities, social movements, and/or relevant social issues.
- 310) AAS 3013. African American Cultural Experiences. (2)**
- a) This course examines cultural expressions (e.g., art, music, film, literature, cultural identity) in the African American experience. The substantive and disciplinary emphasis can vary from one semester to another.
- 311) AAS 3113. African American Studies Research Seminar. (1)**
- a) This course is designed to introduce students to basic research methods and methodological issues in African American Studies. The course covers methods of social science research, research conceptualization, and research design. Students will become familiar with various methods of data collection, data analysis, and theoretical concepts that pertain to developing critical thinking, analytical, and writing skills.
- 312) AAS 3123. Civil Rights Movement & African American Education. (2)**
- a) This course provides an introduction to the period of struggle in American history known as the Civil Rights Movement. The objective is to survey the major historical figures, organizations, locations, strategies and ideas that coalesce to make the history of the movement. The course will analyze the historical trajectory of educational policies with particular emphasis on the Brown v. Board of Education decision in 1954 and its implications over the following 20 years.
- 313) AAS 3133. African Americans in Higher Education. (2)**
- a) This course explores the history of African Americans in higher education. The course examines especially significant post-secondary issues and topics in the twentieth century, such as access, equity, diversity, student organizations, institutional leadership, and current events.
- 314) GLA 3513. International Organizations in World Politics.**
- z) Major issues involving international organizations: nationalism and globalism, financing problems, international staffing, voting patterns, peace-keeping, and international

conferences. Organizations examined include the United Nations system, regional development banks, alliance systems, cartels, and common markets.

aa) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_22970.pdf

TOTAL UNDERGRAD SUSTAIN-FOCUSED OVER THE COURSE OF 3 YEARS: 932

To count as sustainability-inclusive, the course description or rationale provided in the course inventory must indicate that the course incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability challenges, issues, and concepts throughout the course

1) ARC1113 Intro to the Built Environment (3)

a) (taken from course objectives) Awareness of local-global relationships including environmental factors, human and cultural factors, issues of sustainability and how they influence design decision-making

b) <file:///C:/Users/aln309/Desktop/ARC1113%20Intro%20to%20the%20built%20Environm ent.pdf>

2) ARC 1133. Construction Material and Concept

a) You will be made aware of the outside influences such as forces, building codes, safety requirements and regulatory standards on construction and be aware of the problems of toxic materials in new and existing buildings. We will also look at environmental forces that affect the building industry and look at the effect of building on the environment. Sustainability is a role held by designers, manufacturers, contractors and all who work in the built environment.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22392.pdf

3) ARC 1151 Introduction to Architecture and Design

a) Week 6: (TED Talks on Arch. & Sustainability) Quiz Due: By Oct. 4th, 11:59pm Blackboard
Film #1: Norman Foster http://www.ted.com/talks/norman_foster_s_green_agenda
Film #2: William McDonough

http://www.ted.com/talks/william_mcdonough_on_cradle_to_cradle_design Week 7:

(TED Talks on Arch. & Sustainability II) Quiz Due: By Oct. 11th, 11:59pm Blackboard
Film #1: Martin Pawlyn

https://www.ted.com/talks/michael_pawlyn_using_nature_s_genius_in_architecture?language=en Film #2: Janine Benyus

https://www.ted.com/talks/janine_benyus_biomimicry_in_action Film #3 The Nature of
Cities <https://vimeo.com/98080426>

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22362.pdf

4) ARC 1213 Design I (3)

a) (taken from educational objectives) understanding of design as a collaborative process involving investigative iterations, dialog, discussion, and critique, amid a basic awareness of sustainable design processes

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22154.pdf

5) ARC 1513. Great Buildings and Cities of the World (2)

a) Students will consider the important role of human stewardship of natural and built environments

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_30343.pdf

6) ARC 2133. Principles of Architectural Structures (5)

a) (taken from course objectives) Exploring the well-known building examples with different high-rise and wide-span structural systems to inspire further research on structures in terms of sustainability and structural articulation considerations. Developing the ability to assess, select, and conceptually integrate structural systems, building envelope systems, environmental systems, life-safety systems, and building service systems into building design.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_28186.pdf

7) ARC 2156. Drawing and Modeling Studio (5)

a) (taken from premise and description) Following a series of exercises which include wood shop processes, a design project will be assigned that affords the opportunity to examine the instrumental qualities explored in the exercises while introducing site analysis, programming, spatial and functional layout and organization, structural considerations, material selections and applications, and environmental concerns.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_25227.pdf

8) ARC 2166. Digital Design Studio (5)

a) Site Development: demonstrates an applied understanding of, topography, solar orientation, circulation/accessibility, visibility, landscape and sustainability.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_31828.pdf

9) ARC 4143. Architecture Topics (2)

a) (taken from course objectives) Understand lighting applications, techniques, design guidelines, energy codes, and sustainability as it relates to the lighting design field

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_33532.pdf

10) ARC 4156. Building Design Studio. (8)

a) (taken from course goals) To reinforce the designer's ethical responsibilities relative to ecological relevance and social consciousness.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_29011.pdf

11) ARC 4283. Architectural Structures. (8)

a) (taken from course objectives) Exploring the well-known building examples with different high-rise and wide-span structural systems to inspire further research on structures in terms of sustainability and structural articulation considerations.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_28186.pdf

12) ARC 4816. International Studies Studio (5)

a) It offers clues and lessons on how growth can be achieved, compatibly with quality of space and present-day environmental sustainability aims.

b) Today MTA Associates continues a social exploration across projects that reflect thoughtfully on the physical and social context of architecture and on the use of technology and innovative spatial solutions, with particular attention to sustainability.

c) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_17698.pdf

13) IDE 2143. Architecture and Interior Assemblies. (3)

- a) (taken from learning outcomes) Advance your understanding of construction assembly and cost and sustainable principles
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_14308.pdf

14) IDE 2166. Digital Design Studio (2)

- a) Site Development: demonstrates an applied understanding of, topography, solar orientation, circulation/accessibility, visibility, landscape and sustainability.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_31828.pdf

15) IDE 3123. Space Planning and Interior Details. (2)

- a) Standard 14. Environmental Systems and Comfort Interior designers use the principles of acoustics, thermal comfort, and indoor air quality in relation to environmental impact and human wellbeing. Intent: This standard ensures graduates are able to contribute to the development of appropriate strategies for achieving wellbeing, comfort, and performance within interior environments. Additionally, graduates are aware of the environmental impact of their design decisions.
- b) Standard 15. Construction Interior designers understand interior construction and its interrelationship with base building construction and systems. Intent: This standard ensures graduates have an understanding of the documentation, specification, environmental impact, and application of non-load bearing interior construction methods, systems, and details. Graduates should consider the interrelationship of base-building construction to interior construction.
- c) https://bluebook.utsa.edu/Syllabi/Syllabus_201910_23716.pdf

16) URP 3123. Introduction to Community and Regional Planning and Urban Design.

- a) Topic: Environmental Planning In-class. Discussion: Environmental challenges of San Antonio? Documentary WWF International, The Urban Green.
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_21533.pdf

17) CSM 2113. Construction Materials and Methods. (6)

- a) You will be made aware of the outside influences such as forces, building codes, safety requirements and regulatory standards on construction and be aware of the problems of toxic materials in new and existing buildings. We will also look at environmental forces that affect the building industry and look at the affect of building on the environment. Sustainability is a role held by designers, manufacturers, contractors and all who work in the built environment
- b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_19107.pdf

18) ECO 4273. Environmental and Resource Economics. (1)

- a) Economic principles applied to natural resource and environmental problems; relationship of market and nonmarket forces to environmental quality and demands for natural resources; and development of tools for policy analysis

19) BBL 2023. Latino Cultural Expressions. (8)

- a) An introductory overview of Hispanic visual, performing, folk and popular arts from their origins in the Iberian Peninsula, through the later blending of cultures and their parallelism during colonial and revolutionary periods, to contemporary Latino expressions in the United States. Readings, lectures, films, group discussions, active class participation, group assignments, and cultural events are central in this course. The

course introduces the study of cultural expressions through various concepts and methodologies in Chicana/o and Latina/o Studies.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_11850.pdf

20) GLA 3003. International Law.

a) This course evaluates the ways that international law affects world politics. Emphasis is on the foundations and substantive rules of international law and national politics. Topics may include the laws of war, war crimes, terrorism, human rights, economic exchange and natural resources.

21) GLA 3383. East European Politics.

a) This course provides an overview of politics in Eastern Europe broadly understood as the region of East Central and Southeastern Europe, and the post-Soviet space. It traces the evolution of nation building since the interwar period and the system of communist rule, with a focus on key dimensions of the post-communist transformation of the region. Thematic coverage may include constitutions, political culture, party politics, and Euro-Atlantic integration.

22) GLA 3393. Latin American Politics. (2)

a) An examination of political institutions and their relationship to social and economic change in Latin America. Profiles of major Latin American countries, such as Mexico, Brazil, Argentina, Peru, and Cuba.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22966.pdf

23) GLA 3403. European Governments. (1)

a) The interplay of politics with the changing social and economic environment in the advanced industrial societies of Western Europe. Elites, participation, governmental structures, party systems, interest groups, and public policy will be examined in several selected polities and the European Union.

24) GLA 3423. Geopolitics of Russia and Eurasia.

a) Multidisciplinary introduction and regional study of the Russian Federation and the Eurasian realm, including the Caucasus, Central Asian nations, Afghanistan, and Mongolia. Both the geography and the politics of this area will be analyzed. Historical and contemporary geopolitical topics include nation-building, regional civilizations, revolution, terrorism, the 19th-century "Great Game," the rise of the USSR, and the current transition of the Russian Federation to an uncertain future.

25) GLA 3433. Governments and Politics of Southeast Asia. (2)

a) A comparative examination of the political systems of selected Southeast Asian countries and their efforts to deal with political, economic, and social change. Countries studied may include Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201820_29315.pdf

26) GLA 3443. Governments and Politics of East Asia. (3)

a) A comparative examination of the political systems of selected East Asian countries and their efforts to deal with problems of political, economic, and social change. Countries studied may include the People's Republic of China, the Republic of China, and South Korea.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_18611.pdf

27) GLA 3453. Politics of Mexico. (2)

- a) Background to the contemporary political system of Mexico, including independence, foreign intervention, the Diaz regime, and the 1910–1917 revolution. Other topics may include the constitution, the structure of government, political parties, the presidency, economic development and policy, contemporary leadership, and elites.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201810_18612.pdf

28) GLA 3463. Politics of the Third World. (1)

- a) The political system of various Third World nations. An inquiry into the political and economic problems of these countries, such as development, instability, and political change.

29) GLA 3473. Latin America in the World. (1)

- a) Advanced survey of major theories and problems in Latin American political and economic development. Theories of dependency, corporatism, bureaucratic authoritarianism, and transitions of democracy. Selected problems such as political stability, land reform, economic integration, multinational corporations, inflation, foreign debt, revolution and reform, and the military in politics.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_22966.pdf

30) GLA 3493. Politics of the Middle East. (2)

- a) An examination of the past, present, and future of Middle East politics, with an emphasis on culture, politics, religion, and conflicts in the area; the international relations of Middle Eastern countries as well as superpowers' involvement.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_201920_31394.pdf

31) GLA 3523. Force in International Politics.

- a) This course engages with experiences of violence in IR. It provides an examination of modern research into the use of coercion in international relations with a focus on economic sanctions, war, and terrorism. Special emphasis will be placed on the causes, trends, and consequences of interstate wars. Topics may include armed conflict, trauma and suffering, laws of war, representation of war in media, peace movements, and the technologies of peace making.

b) https://bluebook.utsa.edu/Syllabi/Syllabus_202010_24433.pdf

32) GLA 3593. Topics in Latin American Security.

- a) This seminar examines key questions for regional security in Latin America. Although drawing on scholarly and historical materials, this course focuses essentially on contemporary regional security and includes general topics, such as regional security, peace and war in Latin America, civil-military relations, drug trafficking, and public security. The cases are selected in part to provide geographical balance and contemporary relevance, but also to demonstrate the contrasts between traditional and emerging security questions in the region.

33) POL 2603. Introduction to International Relations. (6)

- a) The course focuses on the study of political processes and interactions between states and non-state actors in an interconnected world, and discusses basic theoretical frameworks like realist, liberal, constructivist and critical approaches; levels of analysis; international institutions; causes of war and peace; and effects of international trade. Other topics discussed may include transnational terrorism; human rights; humanitarian intervention and peacekeeping operations; development; globalization; multinational

corporations; nuclear proliferation; climate change; international monetary and financial regimes; democracy promotion, etc.

34) POL 3773. Experiments in Democratic Renewal.

- a) This course examines experiments with popular participation around the world that try new forms of collective action to solve public problems. The setting of these experiments is the double movement of globalization of production and the decentralization of government which have placed a premium on learning processes in contrast to the bureaucratic welfare state and market-based decision-making. The course examines cases in the United States as well as other countries, such as Brazil, Mexico, Canada, India, and others. The course will examine debates about the foundations for as well as the efficacy of new decision-making procedures. Policy cases may include schooling, environmental protection, policing, housing, drug rehabilitation, sweat shop labor, community finance, women's development, and public budgeting.

35) ES 3163. Ornithology. (1)

- a) A course covering various aspects of the biology of birds, including anatomy, physiology, systematics, evolution, behavior, ecology, and biogeography. Field trips may be required.

36) ES 3173. Mammalogy. (2)

- a) A course covering various aspects of the biology of mammals, including anatomy, physiology, systematics, evolution, behavior, ecology, and biogeography. Field trips may be required.

37) ES 3183. Entomology.

- a) A course covering various aspects of the biology of insects, including anatomy, physiology, systematics, evolution, behavior, ecology, and biogeography. Field trips may be required.

38) ES 3193. Herpetology. (2)

- a) A course covering various aspects of the biology of amphibians and reptiles, including anatomy, physiology, systematics, evolution, behavior, ecology, and biogeography.

39) ES 3113. Ichthyology. (2)

- a) Study of fishes, and includes a wide range of topics including taxonomy, systematics, and biogeography, anatomy and physiology, and behavior and ecology. This course will focus on form and function, behavior, life history, ecology, and key taxonomic characteristics of most of the orders of fishes. Field trips may be required.

40) GEO 2003. Mineralogy. (3)

- a) Crystallography, crystal chemistry, and the physical and optical properties of minerals. Principles of optical mineralogy and the microscopic determination of nonopaque minerals.

41) GEO 2011. Mineralogy Laboratory. (3)

- a) Laboratory study of crystal models, crystals, and minerals. Use of physical properties and the petrographic microscope for mineral identification. Field trips may be required.

42) GEO 2113. Fundamentals of Geographic Information Systems (GIS). (4)

- a) This course will serve as a basic introduction to the concepts and techniques of utilizing a Geographic Information System (GIS) to study and model environmental issues. In lecture and laboratory, students will study methods of querying, analyzing, creating and

displaying GIS data utilizing industry standard software. Students will also be introduced to using the Global Positioning System (GPS) as a means for creating GIS data.

43) GEO 3004. Rocks, Fossils, and Global Tectonics. (2)

- a) An investigation of the major rock forming minerals, petrogenesis of the major rock types, and their plate tectonic context. Study of major trends in fauna and flora through time and their application to interpreting plate tectonics, paleoenvironments, and paleoclimate.

44) GEO 3043. Petrology. (2)

- a) Description, classification, occurrence, and origin of igneous and metamorphic rocks. Field trips may be required.

45) GEO 3051. Petrology Laboratory. (2)

- a) Laboratory study of igneous and metamorphic rocks in hand specimen and thin section. Field trips may be required.

46) GEO 3063. Paleontology. (3)

- a) Study of fossil animals and plants. Emphasis on invertebrate animals. Systematics, biostratigraphy, paleoecology, and evolution of fossil organisms. Field trips may be required.

47) GEO 3071. Paleontology Laboratory. (2)

- a) Study of fossil specimens, collections, and preparation techniques. Field trips may be required.

48) GEO 3103. Structural Geology. (2)

- a) Description and origin of geologic structures at the microscopic, hand specimen and mountain scales with emphasis on the response of Earth materials to stress and the role of rheology. Relationships between structure and tectonics will be explored. Field trips may be required.

49) GEO 3111. Structural Geology Laboratory. (2)

- a) Prerequisite: Completion of or concurrent enrollment in [GEO 3103](#). Laboratory study of structural features and concepts using maps, cross-sections, photographs, and descriptive geometric and stereographic methods. Field trips may be required.

50) GEO 3113. Geologic Field Investigations. (5)

- a) Introduction to techniques for studying geologic features and processes in the field, including rock identification, construction of geological maps, orientation analysis, and report writing. Some half-day and Saturday field trips may be required.

51) GEO 3123. Sedimentation and Stratigraphy. (2)

- a) Processes of erosion, transportation, and deposition that form bodies of sedimentary rock. Depositional systems and modeling are a significant area of study. Stratigraphic principles and temporal and spatial facies relationships at various scales. Field trips may be required.

52) GEO 3131. Sedimentation and Stratigraphy Laboratory. (2)

- a) Laboratory studies of sedimentary processes and their products. Hand specimens, thin sections, sedimentary structures, and interpretation of depositional environments. Stratigraphic case studies, including surface, subsurface, and sequence stratigraphic analysis. Field trips may be required.

53) GEO 3143. Economic Geology.

- a) Origin and occurrence of economic natural resources including metallic ore deposits, industrial minerals, and fossil fuels. Field trips may be required.

54) GEO 3151. Economic Geology Laboratory.

- a) Laboratory study of ore specimens and industrial minerals from important ore localities. Field trips may be required. Course Fees: IUE1 \$15; LRS1 \$5; STSI \$5.

55) GEO 3374. Geochemistry. (3)

- a) A survey of geochemical processes and the distribution of elements in the earth. Application of geochemical methods and data to the solution of geologic problems. Includes geochemical laboratory experiments and use of analytical equipment. Incorporates use of standard computer software for analysis of geochemical data and graphing of results.

56) GEO 4023. Engineering Geology. (6)

- a) Geologic factors in construction. Geotechnical properties of minerals, rocks, and soils. Case studies. May not be applied to a major in geology.

57) GEO 4093. Principles of Remote Sensing. (3)

- a) This course will provide a thorough introduction to remote sensing theory, technology, and application. The emphasis in this course is on understanding the underlying principles of acquiring, interpreting, and applying data from imaging systems covering the electromagnetic spectrum from the ultraviolet through the microwave.

58) RFD 4733. Principles of Sustainable Real Estate Development. (5)

- a) The examination of the principles involved in creating value through the real estate development process. Economic, regulatory, planning, sustainability, financing, management and disposition issues are considered in the marketing and financial analyses of development prospects.

**TOTAL UNDERGRAD SUSTAIN-INCLUSIVE OVER THE COURSE OF
3 YEARS: 158**