385. **Scientific Rationality and Cultural Beliefism**
   Spring. 3(3-0) Administered by the College of Arts and Letters
   P: Completion of Tier I writing requirement, two IAH courses, one ISP course, two ISS courses.
   R: Open only to juniors and seniors.
   Conflicting conceptions of rationality embodied in the theory and practice of contemporary sciences and humanities. The historical roots of scientific rationality and implications for questions of cultural diversity.

396. **Energy, the Environment and Human Development**
   Fall, Spring. 3(3-0) Administered jointly by the College of Agriculture and Natural Resources, College of Natural Science, and College of Social Science.
   The College of Natural Science is the primary administrative unit.
   P: One IAH course, one ISP course. R: Open only to juniors and seniors.
   Basic physics, Sources of energy, energy expenditures, and environmental effects. International energy strategies.

395. **Growing Up and Coming of Age in Three Societies**
   Fall, Spring, Summer. 3(3-0) Administered by the College of Education.
   P: One IAH course, one ISP course, completion of Tier I writing requirement. R: Not open to freshmen and sophomores.
   Diverse disciplinary and cultural perspectives of childhood. Continuity and change in families and schools. Factors such as ethnicity, race, gender, and political philosophies. Focus on three contrasting societies.

TRANSCOLLEGIATE COURSES

**Office of the Provost**

290. **Civilizations, Food Crops and the Environment**
   Fall, Spring. 3(3-0) Administered jointly by the College of Agriculture and Natural Resources and College of Social Science. The College of Agriculture and Natural Resources is the primary administrative unit.
   P: IAH 201, one 200-level ISP course, one ISP or ISP course. R: Not open to freshmen.
   Role of the major food crops in the survival of civilizations and cultures from the past to the present, and the resulting environmental impacts.

301. **Issues in the Information Society**
   Fall, Spring. 3(3-2) Administered jointly by the College of Communication Arts and Sciences and the College of Social Science. The College of Communication Arts and Sciences is the primary administrative unit.
   P: One IAH course, one ISP course or one ISP course, one ISP course. R: Not open to freshmen and sophomores.
   Integration of social, economic, technological, and public policy issues raised by the spread of information technologies and services in a post-industrial society.

302. **Science, Technology and Values**
   Fall, Spring. 3(3-0) Administered by the College of Arts and Letters.
   P: Completion of Tier I writing requirement. Two IAH courses, one ISP course, one ISP course, two ISS courses. R: Open only to juniors and seniors.
   The relationship of science to social and value issues. National decision-making utilizing scientific information. Controversies involving scientific findings concerning human nature.

**Department of Geography**

201. **The Role of Planning in Urban and Regional Development**
   Fall. 3(3-0)
   Contemporary urban issues, historical contexts, and the role of planning in the solutions to the problems faced by cities and their surrounding regions.

211. **Introduction to Data Analysis for Urban and Regional Planners**
   Fall. 3(2-2) Interdepartmental with Geography.
   P: CPS 100 or CPS 120 or CPS 121; UP 201.
   Data gathering analysis, information presentation, and basic techniques of urban planning. Application of related computer programs and software.

212. **Methods for the Investigation of Urban Systems**
   Spring. 3(2-2) Interdepartmental with Geography.
   P: UP 313.
   Models, approaches, and techniques for urban and regional problem analysis and plan formulation.

301. **Real Estate Project Design**
   Spring. 4(2-4)
   P: UP 213.
   Subdivision design, criteria, and standards. Integrating activities, structures, and spaces on parcels of varying sizes and configurations.

302. **Ethics and Politics in Planning**
   Spring. 3(3-0)
   P: UP 261.
   Concepts of ethics, socio-political philosophy, and the application of ethical analysis to planning decisions.

303. **Local Economic Planning**
   Spring. 3(3-0)
   P: UP 201, EC 201 or approval of department.
   The economic component of comprehensive community planning. Taxation and services delivery. Fiscal health and physical and social development of a community.

400. **Special Topics in Urban Planning**
   Fall of odd-numbered years. 2 to 4 credits.
   R: Open only to juniors and seniors in Urban and Regional Planning.
   Issues and problems in contemporary urban planning.
408. Comparative Urban Development Planning
Spring. 3(3-0)
P: UP 201. R: Open only to majors in Urban and Regional Planning, or Urban and Regional Planning-Urban Studies. Community planning concepts and practices, tools and techniques in different countries. Case studies.

413. Urban Geography
Fall. 3(3-0) Interdepartmental with Geography. Administered by Geography.

414. Geography of Transportation
Fall of odd-numbered years. 3(3-0) Interdepartmental with Geography. Administered by Geography.

415. Location Theory and Land Use Analysis
Fall. 3(3-0) Interdepartmental with Geography. Administered by Geography.

Fall. 3(2-1)
P: UP 314 or approval of department. R: Open only to majors in Urban and Regional Planning, or Urban and Regional Planning-Urban Studies or Public Administration. Systems and methods for surveillance, monitoring, management and evaluation of development projects, social programs and public policies.

418. The Ghetto
Fall of odd-numbered years. 3(3-0) Interdepartmental with Geography. Administered by Geography.
P: GEO 221. R: Open only to freshmen and sophomores. Analysis of the ghetto including its spatial organization and structure. Socioeconomic and ethnic populations. Emphasis on U.S. cities.

425. Geographic Information Systems
Spring. 4(3-2) Interdepartmental with Geography. Administered by Geography.
P: GEO 221.

427. Mine Land Reclamation Planning
Fall of odd-numbered years. 3(3-0)
P: UP 334. R: Open only to majors in Urban and Regional Planning or Urban and Regional Planning-Urban Studies or Landscape Architecture or Resource Development or Resource Development-Urban Studies. Issues, procedures, and opportunities in mine land reclamation.

428. Principles of Regional Planning
Fall. 3(3-0)

437. Urban Design
Fall of even-numbered years. 3(1-4)
P: UP 334 or LA 470 concurrently. R: Not open to freshmen and sophomores. Urban design theory and application of physical design principles at various scales. Design of urban open space systems, building groupings, urban linkage, and site details in studio projects.

439. Golf Course Planning and Design
Fall of even-numbered years. 3(3-0) Interdepartmental with Landscape Architecture.
P: UP 344 or LA 342. R: Open only to seniors and graduate students in Urban and Regional Planning or Urban and Regional Planning-Urban Studies or Landscape Architecture. History, planning, and design of the golf course as a component of the community. Environmental, regulatory, technical, and financing issues.

457. Local Economic Development
Fall. 3(2-1)
P: UP 354. R: Open only to juniors and seniors. Principles and techniques of local economic development planning. Impacts of state, federal, and local economic policies and programs.

458. Housing and Real Estate Development
Spring of even-numbered years. 3(2-2)
P: UP 354. Real estate development process from idea inception to asset management. Finance, organization, design and implementation. Housing, social impacts, and public sector involvement.

463. Introduction to Quantitative Methods for Geographers and Planners
Fall. 3(3-0) Interdepartmental with Geography. Administered by Geography.
P: Completion of University mathematics requirement. R: Open only to majors in Geography, Urban Planning, and Landscape Architecture. Quantitative techniques in the analysis and classification of spatial data.

485. Planning Law II (W)
Spring. 3(3-0)
P: UP 465. Advanced topics in urban planning legislation and case law.

488. Planning Law II
Spring. 3(3-0)
P: UP 465. Advanced topics in urban planning legislation and case law.

496. Urban Transportation Planning
Spring. 3(3-0) Interdepartmental with Geography.
P: UP 291, UP 314. R: Open only to majors in Geography or Urban and Regional Planning or approval of department. Principles of decision-making in urban transportation planning. Demand and supply analysis, social and environmental impacts, implementation programs. Use of computer models.

498. Internship in Urban Planning
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to majors in Urban and Regional Planning or Urban and Regional Planning-Urban Studies. Approval of department. Supervised planning experience in a professional setting.

499. Independent Study in Urban Planning
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to freshmen and sophomores. Approval of department.

500. Senior Planning Practicum I
Fall. 3(3-0)
P: Open only to seniors in Urban and Regional Planning. Collection, analysis and synthesis of planning information. Preparation of written report. Project management in the U.S. and other countries. Problem identification and alternative plan formulation. Senior examination. SA: UP 485

501. Concepts and Issues in Planning and Development
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to graduates in Urban and Regional Planning. Issues and current research in urban planning.

502. Quantitative Methods for Urban Planning
Fall. 3(2-2)
P: Open only to graduates in Urban and Regional Planning, Public Administration, and Geography. Quantitative techniques for the analysis and classification of data for urban planners.

503. Applied Research Methods for Planning and Development
Spring. 3(2-2) Interdepartmental with Geography.
P: UP 493. R: Open only to graduate students in Urban and Regional Planning, Public Administration, and Geography. Techniques in urban and regional planning research. Forecasting models. Methods of urban project appraisal.

504. Urban Land Management
Fall. 3(3-0)
P: UP 491 or concurrently. Concepts, principles, tools, and techniques of urban and regional land management. Land use planning, public facilities, infrastructure location, and environmental sensitivity in land management.