

**826. Cardiology**

Fall. 3(2-4) Approval of department.

Study recent advances in veterinary cardiology. Includes electrocardiology, congenital and acquired diseases, cardiac catheterization and surgery.

**899. Research**

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 18 credits. Approval of department.

Research on thesis problems.

**SOCIAL SCIENCE**

**S S**

**University College**

To satisfy the University General Education requirement, a student must take one course in each of the following groups. Additional courses may be taken for elective credit.

1. 201, 211, 221, 241
2. 202, 212, 222, 242
3. 203, 213, 223, 243

**201. Americans and Their Values**

Fall, Winter, Spring, Summer. 4(4-0)

Processes by which individuals are socialized to the prevailing patterns of behavior by such agencies as family, school, peer groups, mass media and church. Part played by each in the development of personality.

**202. Power in America**

Fall, Winter, Spring, Summer. 4(4-0)

201, or 211, or 221, or 241 recommended; 201 preferred.

Problems of regulating and controlling human behavior. Emphasis placed on major economic and political institutions involved in social control. This includes problems of human wants and needs.

**203. American and World Problems**

Fall, Winter, Spring, Summer. 4(4-0)

202, 212, 222 or 242 recommended; 202 preferred.

The international scene with the focus on problems of economic development, conflict among the nation-states and attempts at conflict control.

**211. The Emergence of Man**

Fall, Winter, Spring, Summer. 4(4-0)

The bio-social evolution of man. The theories and empirical findings of the behavioral sciences are brought to bear upon the nature of man.

**212. Coping with Changing Institutions in Modern Society**

(232B.) Fall, Winter, Spring, Summer.

4(4-0) 201, 211, 221 or 241 recommended; 211 preferred.

Factors and directions in urban change. Impacts on life styles and life strategies of urban groups. Challenges to traditional family, educational, and community patterns.

**213. Casualties of Contemporary Society**

(233B.) Fall, Winter, Spring, Summer.

4(4-0) 202, 212, 222 or 242 recommended; 212 preferred.

The meaning of deviant behavior and personal disorganization and their impact on society. Selected problems examined in depth.

**IDC. The Politics of Ecology**

For course description, see Interdisciplinary Courses.

**221. The Changing American Metropolis: Ecology of the Urban Community**

Fall, Winter, Spring, Summer. 4(4-0)

Factors and directions in urban change. Impacts on life styles and life strategies of urban groups. Challenges to traditional family, educational, and community patterns.

**222. Metropolitan Perspectives: Economics, Politics and Policies**

(232C.) Fall, Winter, Spring Summer.

4(4-0) 201, 211, 221, 241, recommended; 221 preferred.

Changing patterns of economic and political participation. Issues of employment security and job satisfaction. Distribution of economic rewards, political power, and civil rights. Inter-meshing of economic and political activities.

**223. World Urbanization: Human Consequences**

(233C.) Fall, Winter, Spring, Summer.

4(4-0) 202, 212, 222 or 242 recommended; 222 preferred.

The unity of urban life patterns and the emergence of modern-day urban problems. Cultural variations in approach to issues-comparative political, social, economic, ideological systems.

**241. Cultures in Crisis**

Fall, Winter, Spring Summer. 4(4-0)

The nature and sources of social cohesion. Approaches to the modernization of traditional societies. Problems and alternative strategies of nation building.

**242. Freedom and Justice**

(232D.) Fall, Winter, Spring, Summer.

4(4-0) 201, 211, 221 or 241 recommended; 241 preferred.

Ideologies of change in the modern world-sources, appeals, problems. Issues of social justice and individual freedom.

**243. War and Morality**

(233D.) Fall, Winter, Spring, Summer.

4(4-0) 202, 212, 222 or 242 recommended; 242 preferred.

Social tensions and revolutionary change. The causes of war: international conflict and the great powers. Strategies for peace. Man's conscience versus state policies.

**300. Supervised Individual Study**

Fall, Winter, Spring, Summer. 2 to 4 credits. 8 credits completed in general education social science; approval of department.

Selected students requesting individual study of interdisciplinary problems will work under supervision of University College professors. Variable elective credit will be determined when the student secures instructor, adviser, and department approval.

**IDC. Modernization: India, Pakistan Bangladesh**

For course description, see Interdisciplinary Courses.

**IDC. Modernization: The Middle East**

For course description, see Interdisciplinary Courses.

**IDC. Far East: Contemporary Issues and Problems**

For course description, see Interdisciplinary Courses.

**IDC. Refugees, Displaced Persons, Hostages, Exiles**

For course description, see Interdisciplinary Courses.

**SOCIAL SCIENCE (COLLEGE OF)**

**SSC**

**490. Individual Research Projects**

Fall, Winter, Spring. 4 credits. May re-enroll for a maximum of 8 credits. Multidisciplinary social science majors and 12 credits in social sciences — agricultural economics, anthropology, economics, geography, political science, psychology and sociology.

Individually supervised study and research on a topic using a multidisciplinary approach.

**491H. Perspectives in the Social Sciences and Humanities**

Fall, Winter, Spring. 2 to 6 credits. May re-enroll for a maximum of 12 credits if different topic is taken. Juniors, approval of Honors College, or approval of instructor. Interdepartmental with the colleges of Arts and Letters and Justin Morrill and administered by the College of Arts and Letters.

An integration of subject matter and methodologies of several disciplines as they are relevant to particular topic areas.

**495. Foreign Area Field Study**

Fall, Winter, Spring, Summer. 3 to 15 credits. May re-enroll for a maximum of 24 credits. Juniors and 12 credits in social science.

Study in a variety of foreign settings under the guidance of an adviser, such as American University Field Study Centers in Rome and Singapore.

**810. Introduction to Linear System Theory**

Fall. 3(3-0) MTH 214. Interdepartmental with the Department of Computer Science and Systems Science and administered by Systems Science.

A first course in system theory for students from a range of disciplines. Mathematical representation of system variables, transform and state space method of analysis, introduction to control theory, applications to physical, economic and social systems.

**811. System Methodology and Simulation**

Winter. 3(3-0) 810, STT 441. Interdepartmental with the Department of Computer Science and Systems Science and administered by Systems Science.

Problem definition, design of abstract models for system design and control, simulation of systems described by differential and difference equations, generation of random variables, simulation of discrete object stochastic systems, simulation languages, applications to physical, economic and social systems.

**813. System Project**

Spring. 3(1-6) 811. Interdepartmental with the Department of Computer Science and Systems Science and administered by Systems Science.

Individual or team application of simulation methods to system design and/or management.

**999. Research**

Fall, Winter, Spring, Summer. Variable credit. Approval of college.