# **GLOBAL RESOURCE SYSTEMS** (GLOBE)

### Courses primarily for undergraduates:

#### **GLOBE 110: Orientation**

(1-0) Cr. 1. F.

An introduction to Global Resource Systems (GRS) program. University and career acclimation, development of educational and professional skills, participation in GRS Learning Community. Assessed service-learning component.

### **GLOBE 201: Global Resource Systems**

(3-0) Cr. 3. S.

A comparative analysis of global resources and the various natural and human systems affecting those resources. Assessed service-learning component.

### GLOBE 211: Issues in Global Resource Systems

(1-0) Cr. 1. Repeatable, maximum of 3 credits. F.S.

Prereq: credit or enrollment in GLOBE 201

Discussion of topics of current importance in global resource systems. Offered on a satisfactory-fail basis only. A maximum of 3 credits of 211 may be used towards degree requirements.

### **GLOBE 220: Global Sustainability**

(Cross-listed with ANTHR, ENV S, M E, MAT E, SOC, T SC). (3-0) Cr. 3. F.S. An introduction to the key global issues in sustainability. Focuses on interconnected roles of energy, materials, human resources, economics, and technology in building and maintaining sustainable systems. Applications discussed will include challenges in both the developed and developing world and will examine the role of technology in a resource-constrained world. Cannot be used for technical elective credit in any engineering department.

Meets International Perspectives Requirement.

### **GLOBE 221: Apprenticeship**

Cr. R. Repeatable. F.S.SS.

Prereq: Approval by the Global Resource Systems Faculty Coordinator
Practical work experience in approved domestic or international settings such as with a company, research laboratory, governmental agency or non-governmental organization. Offered on a satisfactory-fail basis only.

### **GLOBE 290: Independent Study**

Cr. 1-2. Repeatable. F.S.SS.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Independent study on topics of special interest to the student. Comprehensive report required. Intended primarily for first-year students and sophomores.

# GLOBE 290H: Independent Study, Honors

Cr. 1-2. Repeatable. F.S.SS.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Independent study on topics of special interest to the student. Comprehensive report required. Intended primarily for first-year students and sophomores.

# **GLOBE 301: Resource Systems of Industrialized Nations**

(3-0) Cr. 3. S.

Prereq: GLOBE 201, ECON 101 or ECON 102

In-depth analysis of the opportunities, constraints and consequences of the resource systems common in industrialized nations. Topics integrate natural resources with land tenure, societal structure, food security, agriculture, shelter, energy and wealth dynamics.

### **GLOBE 302: Resource Systems of Developing Nations**

(3-0) Cr. 3. F.

Prereg: GLOBE 201, ECON 101 or ECON 102

In-depth appraisal of resource systems common throughout the developing world. Topics integrate natural resources with land tenure, societal structure including gender issues, food security, agriculture, shelter, energy and wealth dynamics and effectiveness of global programs aimed at sustainable development.

# **GLOBE 320: Global Resource Systems Internship Preparation**

(1-0) Cr. 1. S

Prereg: Permission of instructor.

Students enrolled in this course intend to enroll in Globe 321 or 322 in the following term. Topics provide a pre-departure orientation, including logistical, academic, cultural, and personal requirements for completion of an experiential supervised work experience.

### GLOBE 321: Internship - Global

Cr. 3-6. Repeatable. F.S.SS.

Prereq: GLOBE 320, Junior or Senior and enrollment in Global Resource Systems major; permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

A supervised learning experience including an analysis of an international location's resource system via immersion in a foreign culture lasting at least five weeks. The experience should focus on the region consistent with the student's degree track. Course expenses paid by student. A maximum of 12 credits of GLOBE 321 and 322 may be used for degree requirements.

### GLOBE 322: Internship - United States

Cr. 3-6. Repeatable. F.S.SS.

Prereq: GLOBE 320, Junior or Senior and enrollment in Global Resource Systems major; permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

A supervised learning experience including an analysis of a domestic location's resource system via immersion in a different culture within the United States lasting at least five weeks. Designed for international students and for students who are not in a position to leave the United States. Course expenses paid by student. A maximum of 12 credits of Globe 321 and 322 may be used for degree requirements.

### **GLOBE 385: Economic Development**

(Cross-listed with ECON). (3-0) Cr. 3.

Prereq: ECON 101, ECON 102

Current problems of developing countries, theories of economic development, agriculture, and economic development, measurement and prediction of economic performance of developing countries, alternative policies and reforms required for satisfying basic needs of Third World countries, interrelationships between industrialized countries and the developing countries, including foreign aid.

Meets International Perspectives Requirement.

### **GLOBE 401: Senior Project**

Cr. 3. F.S.SS.

Prereq: Senior classification in Global Resource Systems
Research project in collaboration with faculty that complements
and furthers a student's experiences from Globe 321 and 322 while
simultaneously bringing into focus entire four-year experience.
Student will write a research report and make either an oral or poster
presentation.

### GLOBE 401H: Senior Project, Honors

Cr. 3. F.S.SS.

Prereq: Senior classification in Global Resource Systems
Research project in collaboration with faculty that complements
and furthers a student's experiences from Globe 321 and 322 while
simultaneously bringing into focus entire four-year experience.
Student will write a research report and make either an oral or poster
presentation.

# **GLOBE 402:** Responses to Global Resource System Challenges (3-0) Cr. 3. S.

Capstone analysis of critical global resource challenges facing both developed and developing countries. Students will use research skills to investigate specific global resource issues and use communications skills to work as a team to integrate their research, develop an interdisciplinary perspective, and evaluate potential solutions to resource challenges.

### **GLOBE 441: International Animal Agriculture**

(Cross-listed with AN S). (3-0) Cr. 3. S.

Prereq: Two courses from AN S 223, AN S 225, AN S 226, AN S 229, AN S 235 An overview of animal agriculture with emphasis on animal agriculture in developing countries. Historical, economic, environmental; and political considerations will be assessed and evaluated. Issues related to gender, resilience and sustainability for different production systems will be investigated.

Meets International Perspectives Requirement.

### GLOBE 446: International Issues and Challenges in Sustainable Development

(Cross-listed with AGRON, INTST). Cr. 3. F.S.

Prereq: 3-credit biology course, Sophomore or higher classification, permission of Instructor

Interdisciplinary study and analysis of agricultural systems, sustainable management, and impact on plants and animal biodiversity. International field experience in evaluating different agricultural systems and impact on biodiversity may be required. A program fee is charged to students for international study abroad.

Meets International Perspectives Requirement.

### **GLOBE 490: Independent Study**

Cr. 1-4. Repeatable. F.S.SS.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Independent study on topics of special interest to the student. Comprehensive report required. Intended primarily for juniors and seniors. A maximum of 9 credits of all (university-wide) 490 courses may be used for degree requirements.

### GLOBE 490A: Independent Study: General

Cr. 1-4. Repeatable. F.S.SS.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Independent study on topics of special interest to the student. Comprehensive report required. Intended primarily for juniors and seniors. A maximum of 9 credits of all (university-wide) 490 courses may be used for degree requirements.

### GLOBE 490E: Independent Study: Entrepreneurship

Cr. 1-4. Repeatable. F.S.SS.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Independent study on topics of special interest to the student. Comprehensive report required. Intended primarily for juniors and seniors. A maximum of 9 credits of all (university-wide)490 courses may be used for degree requirements.

### GLOBE 490H: Independent Study: Honors

Cr. 1-4. Repeatable. F.S.SS.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Independent study on topics of special interest to the student. Comprehensive report required. Intended primarily for juniors and seniors. A maximum of 9 credits of all (university-wide) 490 courses may be used for degree requirements.

### GLOBE 490Z: Independent Study: Service Learning

Cr. 1-4. Repeatable. F.S.SS.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Independent study on topics of special interest to the student. Comprehensive report required. Intended primarily for juniors and seniors. Assessed service-learning component. A maximum of 9 credits of all (university-wide) 490 courses may be used for degree requirements.

### **GLOBE 494: Service Learning**

Cr. arr. F.S.SS.

Prereq: Permission of instructor.

Selected projects that result in outcomes benefiting a non-lowa State University entity while instilling a professional ethics and accomplishing student learning goals. Course expenses paid by student. Assessed service-learning component.

### GLOBE 494A: Service Learning: International

Cr. arr. Repeatable, maximum of 12 credits. F.S.SS.

Prereq: Permission of instructor.

Selected projects that result in outcomes benefiting a non-lowa State University entity while instilling a professional ethics and accomplishing student learning goals. Course expenses paid by student. Assessed service-learning component.

### GLOBE 494B: Service Learning: Domestic

Cr. arr. Repeatable, maximum of 12 credits. F.S.SS.

Prereq: Permission of instructor.

Selected projects that result in outcomes benefiting a non-lowa State University entity while instilling a professional ethics and accomplishing student learning goals. Course expenses paid by student. Assessed service-learning component.

### GLOBE 495: Global Resource Systems Study Abroad Course Preparation

(1-0) Cr. 1. Repeatable. F.S.

Prereq: Permission of instructor

Global resource systems topics will include the agricultural industries, climate, crops, culture, economics, food, geography, government, history, livestock, marketing, natural resources, public policies, soils, and preparation for travel to locations to be visited. Students enrolled in this course intend to register for Globe 494A, 496 or 497 the following term.

### GLOBE 496: Global Resource Systems Study Abroad

Cr. 2-4. Repeatable. F.S.SS.

Prereq: Permission of instructor

Extended field trips abroad to study global resource systems. Location and duration of trips will vary. Pre-trip sessions arranged through Globe 495. Trip expenses paid by student.

Meets International Perspectives Requirement.

### GLOBE 497: Deans Global Ag and Food Leadership Program

Cr. 1-4. Repeatable. F.S.SS.

Prereg: Permission of instructor

An integrated agricultural and food production and policy program that allows students to assess, analyze and evaluate complex, country-specific situations and to develop their skills, knowledge and abilities via team-oriented projects that involve complex issues such as development of effective foreign food aid and agricultural and food production systems, drivers of world hunger, sustainable resource management and efficacy of policy, and the role of the USA and the United Nations and other development agencies in these systems. International location and duration of program will vary. Pre-trip sessions arranged through Globe 495. Trip expenses paid by students.

Meets International Perspectives Requirement.

### **GLOBE 499: Undergraduate Research**

Cr. arr. F.S.

Prereq: Permission of the instructor and approval by the Global Resource Systems Faculty Coordinator

Research projects in collaboration with faculty.