

# Courses in Sustainable Systems Curriculum

## **a. Sustainable Systems Analysis Core (18 hrs total)**

### **1) Systems Analysis for Sustainability (6 hrs) fulfills Analytics requirement**

Industrial Ecology [NRE 557/CEE 586] (3)  
Systems Thinking For Sustainable Development and Enterprise [NRE 550/CSIB 566] (3)  
Risk-Benefit Analysis in Environmental Engineering [NRE 595/CEE 589] (3)  
Principles of GIS [NRE 531] (4)

### **2) Sustainable Design and Technology (3-9hrs)**

Sustainable Energy Systems [NRE 574/RCNSCI 419/PUBPOL 519] (3)  
Building Ecology [Arch 575] (3)  
Landscape Analysis and Planning [NRE 687] (4)  
Applying Landscape Ecological Design to Brownfield Redevelopment [NRE 787] (2 or 3)  
Principles of Ecodesign and Manufacturing [MECHENG 589] (3)  
Hydrogen Production & Storage [ChE 496] (3)  
Case Studies in Environmental Sustainability [CEE 686/ChE 686] (2-3)  
Environmental Microbiology [CEE 582] (3)  
Management for Sustainable Manufacturing [ME 599] (3)  
Sustainable Manufacturing [OMS 742] (1.5)  
Design of Environmental Engineering Systems [CEE 460] (3)  
Green Construction [TBD Winter for 06]

### **3) Sustainable Enterprise (3-9 hrs)**

Strategies for Environmental Management [NRE 513/ CSIB 564 & 565] (3)  
Behavior and Environment:[NRE 560/UP 560] (3)  
Institutions for Sustainability [NRE 565] (3)  
Natural Resources and Environmental Conflict Management [NRE 532] (3)  
Negotiating Skills In Environmental Dispute Resolution [NRE 533] (3)  
Ethics Corporate Management [NRE 512] (2)  
Business Ethics, Science & Technology [LHC 503] (1.5)  
Environmental Management Topics [NRE 735] (1.5)  
Sustainable Manufacturing [OMS 742] (1.5)  
Finance and Sustainable Enterprises [FIN 637] (1.5)  
Environmental Risk Communication [NRE 515] (3)  
Non-Market Strategy: Shaping the Rules of the Game [NRE 551/BE 550] (1.5)  
Social Institutions for Energy Production [NRE 527] (3)  
Green Construction [TBD Winter for 06]  
Leadership and Organizational Change Management [TBD for Winter 06]  
Integrated Strategy: Corporate Social Responsibility, Sustainability, and Environment [BE 556] (1.5)

## **b. Distribution (9 hrs total)**

### **1) Policy (3hrs)**

Water Resources Policy [NRE 558/CEE 587] (3)  
Resource Policy and Administration [NRE 562] (3)  
Institutions for Sustainability [NRE 565] (3)  
Thinking Analytically for Policy & Decisions [NRE 575] (3)  
Environmental Policy [PUBPOL 563] (3)  
Integrated Problem Solving xxx (3)

### **2) Economics (3 hrs)**

Environmental Economics [NRE 571] (3)  
Microeconomics with Natural Resource Applications [NRE 570] (3)  
Intermediate Natural Resource Economics [NRE 583] (3)

### **3) Ecology/Environmental Science (3hrs)**

Ecosystem Modeling and Synthesis [NRE 501] (3 or 4)  
Ecosystem Ecology [NRE 476/ENVIRON 476/EEB 476] (3)

\*\*Other REM courses, depending on focus and approval of faculty advisor

## **Abbreviations**

ARCH = Architecture  
AOSS = Atmospheric, Oceanic and Space Sciences  
BE = Business Economics and Public Policy  
CEE = Civil and Environmental Engineering  
CSIB = Corporate Strategy and International Business  
EHS = Environmental Health Sciences  
FIN = Finance  
LHC = Law, History, and Communication  
ME = Mechanical Engineering  
NRE = Natural Resources and Environment  
OMS = Operations and Management Science  
PUBPOL = Public Policy  
TBD = To Be Developed