Sustainability Minor Catalog Description[i]

A minor in Sustainability requires 18 credits, distributed as follows:

- 3 credits of CU 2010, *Sustainability Leadership*[ii].
- 3 credits of approved[iii] engagement activities (e.g., Creative Inquiry, study abroad, independent research, co-ops, capstone projects) that focus on sustainability issues.
- 12 credits of courses focused on sustainability issues from the following list[iv]
    - Including at least 9 credits at the 3000-level or higher
    - Including at least 3, but no more than 9, credits from the social dimension of sustainability (indicated by * in the table below).

Course Code	Course Title
AGM 3010	Soil and Water Conservation
APEC 2570	Natural Resources, Environment, and Economics
APEC 3570	Natural Resource Economics
*APEC 4570**	*Natural Resource Use, Technology and Policy*
ARCH 4250	Energy in Architecture
*ARCH 4710**	*Architectural History of Place*
*ARCH 4720**	*Architectural Field Studies*
BE 4080	Land Treatment of Wastewater and Sludges
BE/EES/FOR 4510	Newman Seminar and Lecture Series in Natural Resources Engineering
BE 4240	Ecological Engineering
BE 4400/CE 4400	Sustainable Energy Engineering
BE 4401/CE 4401	Sustainable Energy Engineering Laboratory
BE 4640	Non-Point Source Management in Engineered Ecosystems
*BIOL 2040**	*Environment, Energy and Society*
BIOL 3130	Conservation Biology
BIOL 4410	Ecology
BIOL 4860	Natural History
BT 2200	Biosystems Technology I
BT 2201	Biosystems Technology I Laboratory
BT 2400	Biosystems Technology II
BT 2401	Biosystems Technology II Laboratory
CE 4120	Urban Transportation Planning
CE 4360	Sustainable Construction
CE 4370	Sustainable Energy Project Design and Analysis
CHE 4500/6500	Chemical Reaction Engineering
*COMM 3070**	*Public Communication of Science and Technology*
ECE 4200	Renewable Energy Penetration on the Power Grid
ECE 4610	Fundamentals of Solar Energy
ECE/ME 4570	Fundamentals of Wind Power
ECE 4710	Electric Vehicles and Energy Storage
ECON 3190	Environmental Economics
EES 3030	Water Treatment Systems
EES 3040	Wastewater Treatment Systems

EES 4300	Air Pollution Engineering
EES 4800	Environmental Risk Assessment
EES 4840	Municipal Solid Waste Management
EES 4860	Environmental Sustainability
*ENGL 4340 **	*Environmental Literature*
ENR 1010	Introduction to Environmental and Natural Resources
ENR 3120*	Environmental Risks and Society
ENR 4130	Restoration Ecology
*ENR 4290**	*Environmental Law and Policy*
*ENR 4500**	*Conservation Issues*
ENSP/GEOL 1250	Sustainable Resource Use
ENSP 2000	Introduction to Environmental Science
ENSP 2010	Introduction to Environmental Science for Education Majors
ENSP 3150	Environment and Agriculture
*ENSP 4000**	*Studies in Environmental Science*
ENSP 4720	Environmental Planning and Control
ENT 3000	Environmental Entomology
ETOX 4000	Wildlife Toxicology
ETOX 4210	Chemical Sources and Fate in Environmental Systems
ETOX 4370	Ecotoxicology
ETOX 4460	Soil and Water Quality: Fundamentals
ETOX 4470	Soil and Water Quality: Applications
ETOX 4850	Environmental Soil Chemistry
FOR 4230	Current Issues in Natural Resources
FOR 4340	Geographic Information Systems for Landscape Planning
FOR 4650	Silviculture
FOR 4651	Silviculture Laboratory
GEOL 1120	Earth Resources
GEOL 1140	Earth Resources Laboratory
GEOL 1200	Natural Hazards
*GEOL 2700**	*Experiences in Sustainable Development: Water*
GEOL 3000	Environmental Geology
*GEOL 4090**	*Environmental and Exploration Geophysics*
*GEOL 4091**	*Environmental and Exploration Geophysics Laboratory*
*HIST 1240**	*Environmental History Survey*
*HIST 3920**	*History of the Environment of the United States*
HON 2060	Sustainable Energy Innovation
HON 2060	Experimental Forest
HORT 1010	Horticulture
HORT 3080	Sustainable Landscape Garden Design
HORT 3090	Sustainable Landscape Garden Design Laboratory
HORT 4560	Organic Vegetable Production
*HORT 4561**	*Organic Vegetable Production Lab*
*HORT 4610**	*Advanced Landscape Garden Design*
*HORT 4611**	*Advanced Landscape Garden Design Laboratory*
*LARC 4230**	*Environmental Issues in Landscape Architecture*
ME 4200	Energy Sources and Their Utilization
ME 4260	Nuclear Energy

MSE 4330	Combustion Systems and Environmental Emissions
PES 3350	Agricultural Biotechnology
PES 3351	Agricultural Biotechnology Laboratory
PES 4080	Land Treatment of Wastewater and Sludges
PES 4220	Major World Crops
PES 4230	Field Crops - Forages
*PES 4450**	*Regulatory Issues and Policies*
*PES 4510**	*Agricultural Biotechnology and Global Society*
PES 4900	Beneficial Soil Organisms in Plant Growth
*PHIL 3260**	*Science and Values*
*PHIL 3400**	*Technology, Environment, and Sustainability*
*PHIL 3450**	*Environmental Ethics*
PHSC 1070	Introduction to Earth Science
PHYS 2450	Physics of Global Climate Change
PHYS 4200	Atmospheric Physics
*PKSC 3680**	*Packaging and Society*
*POSC 4160**	*Interest Groups and Social Movements*
*PRTM 4300**	*World Geography of Parks and Equivalent Reserves*
*RS 4010**	*Human Ecology*
*SOC 4030**	*Technology, Environment and Society*
*SOC 4330**	*Globalization and Social Change*
*SOC 4590**	*The Community*
*SOC 4710**	*Population Issues and Methods*
*STS 2150**	*A Critical Approach to the Global Challenge of Technological Revolutions*
WFB 3130	Conservation Biology
WFB 4180	Fishery Conservation
WFB 4300	Wildlife Conservation Policy

[i] Approved and will appear in the 2015 catalog.

[ii] Contact Jennifer Goree, goree@clemson.edu, with any questions.

[iii] Engagement activities will be approved by CU 2010 instructors if they meet learning objectives for the minor.

[iv] Other courses may be submitted, through CU 2010 instructors, for approval for inclusion on this list