Course Description
Level 100
Unit Code and Description

UCU 100: Communication Skills
Refer to the department of UCU

UCU 103: Introduction to Critical and Creative Thinking
Refer to the department of UCU

UCU 104: Introduction to Entrepreneurship
Refer to the department of UCU

ECD 100: Foundations & Development of Environmentalism
Introduction: the environment and its components; Environmental worldviews; History of environmental concern; Rise of environment as an important political issue; Environmentalism and the environment crisis; Environmentalism as a social movement; Foundation, evolution and growth of environmentalism; Landmark events in the development of environmentalism; Anti-environmentalism, Environmentalism in Kenya, Future of environmentalism.

ECD 103: Fundamentals of Sustainable Community Development
Concept of community: sense of identity and security; cohesion; values and belief system of communities; Physical, social and psychological factors affecting identity and interaction; From Economic growth to sustainable development; Overview of past and national and community development initiatives; Analysis of integrated rural poverty; Philosophy of Community Capacity Building (CCB) and Community Competencies; Critical elements of community capacity building; Challenges of community capacity building; Role of different stakeholders in community capacity building; Characteristics of sustainable communities; Case studies

ECD 105: Population dynamics & Resource Use
Basic terms and concepts in population dynamics; Theories of population growth and structure; Population dynamics vis a vis MDGs and Kenya’s Vision 2030; Drivers of population changes and implications on sustainable livelihoods; Global, regional and local trends and patterns of population growth; Structure and distribution; determinants of population change; Relationship between population and resource use; Regional population dynamics with emphasis on land, water resources, climate change, food security, economic refugees; People and resource use paradigms: Impact per capita; Population census and implications for national and community development; Population management approaches and strategies; Selected case studies: Population policy in Kenya; China’s population policy.

ECD 108: Global Trends in Community Development
Community Development Concepts and definitions; Historical approaches to community development; Community development in developing countries; Growth, Challenges and Opportunities; Historical Approaches to Community Development in Northern America; Ecological, Interactional and Structural-Functional; Community development in Western
Europe; Establishing sustainable community development; The future of community development.

EDC 109: Human Ecology and Adaptation

ECD 110: Environmental Innovations & Technologies
The context for innovation in the 21st Century: the historical and scientific background of the serious environmental challenges facing society; the role of new technologies and green innovations as a response to environmental problems. the major approaches to innovation studies; the institutionalization of innovation, with an emphasis on the role of learning, knowledge, and policy; The empirical studies of green innovations, including new energy technologies such as wind and solar power; New transportation technologies, “smart cities”, and innovations in the bio economy, including biomimicry; Critically assessment of the potentials and limits of innovations as a response to environmental problems, and discussion on the role of social innovation in transformations to sustainability.

ECD 111: Strategic and Transformative Community Development
Concept and benefits of transformative community development; Definition of terms: Community, community development, strategic community development, transformative community development; Community development principles, Steps in designing and implementing community development intervention, When and why is transformative community development needed; Concept of strategic Community development; Foundations of strategic approach, Components of strategic community development, Source of capital in strategic Community Development; Strategic community development planning; Vision, Mission, Objectives, Strategies and Actions (VMOSA); Strategic direction and expected transformation; Action strategies in community development; Evaluation and control in transformative community development; Community organization; Role of partnerships in transformative community development; Community capacity building; Transformative Community; Development and Environmental Sustainability; Challenges to effective community development

EPM 111: Principles of Planning and Management
Concepts and principles; Introduction to environmental planning and management; Evolution and nature of resource utilization; Natural and human processes influencing resource use; Basic methods in planning and management of resources; Planning as a decision making process; Attributes and implications of the political and administrative environment; Planning and management of natural resources such as water, energy and wildlife.
ENS 132: Environmental Biology
Bio techniques: biosystematics; chemicals of life: carbohydrates, liquids and proteins; cell biology; morphogenesis and development anatomy; self-perpetuation adaptation: embryogenesis; plant and animal parasites; life cycles of major insects and acarine groups; plant/animal responses; laboratory sessions.

EED 100: Principles of Environmental Education
Concepts of environment; historical development; aims, goals, objectives and guiding principles of environmental education; environmental education at global, regional and national levels, relevance of environmental education at global, regional and national level; major global and regional conferences.

Level 200

Unit Code and Description
ECD 202: Environmental Anthropology & Indigenous Knowledge Systems
Theory and Practice in Anthropology: Introduction and Course Overview; Anthropology in Practice; Definitions of Anthropology and Environmental Anthropology; Fields of Anthropology; Rationale for studying Environmental Anthropology; Anthropology and related social sciences; The concept of community in relation to social structure/environment; Levels and classifications of communities; Nature verses nurture debate; The Concept of Culture in Anthropology; Levels of Culture and Cultural Perspectives; Culture as: All-encompassing; General and Specific; Learned as well as Naturalistic Phenomena; Symbolic, Shared, Patterned, Adaptive and Maladaptive; Anthropology as the Study of Human Ecology; Human ecology as the Study of Environmentalism; Society as the environment; Culture and Biodiversity; Anthropology as Theorists of environmentalism; Traditional subsistence economies and the environment; Environmentalism as Culture; Environmental Determinism and Environmentalism; Cultural Determinism and Environmentalism.

ECD 204: Community Water Resources & Sanitation Management
Water Quality and Assessment: Basic concepts in water quality; Water pollution and pathogenicity; Parameters and procedures of water quality assessment; International and local standards criteria for water quality; Advances in water quality and environmental monitoring; Waste Management Approaches and Systems: Basic Concepts; Types and characteristics of wastes; Environmental implications of wastes; Waste generation; Waste Management Systems: activated sludge pond, conventional ponds, lagoons, land-fills, treatment methods; Concept of clean production mechanisms; The relevance of 3Rs (Reduce, Reuse, Recycle); Waste as a Source of income; Conceptualising sustainable waste management; Community Sanitation System; Water and Sanitation Governance: Institutional framework; Analysis of the Water Act and the National Water Policy; Analysis of the Public Health Act; Governance framework for Water and Sanitation Systems; Role of various Stakeholders in Water and Sanitation; Policy Setting and Implementation: The role of city governments; The role of international community; The role of communities and other agencies; Developing strong local information systems; Link to millennium development goals; Towards integrated governance.
ECD 205: Principles of Integrated Watershed Management

Basic Principles and the key Concepts of IWSM; Catchments, watersheds and focal development areas; IWSM in space, time and by sector; Systems approach and problem analysis in IWSM; Watershed, Land use and Human Impact; Interactions between human, climate, vegetation and soils in a watershed; Ecosystems Services in the watershed; Threats to watersheds with focus on water and wind erosion, including universal soil loss equation; Rainfall-runoff-erosion nexus, including Mannings formular; Principles of watershed conservation and rehabilitation; Climate change and impact on watershed management; Stakeholders and their roles in sustainable watershed management; Case studies on the management and rehabilitation of degraded watersheds.

ECD 206: Principles of Natural Resources Management

Role of natural resources in community and national development; relationship between natural resources and capital model concept; property Rights Regimes (private, communal, public); Concept of carrying capacity and tragedy of the commons; Principles of land use planning; Land evaluation and suitability classification; Role of Agro ecological zonation in natural resources management; Tools for natural resources management; sessional papers and national development plans on NRM; Alternative land use options e.g. Farm Forestry Enterprises (FFEis), Eco-tourism, quarrying, etc; Case studies: Critical analysis of Kenya's land policy, principles of forestry management, agro-forestry.

ECD 207: Trade, Environment & Community Dev.


ECD 209: Climate Change & Community Livelihoods

Terminologies; the Kyoto protocol; background to climate change; the politics of climate change and roadmap to cop meetings; causes of climate change; effects and drivers of climate change; the science of climate change; RDD+; Kenya’s climate change policy documents; adaptation and mitigation options; community livelihoods; gender and climate change; Africa, Kenya and climate change; opportunities emerging from climate change.

ECD 210: Comparative Strategies in Community Development

Community Development Concepts and definitions; Historical approaches to community development; Community development in developing countries; Growth, Challenges and Opportunities; Community development strategies; locality development, Social action, social planning, social reforms, community relations, social capital formation, capacity building and asset based community development; Historical Approaches to Community Development in Northern America; Ecological, Interactional and Structural-Functional; Community development in Western Europe; Establishing sustainable community development; The future of community development.
ECD 211: Introduction to Geo-Spatial Techniques

ECD 212: Social Change & Environmental Management
Social change: Key definitions and concepts; Nature of social change; Magnitude of social change on environmental management; Indicators of social change; Stimulus and barriers to social change in environmental management; Theories of social change and environmental management; Social Change and Community Development; Environmental management; Case Studies: Planned Social Change, Spontaneous Social Change, and Coercive Social Change.

ECD 213: Environment & Community Leadership
Introduction to environment and community leadership; meaning of community leadership, importance of community leadership on the environment; Community leadership theories; Relevance of community leadership theories on the environment; Impact of community leadership on the environment; Concept of community leadership styles, types of community leaders; factors that influence community and environmental leadership styles; Impact of community leadership styles on the environment; Challenges of community leadership on environmental development activities; community leaders and participation of environmental activities; environmental community management committees; Leadership and community relations; environmental community conflicts management; Community integration; Community leadership guiding strategies: Emerging trends in community leadership.

EED 203: Education for sustainable development
Concepts and principles; historical development; sustainable development and nature conservation; keeping within the ecological carrying capacity; needs satisfaction; caring for the whole community of life; radical, political and ethical approaches to sustainable development; environmental education and sustainable development; environmental education institutions.

ENS 241: Biodiversity Conservation
Definition of biodiversity and species; mega biodiversity and conservation areas of east Africa; causes of species extinctions; endangered, threatened and vulnerable species; exotic species and extinctions; biodiversity conservation: habitat protection, insitu and ex-situ, legislation and recovery plans; cases.

EPM 244: Waste Management Planning
Definitions, types, sources, nature and composition; Individual and group perceptions; Management: generation, collection, transportation and disposal; Recycling and treatment. Regulatory instruments: standards, permits and licences. Economic instruments: charges, market
creation, subsidies, deposit refund systems; Education and awareness creation; Enforcement institutions and their capacities; Waste management policies and plans; preparation, implementation and monitoring; Case studies.

Level 300

Unit Code and Description
ESU 300: Environmental Impact Assessment & Auditing
Concepts: environment, impact and assessment; Historical development; Components of EMP; EIA Process and methods; Typology of impacts; Auditing: nature and steps; Interdisciplinary approaches to impact analysis; Impact significance; Analysis of alternatives. Stakeholder involvement; EIA report writing; Institutional arrangements: policy, legislation, information systems and logistics; EIA report review and decision making; Practical assignment.

ESU 301: Environmental Policy and Law
Understanding policy and law as concepts; Ethics in environmental policy and management; Principles of environmental policy and law; International Environmental Convention, Protocols and Treaties; Environmental Management and Coordination Act: Challenges and opportunities in environmental policy and law enforcement (EMCA 1999); Case studies.

ESU 302: Statistics
Importance of statistics on environment and community development; statistical analysis suitability for qualitative and quantitative studies; application of statistics and inferential statistics; application of measures of dispersion; correlation and regression; parametric and non-parametric statistics , application of t-test, Z-test and chi-square, analysis of variance(ANOVA); factor analysis, principals component analysis, selected software packages for data analysis

ESU 303: Project Mgt, Monitoring & Evaluation
Project defined: What is a project?; characteristics of project; Projects versus programmes: Project proposals and fundraising; Individuals who write proposals; Proposals and the grant market; Motivations and priorities of grant makers and grant seekers: Projects and proposal writing; Proposal writing formats; Proposal for academic projects; Proposals for development projects: Principles of project management; Initiating project planning; Role of project planning; Identifying projects; Sources of project ideas: Project management cycle; Project conceptualization [needs assessment and situation analysis]; Project selection; Project planning and design; Project implementation; Project monitoring and evaluation; Project termination.

ESU 304: Research Methods
Key concepts; types; objectives; research designs; sampling; identification of data sources (primary and secondary); field research procedures; data collection; tools; management and analysis; research proposal development; use of computer; reporting; dissemination and application of research findings.
ESU 305: Environmental Economics
Theory of environmental economics: resource use and allocation, opportunities and constraints in economic development; environment as a public good; externalities; efficiency versus social consideration; political economy of resource use and environmental management; public and private conflicts in resource use; economic and cost-benefit analysis of utilization of environmental resources; valuation techniques for market and non-market environmental goods and services; integration of environment in economic management and development.

ECD 306: Human Settlement, Env’t and Dev
Types of Human settlement and implication for community development: (Clustered-Urban areas/Towers/Cities/Metropolis); (Dispersed-Village settings/Hamlets); (Linear settlements); Drivers of settlement patterns; Urban and rural settlement infrastructure and services; Human settlements as a basic need and right; Analysis of the mandate of UN-Habitat; Understanding the challenges in planning and implementing Human settlements in Kenya; Rural-urban migration versus Urban-Rural migration; Implications of counties in the new constitution on settlement dynamics; Relationship between settlement pattern and Environmental quality/aesthetics; Settlement in relation of critical natural resources in Kenya (Land, Water, and Forests), hence Land Policy, Water Act, Forest Policy; Settlement in relation to EMCA 1999; Analysis of the National policy on housing/settlement; Settlement in the context of sustainable thinking: settlements and community development, settlements of the future; Case studies: Audit of the Kibera Slum upgrading program; Soweto Slum in South Africa, the Kibbutz in Israel.

Overview of global energy trends: demand and supply dynamics; Categories of energy resources and their relevance in community development: Hydro-power (Large-hydro, Medium-hydro, Small-hydro, Mini-hydro, Micro-hydro, Pico-hydro); Fossil fuels; Nuclear; Solar; Wind; Geothermal; Biomas (Biofuels, biogas, charcoal, fuelwood and agrowaste); Energy Efficiency at household levels, energy saving technologies; Link between Energy resources and MDGs and vision 2030; Current and potential status of Energy resources in Kenya; Energy development and environmental quality in Kenya; Energy conservation practices for community development; Energy, forest cover and carbon trading nexus; Energy policy and ACT for Kenya and relevance to community development; Challenges to energy development in Kenya; Case studies: Rural Electrification programme; Clean Production Development.

ECD 316: Civil Society, Politics & Environmental Mgt
Civil society as a forum for socio-economic development; Relationship between the civil society and UN agencies, Government and NGOs; Civil society as the basic representation of community values and interests; Conceptualization of the roles of civil society in UNCHE, UNCED, WSSD, MDGs, EMCA and Kenya’s Vision 2030; Conflicts of environmental agencies and Civil Society Organisations’ development agenda: Case studies; Dealing with conflicts of development agencies and Civil Societies’ interests: Prospects and Challenges; Community involvement in planning and implementation of environmental conservation programmes; Case studies of community oriented development programmes through Civil Societies: indigenous NGOs, FBOs, CBOs and SHGs.
ECD 318: Participatory Comm. Dev. and Capacity Building
Participatory development: Key concepts: participation, grassroots participation, people’s participation in development; Theoretical perspectives to participatory development; Participatory approaches: Target oriented approach and its variants-Extractionist participation; vertical participation; benefit-induced participation (extensionist). Process oriented/people focused participation ; assumptions underlying participatory approaches; Participatory Development approaches: Rapid Rural Appraisal: Participatory Rural Appraisal: Participatory Appraisal techniques and methods e.g. Community/social mapping ,Wealth ranking, Transect walks, Venn diagrams , Livelihoods analysis; Participatory Planning: What is participatory planning ; Participatory planning workshops: Co-evolving streams of participatory methodologies; Integrated pest management ; Stepping stones ; Participatory GIS; Participatory Action and learning systems; Community-led total sanitation; Participatory Technology Development (PTD): Historical and institutional contexts for PTD; The PTD process; Typologies of participation : Participatory Evaluation; What is participatory evaluation? ; The need for participatory evaluation; Differences between participatory and conventional evaluation.

ECD 319: Social Work & Humanitarian Assistance
What is social work and humanitarian assistance? :Principles of social work; The Social Work practice; Humanitarian assistance and the principles of neutrality and impartiality ; Social work and humanitarian assistance in historical contexts; Social work theories: Systems Theory; Behavioural and social learning theory; (Social ) Conflict theory ; Psychosocial development theory; Social exchange theory: Social work and community Development: Social ‘Work’/Social ‘Welfare’; Casework; Group work; Community organization and Community Relations and Services: Social work and humanitarian assistance legal and policy frameworks; Humanitarian Principles; International Humanitarian Law; the Geneva and Hague laws relating to humanitarian work; Kenyan Humanitarian Laws and policies; International and National humanitarian organization; Institutional arrangements in social work in Kenya; Horn of Africa conflicts and strategic location of Kenya as a humanitarian hub; International humanitarian organizations in Kenya; National social work and humanitarian organization; Resource types and their mobilization for social work and humanitarian assistance: Purpose of resource mobilization; Fund raising ; Researching the current situation; Volunteer resources; Leadership responsibility; Income generating activities.

ECD 321: Resource Mobilization & Economic Empowerment
The concept, “Resource mobilisation”; elements of resource mobilization; Resource Mobilization Pyramid and the 80-20 Rule; SWOT analysis; internal and external factors affecting an organization resource mobilization abilities; the vision ,the mission, the goals and their impact on resource mobilization; pre-liquisites in attracting donor’s financial support for organizations.

ECD 304: Practicum
Practicum is a mandatory programme for all Bachelor of Environmental Studies students. Students will only be allowed to proceed for practicum on completion of the third year units. The student will be assessed by a university academic member of staff, which will be done on two separate visits. At the end of the Practicum, the student will be required to prepare a report to be submitted not later than two weeks after completion of the attachment.
HEH 304: Occupational Health and safety

Level 400
Unit Code and Description
ESU 400: Environmental Conflicts and Peace Building
General overview of conflicts: Definition of terms: Conflict, natural resources, peace building, peacekeeping, peacemaking, security; Stages of a conflict; Consequences of conflict; Conflicts and the environment: Typology of environmental conflicts. Drivers of environmental conflicts; Impacts of conflicts on natural resources and the environment; Role of natural resources and environment on conflict: Environmental conflicts management; Dimensions of environmental conflicts management; Strategies for addressing and managing environmental conflicts; Role of stakeholder analysis in conflict prevention: Environmental peace building (i) Dimensions of peace building (ii) Environmental conflict prevention and peace building strategies (iii) Role of natural resources and environment in peace building; Conflict analysis for peace building; Environmental security emerging issues; Impacts of conflict on agriculture and food security; Case studies.

ECD 403: Environment and Community Health
Conceptualizing environmental health, Role of environmental health in community development; Environmental variables and health; Environmental hazards and health, Persistent organic pollutants; Environmental and Behavioral toxicology; Risk assessment; Traditional medicine verses conventional medicine and nature conservation; Primary health care; Occupational health and safety; Psychopharmacology; Principles of waste management; Case study: malaria and its management; Environmental health policy in Kenya

ECD 404: Research Project
The project will involve research on a topic selected by the student with instructor’s guidance. Research may include, field, laboratory and library components and will be carried out under the instructor’s supervision and the eventual result will be presented as a written project report. The project report should be completed within two semesters, in the first semester students should write project proposal and in the second semester the research project.

ECD 413: Ethics and Environmental Governance
Governance and Principles of good governance, Principles of good governance, Global environmental governance, environmental governance and Principles of Effective Environmental Governance, ethics and the environment, Environmental ethical principles, Modes of ethical reasoning, Branches of ethics, Environmental justice, Environmental virtue ethics, Stakeholders in environmental governance, Role of civil society in environmental governance.

ECD 415: Poverty, Ecosystems. & Human Well-being
Understanding the poverty- ecosystem-human well-being nexus, the resources use paradigms in different ecosystems and their linkages to human well-being, the various ecosystem assessment frameworks: Integrated frameworks, millennium assessment frame works (MA); how to conduct an ecosystem assessment (the various stages of ecosystem assessment ); the scope and scale of ecosystem assessment; Drivers of change in ecosystems; determining ecosystem boundaries and
categories; management of ecosystems in Kenya: laws/institutions that govern the management of ecosystems in Kenya; Choosing policy options to sustain ecosystem services; How international level decisions affects/undermines ecosystems and their management at the local and national level; Case studies/lessons learned from various ecosystems; Field work (optional).

ECD 420: Principles of Administration & Management
Principles and practice of management; public service and professionalism; problem solving/decision-making; strategic planning and management; public policy formulation and management; public financial management; public procurement management; risk management in the public service; results based management; human capital management; interpersonal communication (team building, emotional intelligence, delegation, presentation; reporting, interviews, etiquettes); introduction to total quality management (TQM); case studies.

ECD 423: Community Asset Building & Social Entrepreneurship
Asset-Based Approaches to Community Development: Concepts: assets, income, community assets, welfare, wellbeing, poverty; Community assets versus asset building Why asset building is important; Welfare based on asset theory; Effects of assets on community; Community development approaches (The Needs Approach versus Assets Approach); Asset building programs: IDAs, Youth accounts, child development accounts; Typologies of assets; Asset mapping; Social entrepreneurship: Social enterprises: What are they?; Social entrepreneurs: Who are they?; The social entrepreneurship model; Social entrepreneurship and community development; Social entrepreneurship case studies.

ECD 424: Environment, Microfinance & Financial Inclusion

ECD 425: Environment and International Relations
Theories of international relations (Realism, Liberalism) International environmental governance; Multilateral Environmental Agreements (MEAs); Understanding MEAs; Benefits of MEAs; Enforcement of MEAs; Actors in international environmental governance; (States, Non State Actors and International Organisations.); International treaties and local environment; Globalisation, communities and environmental protection; Environmental concerns in a global village era; International cooperation; National sovereignty; Trade-environment nexus.

ECD 426: Environment and Corporate Social Responsibility
Understanding intellectual social responsibility and the environment; The philanthropic dimension and the environment; Nexus of ISR-CSR and the environment; Role of ISR in community and national development; Role of CSR in community and national development; ISR/CSR stakeholders and responsibilities; Professional and Business Ethics; Workplace welfare and environment; Environmental stewardship; Community engagement in CSR and the environment; Corporate governance, private sector responsibility and the environment; CSR and corporate environmental Reporting; Case studies with focus on multi-national corporations locally and internationally. Leaders and professionalism Ethics; Case studies.

ECD 427: Environment, Gender and Community Development
Defining and conceptualising gender; marginalisation theories and perspectives; gender analysis; gender sensitivity analysis; gender and natural resources dynamics; from women in development...
to gender and development; application of gender perspectives in sustainable development; mainstreaming gender in sustainable environmental management and development policy; Gender and global environmental change; mobilising women for environmental management; Case studies.

EDC 428: Environmental Communication and Development
Communication for Environmental Conservation and Community Development; Introduction, The concept of Environmental Conservation and Community Development; Influencing Public Attitudes and Behaviors; Designing a Public Communication Program; Communication Strategies and Actions; Communicating with Groups; Using Mass Media; Conservation through Education.

ECD464: Disaster Management

Terminologies based on UN/ISDR; Classification of Disasters; Disaster Trends; Disaster Risk Reduction and Management Frameworks; National Disaster Policies; The Hyogo Framework of Action; Disaster Cycles; Disaster nexus; Climate Change and Disasters; Gender and Disasters; Disasters and Development; Risk Governance; Risk Assessment; Local Case Studies; Individual/Group Exercises