Assignment 1: Biodiversity Analysis

Purpose

Analyze biodiversity in a local area and evaluate conservation needs.

Tasks

Task 1: Biodiversity Inventory (25 points)

Conduct a biodiversity survey of a local area: - Identify at least 15 species - Document species abundance - Note habitat characteristics - Create species list with photos or sketches

Task 2: Diversity Calculations (25 points)

Calculate biodiversity indices: - Species richness - Species evenness - Shannon Diversity Index - Compare to other areas if possible

Task 3: Threat Assessment (25 points)

Identify threats to local biodiversity: - Habitat loss - Invasive species - Pollution - Climate change impacts - Human activities

Task 4: Conservation Plan (25 points)

Develop a conservation plan: - Priority species or habitats - Specific conservation actions - Stakeholder involvement - Success metrics - Timeline

Format

- 4-6 pages
- Include data tables and calculations
- Use proper scientific format
- Include maps or diagrams

Submission

Submit via Canvas with all supporting materials.