Course Objectives/Course Outline
Spokane Community College

Course Title: **Wildlife Techniques**
Prefix and Course Number: **ENVS 217**

Course Learning Outcomes:
By the end of this course, a student should be able to:

My objective is to provide the knowledge and skills needed to conduct ecological sampling of selected habitats, species, and communities. Emphasis will be placed on sampling theory and familiarization with the techniques commonly used by field technicians working in wildlife research and monitoring efforts. Expectations are that by successfully completing this course, you will be able to:

- independently develop a sampling approach for a given fish/wildlife sampling objective
- efficiently, effectively, and safely conduct field sampling exercises
- understand and be able to apply basic statistical approaches used in field sampling
- be able to compile, analyze, and report results from field sampling exercises
- use equipment and technologies commonly used by fish and wildlife technicians
- use spreadsheets to develop datasheets, record data for analysis, and graphically display results of sampling

Course Outline:

I. Introduction
   A. Experimental design
   B. Principles of sampling
II. Capture, handling and care of wildlife
   A. Care and use of wildlife in field research
   B. Capture methods
   C. Handling and immobilization
III. Marking methods and capture approaches
   A. Marking techniques
   B. Population estimation
IV. Census methods
   A. Transects
      i. Distance
      ii. Line and point methods
      iii. Line intercept methods
   B. Time constrained searches
   C. Direct and indirect counts
   D. Double observer and double survey
V. Radio-telemetry
   A. Error polygon delineation
   B. Transmitter location and mapping
   C. Habitat assessment and radio telemetry data
VI. Data analysis, compiling, and reporting
   A. Common statistical approaches
   B. Field note taking
   C. Report writing