2024 Tribal Data and Technology Academy Workshops



The <u>Tribal Exchange Network Group (TXG)</u> is continuing its partnership with <u>The Carpentries</u> organization to offer **free online trainings** for Tribal professionals interested in learning new skills for effective data management, analysis, and visualization. Workshops are taught by Carpentries-certified instructors with experience teaching learners from a wide variety of backgrounds, and no prior knowledge is required for learners to be successful. Over the course of three days, instructors will present the workshop topics through the use of guided lessons, open dialog, and individual practice. Lessons use the same sample datasets and easy-to-follow instructions for ensuring everyone can access the same information before, during, and after the workshop.

For 2024, the following workshops are being offered; registration details and more information will be announced approximately two months prior to each session.

June 4-6, 2024 – Data Carpentry for Ecologists (R emphasis)

This workshop teaches data cleaning, management, analysis, and visualization with ecological data samples, and models the reproducible data management and analysis workflow activities typically used in a research project. Lessons on basic coding principles will introduce students to R.

July 30-August 1, 2024 – Data Carpentry for Ecologists (Python emphasis)

This workshop teaches data cleaning, management, analysis, and visualization with ecological data samples, and models the reproducible data management and analysis workflow activities typically used in a research project. Lessons on basic coding principles will introduce students to Python.

October 1-3, 2024 – Software Carpentry: R for Reproducible Scientific Analysis

Lessons will teach novice programmers to write modular code and best practices for using R and RStudio for analyzing scientific data. The emphasis of these materials is to give attendees a strong foundation in the fundamentals of R, and to teach basic principles of scientific computing. Topics include: data structures, subsets, plotting data, vectors, functions, data frames and manipulation, and producing reports. The workshop also teaches the basics of the Unix shell, and version control using Git.

November 19-21, 2024 - Software Carpentry: Programming with R

This workshop provides an introduction to R built around the common scientific task of data analysis. Instructors will teach the basic concepts of good programming using R and RStudio to analyze commaseparated datasets and plot results. Topics include: creating functions, analyzing multiple datasets, best practices for writing R code, creating reports and packages, data types and structures, and loops in R. The workshop also teaches the basics of the Unix shell, and version control using Git.

Contact <u>NEIEN@nau.edu</u> for more information about these workshops.