Inspire Grant Program
Data Librarian, Library

PROJECT TITLE:
Data Carpentry Workshop

SUMMARY:
From culture and media studies to the physical and environmental sciences our increasing capacity to collect data is changing academic research. Data collection and analysis allows students and faculty to ask questions that previously could not have been answered, and it changes the impact that academic research has on society. While Petabytes of data are now available, however, many disciplines are failing to incorporate this class of information into teaching, learning and scientific advances. The missing step between data collection and research progress is a lack of training for students and researchers in crucial skills for effectively finding, accessing, managing, and analyzing various types and amounts of data.

Teaching and hosting Data Carpentry workshops will address this gap by training students, teaching faculty and researchers in data organization, management, and analysis to increase data literacy and improve research outcomes.

GOALS:
The goal of this initiative is to provide students and faculty with an opportunity to learn about data management, content, and tools, reducing barriers to entry and imparting the skills both researchers and citizens need for continued learning and engagement.

Data Carpentry workshops are domain-specific, so that students and researchers learn the skills most relevant to their domain, using examples from their field of study. Hosting a workshop at the Library (Fall term) for the Social Sciences will provide attendees with the core data skills for efficient, shareable, and reproducible community research practices.

Based on this experience, our assessment and learning outcomes, more discipline-specific Data Carpentry workshops may be planned for the future.

LEARNING OBJECTIVES:
Best practices in data organization, cleaning, management, analysis and visualization.

DELIVERY APPROACH:
Intensive, hands-on 2-day workshops designed for people with little to no prior computational experience; domain-specific, so that students and researchers work with data most relevant to their own work.

Workshops are taught by trained, peer, volunteer instructors. Lessons are distributed under the CC-BY and are free for re-use or adaptation, with attribution.

ASSESSMENT:
Pre-test and post-test surveys for both assessing learning outcomes and improving content.

PLAN/TIMELINE:
Summer 2018
- Decide on the Data Carpentry curriculum that would best serve campus learners (based on needs assessment)
- Work with the Carpentries Program Manager and Workshop Administrator to set dates and location for workshop

Fall 2018
- Recruit helpers to join workshop.
- Advertise workshop.
- Make travel arrangements for visiting instructors (or determine process to reimburse them for their expenses)
- Arrange for required materials and equipment

December 2018
- Hold workshop

BUDGET:
The cost of hosting a workshop is both the Workshop Administration Fee and travel expenses for two instructors. Additional costs include catering for 40 participants.

Total budget requested: $7000 CAD

- Workshop Administration Fee: $2500
- Travel Expenses for Instructors: $2000
- Catering (40 persons/ 2 days): $1750
  - Breakfast: $250
  - Lunch: $800
  - Coffee breaks: $ $700

All instructors are volunteers, but the Host needs to cover their travel expenses. Data Carpentry staff will work to find local instructors, but suggest that a budget estimate about $2500 CAD for the travel, food and accommodation of the instructors.

LIBRARY LEAD:
Data Librarian

TEAM MEMBERS:
Liaison Librarian
Student volunteers (to be recruited)