GEOGRAPHIC INFORMATION SYSTEM (GIS) RESOURCES FOR GRADUATE STUDENTS

BRUCE GODFREY

GIS LIBRARIAN

BGODFREY@UIDAHO.EDU

Agenda

- GIS support services and learning resources
- GIS software
- Navigating the U of I Teaching & Scholarly Research ArcGIS Online Portal

Support - Services

- [University of Idaho Library | Data Hub: Geospatial and Data Sciences Support (uidaho.edu)](uidaho.edu)
  - Space and service point providing co-curricular and research support in the areas of geographic information systems, data sciences, data analysis and visualization, and research data management.

UI LIBRARY
MAP ROOM HOURS:

Monday - Friday
8am - 5pm

If you need assistantance accessing or finding maps, please email Rami Attebury at rattebur@uidaho.edu.

Atlases have been moved upstairs into our general collection. If you need assistance finding an atlas, you can ask for help at the Reference Desk, also located online: https://www.lib.uidaho.edu/help/
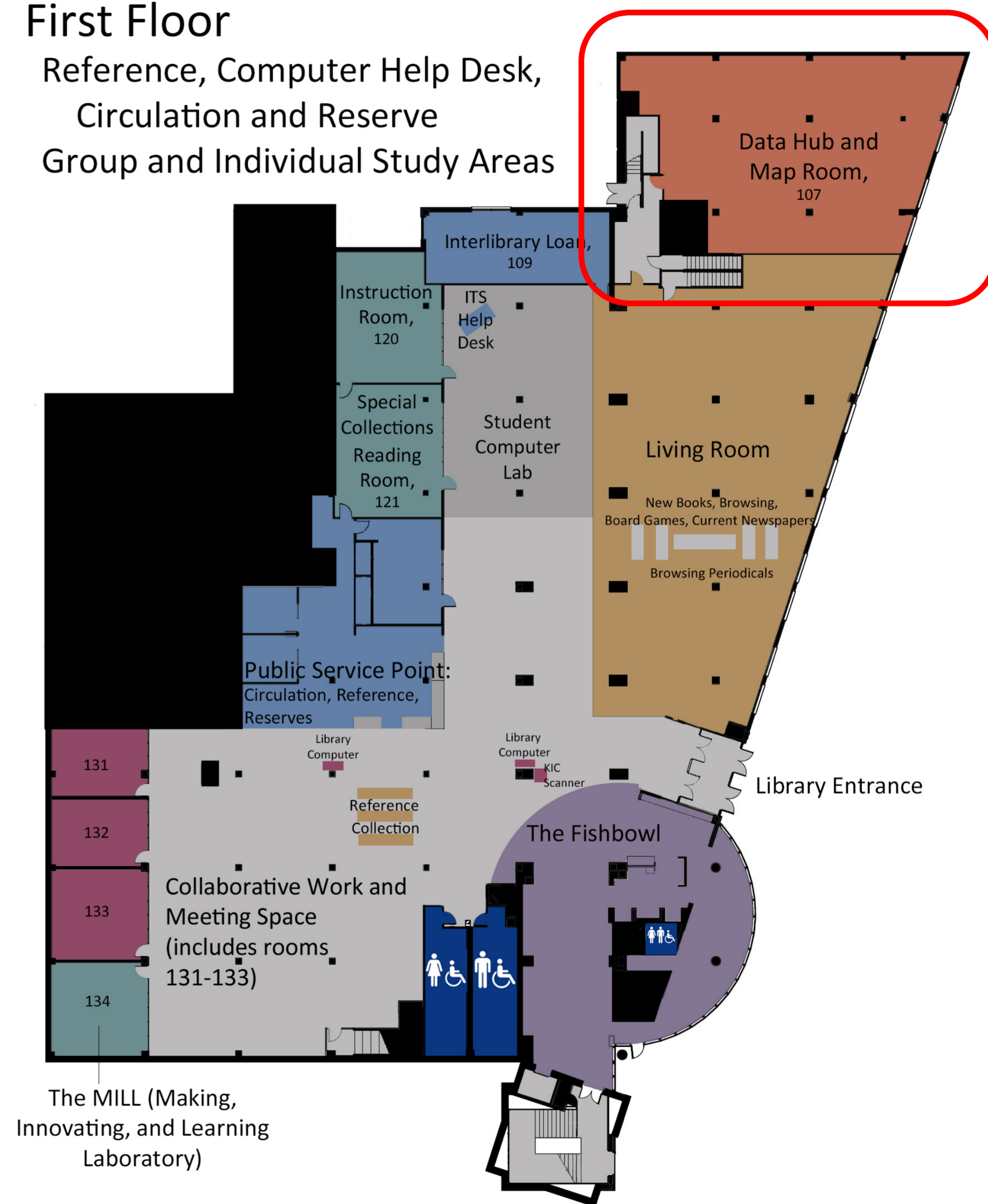
The Map Room is undergoing renovation to make room for the new Data Hub. Closures may occur without notice.

Support - Services

- [University of Idaho Library | Data Hub: Geospatial and Data Sciences Support (uidaho.edu)](uidaho.edu)

  o Room 107 - 1st floor of the library (NW corner)

First Floor

Reference, Computer Help Desk, Circulation and Reserve
Group and Individual Study Areas

Support - Services

- [University of Idaho Library | Data Hub: Geospatial and Data Sciences Support (uidaho.edu)](uidaho.edu)

  o Data Hub Librarian assistance is available Monday - Friday, 11am - 3pm

    ▪ In person

    ▪ Phone (885-7724)

    ▪ Remote

      ❑ Chat (icon on web page)

      ❑ Zoom

Map Room

The Map Room is home to the physical portion of the University of Idaho's map collection. If you have any questions about finding a map, contact the Reference Desk.

Data Hub

Located in the Map Room, the Data Hub is a space in the library, staffed by librarians and partners from around campus, to assist with mapping and GIS (geographic information systems), data sciences, quantitative analysis and visualization, and research data management.

University of Idaho
Library

Support - Services

- Esri Technical Support
  - Contact Bruce Godfrey (bgodfrey@uidaho.edu) to submit a case on your behalf

Support – Resources

- See the 'Resources' button on a product web page

Mapping Products | GIS Software Products - Esri

- o ArcGIS Online Resources | Tutorials, Documentation, Videos & More (esri.com)

- o ArcGIS Pro Resources | Tutorials, Documentation, Videos & More (esri.com)

Support – Resources

- Esri Self-Paced E-Learning Courses (Esri Training)
  Access to no-cost self-paced e-learning resources.

Support – Resources

- https://esri.com/training
- Sign in using your U of I Account
- Explore the course catalog

Sign in with esri

ArcGIS login

Your ArcGIS organization's URL

Uidaho ✕

Enter another organization

About	Catalog	Certification	My Academy	Help

Course Catalog
Explore our learning resource collection.

Courses by Schedule
View upcoming classes and online training events.

Courses by Location
View classes offered at Esri training centers.

New and Retired Training
View the latest training options available and what is scheduled to be retired.

Learning Plans
Master a focused topic with one of our plans.

Cost

Prefer Custom to One Size Fits All?
Copy an Esri learning plan and add or remove courses to make it your own.

View Learning Plans

Support – Resources

- https://esri.com/training
- Sign in using your U of I Account
- Explore the course catalog

Support - Events

- GIS Day 2024 @ U of I
  - In person & virtual
  - Wednesday November 20
  - Call for lightning talk presentations coming
- 25th anniversary

GIS Software

- [University of Idaho Library | GIS Software (uidaho.edu)](uidaho.edu)

GIS software

- Open source

Open Source GIS Tools

There are numerous desktop GIS software programs such as **QGIS**. There are also many web-based options such as **Mapbox** and **Carto**. Take a look at the **OSGeo projects** to help you find an open source technology to meet your needs.

Also, take a look at a list of **Open-Source GIS Software** put together by Syracuse University or **The History of Open Source GIS** by makepath.

QGIS®
trademark

Windows, MacOS, Linux

GIS software

- Site License with Esri (proprietary)

Esri GIS Software

The University of Idaho participates in the **Education Institution License Program** with **Environmental Systems Research Institute, Inc.** (Esri). Many products are available for teaching, research, and administrative uses; others are available only for teaching and research. Commercial use of the software is not a **permitted use** under the License.

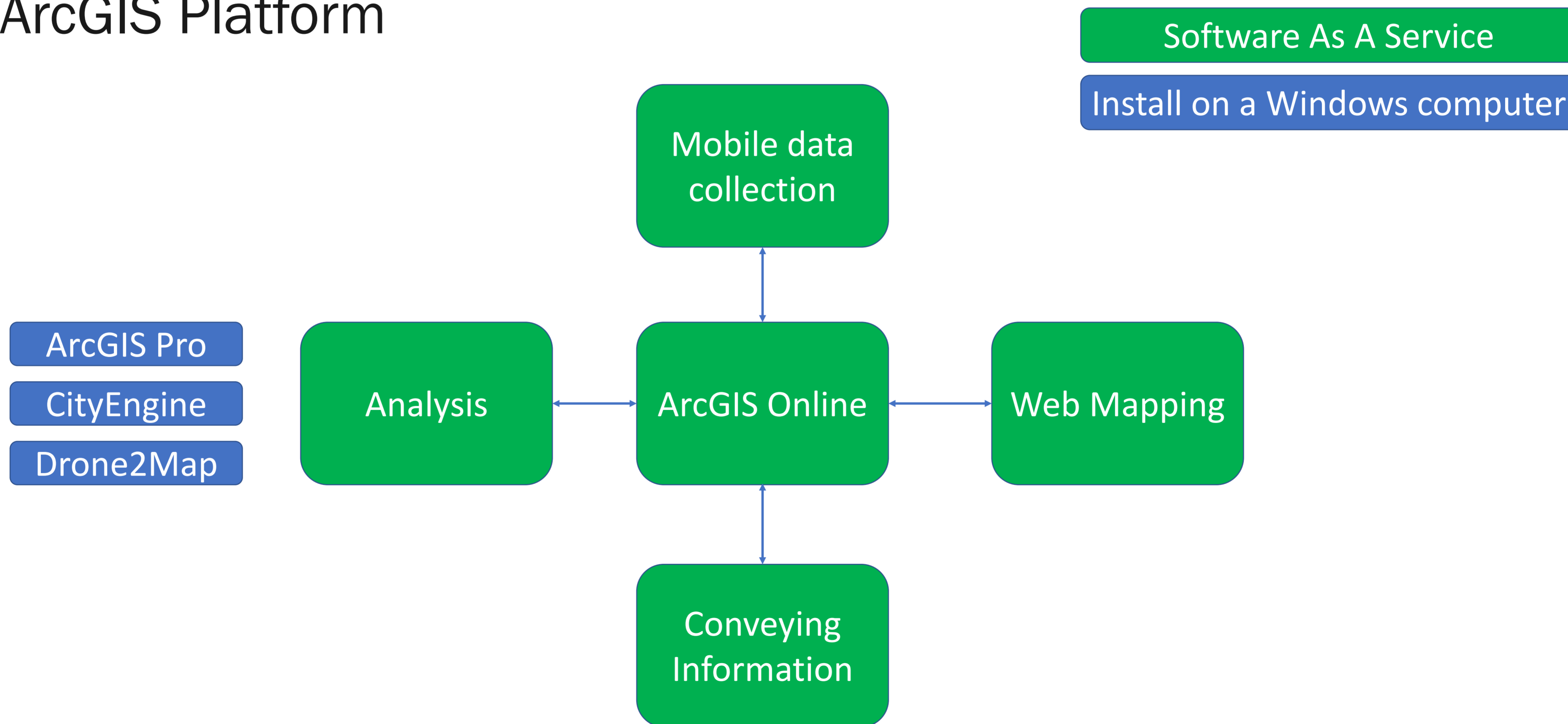Along with software, U of I students, faculty, and staff have access to Esri no-cost, self-paced online learning opportunities. **Sign in** using your U of I Account.

Have questions? Contact **Bruce Godfrey**, GIS Librarian.

GIS software

- ArcGIS Platform

Software As A Service

Install on a Windows computer

ArcGIS Pro

CityEngine

Drone2Map

Mobile data collection

Analysis

ArcGIS Online

Web Mapping

Conveying Information
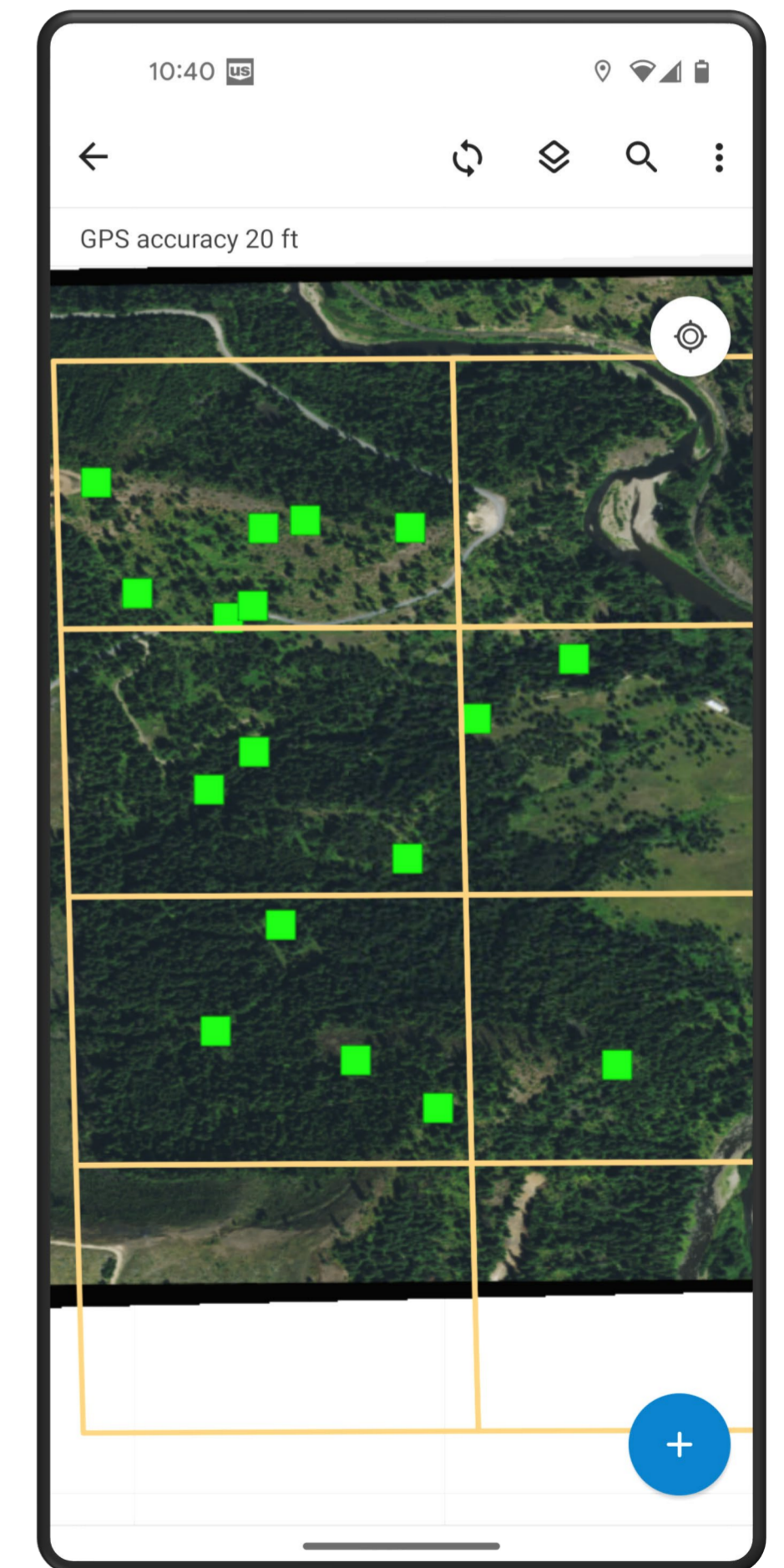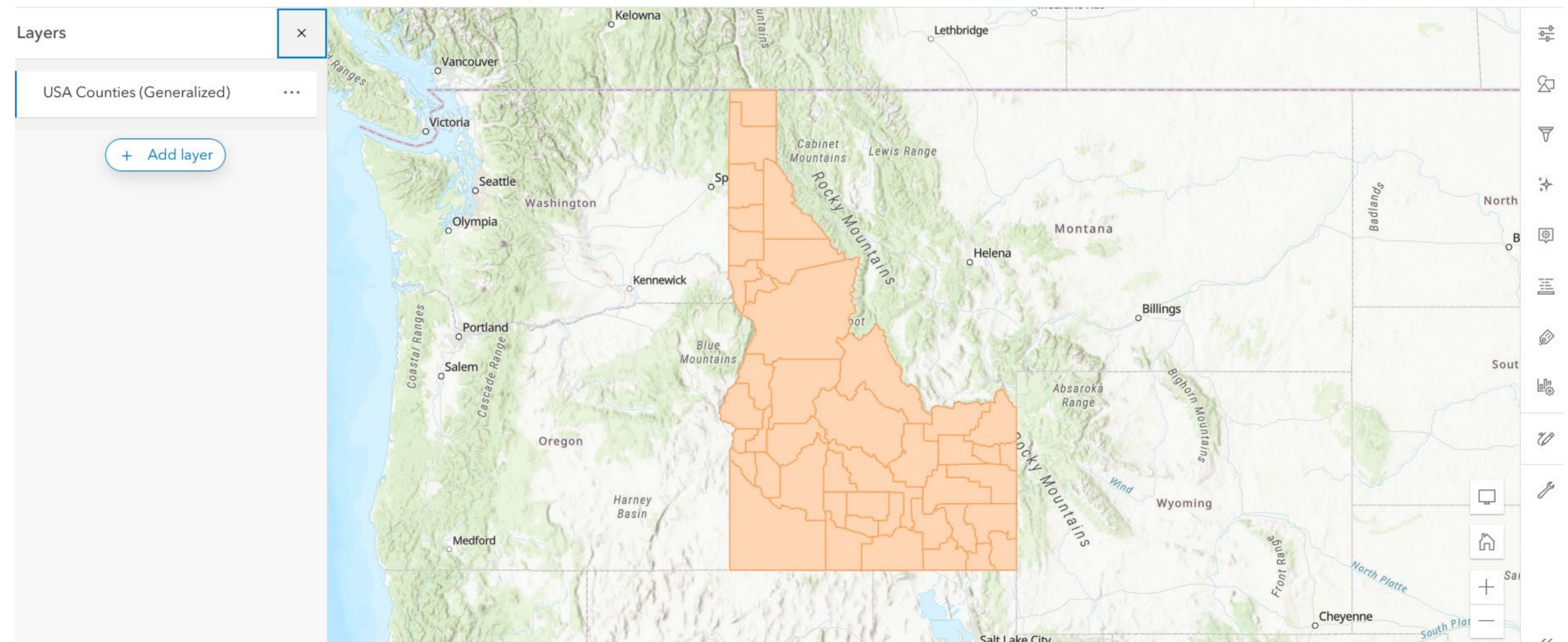
Apps for mobile data collection

- [ArcGIS Field Maps](#) - map-centric app for mobile data collection

- [ArcGIS Survey123](#) - form-centric app for collecting survey data

- [QuickCapture](#) – quickly collect field observations

Apps for web mapping

- [Scene Viewer](#) – create 3D web maps

- [Map Viewer](#) – create 2D web maps

Apps for analysis

- [ArcGIS Pro](#) – desktop GIS (Windows)

- [CityEngine](#) – desktop 3D city design software (Windows/Linux)

- [Drone2Map](#) – desktop GIS drone mapping (Windows)

- [ArcGIS Maps for Office](#) – add-in to make maps in Excel

- [Insights](#) - location analytics

- [Notebooks](#) – spatial analysis & visualization

Apps for analysis

- [Business Analyst](#) – site selection & market analysis

- [ArcGIS Urban](#) – city planning

Apps for the conveying information

- [StoryMaps](#) - digital storytelling

  - Embed text, maps, pictures, video, audio to tell a story

- [Dashboards](#) - information at-a-glance

- [Hub](#) - community engagement initiatives

- [Instant apps](#) – choose a template -> embed a web map in a web app

- [Experience Builder](#) – drag-and-drop web app building

App for developers

- [AppStudio](#) – develop apps for mobile devices

- [APIs & SDKs](#) – use Esri services in your own applications

- [ArcGIS API for Python](#) - script and automate across the ArcGIS product suite

What is ArcGIS Online?

- A cloud-based global collaborative platform hosted by Esri that allows you to use, create, manage, analyze, and share maps, apps, and data.

  o https://arcgis.com

  o Ongoing evolution from desktop to web-centric GIS

  o U of I ArcGIS Online Portal for Teaching & Scholarly Research

    ▪ https://uidaho.maps.arcgis.com

    ▪ Sign in using your U of I Vandal NetID

    ▪ Items are not backed up by the U of I

Sharing content between apps and the portal

- Example
  - Collect data in the field with Field Maps, sync those data with the portal, then access those data from Pro
    - ArcGIS Field Maps ⟷ ArcGIS Online ⟷ ArcGIS Pro
  - Create a map in Pro, share it as a web map in ArcGIS Online, then use that map in a story
    - ArcGIS Pro ➡ ArcGIS Online ➡ ArcGIS StoryMaps
  - Or Field Maps to ArcGIS Online to Story Maps

Sharing content with others

- All items are 'private' by default
- Users choose to make them available more broadly
- Groups can include members of other ArcGIS Online organizations (e. g. governmental or other academic institutions) unless it is a shared update group
- An item can have multiple editors from the same organization if it's in a group having shared update enabled

Demo

- Let's look at ArcGIS Online & ArcGIS Pro

PREVIOUS WORKSHOPS

https://www.lib.uidaho.edu/services/workshops/resources.html

- Tips and Tricks for Word, Excel, and PowerPoint

- Organizing your Research and Data Management

- Planning and Organizing a Literature Review

- Tools for Building a Scholarly Presence

- Creating Research Posters with PowerPoint

- Essential Library Skills to Ace Graduate School

- Open Educational Resources and Graduate Students

- **AND MORE!**

FALL 2024 GRADUATE STUDENT ESSENTIALS

WHEN: Wednesdays from 12:30pm – 1:30pm

WHERE: Library first floor classroom (Room 120) and live via Zoom

- **August 21**: Slides Like Whoa: Presentation Strategies and Tools

- **August 28**: GIS Resources for Graduate Students

- **September 4**: Cite Me Maybe: Open Access Publishing for Graduate Students (Zoom only)

- **September 11**: Getting Started with Popular Library Databases

- **September 18**: Let's Start from the Beginning: Teaching with Primary Sources in Special Collections

- **September 25**: Make Data Management Easier

University *of* **Idaho**
Library

University *of* Idaho

Library

THANK YOU!