Web Mapping for Every Discipline – How to Use ArcGIS Online

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Selecting GIS software

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

GIS Software

A variety of GIS software tools are available for creating, analyzing, and visualizing geospatial data. University of Idaho students, faculty, and staff have access to Esri products through a higher education site license but there are also many open source options.
Selecting 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.
Selecting GIS software

• Proprietary (Esri)

Esri Products

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.
Selecting GIS software

• Proprietary (Esri)

ArcGIS Online

ArcGIS Online is a web-based collaborative platform (hosted by Esri) that enables members to use, create, manage, store, document, and share maps, apps, and data.

Sign into U of I’s Research & Teaching Portal
Selecting GIS software

• Proprietary (Esri)
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](https://arcgis.com)
  
  o Ongoing evolution from desktop to web-centric GIS
  
  o U of I Portal for Teaching & Scholarly Research:
    ▪ [https://uidaho.maps.arcgis.com](https://uidaho.maps.arcgis.com)
    ▪ Items are not backed up by the U of I
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

Install on a mobile device
Apps for web mapping

- **Scene Viewer** – create 3D web maps
- **Map Viewer** – create 2D web maps

Access using a web browser.
Apps for analysis

• ArcGIS Pro – current desktop GIS

• CityEngine – 3D city design software

• Drone2Map - GIS drone mapping

• ArcGIS Maps for Office - make maps in Excel

• Insights - location analytics

• Notebooks – spatial analysis & visualization

Some install - some web browser-based – some both
Apps for analysis

• **Business Analyst** – site selection & market analysis
• **Community Analyst** – analyze impacts of policy decisions
• **GeoPlanner** – scenario planning for natural systems
• **ArcGIS Urban** – city planning

Some install - some web browser-based – some both
Apps for the conveying information

• **StoryMaps** - digital storytelling

• **Dashboards** - information at-a-glance

• **Hub** - community engagement initiatives

• **Instant apps** – choose a template and embed a web map in a web app

• **Experience Builder** – drag-and-drop web app building

• **Web AppBuilder** – use themes & widgets and embed a web map in a web app

Access using a web browser
App development

• **AppStudio** – develop apps for mobile devices

• **API & SDK** – create apps using application programming interfaces and software development kits
Sharing content between apps and the portal

• Example
  o 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
  o 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
  o 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

- Teaching & Scholarly Research Portal
  - [https://uidaho.maps.arcgis.com](https://uidaho.maps.arcgis.com)
  - Sign in using U of I Vandal NetID
Support

- University of Idaho Library | Data Hub: Geospatial and Data Sciences Support (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.
Support

• University of Idaho Library | Data Hub: Geospatial and Data Science Support (uidaho.edu)
  ○ Room 107 - 1st floor of the library (NW corner)
Support

- University of Idaho Library | Data Hub: Geospatial and Data Sciences Support (uidaho.edu)
  - Data Hub Librarian assistance is available Monday - Friday, 11am - 3pm
    - In person
    - Phone (885-7724)
    - Remote
      - Chat (icon on web page)
      - Zoom
Julie and David Levine Data Hub Fellowship

• This program funds one student each year to work with the faculty and staff at the Library to support the operations of the University of Idaho Library’s Data Hub, a center for geospatial and data sciences support.

• [Apply here](#)
Support

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

• 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)
Learning

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

- [https://esri.com/training](https://esri.com/training)
- [Sign in](https://esri.com/training) using your U of I Account
- Explore the Catalog
Learning

• [https://esri.com/training](https://esri.com/training)
• **Sign in** using your U of I Account
• Explore the Course Catalog
Events

- University of Idaho Library | GIS Day @ University of Idaho (uidaho.edu)
Fall 2022 Graduate Student Essentials

**When:** Tuesdays from 12:30pm – 1:30pm

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

**September 6:** Essential Library Skills to Ace Graduate School

**September 13:** 7 Tips To Make Your Data Management Life Easier

**September 20:** 3 Simple Tips for Expanding Your Literature Review

**September 27:** Supercharging Your Scholarly Presence in 3 Easy Steps

**October 4:** Web Mapping for Every Discipline – How to Use ArcGIS Online