Web Mapping for Every Discipline – How to Use ArcGIS Online

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Tell me about your mapping experience

• What software have you used? How recently? For a course/work?
Available GIS resources

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

Windows, MacOS, Linux
Selecting GIS software

- Site License with Esri (proprietary)

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

• Esri – ArcGIS Platform
Services - 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.
Services - support

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

• Esri Technical Support
  o Contact Bruce Godfrey (bgodfrey@uidaho.edu) to submit a case on your behalf
Teaching & 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)**
Teaching & learning

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

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

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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 Portal for Teaching & Scholarly Research:
  ▪ 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
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
- **Community Analyst** – analyze impacts of policy decisions
- **GeoPlanner** – scenario planning for natural systems
- **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 development

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

• **API & SDK** – create apps using application programming interfaces and software development kits
ArcGIS Online

- Teaching & Scholarly Research Portal
  - https://uidaho.maps.arcgis.com
  - Sign in using U of I Vandal NetID
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
Events

GIS Day @ University of Idaho

- Call for Proposals Open Now!

- Library Workshops