GIST4302/5302: Instructions to Moving to On-line

(Windows Version, Tentative)

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This document describes the steps to move the class, lectures, and labs to on-line. For the lecture, we will primarily use Blackboard, but also Microsoft Teams as the backup in case the Blackboard system is overwhelmed. For the lab, additional steps will be required to access TTU server using your computer at home. The remainder of this document describes the details .

# 1. Lectures

Lectures will be live stream during the scheduled class time, 12:30pm-1:30pm on Tuesday and Thursday, and the recorded video should be available after the lectures complete.

## Blackboard

Blackboard is the easiest option without needing extra software. The following is the link to access the live stream during scheduled class time:

<https://us.bbcollab.com/guest/bf4809aecaee4a3e9e5757f7ebb6436e>

## Microsoft Teams

As mentioned, we will go with this option as a backup in case the Blackboard is overwhelmed by the load. To setup Microsoft Teams, copy and paste the following link into your browser (Google Chrome is recommended on both Windows and Mac), and it might ask you to install Microsoft Teams software.

<https://teams.microsoft.com/l/team/19%3aacc451c2de9b47afa2acb85c6716ebf9%40thread.tacv2/conversations?groupId=34a51520-8323-400a-9d6a-572cefdf3e3c&tenantId=178a51bf-8b20-49ff-b655-56245d5c173c>

# 2. Lab

**Chanmi will live stream her lab instructions during lab hours as I do for the lectures.**

Compared with lectures, moving labs to on-line takes extra steps. VPN is essential to allow access to TTU resources from your home. I recommend you to setup VPN first (instructions to setup VPN is below). After that, you can access the TTU server including the lab materials folder on Techshare from home as you normally do on campus. To map a network drive to the class server, use the link [\\techshare.ttu.edu\depts\geosciences\gistcourses\gist4302](file:///\\techshare.ttu.edu\depts\geosciences\gistcourses\gist4302) like you did in the first lab class.

For Windows users, I strongly recommend installing ArcMap on your home computers. You already received a license code for the installation (check the excel file sent from Dr. Cao on March 25). After VPN is set up, go to the lab materials folder. The installation package is ‘ArcGIS\_Desktop\_1071\_169506,’ and the installation process is relatively straightforward (detailed instructions to setup ArcMap is below). We will use GeoDa for couple of labs, and the executable program will be provided. There will not be extra installation steps for GeoDa.

When you have VPN setup and ArcMap installed, you basically can do the labs as you normally do in remote sensing lab.

In case you cannot have ArcMap installed for some reason, we provide remote desktop as a backup option. You already have an IP address of computers in the Remote Sensing lab (Holden Hall 221) that you can access through remote desktop (your IP address is also in the same excel file sent from Dr. Cao on March 25). See the following for the remote desktop instructions.

## VPN

VPN stands for Virtual Private Network. It is required to access most of the TTU computation resources using off-campus computers. A TTU VPN connection authenticates your TTU credentials as an approved user who is allowed permission to access the TTU network. The setup of VPN on your own computer needs a software named GlobalProtect. The TTU IT Help Central has detailed instructions on how to setup:

<https://www.askit.ttu.edu/portal/app/portlets/results/viewsolution.jsp?guest=0&solutionid=181128172423631&hypermediatext=null>

## ArcMap Installation

Follow these steps to **install** ArcGIS 10.x for Desktop:

1. If you do not currently have an earlier version of ArcGIS installed on your machine, proceed to step 2. If you have ArcGIS version 10.1 or later installed, you do not need to uninstall it before installing version 10.7.1; the ArcGIS setup package will detect and upgrade your ArcGIS for Desktop software. If you have ArcGIS version 10.0 or earlier installed, please uninstall it using the Uninstall Utility (download below) before installing ArcGIS 10.7.1.
2. Download ArcGIS for Desktop, Microsoft .NET Framework 3.5 (you might already have this on your computer), and the other files you would like to install. Please note that ArcGIS Data Interoperability, ArcGIS Data Reviewer, and ArcGIS Workflow Manager require ArcGIS for Desktop.
   * When downloading with the Esri Download Manager, you can select and download multiple products. However, only one product should be launched at a time when the downloads are complete.
   * Make sure you have write access to your download directory location as well as your ArcGIS installation directory location, and that no one is accessing it.
3. Install the Microsoft .Net Framework 3.5 Service Pack 1 below (you might have this on your computers).
   * ArcMap requires [Microsoft .NET Framework 3.5 SP1](http://www.microsoft.com/en-us/download/details.aspx?id=25150) and [Microsoft Internet Explorer](http://windows.microsoft.com/en-us/internet-explorer/download-ie) version 7 or newer. Before running the installation program for ArcMap, ensure that your machine meets these prerequisites. The [quick start guide](http://desktop.arcgis.com/en/desktop/latest/get-started/quick-start-guides/arcgis-desktop-quick-start-guide.htm) provides an overview of installing and setting up ArcMap and links to detailed resources, including [system requirements](http://desktop.arcgis.com/en/desktop/latest/get-started/system-requirements/arcgis-desktop-system-requirements.htm).
4. Install and authorize ArcGIS for Desktop
   * Select a destination folder to extract the install files to. If you choose, you can automatically launch the setup after the files have been extracted
   * When prompted, select **ArcGIS for Desktop Advanced Single Use**.
   * When prompted, accept the default, **I do not wish to authorize any extensions** at this time. The extensions will be authorized automatically.
   * Enter your authorization number.

Follow these steps to **authorize** the software:

If you installed the software but did not authorize it, follow these steps:

1. Select **ArcGIS for Desktop Advanced (Single Use)**, and click **Authorize Now**.
2. Verify the software you selected is listed at the top of the box. Click **OK**.
3. Select I have installed my software and need to authorize it. Click **Next**.
4. Select **Authorize with Esri now using the Internet**. Click **Next**. If you do not have an Internet connection on the computer you intend to install the software on, you can authorize the software using another computer that has Internet access or via e-mail.
5. Enter your personal information (2 panels). Click **Next** on both.
6. When prompted, accept the default, **I do not wish to authorize any extensions** at this time. The extensions will be authorized automatically.
7. Enter your 12-character authorization number (EVAxxxxxxxxx), and click **Next**.
8. After the authorization process is complete, click **Finish**. Authorization typically takes between 30 seconds and 2 minutes.
9. Click **OK** to close the ArcGIS Administrator. The software is ready to use.

## Remote desktop

If you are on Windows system, remote desktop should already be there. Follow the instruction that TTU IT Help provided (the link is below). **In the second step of the instruction, please use the IP address (computer name) you are assigned to.** This IP address has the format like ‘rs20.geog.ttu.edu.’

<https://www.askit.ttu.edu/portal/app/portlets/results/viewsolution.jsp?guest=0&solutionid=160524122638595&hypermediatext=null>