

Software Installation Guide

EC325: Econometrics | Colby College

Prof. Caraher

September 16, 2026

This guide walks you through installing everything you need for EC325: Econometrics. Please complete these steps **the first week of class**.

Work through the steps in order—each one builds on the last. Set aside about an hour, and do it somewhere with a solid internet connection.

If you have any issues, check the [Troubleshooting](#) section at the end of this guide first. If that doesn't solve it, please send me an email or come to office hours.

Step 1: Install R

R is the statistical programming language we'll use throughout the course.

1. Go to <https://cloud.r-project.org/>
2. Click the download link for your operating system (Windows, macOS, or Linux)
3. Follow the installation instructions

Already Have R From Another Class?

If you installed R for a previous course, you may have an older version. This course uses features that require **R 4.1 or newer**. Open RStudio and run `R.version.string` in the console to check. If you're below 4.1, install the current version using the link above—you can have both, and RStudio will use the newest one.

Step 2: Install RStudio

RStudio is the interface we use to work with R. It makes coding much easier.

1. Go to <https://posit.co/download/rstudio-desktop/>

2. Download the free Desktop version for your operating system
3. Install and open RStudio

! Important

After installing both, you only need to open RStudio—it runs R automatically in the background.

Step 3: Create a GitHub Account

We use GitHub to share course materials.

1. Go to <https://github.com/>
2. Click “Sign up” and create a free account
3. Use your **@colby.edu email** to get free GitHub Pro access (optional but recommended)

Step 4: Install Git

Git is version control software that lets you download and update course materials.

Mac Users

Most Macs already have Git preinstalled! But it is important to quickly check.

1. Open Terminal (press **Cmd + Space**, type “Terminal”, press Enter, or open the Terminal app in Apps)
2. Type `git --version` and press Enter
3. If Git isn’t installed, you’ll see a pop-up prompting you to install the Command Line Developer Tools—click “Install”
4. Wait for the installation to complete

The Command Line Developer Tools download is large and can take 10–30 minutes depending on your connection. Let it finish before moving on.

Windows Users

1. Go to <https://git-scm.com/download/win>
2. The download should start automatically
3. Run the installer
4. Use the **default settings** for all options (just keep clicking “Next”)

5. Click “Install” and then “Finish”

! Install Git Before You Reopen RStudio

RStudio only looks for Git when it starts up. If RStudio was already open while you installed Git, quit it completely and reopen it now, or it won't find Git in the next step.

Step 5: Configure Git

Before using Git, you need to tell it your name and email. This information is attached to any changes you make.

1. Open RStudio
2. Go to **Tools** → **Terminal** → **New Terminal**
3. Type the following commands, pressing Enter after each line, based on your account info used to create a GitHub account:

```
git config --global user.name "Your Name"
git config --global user.email "your.email@colby.edu"
```

Replace **Your Name** with your GitHub username and **your.email@colby.edu** with your Colby email (or whatever email you used for your GitHub account). Keep the quotation marks.

To verify it worked, type:

```
git config --global user.name
git config --global user.email
```

You should see your name and email printed back. For more information about installing Git on your machine, refer to <https://git-scm.com/install/>.

Step 6: Clone the Course Repository

Now let's download the course materials to your computer.

1. Open RStudio
2. Go to **File** → **New Project** → **Version Control** → **Git**
3. Enter the repository URL: `https://github.com/rpcaraher/ec325.git`
4. Choose where to save the folder on your computer (see the warning below)
5. Click “Create Project”

⚠ Don't Put It in a Cloud-Synced Folder

Do **not** save the project inside iCloud Drive, OneDrive, Dropbox, or Google Drive. These services sync files in the background and will fight with Git, which can corrupt the repository and produce errors that are genuinely painful to untangle.

On most Macs, your **Desktop and Documents folders are synced to iCloud by default**, so avoid those. A good choice is a new folder in your home directory, such as `~/GitHub/` on Mac or `C:\Users\YourName\GitHub\` on Windows.

You now have all course materials! To get updates throughout the semester, click the **Pull** button (the down arrow) in the Git tab, usually in the top-right panel of RStudio.

! Pull Only—Never Push

The Git tab has **Commit** and **Push** buttons sitting right next to **Pull**. You only ever need **Pull**. Committing changes to the course files is what causes merge conflicts later, and Push will just fail with a login prompt, since you don't have write access to my repository. Keep your own work in the `student-work/` folder and you'll never have a problem.

Step 7: Verify Your Setup

To make sure everything works:

1. Open RStudio
2. In the Console (bottom-left panel), type `2 + 2` and press Enter
3. You should see `[1] 4`
4. Check that the **Git** tab is present in the upper-right panel of RStudio

If that works, you're ready for class!

i What About R Packages?

R's add-on packages extend what it can do, and we'll use a number of them this semester. You don't need to install any of them now—we'll install each one together in class as we get to it.

Troubleshooting

“Version Control → Git” is missing or greyed out

This is the most common issue, and it almost always means RStudio was open before Git finished installing.

1. Quit RStudio completely (not just close the window) and reopen it
2. If it’s still missing, go to **Tools → Global Options → Git/SVN**
3. Make sure “**Enable version control interface for RStudio projects**” is checked
4. Check that the Git executable path is filled in. If it’s blank, click “Browse” and set it to:
 - **Mac:** /usr/bin/git
 - **Windows:** C:/Program Files/Git/bin/git.exe
5. Restart RStudio

The Mac Command Line Developer Tools install fails or hangs

Try again on a different network, or open Terminal and run `xcode-select --install` to restart the process.

The clone worked but I don’t see the files

Check that RStudio actually opened the new project. The project name should appear in the top-right corner of the RStudio window. If it says “Project: (None),” go to **File → Open Project** and navigate to the folder you created in Step 6.

Something else

Email me at rcaraher@colby.edu or come to office hours. Copy and paste the full error message into your email if there is one—it makes it much easier for me to figure out what happened.