Course Introduction

Guy J. Abel

Migration Workshop

- This workshop covers *Estimating, Measuring and Working with Migration Data in R*
- Covering many methods described in UN DESA manuals:
  - *Manual VI. Methods of measuring internal migration*
  - *Preparing migration data for subnational population projections*
- In addition methods covered in migration chapters of the IUSSP *Tools for Demographic Estimation*
- Plus many more recent developments

Migration Workshop

- Course outline
  - Part 1: Migration data and concepts
  - Part 2: Handling migration data in R
  - Part 3: Summary migration indices
  - Part 4: Estimating net migration
  - Part 5: Describing and estimating migration age structure
  - Part 6: Describing bilateral migration data
  - Part 7: Estimating bilateral migration
  - Part 8: Chord diagrams for visualising bilateral migration
  - Part 9: Sankey plots for visualising bilateral migration

Migration Workshop

- Dropbox folder: `http://bit.ly/kostat2022mig`
- Contains
  - `slides-pdf`
  - `slides-code` (code used in the slides)
  - `exercise`
  - `exercise-solutions`
  - `data` (for both slides and exercises)
- The `slides-code` folder contains the R functions in the PDF's of each slide
  - Ignore the first few lines (with `knitr` functions), they are by-product of using Rmarkdown to create the slide PDFs

General Points

1. Please be patient. Teaching classes that involve R is never smooth.
   - Everyone has different computers, R versions, package versions
   - Remote learning and getting used to Zoom
2. Assuming you have some knowledge on using R, especially the *tidyverse* set of packages. If you do not, then try working your way through an online course to get up to speed:
   - `https://r-bootcamp.netlify.app/` (free)
3. Throughout the course we will work on some exercises. You might get stuck, especially if you are new to R. Be patient and remember that the frustration is a normal part of learning a programming language.

General Points

4. There are exercises for each part of course, in the `exercise` folder. Each takes around 30 mins - 1 hour, depending on your experience with R
5. The exercise solutions are provided at the end of each day. If you do not have time to complete the exercises in class, spend some extra time to work through the solutions.
6. If having trouble installing R, RStudio or the packages I have set up an RStudio cloud project where everything is installed for you:
    - `https://rstudio.cloud/project/1593361`
    - Need to create a RStudio account
    - Save changes using button on top right