



## The Carpentries: How we Operate

#### History



- 1998: Software Carpentry co-founded by Brent Gorda and Greg Wilson
- 2004-2005: materials released under CC-BY
- 2010-2011: current two-day workshop model with standard curriculum emerges
- 2013: SSI in UK starts administering UK workshops
- 2013: Software Carpentry community identifies need for training to handle data
- 2015: became non-profit organisation, Software Carpentry Foundation (SCF)

#### Software and Data Carpentry



#### Software Carpentry

Audience: researchers who need to program more effectively

domain independent

modular curriculum three distinct required sections, one optional research-focused computational skills, addressing gaps

two-day workshops

volunteer instructors from research communities

#### Data Carpentry

Audience: pure novices, who are dealing with significant data

domain specific (ecology, genomics, GIS, others...)

full, two-day curriculum centered around a single dataset



Workshops and material, train instructors, mentoring

- Instructors: teach workshops cornerstone of the community
- **Trainers:** train new instructors, lead teaching demos, develop instructor training curriculum
- Mentors: lead discussion sessions & mentoring groups
- Maintainers: oversee curricular changes



Oversight, strategy, advocacy, administration

- Lesson infrastructure subcommittee: maintain lesson templates
- Policy subcommittee: moderate discussion lists and arbitrate Code of Conduct violations
- Steering committees: future strategy
- Local champions: advocate Carpentries at home institutions/regions
- Other roles: admin, event participation, blogs

## The Carpentry Community



- <u>Software</u> and <u>Data</u> Carpentry websites, blogs
- Lesson materials hosted on GitHub
  - Lesson <u>template</u>
  - Published using GitHub pages
  - Contributions & discussions via GitHub pull requests and issues
- Public discussion lists
  - Teaching practices, job postings, announcements
- Host monthly community calls, weekly instructor discussion sessions
- Data Carpentry discussion forum
- Twitter, Slack, Facebook

#### How a Workshop Works



- Two types
  - Centrally-organised: Carpentry staff e.g. administrate, liaise with event host, find instructors, handle registration
  - Self-organised: all above handled by instructors/ organisation hosting the event
- Read the policies for instructor training & Data/ Software Carpentry workshops
  - https://github.com/carpentries/policies
  - Read through instructor no-show policy before first workshop
    - <u>https://github.com/carpentries/policies/blob/master/instructor-no-show-policy.md</u>

#### In Practice...



- Teaching materials
  - Can use for any purpose (CC-BY 4.0)
  - Should tailor materials to fit purpose and audience
- "Software Carpentry" & "Data Carpentry" terms and logos trademarked. Can use name in workshop if
  - It covers the core topics
  - At least one instructor is certified
  - You run our pre/post workshop questionnaires
  - Send summary information about attendees (minimum)
- Instructors must be certified then can run either type of workshop
- Must create a one-page workshop website...

Exercise 1: Practice with SWC or DC Infrastructure



In groups of two or three.

Go to either the Software Carpentry or Data Carpentry template repository and follow the directions to create a workshop website using your local location and today's date.

- https://github.com/swcarpentry/workshop-template
- https://github.com/datacarpentry/workshop-template

**Share** the link for your workshop website into the Googledoc.

### A Culture of Contribution



- Aim to be open, collaborative, based on best practices
  - Draw together community expertise
  - Create, share and improve lessons
- Carpentry materials hosted on GitHub
- Contributions managed using GitHub "issues" or "pull requests"
  - Allows community discussion before merging

# Exercise 2: Check Out the Discussion



As an instructor, **your voice is important**!

We want you to be **actively involved** in discussions about the lesson materials.

Go to the GitHub page for the lesson you worked with over the past two days:

- Click on the "Issues" tab
- **Read** through some of the discussions and, if you have anything to add, please add it to the conversation!

If you do make a significant contribution to the discussion, send a link to the issue to <a href="mailto:checkout@carpentries.org">checkout@carpentries.org</a>.

**Congratulations!** You've just completed one of the three remaining steps in becoming a Carpentry instructor.

#### Contributing to Lessons



- Lesson incubation
  - Feeling inspired to write a fantastic lesson?
  - Model it after the Carpentry lesson format:
    - <u>https://github.com/swcarpentry/lesson-example</u>
    - Template and instructions
- Many ways to contribute
  - GitHub not for everyone
  - Suggestions for improving process? Let us know!





• What questions do you have about running and teaching at a workshop?