

Course Title: Creating Scientific Figures with Adobe Illustrator



Course Length: 1 Day (6 hours total: 9:00 am – 12:00 pm & 1:00 – 4:00 pm)

Max. registration: 20 (will be repeated if capacity exceeded).

Target Audience: Scientists, researchers, and students aiming to produce publication-ready scientific figures.

Items in green will be taught by Martha Marchini

Items in red will be taught by Juan Jovel

Course Outline

1. Introduction to Adobe Illustrator for Science (9:00 – 9:30 am)

- Overview of Adobe Illustrator's interface
- Understanding the role of Illustrator in scientific visualization
- Examples of high-quality scientific figures

2. Basic Tools and Techniques (9:30 – 10:00 am)

- Drawing tools (shapes, lines, pen tool)
- Layers and grouping for effective figure organization
- Artboards: Using multiple artboards for different figure panels
- Practical Exercise: Create basic visual elements (e.g., bar charts, simple illustrations)

3. Importing and Organizing Data Visualizations (10:00 – 10:30 am)

- Importing data graphics from tools like Excel, GraphPad, or R
- Cleaning up imported vector graphics
- Combining graphs into cohesive figure panels
- Practical Exercise: Import a sample chart and edit it for clarity

Coffee break (10:30 – 11:00 am)

4. Working with Colors and Styles (11:00 – 11:30 am)

- Choosing effective color schemes for scientific clarity (e.g., colorblind-friendly palettes)
- Using gradients and transparency to add depth
- Best practices for consistency in color and line styles
- Practical Exercise: Apply color schemes to an imported figure

5. Typography and Labels (11:30 am – 12:00 pm)

- Adding titles, axis labels, and annotations
- Choosing appropriate fonts for readability
- Creating consistent text styles across panels
- Practical Exercise: Annotate an existing figure with labels and titles

Lunch break (12:00 – 1:00 pm)

6. Advanced Techniques for Figure Panels (1:00 – 1:30 pm)

- Aligning and arranging multiple panels for cohesive figure sets
- Using clipping masks and compound paths
- Adding icons or schematics to enhance storytelling
- Practical Exercise: Assemble a multi-panel figure

7. Exporting Figures for Publication (1:30 – 1:45 pm)

- Export settings for different outputs (e.g., journals, presentations, posters)
- Understanding file formats (EPS, TIFF, PNG, PDF)
- Practical Exercise: Export a figure for journal submission

8. Hands-On Project: Creating a Full Figure (1:45 – 3:00 pm)

- Participants create a complete scientific figure using provided data
- Individual guidance and troubleshooting
- Group feedback and discussion

Coffee break (3:00 – 3:30 pm)

9. Wrap-Up and Tips for Efficiency (3:30 – 4:00 pm)

- Illustrator shortcuts for faster workflows
- Common pitfalls and how to avoid them
- Resources for continued learning

Course Outcome: Participants will be able to create professional, publication-ready scientific figures using Adobe Illustrator, incorporating best practices in visualization and design.