

## **Module 1 (Introduction & Background to Reproducible Research with Jupyter Notebooks. By the end of this module, you should be able to:**

### **Understand the concept, importance, and components of reproducible research**

- ☐ Define reproducible research.
- ☐ Name and describe the four facets of reproducible research.
- ☐ Explain why reproducible research is important for the research community.
- ☐ List three ways that implementing reproducible practices can benefit your own research.

### **Understand strengths of Jupyter Notebooks as a tool for reproducible research.**

- ☐ Name and describe the components of a Jupyter notebook and how they interact.
- ☐ Explain the concept of a Jupyter ecosystem.
- ☐ List five strengths of using Jupyter notebooks for conducting reproducible research.

### **Create and navigate through a Jupyter notebook containing markdown and code cells.**

- ☐ Use tabs and keyboard shortcuts to run cells and format text within cells.
- ☐ Create a markdown cell including headers, lists, embedded code, LaTeX equations, and HTML.
- ☐ Understand the function of a kernel, manage & interrupt a kernel if necessary.

### **Access the broader Jupyter community.**

- ☐ List three resources (online or local) you can use as you develop your Jupyter/Python research project.