

Scientific Writing and Publishing course: a guide for teaching staff

Nature Masterclasses has developed this content guide for senior university researchers or tutors wishing to use the Scientific Writing and Publishing course as a teaching resource.

IF YOUR RESEARCHERS ARE ABOUT TO WRITE A PAPER...

If your researchers are about to write a paper or planning to write their very first paper, head to 'Writing a Research Paper', [Part 1 of the Scientific Writing and Publishing course](#).

Using the table below, jump to the module that matches the stage your researchers are at within the writing process. (Log in to *Nature Masterclasses* using your institution's access method and the link will take you straight to the module)



If your researchers are about to...	Go to module:	What your researchers will learn from the module:	Lessons within the module:
...Start writing up their research for the very first time	Module 1 What makes a great paper?	Learning outcomes: <ul style="list-style-type: none"> Where publication fits into the research life cycle The importance of publishing research The criteria for a good paper How Nature Research journal editors define a great paper 	<ol style="list-style-type: none"> Why publish your research? Starting to write and using storytelling to craft your paper What do editors look for in a great paper? There is no magic formula to writing a great paper Editors' favourite papers FAQ Module summary
...Start writing their papers	Module 2 Elements of writing style	Learning outcomes: <ul style="list-style-type: none"> Simple changes you can make when writing to make your papers easier to read How to use different paragraph types and transitions to create focus and flow in your manuscript 	<ol style="list-style-type: none"> The ABC of effective writing Common issues in writing style Building a paragraph FAQ Module summary
	Module 3 Titles and abstracts	<ul style="list-style-type: none"> How to improve your writing style through exercises What makes a good title Two easy-to-use abstract templates that you can apply directly to your own writing What to avoid when writing titles and abstracts 	<ol style="list-style-type: none"> How to reach your audience The value in crafting a great title How to write effective titles Things to avoid in titles Choosing keywords for your paper How to write an abstract Things to avoid in abstracts Module summary
...Write the body of their paper	Module 4 From introduction to conclusion	Learning outcomes: <ul style="list-style-type: none"> What should be included in, or excluded from, each section of the paper How to organize your ideas effectively and avoid common mistakes How to create a narrative flow to help readers follow your argument 	<ol style="list-style-type: none"> Writing a paper: The big picture Writing the introduction Writing the methods section Writing the results section Data deposition Writing the discussion section Writing the combined results and discussion section Writing the conclusion Things to avoid: Overhyping your work FAQ Module summary
...Share their data	Module 5 Data management	Learning outcomes: <ul style="list-style-type: none"> Why it is important to accurately record, share and preserve your data The best approaches to managing your research data The importance of sharing your data and who might use it 	<ol style="list-style-type: none"> Managing data Risks of data mismanagement Creating a data management plan The importance of sharing data Meaningful metadata Sharing data The rise of data journals FAQ Module summary
...Create their figures	Module 6 Data presentation	Learning outcomes: <ul style="list-style-type: none"> The four principles of creating clear and engaging figures for your paper How to choose which figures to include in your manuscript Best practices in raw data processing and image preparation Tips to ensure that your figures are clear and informative for your readers 	<ol style="list-style-type: none"> Principles of data presentation Determine your main message Find the best format for your data Organize your data Choose a representative image Visual clarity Use colour wisely FAQ Module summary