First Scientific Paper Planning Checklist

Use this checklist to plan, draft, and review your first research paper.

🧭 Stage 1: Before You Start Writing

☐ Have I clearly defined my research question or objective?
→ This will guide your entire paper and help avoid scope creep.

☐ Have I reviewed at least 5–10 relevant papers or sources?
→ Reviewing literature helps identify gaps and justify your research.

☐ Do I know which journal or conference I'm targeting?
→ Knowing the target journal early will help you write with the right tone and format.

☐ Have I noted the formatting or citation requirements of the target journal?
→ Check author guidelines for word count, referencing style, and figure/table limits.

🧱 Stage 2: Structuring the Paper

☐ Do I understand the standard structure (e.g., IMRAD format)?
→ Most scientific papers follow Introduction, Methods, Results, and Discussion.

☐ Have I outlined the main points I want to include in each section?
→ Outlining helps prevent writer's block and maintain logical flow.

☐ Is my main finding or contribution clearly stated?
→ This is your paper's core message — make it stand out.

✍️ Stage 3: Writing and Drafting

☐ Have I scheduled time for writing regularly?
→ Consistency is key. Treat writing like a part of your regular schedule.

☐ Have I written at least one complete draft without worrying about perfection?
→ Getting your thoughts out is more important than polishing on day one.

☐ Have I provided enough detail for reproducibility?
→ The Methods section should allow another researcher to replicate your work.

☐ Have I cited the original sources of protocols or tools used?
→ Even widely used methods like PCR or SPSS analysis need proper citation.

📄 Stage 4: File Preparation and Supplementary Material

☐ Is the file saved in the correct format (e.g., .docx, LaTeX, or journal template)?
→ Many journals provide downloadable templates — using them can save time and reduce formatting errors.

☐ Are all supplementary files (figures, datasets, appendices) properly named and referenced?
→ Keep filenames simple, clear, and consistent.

☐ Is the manuscript anonymized if submitting to a double-blind journal?
→ Remove names, affiliations, and identifying phrases from the text and metadata.

📊 Stage 5: Figures, Captions & Terminology

☐ Are all figures/tables clearly labeled and numbered?
→ Use consistent numbering (e.g., Fig. 1, Table 2) and refer to them appropriately in the text.

☐ Do all figures have self-explanatory captions?
→ Captions should briefly explain what the figure shows — without needing to read the whole paper.

☐ Are figure axes and units clearly labeled?
→ Avoid ambiguous axes — make sure every unit (e.g., mg/L, seconds) is readable and standardized.

☐ Are abbreviations defined at first mention?
→ Write the full form followed by the abbreviation in brackets the first time (e.g., Scanning Electron Microscopy (SEM)).

☐ Are all acronyms and terminology consistent throughout?
→ Don't switch between "WHO" and "World Health Organization" randomly — stay consistent.

☐ Have image files been optimized for submission?
→ Use the required format (e.g., TIFF, JPEG, EPS) and resolution (often 300 DPI for journals).

☐ Are figure legends and table titles informative but concise?
→ They should describe the content clearly, without restating the entire result.

🔍 Stage 6: Review & Language Quality

☐ Have I identified peers or mentors who can give feedback?
→ Constructive feedback is essential before submission.

☐ Have I proofread for grammar, clarity, and formatting?
→ Minor errors can lead to rejection even with strong content.

☐ Have I eliminated jargon or explained it where necessary?
→ Avoid overly technical language unless it's common in your field.

☐ Is the tone formal, objective, and free from personal opinions?
→ Avoid first-person unless the journal allows it.

☐ Have I avoided vague words like “interesting,” “nice,” or “good”?
→ Use precise, discipline-specific language instead.

🏷️ Stage 7: Title, Abstract & Keywords

☐ Is the title concise, specific, and informative?
→ Avoid vague titles; state your key result or method.

☐ Does the abstract summarize the full study (background, method, key result, conclusion)?
→ The abstract is often the only part read — it must stand alone.

☐ Are keywords relevant, searchable, and not too general?
→ Avoid terms like "science" or "study" — use field-specific terms.

📜 Stage 8: Declarations and Ethics

☐ Have I included a conflict-of-interest statement if required?
→ Many journals require this even for student authors.

☐ Have I acknowledged funding sources, lab support, or institutional help?
→ This adds transparency and gives credit where it’s due.

☐ Have I included all required declarations (ethics approval, data availability, etc.)?
→ Some journals require these even at submission stage.

📬 Stage 9: Final Pre-Submission Checks

☐ Have I double-checked references and citations?
→ Ensure in-text citations match the bibliography.

☐ Have I checked submission requirements again before uploading?
→ Some journals have technical checks that can be avoided with a final review.

☐ Have I checked the journal's checklist or author guidelines one last time?
→ It’s easy to overlook small formatting or metadata issues.

🗓️ Timeline Goals:

- First Draft: _____
- Review/Feedback: _____
- Second Draft: _____
- Submission: _____

🎯 Journal Fit Checklist:

☐ Scope matches my topic
☐ Word count is within limits
☐ Reference style confirmed
☐ Recent similar papers published
