Overview of Journal Article

Audience and Purpose of a refereed (peer reviewed) journal article:

- expert audience
- primary literature (the findings of the original researchers)

See syllabus (and ACS book) for broad organizational structure:

- 1. Title
- 2. Your name and affiliation
- 3. Abstract
- 4. Introduction
- 5. Methods (Experimental)
- 6. Results
- 7. Discussion (often ends with Conclusions)
- 8. Acknowledgements
- 9. References

Title and Abstract are routinely written last, because these sections need to summarize the paper clearly, accurately, and concisely in as few words as possible.

Abstracts can range from one sentence to one paragraph. 200 words is a long abstract. (maximum information in the fewest words)

Introduction, Methods (Experimental), Results, Discussion = IMRD format, p. 45

IMRD "hourglass" on p. 46, Fig. 2.1.

Introduction

Generally, placing your work in the context of the field (showing your work's relevance and where it fits). Lots of citations.

Begin with broader view of the field, and narrow to cite work most relevant to your work.

Progress through the field from the general background to the specifics of your work.

Methods

Essentially, the materials and procedures used to generate the results.

Continue to be specific to your work.

Perhaps an occasional citation of others who have used similar methods.

Results

Essentially, a summary of the data.

Continue to be specific to your work.

Perhaps an occasional citation.

Discussion

Interpret your results and relate your work to other work in the field.

Some broadening as you place your work into the context of the field.

Some citations, but not as many as in the Introduction.

(Note: every journal has its own variation of the IMRD format, e.g., Experimental instead of Methods, so you must follow the journal's rules when submitting a paper to that journal)